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Bulletin 925F

SPME Applications Guide

The SPME Applications Guide is a bibliographic resource of published technical articles about solid phase microextraction. With the continued growth of SPME, and its expansion into environmental, food, forensic, and other fields, we recognize the need for an organized bibliography. This guide should serve a useful purpose in your SPME research and analyses.

This guide is for general information only. We have made every attempt to make the information as complete and accurate as possible. Where entries are missing, information was not available at the time of printing.

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Using This Guide

This guide is organized in an easy-to-use format. The references are grouped into application areas (see the Table of Contents) with the new references placed at the end of each area in bold. The *Analyte/Matrix* column identifies the class of analytes and the sample matrix. The *Literature Reference* column provides the title of the article, journal reference, and authors. The next column describes the SPME fiber and conditions used in the sample extraction. The last column indicates the instrument used in the analysis.

Key to Abbreviations

Abbrev.	Description
AED	atomic emission detection
DVB	divinylbenzene
ECD	electron capture detection
FID	flame ionization detection
FPD	flame photometric detection
FTD	flame thermonic detection
GC	gas chromatography
HPLC	high pressure liquid chromatography
ICP	inductive coupled plasma
MS	mass spectrometry
MSD	mass selective detection
NPD	nitrogen/phosphorus detection
PAD	photodiode-array detection
PDMS	polydimethylsiloxane
PICI	positive ion chemical ionization
SIM	selective ion monitoring
TCD	thermionic-selective detection
TED	thermal energy detection
VIS	visible spectrophotometry

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Application Area

SPME Application Guide 7th Edition

(New references added to the 7th edition are in bold)

	Analyte / Matrix	Literature Reference	SPME Fiber / Extraction Conditions	Instrument
Books				
		Techniques for Analyzing Food Aroma, Marcel Decker ISBN: 0-8247-9788-4, Marsili, R.	Supelco Cat. # 26589-U	
		Solid Phase Microextraction: A Practical Guide Edited by SueAnn Scheppers Wercinski Marcel Decker 15BN: 0-8247-7058-7	Supelco Cat. # 26610-U	
		Solid Phase Microextraction: Theory and Practice Edited by Janusz Pawliszyn VCH, New York, 275pp (1997)	Supelco Cat. # 26591-U	
		Applications of Solid Phase Microextraction Edited by Janusz Pawliszyn RSC Chromatography Monographs ISBN 0-85404-525-2 Royal Society of Chemistry 1999	Supelco Cat. # 26611-U	
		Applied SPME, 1999, 364-371 Royal Society of Chemistry, Cambridge, UK Coden: 67TUA8 Talon, R, Montel, M.		
Foods, Flavors, & Fragrances				
601	Aroma compounds in food	Developments in extraction techniques and their application to analysis of volatiles in foods *Trends-Anal-Chem, May 2000, 19(5), 322-329* Sides, S., Robards, K., Helliwell, S.	Review article	GC
602	Contaminants in Food	Application of SPME in Food Analysis *J. Chromatogr. A (2000), 880(1+2), 35-62* Kataok, H., Lord, H., Pawliszyn, J.	Review article	GC, LC, MS
2593	**PAHs in tea infusion**	**Use of headspace SPME coupled to LC for the analysis of PAHs in tea infusions** ***J Chromatogr A 1164, #1-2, 10-17 (2007)*** **Vinas, P.; Campillo, N.; Aguinaga, N.; Perez-Canovas, E.;** Hernandez-Cordoba, M.	**60µM PDMS/DVB 60 min @ 90 °C headspace**	**LC-fluorimetric**
784	Catechins, cafeine in tes	Automated in-tube solid phase microextraction coupled with HPLC-ES-MS for the determination of catechins and caffeine in tea *Analyst (Cambridge, U. K.) (2000) 125(12), 2216-2222* Wu, J. C.; Xie, W.; Pawliszyn, J.	polypyrrole capillary	LC-ES-MS
2557	**Sorbic, benzoic acids in food dressing**	**Simultaneous determination of sorbic and benzoic acids in food dressing by headspace SPME and gas chromatography** ***J. Chromatogr., A 1117, #1, 109-114 (2006-06-02)*** **Dong, C. Z.; Mei, Y.; Chen, L.**	**85µm polyacrylate headspace**	**GC-FID**
2199	**Sorbic, benzoic acids in beverages**	**Headspace SPME applied to the simultaneous determination of sorbic and benzoic acids in beverages** ***Anal. Chim. Acta (2006) 562. #1, 23-29*** **Dong, Chunzhou; Wang, Wenfang**	**65µm PDMS-DVB headspace**	**GC-FID**
834	Caffeine in beverages	Caffeine determination in beverages by SPME and GC-MS *Ind. Bevande (2000) 29(170) 595-597, 605* Guidotti, Maurizio; Panzironi, Laura		
8	Caffeine and flavors in coffee/tea/cola	Solventless Determination of Caffeine in Beverages Using SPME with Fused Silica Fibers J. Chromatogr. 603: 185-191 (1992) Hawthorne, S., Miller, D., Arthur, C., Pawliszyn, J.	uncoated fiber 5 min	GC-MS
2461	**Phthalic acid esters**	**Headspace SPME of phthalic acid esters from vegetable oil**	**100µm PDMS**	GC/ECD

	in vegetable oil	**employing solvent based matrix modification** ***Anal. Chim. Acta 582, #1,24-33 (1-16-2007)*** **Holadova, K.; Prokupkova, G.; Hajslova, J.; Poustka, Jan**	**headspace**	
2751	**Volatiles from free Fatty acids**	**Headspace-(HS-SPME) analysis of oxidized volatiles from free fatty acids (FFA) and application for measuring hydrogen donating antioxidant activity** ***FOOD CHEM. 105, #1, 414-420 (2007)*** **JaeMin Lee; Dong-Hwan Kim; Pahn-Shick Chang; JaeHwan Lee**	**headspace**	**GC**
2875	**Alcohol hydrolases**	**Reaction design for evaluation of the substrate range of hydrolases** ***Biocatalysis and Biotransformation 26, #3, 228-234 (2008)*** **Antoniotti, Sylvain; Fernandez, Xavier; Dunach, Elisabet**	**headspace**	**GC-MS**
2471	**Fatty acids in solid fats**	**Physicochemical and volatiles characterization of trans-free solid fats produced by lipase-catalyzed interesterification.** ***J Food Sci 72, #6, E368-74 (2007 Aug)*** **Lee, J H; Akoh, C C; Lee, K-T**	**headspace**	**GC**
2209	**Volatiles in Sesame oil**	**Identification of volatile degradants in formulations containing sesame oil using SPME/GC/MS** ***J. PHARM. BIOMED. ANAL. 44, #2, 450-455 (28 JUN 2007)*** **Chen, W.; Zhou, P.; Wong-Moon, K. C.; Cauchon, N. S.**	**headspace**	**GC-MS**
2671	**Off-flavours in nuts**	**SPME-GC and sensors as rapid methods for monitoring lipid oxidation in nuts.** ***Food Additives and Contaminants 24, #11, 1219-1225 (2007)*** **Pastorelli, S; Torri, L; Rodriguez, A; Valzacchi, S; Limbo, S; Simoneau, C.**	**headspace**	**GC-FID**
2726	**Flavors in camellia oil**	**Endogenous biophenol, fatty acid and volatile profiles of selected oils** ***FOOD CHEM. 100, #4, 1544-1551 (2007)*** **Haiyan, Z.; Bedgood, Jr D. R.; Bishop, A. G.; Prenzler, P. D.; Robards, K.**	**headspace**	**GC**
2275	**Flavors in canola oil and caprylic acid**	**Sensory evaluation of butterfat-vegetable oil blend spread prepared with structured lipid containing canola oil and caprylic acid** ***J Food Science 70 #7, S406-S412 (2005)*** **Kim, B.; Shewfelt, Robert L.; Lee, Hyoungil; Akoh, Casimir C.**	**headspace**	
2158	**Volatile oxidative products of canola oil**	**Evaluation of oxidative stability of canola oils by headspace analysis** ***JAOC, 82, #12, 869-874 (2005)*** **Richards, Amy; Wijesundera, Chakra; Salisbury, Phil**	**headspace**	**GC**
2157	**Volatile flavors in flaxseed oil**	**Sensory and oxidative quality of screw-pressed flaxseed oil** ***JAOC, 82, #12, 887-892 (2005)*** **Wiesenborn, D.; Kangas, N.; Tostenson, K.; Hall, C.; Chang, K.**	**headspace**	**GC**
2305	**Volatiles in Poppy seed oil**	**Analysis of volatile compounds and triglycerides of seed oils extracted from different poppy varieties (Papaver somniferum L.)** ***J Ag Food Chem 53, #21, 8310-8316 (2005)*** **Krist, S.; Stuebiger, G.; Unterweger, H.; Bandion, F.; Buchbauer, G.**	**DVB/Car 50/30µm headspace**	**GC/MS**
2693	**Hexanal & pentane in liquid infant foods**	**A headspace SPME method of use in monitoring hexanal and pentane during storage: Applications to liquid infant foods and powdered infant formulas.** ***Food Chem. 101, #3, 1078-1086 (2007)*** **Garcia-Llatas, G.; Lagarda, M. J.; Romero, F.; Abellan, P.; Farre, R.**	**headspace**	**GC/MS**
32	Flavors in coffee/fruit juice/ vegetable oil	Solid Phase Microextraction for Flavor Analysis *J. Agric. Food Chem, 42: 1925-1930 (1994)* Peppard, T., Yang, X.	100µm PDMS 10 min	GC/GC-MS
603	Volatiles in vegetable oil	Analysis of volatile contaminants in vegetable oils by headspace SPME with Carboxen-based fibers. *J. Chromatogr. 873 (2000): 79-94* Page, B., Lacroix, G.	75µm Carboxen/PDMS 30-45 min @ 100°C headspace	GC-MS
39	Halogenated volatiles in food	Application of SPME to the Headspace GC Analysis of Halogenated Volatiles in Selected Foods J. Chromatogr. 648 (1): 199-211 (1993)		GC

		Page, B., Lacroix, G.		
41	Fatty acids C2-C10 in water	Determination of Fatty Acids Using SPME Anal. Chem: 67(23): 4396-4403 (1995) Pan, L., Adams, M., Pawliszyn, J.	85µm polyacrylate Low pH, salt derivative: 1-pyrene-diazomethane	GC/GC-MS
2646	**Volatiles from flavonol glycosides**	**Chemical composition and volatile constituents of Anthyllis barba-jovis** ***NAT. PROD. RES. 21, #5, 418-425 (01 MAY 2007)*** **Pistelli, L.; Noccioli, C.; Bertoli, A.; Scapecchi, G.; Potenza, D.**	**headspace**	**GC-MS**
2176	**Volatile organics from artificial flavors**	**Headspace solid-phase microextraction analysis of artificial flavors** ***J Sci of Food and Agri., (2005) 85, #25, 2645-2654*** **Coleman, William M.; Dube, Michael F.**	**headspace** **30 min**	**GC-MS**
42	Flavors in corn oil	Measuring Flavors Using SPME Food Quality January/February 1995, pp40-41 Mindrup, R.	100µm PDMS 40°C, 45 min	GC-MS
925	Flavors, off-flavors in food	Sample preparation for the analysis of flavors and off-flavors in foods *J. Chromatogr A, 2000, 873(1), 3-11* Wilkes, J., Conte, E., Kim, Y., Holcomb, M., Sutherland, J. Miller, D.	Review article	
883	Flavors in food	Recent application of SPME for monitoring flavor components in foods *Food Testing & Analysis Feb./March 2000, 17-20* Mindrup, R.	75µm Carboxen/PDMS 65µm DVB/PDMS	GC-MS
181	Flavors in coffee, potato chip	SPME Associated with Microwave Assisted Extraction of Food Products *J. High Res. Chromatogr. 20 (4): 213-216 (1997)* Wang, Y., Bonella, M., Khaled, M., McNair, H.	100µm PDMS pH 2, salt headspace 10 min	SIM GC-MS
60	Sulfur volatiles in truffle aroma	Headspace SPME Analysis of Volatile Organic Sulfur Compounds in Black and White Truffle Aroma *J. Agric. Food Chem, 43 (8): 2138-2143 (1995)* Pelusio, F., Nilsson, T., Tino, R., Larsen, B., Montnarell, L.		
830	Sulfur compounds from egg shell	Changes of aroma in shell eggs *Czech J. Food Sci (2000) 18, 231-233* Adamiec, J.; Dolezal, M.; Mikova, K.; Davidek, J		
831	Sulfur compounds	Limitations to the use of SPME for quantitation of mixtures of volatile organic sulfur compounds *Anal. Chem (2001) 73(7) 1646-1649* Murray, R. A.		
2245	**Aroma compounds of Bulgogi**	**Aroma active compounds of Bulgogi** ***Journal of Food Science (2005) 70 #8, C517-C522*** **Ko, H.; Kim, T.; Cho, I.; Yang, J; Kim, Y.; Lee, H.**		**GCO**
604	Aroma compounds in fermented cucumbers	Determination of major aroma impact compounds in fermented cucumbers by SPME-GC-MS-Olfactometry detection *J. Chromatogr. Sci. (2000), 38(7), 307-314* Marsili, R., Miller, N.	75µm Carboxen/PDMS 20min @50°C NaCl added	GC-MS
61	Flavors in cinnamon bark	SPME of Flavor Compounds -- A Comparison of Two Fiber Coatings and Discussion of the Rules of Thumb for Adsorption LC-GC 13 (11): 882-886 (1995) Yang, X., Peppard, T.	100µm PDMS, 85µm polyacrylate 120°C headspace	GC-FID
62	Flavors in apple essence, seeds, candy	SPME and Chiral Gas Chromatography Separations LC-GC 13 (9): 734-740 (1995) Mani, V., Woolley, C.	100µm PDMS 30°C or 40°C headspace	GC-FID

2544	**Aroma compounds from spices**	**HS-SPME analysis of the volatile compounds from spices as a source of flavour in 'Campo Real' table olive preparations** ***Flavour and Fragrance J. 22, #4, 265-273 (JUL-AUG 2007)*** **Perez, R. A.; Navarro, T.; de Lorenzo, C.**	**65µm PDMS/DVB headspace**	**GC-MS**
2578	**Volatiles in potherb mustard**	**Analysis of volatile components during potherb mustard (Brassica juncea, Coss.) pickle fermentation using SPME-GC-MS** ***LWT - Food Science and Technology 40, #3, 439-447 (2007)*** **Zhao, Dayun; Tang, Jian; Ding, Xiaolin**	**headspace**	**GC-MS**
772	Volatiles in mustard paste	Analysis of volatile constituents of mustard paste by GC/MS w/SPME and simultaneous distillation and extraction *Fenxi Huaxue (2000) 28(12) 1489-1492* Liu, B.	100µm PDMS 30min @ 70°C in Chinese	GC-MS
2437	**Volatiles in vanilla extracts**	**Comparison of headspace-SPME-GC-MS and LC-MS for the detection and quantification of coumarin, vanillin, and ethyl vanillin in vanilla extract products** ***Food Chem 107, #4, 1701-1709 (15 APR 2008)*** **De, Jager L. S.; Perfetti, G. A.; Diachenko, G. W.**	**headspace**	**GC-MS**
854	Volatiles in vanilla extracts	Analysis of the volatile components in vanilla extracts and flavourings by SPME and gas chromatography *J Ag Food Chem (2000) 48(12), 5802-5807* Sostaric, T.; Boyce, M. C.; Spickett, E. E.	85µm polyacrylate 40min @ 20°C	GC-MS
829	Volatiles of distillers grains	Analysis of headspace compounds of distillers grains using SPME in conjunction with GC/MS and TGA. *J Cereal Sci. (2001) 33(2), 223-229* Staff, C., Biswas, S.	75µm Carboxen/PDMS 60min headspace	GC-MS
2211	**Essential oil of Xanthogalum purpurascens Lallem**	**Comparison of essential oil of Xanthogalum purpurascens Lallem. Obtained via different isolation techniques** ***J. Essent. Oil Res. 18 #2, 181-184 (2006)*** **Baser, K.H.C.; Duran, A.; Ozek, G.; Ozek, T.; Sagiroglu, M.**		**GC-MS**
878	Essential oils in hops	SPME of hop volatiles Potential use for determination and verification of hop varieties *J. Chromatogr A 918 (2001) 159-167* Kovacevic, M., Kac, M.	100µm PDMS 30min @ 70°C headspace	GC-MS
63	Essential oils in hops	Determination of Essential Oils in Hops by Headspace SPME J. Agric. Food. Chem, 44: 1768-1772 (1996) Field, J., Nickerson, G., James, D. Heider, C.	100µm PDMS 50°C, 4 hr	GC-FID
2860	**Volatiles from Essential oils**	**Comparison of liquid-liquid extraction with headspace methods for the characterization of volatile fractions of commercial hydrolats from typically Mediterranean species** **J. Chromatogr A 1193, 1-2, 37-49 (Jun 6 2008)** **Barboni, T.; Costa, J.; Desjobert, J.; Leandri, C.; Paolini, J.**		**GC-MS**
605	Essential oils in yarrow	Production of Yarrow (Achillea millefolium L.) in Norway: Essential Oil Content and Quality *J. Agric. Food Chem, (2000) 48 No,12, 6205-6209* Rohloff, J., Skagen, E., Steen, A., Iversen, T.	100µm PDMS 40min @ 50°C headspace	GC-MS
2917	**Volatiles from plants**	**Inheritance of aroma compounds in a model population of Fragaria** ***Plant Breeding 127, #1, 87-93 (FEB 2008)*** **Olbricht, K.; Grafe, C.; Weiss, K.; Ulrich, D.**	**headspace**	**GC-MS**
2679	**Essential oils in aromatic plants**	**Comparison of different extraction methods for the determination of essential oils and related compounds from aromatic plants and optimization of solid-phase microextraction/gas chromatography.** ***Anal Bioanalyt Chem 387, #6, 2207-2217 (2007)*** **Richter, J.; Schellenberg, I.**	**headspace**	**GC-MS**
221	Essential oils in Virginia cedar oil	A Comparison of Selected Analytical Approaches to the Analysis of an Essential Oil	100µm PDMS 10-120 sec	GC-MS

		Flavour and Fragrance Journal 12 (1): 1-8, (1997) Coleman, W., Lawrence, B.	headspace	
396	Essential oils in Virginia cedar oil	Automatic Injection SPME-Chiral-GC-MSD Analysis of Essential Oils *J.Chromatographic Sci., Vol. 36, Dec. 1998, 575-578* Coleman, W., Perfetti, T., Lawrence, B.	7µm PDMS 6 sec headspace stirring	GC-MS
444	Volatiles in sunflower oil	Identification of Volatile Compounds in Sunflower Oil by Headspace SPME and Ion-Trap GC/MS *J. High Resolut. Chromatgr. (1998), 46(7), 2744-2747* Keszler, A., Heberger, K., Gude M.	100µm PDMS	GC-MS
841	Volatiles in sunflower oil	Mechanism of volatile compound production during storage of sunflower oil *J Ag Food Chem. (2000) 48(12), 5981-5985* Keszler, A., Kiska, T. Nemeth, A..	100µm PDMS 40 min @ 25°C headspace	GC-MS
2832	**pentachlorophenol in water**	**A preliminary feasibility study for pentachlorophenol column sorption by almond shell residue** ***Chem. Eng. J. 136, #2-3, 188-194 (Mar 1 2008)*** **Alves, A.; Estevinho, B.N.; Ribeiro, E.; Santos, L.**		**GC-MS**
2658	**Aldehydes in bitter almonds & cinnamon bark**	**Determination of some aldehydes by using SPME-HPLC w/ UV detection.** ***J AOAC Int 90, #6, 1689-94 (2007 Nov-Dec)*** **Kumar, Ashwini; Singh, Baldev; Malik, Ashok Kumar; Tiwary, Dhananjay K**	**65µm PDMS/DVB**	**LC-UV**
2184	**Volatiles from oat flakes**	**Analysis of volatile aldehydes in oat flakes by SPME-GC/MS** ***Polish J Food and Nutrition Sci. (2005) 14, #4, 389-395*** **Klensporf, Dorota; Jelen, Henryk H.**	**headspace DVB/Carboxen**	**GC-MS**
569	12 Aldehydes in sunflower oil/water	Influence of extraction parameters and medium on efficiency of SPME sampling in analysis of aliphatic aldehydes J-Chromatogram-A. 11 Jun 1999; 845(1-2): 337-347 Keszler,-A; Heberger,-K	100µm PDMS 30 min @ 40°C headspace	GC-MS
447	Xylene in palm oil	Determination of trace xylene in contaminated palm oil by SPME and capillary GC Fenxi Huaxue (1999), 27(6), 676-678 Chen, W., Guo, C., Hu, C.	100µm PDMS 1 min. 60°C headspace	GC-FID
2757	**Aroma volatiles in olive oil**	**A 3-year study on quality, nutritional and organoleptic evaluation of organic and conventional extra-virgin olive oils** ***JAOCS 85, #2, 151-158 (2008)*** **Ninfali, P.; Bacchiocca, M.; Biagiotti, E.; Esposto, S.; Servili, M.; Montedoro, G.; Rosati, A.**		**GC/MS**
2672	**Aroma volatiles in food**	**Aromagrams - Aromatic profiles in the appreciation of food quality** ***FOOD CHEM. 101, #2, 845-872*** **Plutowska, B.; Wardencki, W.**	**review article**	
2147	**Aroma volatiles in olive oil**	**Analysis of single-cultivar extra virgin olive oils by means of an Electronic Nose and HS-SPME/GC/MS methods** ***Sens Actuators, B Chem, (2006) 114, #2, 674-680*** **Cimato, A.; Dello Monaco, D.; Distante, C.; Epifani, M.; Sani, G.; Siciliano, P.; Taurino, A.M.;Zuppa, M.**	**headspace**	**GC/MS**
803	Volatiles in olive oil	Volatile compounds of virgin olive oil evaluated by SPME An application in the discrimination of virgin olive oils according to the cultivar and area *Proceedings of the Phytochemical Society of Europe* (2000) Vol. 46, 211-220 Servili, M; Montedoro, G; Selvaggini, R; Taticchi, A		
577	Dimetyl disulfide & methanethiol in butter	Volatile reduced sulfur compounds in butter by SPME J-Dairy-Res. Feb 1999; 66(1): 115-123 Shooter,-D; Jayatissa,-N; Renner,-N	85µm polyacrylate 10 min. @ 30-35°C	GC-EID
338	Benzene, toluene in vegetable oil	Determination of benzene & toluene in vegetable oil by SPME/HPLC J. Commod. Sci. (1999), 38(1), 3-14	headspace	HPLC

		Giuffrida, R., Clasadonte, M., Zerbo, A.		
606	Volatiles in vegetable oil	Headspace SPME use for the Characterization of volatile compounds in vegetable oils of different sensory quality *J. Agric Food Chem, (2000), 48(6), 2360-2367* Jelen, H., Obuchowska, M., Zawirska-Wojtasiak, R.	Carboxen/DVB/PDMS 20-60°C headspace	GC-FID
885	Steroisomers Pulegone enantiomers	Different stereoselectivity in the reduction of pulegone by Mentha species *Planta Medica (2001) 67(3) 260-262* Mosandl, A.; Beck, T.; Fuchs, S.		GC-MS
2724	**Aldehydes in beer**	**Determination of stale aldehydes in beer by headspace SPME and automatic precolumn derivatization.** ***Fenxi Shiyanshi 26, #4, 38-41(2007)*** **Wu, Q. -J.; Chen, H. -L.; Yang, Z. -X.**	**65µm PDMS/DVB headspace 60min @ 60°C PFBOA derivative**	**GC-MS** in Chinese
2393	**NDMA in beer**	**Solid-phase microextraction of N-nitrosodimethylamine in beer** ***Food Chemistry 107, #3, 1348-1352 (2008)*** **Perez, D. M.; Alatorre, G. G.; Alvarez, E. B.; Silva, E. E.; Alvarado, J. F. J**	**65µm PDMS/DVB headspace**	**GC-MS**
2219	**Aroma from Beers**	**High gravity fermentations for low calories beer production** ***Journal of Biotechnology (2005) 118 Suppl. 1, S152*** **Piddocke, Maya; Sorensen, Thomas; Pedersen, Sven; Olsson, Lisbeth**		**GC**
2558	**Flavors in beer**	**Method optimization by SPME in combination with GC-MS for analysis of beer volatile fraction** ***J. Chromatogr., A 1121, #2, 145-153 (2006-07-21)*** **Pinho, O.; Ferreira, M.; Santos, L.**	**75µm Carboxen headspace**	**GC-MS**
106	Flavors in beer	Characterization of Beer Samples Using SPME-GC Analysis Supelco Reporter Vol. 16, #4, pg. 7 Vas, G.	100µm PDMS 10 min	GC-FID
2716	**Sulfur compounds in beer**	**Comparison of headspace and direct single-drop microextraction and headspace SPME for the measurement of volatile sulfur compounds in beer and beverage by GC-FPD** ***J. Chromatogr. A. 1125, #1, 133-137 (2006-08-25)*** **Xiao, Q.; Yu, C. H.; Xing, J.; Hu, B.**	**headspace**	**GC-FPD**
607	Sulfur compounds in beer	Determination of sulfur compounds in beer using headspace SPME and GC analysis with pulsed FPD detector *J. Chromatogr. A. (2000), 872(1+2), 203-213* Hill, P., Smith, R.	65µm Carboxen/PDMS 32min @45°C headspace	GC-FPD
100	Flavors in vodka	Characterization of Commercial Vodkas by SPME-GC/MS J. Sci. Food Agric. 70: 380-388 (1996) Ng, L., Hupe, M., Harnois, J., Moccia, D.	100µm PDMS 1 hr	GC-MS
202	Methylcyclopendienyl manganese tricarbonyl in beverages	Determination of Methylcyclopendienyl Manganese Tricarbonyl in Beverages by SPME Food Addit. Contam. 14 (3): 301-307 (1997) Forsyth, D., Dusseault, L.		
2538	**Attractants of onion aphids**	**Onion aphid (Neotoxoptera formosana) attractants, in the headspace of Allium fistulosum and A-tuberosum leaves** ***J Applied Entomology 131, #1, 8-12 (FEB 2007)*** **Hori, M.**	**headspace**	**GC-MS**
395	Aroma volatiles in onion	Determination of Fresh Onion (Allium Cepa L) Volatiles by SPME Combined with GC/MS Z Lebedsm Unters Forsch A (1998) 207: 39-43 Jarvedpaa, E., Zhung, Z., Huopalahti, R., King, J.	100µm PDMS 1 min headspace	GC-MS
799	Aroma volatiles in onion	Possible advantage of various sample transfer techniques for fast GC-MS analysis of true onion volatiles *J. Chromatogr. A. (2000), 896(1+2), 117-124* Arnault, I.; Mondy, N.; Cadoux, F.; Auger, J.	100µm PDMS, 85µm polyacrylate 2min, headspace	GC-MS
954	Fatty acids, in whey products	Analysis of free fatty acids in whey products by SPME *J Agric Food Chem, 2001, 49, 3993-3998* Tomaino, R., Parker, J., Larick, D.	30µm PDMS 40 min @ 110°C	GC-FID

			headspace	
816	Fatty acids, lactones in cheese	Determination of free fatty acids and lactones in cheese by solid phase microextraction (SPME) *Aust. J. Dairy Technol.,(1998), 53(2), 140* Wijesundera, C., Drury, L., Walsh, T.		
2298	**Sesquiterpenes in cheese**	**Traceability of Asiago mountain cheese: A rapid, low-cost analytical procedure for its identification based on solid-phase microextraction** ***Journal of Dairy Science (2005) 88 #10, 3426-3434*** **Favaro, G.; Magno, F.; Boaretto, A.; Bailoni, L.; Mantovani, R.**	**PDMS headspace**	**GC/MS**
2256	**Flavors from cheese-based products**	**Application of SPME GC-MS and multivariate analysis for resolving flavor problems with cheese-based products** ***Abstracts of Papers Am Chem Society (2004) 228, #1, U74*** **Marsili, Ray T.**	**headspace**	**GC/MS**
2689	**Aroma from white surface mould cheeses**	**Application of SPME-GC method for analysis of the aroma of white surface mould cheeses** ***J Food Nutrition Research 46, #2, 84-90 (2007)*** **Vitova, E.; Loupancova, B.; Stoudkova, H.; Zemanova, J.**	**headspace**	**GC**
101	Flavors in cheese	SPME for Cheese Volatile Compound Analysis J. Food Sci. 61: 1118-1129 (1996) J. Food Sci. 61: 1118-1129 (1996)	100µm PDMS, polyacrylate 60°C, 20 min	GC, GC-MS
788	Volatilse in cheese	Solid-Phase Microextraction-Mass Spectrometry: A New Approach to the Rapid Characterization of Cheeses *Anal. Chem (2001) 73(5), 1030-1036* Peres, Christophe; Viallon, Christine; Berdague, Jean-Louis		GC-MS
826	Volatiles in Emmital cheese	Use of preconcentration techniques applied to a Mass Spectrometer based "Electronic Nose". *Analusis (2000) 28(8), 743-749* Bosset, J.; Escher, F.; Schaller, E.; Zenhausern, S.; Zesiger, T.		GC-MS
2294	**Aromas in cheese**	**Cooperation between wild lactococcal strains for cheese aroma formation** ***Food Chemistry 94 #2, 240-246 (2006)*** **Amarita, F.; de la Plaza, M.; Fernandez de Palencia, P.; Requena, T.; . Pelaez, C**	**headspace**	**GC/MS**
380	Aroma volatiles in cheese	Pattern Recognition of Swiss Cheese Aroma Compounds by SPME/GC and an Electronic Nose Milchwissenscaft (1998) 53 (5) 259-263 Jou, K., Harper, W.	85µm polyacrylate 40°C, 30 min headspace	GC-FID
449	Aroma volatiles in cheese	Cryo-trapping/SPME/GC analysis of cheese aroma Talanta (1999) 48(4), 747-753 Jaillais, B., Bertrand, V., Auger, J.	100µm PDMS 4 min @ 20°C headspace	GC-FID, EMS
187	Volatiles in whey protein	A Study of Volatile "Trapping" in Spray-Dried Whey Protein Concentrate by Crushing and/or Vacuuming and Detection by SPME/GC-MS Food Res. Int. 29: 495-504 (1996) Stevenson, R., Chen, X.		GC-MS
379	Volatiles in whey protein	Use of SPME of Volatile Compounds in Whey Protein Concentrates Milchwissenschaft (1998) 53 (4) 209-212 Yang, J., Li, W., Harper, W.	85µm polyacrylate 40°C, 30 min headspace, stirring	GC-MS
450	Volatiles in whey protein	Headspace sampling of whey protein concentrate solutions using SPME Food Res. Int. (1999), 31(5), 371-379 Le Quanch, M., Chen, X., Stevenson, R.	headspace	GC-MS
422	Flavors in protein	Isolation of Flavor Compounds from Protein Material ACS Symp. Ser. (1998), 705 (Flavor Analysis), 107-115 Mills, O., Broome, A.		
102	Flavors in	Qualitative and Quantitative Analysis of Flavor Additives on Tobacco Products Using SPME-GC-MS	Carbowax/DVB	GC-MS

	tobacco	J. Agric. Food Chem. 45: 844-849 (1997) Clark, J., Bunch, J.	95°C, 15 min headspace	
137	Phenols in tobacco smoke	Quantitative Determination of Phenols in Mainstream Smoke with SPME-GC Selected Ion Monitoring MS J. Chromatogr. Sci. 34: 272-275 (1996) Clark, J., Bunch, J.	Polyacrylate Buffer, 1 hr	GC-MS
608	Acetates in Cigarette tobacco	Quantitative analysis of acetates in cigarette tobacco using SPME and GC-MS *J. Chromatogr. Sci. (2000), 38(4), 137-144* Watxon, C., Ashley, D.	75µm Carboxen/PDMS 5min. Headspace	GC-MS
369	Carboxylic acid esters in tobacco	Derivatization of SPME GC-MS Determination of Organic Acids in Tobacco J. Chromatographic Science, Vol. 35, (1997) 209-212 Clark, J., Bunch, J.	85µm polyacrylate 15 min, stirring MeOH-HCl derivatives	GC-MS
2216	**Volatiles of tobacco flavor**	**Comparison of simultaneous distillation extraction and SPME for determination of volatile constituents in tobacco flavor** ***J Cent South Univ Technol Eng 12 #5, 546-551 (2005)*** **Guo, Fang-Qiu; Huang, Lan-Fang; Wei, Wan-Zhi; Zhong, Ke-Jun**	**headspace**	**GC-MS**
822	Alkenylbenzenes flavor compounds in tobacco	SPME of alkenylbenzenes and other flavor-related compounds from tobacco for analysis by selected ion monitoring GC-MS *J. Chromatogr.A, 858 (1999) 79-89* Stanfill, S., Ashley, D.	65µm Carbowax/DVB 2min @ 95°C	GC-MS
2200	**Pesticides in honey**	**SPME and GC w/ atomic emission detection for multiresidue determination of pesticides in honey** ***Anal. Chim. Acta(2006) 562. #1, 9-15*** **Aguinaga, N.; Campillo, N.; Hernandez-Cordoba, M.; Penalver, R.**		**Atomic emission**
931	Pesticide residues in honey	SPME applied to the analysis of pesticide residues in honey using GC with ECD J. Chromatogr. A (1998), 829(1-2), 269-277 Jiméniz, J., Bernal, J., del Nozal, G., Martin, M., Mayorga, A.	100µm PDMS, 60min @ 70°C immersed agitated	GC-ECD
431	Phenols in honey	Application of SPME in Determination of Phenol in Honey Riv. Sci. Aliment, (1997) 26(3/4), 97-102 Conte, L., Botolomeazzi, R., Moret, S., Sibaini, A., Marcazzan, G.		
2703	**Aroma volatiles from multifloral honey**	**Determination of volatile organic compound patterns characteristic of five unifloral honey by SPME-GC-MS coupled to chemometrics.** ***J. Agric. Food Chem. 54, #19, 7235-7241 (2006-09-20)*** **Baroni, M. V.; Nores, M. L.; Diaz, M. P.; Chiabrando, G. A.; Fassano, J. P.; Costa, C.; Wunderlin, D. A.**	**headspace**	**GC-MS**
2520	**Aroma volatiles from multifloral honey**	**Screening of volatile composition from Portuguese multifloral honeys using headspace SPME-GC-quadrupole mass spectrometry** ***Talanta 74, #1, 91-103 (NOV 15 2007)*** **Pontes, M.; Marques, J. C.; Camara, J. S.**	**50/30µm DVB/CAR 45 min @ 60°C headspace**	**GC-MS**
2380	**Aroma volatiles from citrus honey**	**Aroma investigation of unifloral Greek citrus honey using SPME-GC-MS** ***Food Chem. 100, #1, 396-404 (2007)*** **Alissandrakis, E.; Tarantilis, P. A.; Harizanis, P. C.; Polissiou, M**	**headspace**	**GC-MS**
2918	**Volatiles from unifloral honey**	**Headspace volatiles from unifloral honeys of Satureja montana L. and Salvia officinalis L.of Croatian origin isolated by SPME** ***Planta Medica 3, #9, 896 (AUG 2007)*** **Jerkovic; Marijanovic, Z.; Jelic, M.**		
2352	**Volatiles from sage honey**	**Volatile profile of Croatian lime tree (Tilia sp.), fir honeydew (Abies alba) and sage (Salvia officinalis) honey** ***Food Technology and Biotechnology 45 # 2, 156-165 (APR-JUN 2007)*** **Lusic, D.; Koprivnjak, O.; Curic, D.; Sabatini, A..; Conte, L..**	**headspace**	**GC-MS**

433	Volatile organics in honey	Identification of Volatile Organic Compounds Present in Different Honeys Through SPME and GC/MS Ind. Alimenti., (1998), 37(368), 351-356 Guidotti, M., Vitali, M.		GC-MS
109	Aroma volatiles in carbonated cola beverages	Comparison of Dynamic Headspace Concentration on Tenax with SPME for Analysis of Aroma Volatiles J. Agric. Food Chem. 45: 2638-2641 (1997) Elmore, S., Erbahdir, M., Mottram, D.	100µm PDMS, 85µm polyacrylate 60°C, 30 min headspace	GC-MS
2433	**Aroma volatiles in brewed coffee**	**Discrimination between defective and non-defective Brazilian coffee beans by their volatile profile** ***FOOD CHEM. 106, #2, 787-796 (15 JAN 2008)*** **Mancha, Agresti P. D. C.; Franca, A. S.; Oliveira, L. S.; Augusti, R.**	**50/30µm DVB/CAR headspace**	**GC-MS**
349	Aroma volatiles in brewed coffee	SPME Applications in Gas Chromatography Olfactometry Dilution Analysis J. Agric. Food Chem. 1999, 47, 1616-1618 Deibler, K., Acree, T., Lavin, E.	100µm, 30µm, 7µm PDMS 1-90 min headspace, stirring	GC-FID
119	Aroma in food products	Solid Phase Microextraction: A Valuable Problem Solver Food Product Design December 1996, pp 73-77 Marsili, R.	various fibers & extraction conditions	
128	Flavor volatiles in fruit juice	Analysis of Flavor Volatiles Using Headspace SPME J. Agric. Food Chem. 44: 2187 (1997) Steffen, A., Pawliszyn, J.	85µm polyacrylate 60 min, salt added headspace, stirring	GC-FID
609	Aroma compounds in Brazilian fruit	Screening of Brazilian fruit aromas using SPME-GC-MS *J. Chromatogr. A.,873(1), 117-127* Augusto, F., Valenta, A., dosSantos, T., Rivellino, S.	various fibers headspace	GC-MS
425	Volatiles in fruit	Analysis of Volatile Fruit Components by Headspace Solid Phase Microextraction Food Chem. (1998), 63(2), 281-286 Ibanez, E., Lopez-Sebastian, S., Ramos, E., Tabera, J., Reglero, G.	100µm PDMS 30 min @ 30°C headspace	GC-MS
872	Phenolics in fruits	Sample preparation in the determination of phenolic compounds in fruits *Analyst (Cambridge, U. K.) (2000) 125(5) 989-1009* Antolovich, M.; Prenzler, P.; Robards, K.; Ryan, D.	review article	
130	Flavor volatiles in fruit beverage	Flavor Volatiles in Fruit Beverage with Automated SPME Food Test. Anal, 2(3), pp16-18 (1996) Penton, Z.	100µm PDMS, 85µm polyacrylate 20 min, headspace	GC-FID
424	Oxidative byproducts in citrus hystrix oil	Changes in Citrus Hystrix Oil During Autoxidation Dev. Food Sci. (1998), 40 (Food Flavors: Formation, Analysis and Packaging Influences), 707-718 Pudil, F., Wijaya, H., Janda, V., Volfova, J., Valentova, H., Porkorny, J.		
893	Monoterpenes in orange juice	Degradation of monoterpenes in orange juice by gamma radiation *J. Ag Food Chem. (2001) 49(5) 2422-2426* Fan, Xuetong; Gates, Robert A	100µm PDMS 60°C, 20 min headspace, stirring	GC-MSD
2632	**Aroma compounds orange juice**	**Effect of pulp reduction and pasteurization on the release of aroma compounds in industrial orange juice.** ***J Food Sci 72, #8, S535-43 (2007 Oct)*** **Berlinet, C; Guichard, E; Fournier, N; Ducruet, V**	**headspace**	**GC-MS**
2472	**Flavor compounds orange beverage emulsion**	**SPME for headspace analysis of key volatile compounds in orange beverage emulsion.** ***Food Chemistry 105, #4, 1659-1670 (2007)*** ***Mirhosseini, H.; Salmah, Y.; Nazimah, S. A. H.; Tan, C. P.***	**75µm Carboxen Headspace 15 min @ 45°C**	GC

			15% NaCl	
358	Flavor compounds in orange juice	Optimization of SPME Analysis for Headspace Flavor Compounds of Orange Juice J. Agric. Food Chem. 1998, 46, 2744-2747 Jia, M., Zhang, H., Min, D.	100µm PDMS 60°C, 20 min headspace, stirring	GC-FID
451	Flavor compounds in orange juice	Pulsed electric field processing effects on flavor compounds and microorganism of orange juice Food Chem (1999), 65(4), 445-451 Jia, M., Zhang, Q, Min, D.		
561	Flavor compounds in orange juice	Volatiles from Unpasteurized and Excessively heated orange juice with SPME and GC Olfactometry J. Food Science, Vol.64, N0.5, 1999, 800-803 Bazemore, R., Goodner, K. Rouseff, R.	75µm Carboxen/PDMS 30 min Headspace 40°C	GC-MS
359	Flavors in fruit juices	Comparison of Gas-Sampled and SPME-Sampled Static Headspace for the Determination of Volatile Flavor Compounds Anal. Chem. Vol. 71, No. 1, January 1, 1999, pg 23-27 Miller, M., Stuart, J.	65µm PDMS/DVB 40°C, 30 min headspace	GC-MS
131	Flavor volatiles in apples	Solid Phase Microextraction for Quantitative Headspace Sampling of Apple Volatiles Anal. Chem. 68: 4114 (1996) Matich, A., Rowan, D., Banks, N.	100µm PDMS 30 min headspace	GC-MS
203	Flavor volatiles In apples	Rapid Analysis of Volatile Flavor Compounds in Apple Fruit Using SPME & GC-Time-of-Flight Mass Spec J. Agric. Food Chem. 45: 1801-1807 (1997) Song, J., Gardner, B., Holand, J., Beaudry, R.	100µm PDMS 2-8 min headspace	GC-FID
433	Volatiles in red delicious apples	Volatile Production and Fruit Quality During Development of Superficial Scald in Red Delicious Apples Food Res. Int. (1997), 30(2), 95-103 Paliyath, G., Whiting, M., Stasiak, M., Murr, D., Clegg, G.		
899	Aroma compounds in strawberries	Influence of packaging on the aroma stability of strawberry syrup during shelf life *J. Agric. Food Chem. 49(5): 2290-2297 (2001)* Ducruet, V Feigenbaum, A; Fournier, N; Guichard, E; Saillard, P.	100µm PDMS 60 min @ 50°C headspace agitated	GC-FID
383	Flavor volatiles in tomato, strawberry	Application of SPME and GC/Time-o-Flight Mass Spectrometry for Rapid Analysis of Flavor Volatiles in Tomato and Strawberry Fruits J. Agric. Food Chem. 46: 3721-3726 (1998) Song, J., Fan, L., Beaudry, R.	65µm PDMS/DVB 23°C, 12 min headspace	GC-MS
452	Flavor volatiles ir tomato, strawberry, raspberries, apples	A new concept for the measurement of total volatile compounds of food Z. Lebenam. Unters, Forsch A, 1999, 208(4), 254-258 Azodanlou, R., Darbellay, c., Luisier, J., Villettaz,J., Amode, R.		
2797	**Fungicides in tomatoes**	**Pesticide analysis in tomatoes by solid-phase microextraction and micellar electrokinetic chromatography** ***J. Chromatogr., A 1185, #1, 151-154 (MAR 21 2008)*** **Ravelo-Perez, L.; Hernandez-Borges, J.r; Borges-Miquel, T.; Angel Rodriguez-Delgado, Miguel**	**65µm PDMS/DVB immersed**	
2839	**Aroma volatiles from tomato**	**Study of the volatile composition of tomato during storage by a combination sampling method coupled with GC-MS** ***J Science of Food and Agriculture 88, #1, 116-124 (Jan 2008)*** **Zhang, Zhuo-Min; Zeng, Dan-Dan; Li, Gong-Ke**	**headspace**	**GC-MS**
2684	**Aroma volatiles from tomato**	**Aroma volatiles of tomatoes and tomato products evaluated by SPME** ***Flavour and Fragrance J. 22, #5, 395-400 (2007)*** **Markovic, K.; Vahcic, N.; Kovacevic Ganic, K.; Banovic, M.**	**headspace**	**GC-MS** **GC-FID**
2478	**Aroma volatiles from tomato**	**A preliminary study of plant aroma profile characteristics by a combination sampling method coupled with GC-MS** ***Microchemical Journal 86, #1, 29-36 (JUN 2007*** **Zhang, Zhuo-Min; Li, Gong-Ke**	**headspace**	**GC-MS**

2357	**Allelochemical compounds in tomato plants**	**SPME method for in vivo measurement of allelochemical uptake** ***J Chem Ecol 34, #1, 1-6, 70-75 (Jan-2008)*** **Loi, Rebecca X; Solar, Marissa C; Weidenhamer, Jeffrey D**		GC
2820	**Volatiles from aromatic plant**	**Aroma-active compounds of Elsholtzia splendens using AEDA and HS-SPME-GC-O dilution analysis** ***Flavour and Fragrance J. 23, #1, 58-64 (JAN-FEB 2008)*** **Choi, Hyang S.; Min, Kyung C.**	**headspace**	**GC-MS**
387	Flavor volatiles in tomato	Comparison of Three Sample Preparation Techniques for the Determination of Fresh Tomato Aroma Volatiles Book: Flavor Science: Recent Developments, Buttery & Shadhidi, Washington, DC, 1998 p. 289-292 Krumbein, A., Ulrich, D.	100µm PDMS 30°C, 10 min headspace salt added	GC-MS
766	Volatiles in tomato	Volatile emissions of tomato Mededelingen Faculteit Landbouwkundige en Toegepaste *Biologische Wetenschappen Universiteit Gent* (1999) 64(4), 159-161 Maes, K; Debergh, P; Sandra, P; Vercammen, J	headspace	
933	Volatiles in tomato	Critical aspects for the reliable headspace analysis of plants cultivated in vitro *Phytochemical Analysis (2001) 12(3), 153-158* Maes, K; Debergh, P; Sandra, P; Vercammen, J Pham-Tuan, Hai	headspace	
400	Flavor volatiles in tomato juice	Effect of Thermal Treatment in the Headspace Volatile Compounds of Tomato Juice Istituto di Indstrie Agrarie, University of Perugi, via S. Costnazo I-06126, Pergia-Italy Servili, M., Selvaggini, R., Begliomini, A., Montedoro, G.	65µm Carbowax/DVB 35°C, 30 min CaCl added	GC-MS
780	Flavor volatiles in tomato juice	Relationships between the volatile compounds evaluated by SPME and the thermal treatment of tomato juice: optimization of the blanching parameters *Food Chemistry (2000) 71(3), 407-415* Servili, M.; Selvaggini, R.; Taticchi, A.; Begliomini, A. L.; Montedoro, G.	65µm Carbowax/DVB 29°C, 15 min	GC-EIMS
214	Strawberries & apples in fruit homogenate	Solid-Phase Microextraction: Artifact Formation and Its Avoidance Chromatographia 46: 63-66 (1997) Verhoeven, H., Beuerle, T., Schwab, W.	85µm polyacrylate 30 sec immersion	GC-MS
132	Aroma volatiles in strawberry	Analysis of Strawberry Aroma by SPME Dtsch. Lebesm - Rundsch. 91: 349 (1995) Ulrich, D., Eunert, S., Hober, E., Rapp, E.		
590	Aroma volatiles in strawberries	A new concept for the measurement of total volatile compounds of food. Z-Lebensm-Unters-Forsch-A. Apr 1999; 208(4): 254-258 Azodanlou-R; Darbellay,C; Luisier,JL; Villettaz,JC; Amado,R	PDMS, CW/DVB, PDMS/DVB polyacrylate 30 min @ 25°C headspace	GC-FID
2496	**Aroma volatiles from dried banana powder**	**Comparison of volatiles of banana powder dehydrated by vacuum belt drying, freeze-drying and air-drying** ***Food Chemistry 104, #4, 1516-1521 (2007)*** **Wang, J.; Li, Yuan Zhi; Chen, Ren Ren; Bao, Jin Yong; Yang, Gong**	**headspace**	**GC-MS**
133	Aroma volatiles in banana	Evaluation of the Solid Phase Microextraction of Aroma Compounds in Banana Collog.-Inst. Nat. Rech. Agron. 75 (Bioflavour 95) 117 (1995) Picque, D., Normand, A., Corrieu, G.		
750	Flavor volatiles in cantaloupe	Identification of volatile coumpounds in cantaloupe at various developmental stages using SPME *J Agric Food Chem 2001, 49(3), 1345-1352*	100µm PDMS 12.5 min headspace	GC-MS

		Beaulieu, J., Grimm, C.	sat. salt, agitated	
150	Pyrazines	SPME of Pyrazines in Model Reaction Systems J. Sci. Food Agric. 72: 91 (1996) Ibanez, E., Bernhard, R.		
2895	**Pyrazines**	**Formation of pyrazines and a novel pyrrole in Maillard model systems of 1,3-dihydroxyacetone and 2-oxopropanal** ***J Agric Food Chem 56, #6, 2147-2153 (MAR 26 2008)*** **Adams, An; Polizzi, Viviana; van Boekel, Martinus; De Kimpe, N.**	**headspace**	**GC-MS**
934	Pyrazines	Solid-phase microextraction with aqueous immersion for analysis of Maillard-generated pyrazines in model reaction system *Diss. Abstr. Int., B 2000, 61(5), 2287* Cai, Yanxuan		
356	Menthol (natural)	SPME-GC-Mass Selective Detection Analysis of Selected Sources of Menthol J. Chromatogr. Sci. (1998), 36(8) 401-405 Coleman, W., Lawson, S.	65µm Carboxen/PDMS 50°C, 20 sec headspace	GC-MS
453	Menthol, menthone food/pharmaceutical	Determination of menthol and menthone in food and pharmaceutical products by SPME-GC J. Chromatogr., A 1999, 847 (1+2), 161-169 Ligor, M., Buszewski, B.	ethoxy dimethylsiloxane 15 min @ 30°C immersed	GC-FID
610	Aroma in perfume	Measurement of gas-liquid partition coefficient and headspace concentration profiles of perfume materials by SPME and capillary GC-MS *J. Chromatogr. Sci. (2000), 38(9), 377-382* Liu, Z. Wene, M.	7µm PDMS 10 min headspace	GC-MS
611	Flavor compounds in oatmeal	Contribution of volatiles to the flavor of oatmeal *J. Sci Food Agric.1/15/2000, 80(2);, 247-254* Zhou, M, Robards, K., Helliwell, S., Glennie-Hommes, M.	100µm PDMS water solution @ 100°C headspace	GC-MS
894	Flavor compounds in oats	Changes in the volatile profile of oats induced by processing *J. Agric. Food Chem. 49 (5): 2125-2130 (2001)* Robards, Kevin; An, Min; Helliwell, Stuart; Sides, Alasdair	100µm PDMS 30SEC @ 25°c headspace	GC-MS
309	Flavors in food products	SPME for the Analysis of Flavors Techniques for Analyzing Food Aroma, pp81-112, Food Sci. Technol., New York (1997) Harmon, A.	various fibers & conditions	
388	Volatiles in consumer products	Analysis of Volatile Fragrance and Flavor Compounds by Headspace SPME Combined with Gas Chromatography/ Mass Spectrometry J. Chem. Educ. 1999, 76(2), 245-248 Galipo, R., Canhoto, A., Walla, M., Morgan, S.	100µm PDMS 30 min headspace	GC-MS
760	Flavor volatiles in beverages	Solid Phase Microextraction for the enantiometric analysis of Flavors in Beverages *J. AOAC Intl, Vol. 84, No. 2, 2001, 479-485* Ebeler, S., Sun, G., Datta, M., Stremple, P., Vicker, A.	85µm Polyacrylate 60 min., headspace salt added	GC-MS
2771	**Rose oxide in white wine**	**Stereoselective formation of the varietal aroma compound rose oxide during alcoholic fermentation** ***J. AOAC Intl, Vol.56, No. 4, 1371-1375 (FEB 27 2008)*** **Koslitz, Stephan; Renaud, Lauren; Kohler, Marcel; Wuest, Matthias**	**headspace**	**GC/MS**
2233	**Carbonyls in wine**	**Monitoring of the principal carbonyl compounds involved in malolactic fermentation of wine by SPME and positive ion chemical ionization GC/MS analysis** ***J. Mass Spectrom. 40 #12, 1558-1564 (2005)*** **Dalla Vedova, A.; Flamini, R.; Ongarato, S.; Panighel, A.Perchiazzi,N.;**	**65um DVB (PFBOA) derivatives 5min @ 50C**	**GC/MS**

2904	**Carbonyls**	**Analysis of carbonyl compounds via headspace SPME with on-fiber derivatization and GC-ion trap tandem MS determination**		**GC-ITMS**
	biological samples and foodstuffs,	**of their O-(2,3,4,5,6-pentafluorobenzyl)oxime derivatives** ***Anal. Chim. Acta 617, #1-2, 119-131 (Jun 9 2008)*** **Bokuz, U.; Fischer, Ulrich; Ganss, S.; Kopp, B.; Potouridis, T.;**	**PFBHA derivatives**	
891	Volatile carbonyls in alcohols	Comparison of extraction techniques for GC determination of volatile carbonyl compounds in alcohols. *Fresenius' J.Anal Chem. (2001) 369(7-8) 661-665* Wardencki, W; Namiesnik, J; Orlita, J.	PFBHA derivatives	GC-ECD
903	Carbonyls in water	Determination of carbonyl compounds in water by derivatization SPME and GC analysis J. Chromatography A 1998, 809, 1-2, 75-87 Bao,M., Pantani,F.,Griffini,O.,Burrini,D.,Santianni, D., Barbieri, K.		GC
2817	**Organic content in alcoholic beverage**	**Development of a dynamic headspace SPME procedure coupled to GC-qMSD for evaluation the chemical profile in alcoholic beverages** ***Analytica Chimica Acta 609, #1, 82-104 (FEB 18 2008)*** **Rodrigues, F.; Caldeira, M.; Camara, J. S.**	**various fibers headspace**	**GC-qMSD**
454	Organic content in alcoholic beverage	Research on alcoholic beverages at Alko's control Lab Kem.-Kemi, 1999, 26(2), 95-97 Lehtonen, P.	Finnish	GC-MS
455	Alcohols, esters, free fatty acids in Sake	Analysis of free fatty acids, higher alcohols and esters in sake by headspace-SPME Nippon Jozo Kyokaishi (1999), 94(3), 252-257 Utsunomiya, H.	Japanese	
2867	**Oxazole fungicide in malt beverages**	**Solid-phase microextraction for the GC-MS determination of oxazole fungicides in malt beverages** ***Anal. Bioanal. Chem. 391, #3, 1425-1431 (2008)*** **Aguinaga, N.; Campillo, N.; Hernandez-Cordoba, M.; Martinez-Castillo, N.;Vinas, Pilar**	**100µm PDMS** **70µm CW-DVB** **immersion** **60°C, 30 min**	**GC-MS(SIM)**
312	Flavor volatiles in malt beverages	Headspace Gas Chromatography Profiles of Fruit-Flavored Malt Beverages, Using SPME J. Am. Soc. Brew. Chem. 55 (3): 112-118 (1997) Constant, M., Collier, J.	100µm PDMS 45°C, 45-60 min headspace	GD-FID
2906	**Flavor volatiles in beer wort**	**Optimisation of a complete method for the analysis of volatiles involved in the flavour stability of beer by SPME-GC-MS** ***J. CHROMATOGR. A 1190, #1-2, 342-349 (May 9 2008)*** **De Schutter, D.; Delvaux, F.; Delvaux, F.; Saison, D.**	**headspace** **PFBHA derivative**	**GC-MS**
2422	**Flavor volatiles in beer wort**	**Optimisation of wort volatile analysis by headspace SPME in combination with gas chromatography and mass spectrometry** ***J. CHROMATOGR. A 1179, #2, 75-80 (01 FEB 2008)*** **De, Schutter D. P.; Saison, D.; Delvaux, F.; Derdelinckx, G.; Rock, J.; . Neven, H.; Delvaux, F.**	**headspace**	**GC-MS**
313	Alcohols, esters in beer	Solid Phase Microextraction for the Analysis of Some Alcohols and Esters in Beer: Comparison with Static Headspace Method J. Agric. Food Chem. 46 (4): 1469-1473 (1998) Wasowicz, E., Kaminski, E., Jelen, H., Wlazly, K.	85µm polyacrylate 50°C, 30 min headspace salt added	GC-FID
2818	**Dimethyl sulfide in water**	**Laboratory inter-comparison of dissolved dimethyl sulphide (DMS) measurements using purge-and-trap and SPME techniques during a mesocosm experiment** ***Marine Chemistry 108, #1-2, 32-39 (JAN 1 2008)*** **Vogt, M.; Turner, S.; Yassaa, N.; Steinke, M.; Williams, J.; Liss, P.**	**headspace**	**GC-MS**
		Headspace SPME for the analysis of dimethyl		

456	Dimethyl sulfide in beer	sulfide from beer J. Agric. Food Chem. 1999, 47(7), 2505-2508 Scarlata, C. Ebeler, S.	65µm Carboxen/PDMS 15 min @ 30°C headspace 1.5gm NaCl	GC-FPD
612	Volatiles in whiskies	Characterization of whiskIes using SPME with GC-MS *J.Chromatogr. A (2000) 896, 351-359* Fitzgerald, G., James, K., MacNamara, K., Stack, M.	85µm polyacrylate 35 min headspace	GC-MS
2368	**Volatiles in palm sap**	**Changes in volatile compounds of palm sap (Arenga pinnata) during the heating process for production of palm sugar** ***Food Chemistry 102, # 4, 1156-1162 (2007)*** **Ho, C. W.; Aida, W. M. Wan; Maskat, M. Y.; Osman, H.**	**headspace**	**GC-MS**
953	Volatiles in sugar cane spirits	A headspace SPME method for the determination of some secondary compounds of Brazilian sugar cane spirits by GC J Agric Food Chem, 2001, 49, 3533-3539 Nonato, E., Carazza, F., Silva, C. Carvalho, C., Cardeal, Z	85µm polyacrylate 25 min @ 60°C headspace 2.5g NaCl	GC-FID
2765	**Fatty acid ethyl esters in spirits**	**Determination of volatile fatty acid ethyl esters in raw spirits using SPME and GC** ***Anal. Chim. Acta 613, #1, 64-73 (Apri 14 2008)*** **Plutowska, Beata; Wardencki, Waldemar**	**headspace**	**GC-FID**
2732	**Aroma volatiles in rum**	**Characterization of rum using solid-phase microextraction with GC-MS** ***Food Chemistry 104, # 1, 421-428 (2007)*** **Pino, J. A**	**100µm PDMS 35 min @ 35°C headspace**	**GC-MS**
2502	**Aroma volatiles in whiskeys**	**Comparison of two extraction methods for evaluation of volatile constituents patterns in commercial whiskeys. Elucidation of the main odour-active compounds** ***Talanta 74, #1, 78-90 (Nov 15 2007)*** **Caldeira, M.; Camara, J.S.; Marques, J.C.; Perestrelo, R.; Rodrigues, F.**	**75µm Carboxen headspace**	**GC-MS**
2621	**Aroma volatiles in pear products**	**Aroma of dehydrated pear products** ***LWT - Food Sci. Technol. 40, #9, 1578-1586 (November 2007)*** **Komes, Drazenka; Kovacevic Ganic, Karin; Lovric, Tomislav**	**headspace**	**GC-MS**
595	Aroma volatiles in Brandy	Changes in odor of Bartlett pear brandy influenced by sunlight irradiation. *Chemosphere. Mar 1999; 38(6): 1299-1303* Kralj-Cigic,-I; Zupancic-Kralj,-L	100µm PDMS 15 min @ 40°C	GC-EIMS
613	Aroma compounds in brandy	Analysis of brandy aroma by SPME and liquid-liquid extraction *J. Sci. Food Agric. Apr 2000, 80(5), 625-630* Ebeler, S., Terrien, M., Butzka, C.	100µm PDMS 30 min @ 50°C Headspace	GC-FID
2830	**Resveratrol isomers in wine, musts, fruit juices**	**A comparison of SPME and stir bar sorptive extraction coupled to HPLC for the rapid analysis of resveratrol isomers in wines, musts and fruit juices** ***Anal. Chim. Acta 611, #1, 119-125 (Mar 17 2008)*** **Campillo, N.; Hernandez-Cordoba, M.; Hernandez-Perez, M.; Vinas, P.**	**50 µm CW/TPR immersion 30 min @ 40°C**	**LC-Fluorimetric**
2780	**Aroma volatiles in wine**	**Differentiation of "claret", Rose, Red and Blend wines based on the content of volatile compounds by headspace SPME-GC** ***Eur. Food Res. Technol. 226, #6, 1317-1323 (April 2008)*** **Cabredo-Pinillos, S.; Cedron-Fernandez, T.; Saenz-Barrio, C.**	**65µm CW/DVB Headspace**	**GC-FID**
2410	**Off-flavors in wine**	**Rapid headspace SPME-GC-MS assay for the quantitative determination of some of the main odorants causing off-flavours in wine** ***J. Chromatogr., A 1141,#1, 1-9 (2007-02-02)*** **Boutou, S.; Chatonnet, P.**	headspace	GC-MS
2514	**Aroma volatiles in wine**	**Analysis of aromatic components in kiwifruit wine by GC-MS with SPME** ***J Northwest A & F University - Natural Science Ed. 35, #6, 89-93 (2007)*** **Guo Jing; Yue TianLi; Yuan YaHong; Gao ZhengPeng**	**headspace**	**GC-MS**
827	Aroma volatiles in wine	Optimization of headspace SPME for analysis of wine aroma compounds *Am Journal Enology and Viticul (2000) 51(4), 379-382* Zoecklein, B. W.; Whiton, R. S	headspace	
2859	**Aroma volatiles in wine**	**Use of an array of metal oxide sensors coupled with SPME for characterisation of wines. Study of the role of the carrier gas** ***Sens Actuators, B Chem 132, #1, 125-133 (May 28 2008)***	**headspace**	**GC-MS**

		de Saja, J.; Guadarrama, A.; Rodriguez-Mendez, M.; Villanueva, S.		
901	Aroma volatiles in wine	Discrimination of wine aroma using an array of conducting polymer sensors in conjunction with SPME technique *Sens Actuators, B Chem (2001) 77(1-2), 401-408* De Saja, J.A.; Fernandez, J.A.; Guadarrama, A.; Iniguez, M.; Souto, J		
896	Aroma volatiles in wine	Effect of cultural practices and environmental factors on fruit and wine quality *Agriculturae Conspectus Scientificus 2001 66(1) 13-20* Bravdo, Ben Ami		GC-MS
135	Aroma volatiles in wine	Systematic Optimization of the Analysis of Wine Bouquet Components by SPME *J. High Res. Chromatogr. 19: 257-262(1996)* Garcia, D., Magnaghi, S., Danzer, K.	85µm polyacrylate 15 min immersion, stirring pH 4, salt added	GC-FID
		Rapid headspace SPME-GC-TOF/MS method for qualitative profiling of		
2340	**Aroma volatiles in ice wine**	**ice wine volatile fraction I. Method development and optimization.** ***J Chromatogr A 1147 # 2, 213-223 (2007)*** **Setkova, Lucie; Risticevic, Sanja; Pawliszyn, Janusz**	**50/30µm DVB/CAR** **5 min @ 45 C** **headspace** **3 mL, 1gm salt added**	**GC-TOF/MS**
2356	**Aroma volatiles in ice wine**	**Rapid headspace SPME-GC-TOF/MS method for qualitative profiling of ice wine volatile fraction. II: Classification of Canadian and Czech ice wines using statistical evaluation of the data** ***J Chromatogr A 1147 # 2, 224-240 (2007)*** **Setkova, Lucie; Risticevic, Sanja; Pawliszyn, Janusz**	**50/30µm DVB/CAR** **5 min @ 45 C** **headspace**	**GC-TOF/MS**
		Rapid headspace SPME-GC-TOF/MS method for qualitative		
2411	**Aroma volatiles in ice wine**	**profiling of ice wine volatile fraction. III: Relative characterization of Canadian and Czech ice wines using self-organizing maps.** ***J Chromatogr A 1147 # 2, 241-253 (2007)*** **Setkova, Lucie; Risticevic, Sanja; Pawliszyn, Janusz**		
2564	**Organotin compounds**	**Optimization of the SPME procedure for the ultra-trace determination of organotin compounds by GC-inductively coupled plasma-MS** ***J. Anal. At. Spectrom. 21, #9, 970-973 (2006-08-25)*** **Bianchi, F.; Careri, M.; Maffini, M.; Mangia, A.; Mucchino, C.**	**Car/DVB 30/50µm** **2 cm length**	**GC-ICP-MS**
2421	**Organotin in brandies and wines**	**Organotin speciation in French brandies and wines by SPME-GC-Pulsed flame photometric detection** ***J. CHROMATOGR. A 1180, #1-2, 122-130 (08 FEB 2008)*** **Heroult, J.; Bueno, M.; Potin-Gautier, M.; Lespes, G.**	**100µm PDMS** **30 min** **headspace** **ethylated derivative**	**GC-FPD**
798	trans-ResverAtrol in wine	Gas-phase post-derivatization following SPME for rapid determination of trans -resveratrol in wine by GC-MS *Analytica Chimica Acta (2000) 424(1), 19-25* Luan, T. G.; Li, G. K.; Zhang, Z. X.	22°C headspace silyl derivative	GC-MS
201	Procymidone residue in wine	Comparison of Two Recent Solventless Methods for the Determination of Procymidone Residues in Wines: Solid-Phase Microextraction-GC-MS and ELISA Tests J. Agric. Food Chem. 45: 1519-1522 (1997) Urruty, L., Montury, M., Braci, M., Fournier, J., Dournel, J.	100µm PDMS 30 min immersion stirring	GC-MS
2242	**Favor compounds in plum wine**	**Reveal the diversity of commercial spontaneously-fermented plum wines in their components by using single strain yeast-fermented plum wine** ***Taiwanese J Agr Chem Food Sci. 43 #3, 162-170 (2005)*** **Lin, Shih-Bin; Wu, Yo-Ping; Shen, Fang-Ling**		**HPLC**
936	Aroma volatiles in wine	Qualitative and quantitative analyses of volatile organic compounds in wines using SPME-GC *Chem. Anal. (Warsaw, Pol.) (2001) 46(2) 215-224* Buszewski, B; Ligor, M.		

314	Aroma volatiles in wine	Investigation of Wine Bouquet Components by SPME-Capillary GC, Using Different Fibers J. High Resolut. Chromatogr. 20 (12): 665-668 (1997) De La Calle Garcia, D., Feller, K., Reichbacher, M., Danzer, K., Hurlbeck, C., Bartzech, C.	85µm polyacrylate 30 min immersion stirring	GC-FID
428	Aroma volatiles in wine	Analysis of Wine Bouquet Components Using Headspace SPME-Capillary Gas Chromatography *J. High Resolut. Chromatogr. (1998), 21(7), 373-377* De La Calle Garcia, D., Feller, K., Reichbacher, M., Danzer, K., Hurlbeck, C., Bartzech, C.	85µm polyacrylate 60 min headspace stirring	GC-MS
824	Aroma volatiles in wine	Classification of wine samples according to origin and grape varieties on the basis of inorganic and organic trace analysis *American Lab, Oct. 1999, Vol. 31(20) 26-33* Danzier, K., De La Calle Garcia, D., Thiel, G., Reichbacher, M.,	85µm polyacrylate 60 min headspace stirring salt added	GC-MS
2145	**2,4,6-Trichloro-anisole,2,4,6-tribromoanisole in wine**	**Determination of 2,4,6-trichloroanisole & 2,4,6-tribromoanisole on ng /L to pg/L levels in wine by SPME-GC-MS** ***J. Chromatogr. A, 1111, #1, 71-75 (2006)*** **Gustafsson, I.-B.; Jonsson, S.; Lindstrom, G.; Uusitalo, T.; Van Bavel, B.**	**headspace**	**GC-HRMS**
94	Trichloroanisole in wine	Analysis of Cork Taint in Wine and Cork Material at Olfactory Sub-Threshold Levels by SPME J. Agric. Food Chem. 45: 1995-1997 (1997) Fisher, C., Fischer, U.	100µm PDMS 20°C, 30 min salt added	SIM-GC-MS
385	Trichloroanisole in wine	Detection of Cork Taint in Wine Using Automated SPME in Combination with GC-MS-SIM Book chapter 15: ACS Symposium Series 1999, Oxford University Press, "Flavor Analysis Development in Isolation and Characterization" Butzke, C., Evans, T., Ebeler, S.	100µm PDMS, 85µm polyacrylate 45°C, 25 min headspace	GC-MS-SIM
2821	**Aroma volatiles in model wine**	**Protection of some aroma volatiles in a model wine medium by sulphur dioxide and mixtures of glutathione with caffeic acid or gallic acid** **Flavour and Fragrance Journal 23, #1, 35-39 (JAN-FEB 2008)** **Roussis, Ioannis G.; Sergianitis, Spyros**		**GC-MS**
2384	**Sulfur volatiles in wine**	**Concurrent quantification of light and heavy sulphur volatiles in wine by headspace SPME-GC-MS** ***Rapid Commun. Mass Spectrom. 21,#5, 707-714 (2007-03-15)*** **Fedrizzi, B.; Magno, F.; Moser, S.; Nicolini, G.; Versini, G.**	**CAR/DVB 30/50µm 2 cm length headspace**	**GC-MS**
377	Sulfides, disulfides in wine	Headspace SPME Analysis of Volatile Sulfides and Disulfides in Wine Aroma J. Chromatogr. A 808 (1998) 211-218 Mestres, M., Busto, O., Guasch, J.	100µm PDMS, 85µm polyacrylate 30°C, 15 min, salt headspace	GC-FPD
406	Sulfides, disulfides in wine	Headspace SPME of Sulfides and Disulfides Using Carboxen/PDMS Fibers in the Analysis of Wine Aroma J. Chromatogr. A, 835 (1999) 137-144 Mestres, M., Sala, C., Marit, M., Busto, O., Guasch, J.	75µm Carboxen/PDMS 25°C, 30 min headspace stirring, salt added	GC-FPD
614	Benzothiazoles in wine	Analysis of benzothiazole in Italian wines using SPME-GC-MS *J. Agric. Food Chem. (2000), 48(4), 1239-1242* Bellavia, V., Natangelo, M., Fanelli, R., Rotilio, D.	65µm Carbowax/DVB 15min @ 50°C headspace	GC-MS
363	Aroma volatiles in wine	Similarities in the Aroma Chemistry of Gewurztraminer Variety of Wines and Lychee (Litchi chinesis Sonn.) Fruit J. Agri. Food Chem. 1999, 47, 665-670 Ong, P., Acrees, T.	100µm PDMS 15 min headspace	GC-MS
427	Volatiles	Fast Screening Method for Wine Headspace Compounds Using SPME and Capillary GC Technique	headspace	

	in wine	Am. J. Enol. Vitic. (1998), 49(1), 100-104 Vas, G., Koteleky, K., Farkas, M., Ddobo, A., Vekey, K.		
397	Aroma volatiles in wine	Determination of Volatile Aroma Compounds of Blaufrankisch Wines Extracted by SPME J. Chromatographic Sci., Vol. 36, Oct. 1998, 505-510 Vas, G., Gal, L., Harangi, J., Dobo, A., Vekey, K.	100µm PDMS 10 min (headspace) 1 hr (immersion)	GC-MS
457	Flavor volatiles in wine	Classification of wine samples according to origin and grape varieties on the basis of inorganic and organic trace analysis Am. Laboratory, Oct. 1999, Vol. 31, No. 20, 26-34 Danzier, K, DeLaCalle Garcia, D, Thiel, G., Reichenbacher, M	85µm polyacrylate 60-90 min headspace Satr.salt	GC-FID
458	Aroma volatiles in wine	Examination of aroma production kinetics of different commercial wine yeast in fermenting muscat ottonel wines with the help of SPME headspace sampling and fast GC analysis Acta Aliment, (1999), 28(2), 133-140 Vaes, W., Blechschmidt, I., Kovacs, T., Vekey, K.	100µm PDMS 10 min headspace	GC-FID
582	Aroma volatiles in wine	Improvement of the chemometric variety characterization of wines by improving the detection limit for aroma compound J-High-Resolut-Chromatogr. Jun 1999; 22(6): 322-326 Weber,-J; Beeg,-M; Bartzsch,-C; Feller,-K-H; De-la-Calle-Garcia,-D; Reichenbaecher,-M; Danzer,-M	85µm polyacrylate 3 hr. , headspace NaCl added	GC-EMIS
459	Aroma volatiles in wine	Determination of volatiles from red wines made by carbonic maceration using SPME technique Acta Aliment, 1999, 28(1), 95-101 Vas, G., Loerincz, G.	100µm PDMS 10 min headspace	GC-EIMS
2536	**Aroma volatiles from Pinus massoniana twigs**	**A comparison of the volatiles compounds from Pinus massoniana twigs extracted by SPME and steam distillation** ***J Nanjing Forestry University (Natural Sciences Edition)*** ***31, #1, 78-80 (2007)*** **Wang Yan; Ye JianRen**	**headspace**	**GC/MS**
2634	**Phenolic content in wood**	**Determination of the alkyl- and methoxy-phenolic content in wood extractives by micellar solid-phase microextraction and GC-MS** ***Talanta 73, #3, 505-513 (SEP 30 2007)*** **Pino, Vernica; Ayala, Juan H.; Gonzalez, Venerando; Afonso, Ana M.**	**headspace**	**GC/MS**
2295	**Fragrances from woody material**	**Induction of sesquiterpenoid production by methyl jasmonate in aquilaria sinensis cell suspension culture** ***J. Essent. Oil Res. (2005) 17 #2, 175-180*** **Honda, G.; Ito, M.; Kiuchi, F.; Okimoto, K.; Shimada, Y.; Yagura, T.**	**headspace**	**GC/MS**
2528	**Aroma volatiles from oak chips**	**Analysis of French and American oak chips with different toasting degrees by headspace SPME-GC-MS** ***Journal of Chromatography A 1173, #1-2, 10-17 (2007)*** **Bozalongo, R.; Carrillo, J.; Fernandez-Torroba, M.; Tena, M.**	**Car/DVB 30/50µm** **headspace**	**GC/MS**
559	Aroma volatiles from toasted oak	Monitoring Toasting Intensity of Barrels by Chromatographic Analysis of Volatile compounds from Toasted Oak Wood J. Agric. Food Chem, 1999, 47, 4310-4318 Chatonnet, P., Cutzach, I., Pons, M., Dubourdieu, D.	100µm PDMS 30 min @ 22°C headspace	GC-FID
2663	**Chlorpyrifos in wine**	**Application of SPME for determining residues of chlorpyrifos and chlorpyrifos-methyl in wine with gas chromatography (GC).** ***J Institute of Brewing 113, #2, 213-218 (2007)*** **Anli, E.; Vural, N.; Vural, H.; Gucer, Y.**	**headspace**	**GC-ECD**
460	Polyphenolics in red wine	Assembly tests of "Nero d'Avola" with wines derived from an allocthonous cultivar: study of polyphenolic and aromatic profiles. *Ind. Bevande (1999), 28(160), 119-126* Papucci, A, Monte, L., D'Agostino, S, Aozzino, P., Avellone, G	headspace Italian	GC-MS

Ambient temperature, unless otherwise indicated.

		Sample preparation optimization in wine and grapes. Dilution and		
2885	**Volatiles from wine and grapes**	**sample/headspace volume equilibrium theory for headspace SPME** ***J Chromatogr A 1192, #1, 25-35 (May 23 2008)*** **Boss, Paul K.; Kalua, Curtis M.**	**headspace**	**GC-MS**
		Comprehensive two-dimensional gas chromatography with TOF-MS		
2635	**Monoterpenoids**	**of monoterpenoids as a powerful tool for grape origin traceability**	headspace	**GC-ToF-MS**
	from white grapes	***J Chromatogr A 1161, #1-2, 292-299 (AUG 17 2007)*** **Rocha, S.; Coelho, E.; Zrostlikova, J.; Delgadillo, I.; Coimbra, M.**		
2763	**Volatiles from ligins**	**Distinction and identification of lignins based on their volatile headspace composition** ***Talanta 75, #2, 594-597 (Apr 15 2008)*** **Delgadillo, Ivonne; Evtuguin, D.; Goncalves, V.; Rocha, S.**	**headspace**	**GC-MS**
775	Esters in grape juice	Monitoring ester formation in grape juice fermentations using SPME coupled with GC-MS *J. Agric. Food Chem (2001) 49(2), 589-595* Vianna, E; Ebeler, S.	100µm PDMS 1 hr. headspace	GC-MS
315	Styrene in wine	Determination of Styrene in Wine by SPME and GC-MS Mitt. Klosterneuburg 47 (4): 117-123 (1997) Flak, W., Tscheik, G.		GC-MS
311	Methylisocyanate in wine	SPME Analysis of Methyl Isothiocyanate in Wine J. Agric. Food Chem. 45 (8): 3092-3094 (1997) Gandini, N., Riguzzi, R.	65µm Carbowax/DVB 30 min headspace salt added	GC-FID, NPD
366	Diacetyl in wine	Analysis of Diacetyl in Wine Using SPME -GC-MS J. Agric Food Chem. 1999, 47, 612-617 Hayasaka, Y., Bartowsky, E.	60µm Carbowax/DVB 24°C, 5 min headspace salt added	GC-MS
2465	**Pesticides in Wine**	**Multiple pesticide analysis in wine by MEKC combined with SPME and sample stacking** ***Electrophoresis 28, #22, 4072-4081 (NOV 2007)*** **Borges-Miquel, T.; Hernandez-Borges, J.; Ravelo-Perez, L.; Rodriguez-Delgado, M.**	**60µm PDMS/DVB**	**micellar EKC diode-array detection**
2362	**Pesticides in Wine**	**Pesticide analysis in rose wines by micellar *electrokinetic chromatography*** ***J. Sep. Sci. 30, #18, 3240-3246 (Dec. 2007)*** **Borges-Miquel, T.; Hernandez-Borges, J.; Ravelo-Perez, L.; Rodriguez-Delgado, M.**	**60µm PDMS/DVB**	**micellar EKC**
316	Pesticides in Wine	Determination of Pesticide Residues in Wine by SPME and GC/MS for Consumer Risk Assessment Food Addit. Contam. 15 (3): 280-287 (1998) Vitali, M., Guidotti, M., Giovinazao, R., Cendrone, O.		GC-MS
2611	**Pesticide residue on vegetables**	**Removal of residual pesticides on vegetable using ozonated water** ***Food Control (UK) 18, #5, 466-72 (May 2007)*** **Tiangang Luan; Gilbert Yuk Sing Chan; Jiguo Wu; Chongyu Lan; Thomas Wai Hung Lo**	**headspace**	**GC-MS**
615	Pesticide residue on vegetables	Applications of SPME to the Analysis of Pesticide Residues in Vegetables *Pest. Manag Sci 56: 618-636 (2000)* Volante, M.,Pontello, M., Volante, L. Cattaneo, M., Bianchi, M., Bianchi, M., Colzani, L.	100µm PDMS, 60µm Carbowax/DVB 50 min	GC-ECD GC-NPD
774	Pesticide residue on vegetables	Study on the method of SPME coupled to GC for determination of organophosphorus pesticide residue in vegetables. Ziran Kexueban (2000) 39(4), 509-515 Chen, W; Hou, X; Zhang, L; Lin, H; Pan, Ji	(in Chinese)	

432	Pesticides in food	Some Applications of SPME in the Analysis of Pesticide Residues in Food J. Environ. Sci. Health, Part B (1998), B33 (3), 279-292 Volante, M.,Cattaneo, M., Bianchi, M., Zoccola, G.		
461	Pesticides on strawberries	SPME of pesticide residues from strawberries Food Addit. Contam. (1999), 16(3), 111-117 Hut, R., Henniont, B., Urrutyt, L., Monturyt, M.	100µm PDMS 45 min @ 25°C	
783	Pesticides on strawberries	SPME coupled with HPLC: a complementry technique to SPME GC for the analysis of pesticide residues in strawberries *Food Addit. Contam. (2000), 17(11), 915-923* Wang, Z.; Hennion, B.; Urruty, L.; Montury, M.	60µm PDMS/DVB 45 min @ 25°C headspace	LC-UV
2439	**Pesticides in fruit juices**	**Analysis of carbamate and phenylurea pesticide residues in fruit juices by SPME-LC-MS.Analysis of carbamate and phenylurea pesticide residues in fruit juices by SPME-LC-MS** ***J. Chromatogr., A 1147, #2, 135-143 (2007-04-20)*** **Sagratini, G.; Manes, J.; Giardina, D.; Damiani, P.; Pico, Y.**	**50µm CW/TPR 60µm PDMS/DVB** **90 min @ 20 C**	**LC-MS**
2408	**Pesticides in fruit juices**	**Fast screening of pesticide residues in fruit juice by SPME** ***Food Chemistry 107, #3, 1314-1325 (2008)*** **Cortes-Aguado, S.; Sanchez-Morito, N.; Arrebola, F. J.; Frenich, A. G.; Vidal, J. L. M**	**10 min**	**GC-MS**
2498	**Pesticides in vegetables**	**Screening method for the determination of parts per trillion levels of pesticide residues in vegetables combining SPME-GC-MS** ***Anal. Lett. 40, #13-15, 2886-2914 (2007-12)*** **Cortes Aguado, S.; Sanchez-Morito, N.; Garrido Frenich, A.; Martinez Vidal, J. L.;**	**65µm PDMS/DVB** **10 min @ 20 C** **immersed**	**GC-MS**
462	Organophosphorus pesticides in fruit/fruit juices	Validation of a SPME method for the determination of organophosphorus pesticides in fruits and fruit juice J. Chromatogr. A (1999), 843(1), 35-42 Simplicio, A, Vilas Boas, L.	100µm PDMS 3 min immersed	GC-FPD
2358	**Insecticides in honey**	**SPME-HPLC-MS applied to the analysis of insecticides in honey.** ***Food Addit Contam 25, #1, 59-69 (2008 Jan)*** **Blasco, C; Font, G; Picoo, Y**		**HPLC-MS**
929	Organophosphorus pesticides in honeybees	Determination of organophosphorus pesticides in honeybees after solid phase microextraction *J. Chromatogr. A (2001), 922(1-2) 257-265* Fernandez, M., Padron, C., Marconi, L., Colombo, R. Ghinie, S. Sabatini, A, Girotti, S.	85µm Polyacrylate 45min @ 25°C immersed stirred	GC-NPD
463	Organochlorine & organophosphorus in water/ethanol	A Systematic Approach to Optimize SPME determination of Pesticides in Ethanol/Water mixtures used as Food Simulates Anal. Chem. (1999), 71(13), 2417-2422 Batlle, R, Sanchez, C., Nerin, C.		
616	Volatiles in water	Evidence for selectivity of absorption of volatile organics compounds by PDMS SPME fiber *J. Chromatogr. A,(2000) 885, 457-464* Niedziella, S., Rudkin, S., Cooke, M.	30µm PDMS 60min headspace	GC-MS
317	Aroma volatiles in water traps	Analysis of Aroma Release During Microwave Heating J. Agric. Food Chem. 45 (11): 4388-4392 (1997) Roberts, D., Pollien, R.	60µm Carbowax/DVB 10 min immersion, stirring	GC-FID
435	Aroma volatiles in food products	SPME Associated with Microwave Assisted Extraction of Food Products J. High Resolut. Chromatogr. (1997), 20(4), 213-216 Wang, Y., Bonilla, M., McNari, H., Khaled, M.		
2400	**1-naphthlamine from silica gel**	**Application of microwave-assisted desorption/headspace SPME as pretreatment step in the gas chromatographic determination of 1-naphthylamine in silica gel adsorbent** ***Talanta 71, # , 1993-1997 (2007-03-30)*** **Yan, C. T.; Jen, J. F.; Shih, T. S.**	**65µm PDMS/DVB** **headspace**	**GC-FID**

2870	**Volatiles from dry-cured**	**Analysis of volatile compounds of Iberian dry-cured loins with different intramuscular fat contents using SPME-DED** ***Meat Science 79, #1, 172-180 (MAY 2008)***	**headspace**	**GC/MS**
2583	**Volatiles from dry-cured Iberian ham**	**Effect of salt content and processing conditions on volatile compounds formation throughout the ripening of Iberian ham** ***Eur. Food Res. Technol. 225, #5-6, 677-684 (September 2007)*** **Andres, Ana I.; Cava, Ramon; Muriel, Elena; Ruiz, Jorge; Ventanas, S.**	**headspace**	**GC/MS**
318	N-nitrosamines in smoked hams	Rapid Semi-Quantitative Estimation of N-Nitrosodibulylamine and N-Nitrosodibenzylamine in Smoked Hams by SPME Followed by GC-Thermal Energy Analysis J. Chromatogr. A 788(1+2): 131-140 (1997) Sen, N., Seaman, S., Page, B.	85µm polyacrylate 10 min headspace stirring salt added	GC-thermal energy or MS
2639	**Volatiles from fermented meat**	**Application of spme for analysis of volatile flavors produced by traditional fermented meat** ***J. Hunan Agric. Univ. (China) 33, #2, 232-4 (2007)*** **Yu Bing; Zhou Hong-li; Li Zong-jun**	**headspace**	**GC/MS**
2234	**Volatiles from raw beef**	**GC-MS techniques for characterization of meat products** ***Annu. Int. Meet., p 7271-7293 (2004)*** **Balasubramanian, S.; Chen, Q.; Gu, H.; Jelen, H.; Logue, C.; Marchello, M.; Nord, R.; Panigrahi,S.**	**75µm Carboxen headspace**	**GC/MS**
348	Flavor volatiles in beef	Application of SPME to the Analysis of Warmed Over Flavor in Beef Poster Paper, IFT 1999 Gruen, I., Fernando, L., Mobley, S.	100µm PDMS 35°C, 10 min headspace	GC-MS
890	Atrazine in beef	Ethanol-modified subcritical water extraction combined with SPME for determining atrazine in beef kidney. *J.Ag Food Chem (2001) 49(5) 2175-2180* Curren, Meredith S. S.; King, Jerry	60µm Carbowax/DVB 30min @ 25°c	GC-MS
617	Aroma compounds in cooked pork	Two-fiber SPME combined with GC-MS for the analysis of volatile aroma compounds in cooked pork *J. Chromatogr. A 905(2000), 233-240* Elmore, J. Mottram, D., Hierro, E.	Carboxen/PDMS. Carboxen/DVB/PDMS 30 min @ 60°C	GC-MS
618	Hexanal, pentanal in cooked turkey	A comparison of SPME fibers for measurement of hexanal and pentanal in cooked turkey *Food Chem Feb. 2000, 68(3), 339-345* Brunton, N., Cronin, D, Durcan, R., Monahan, F.	Carboxen/DVB/PDMS 20 min, headspace @ 40°C	GC-FID
924	Volatiles in frog skin	SPME as a tool for studying volatile compounds in frog skin *Chemistry and Ecology 2000* Smith, B, Zini, C., Pawliszyn, J. Tyler, M., Hayasaka, Y, Williams, B., Caramao, E.		
423	Volatiles in meat	Comparison of Volatile Analysis of Lipid-Containing and Meat Matrices by SPME and SFE ACS Symp. Ser. (1998), 705 (Flavor Analysis), 107-115 Snyder, J., King, J., Zhang, Z.		
2826	**Volatiles from oysters**	**Mass spectrometry based sensor strategies for the authentication of oysters according to geographical origin** ***J Agric Food Chem, 56, #2, 321-327 (JAN 23 2008)*** **Ratel, J.; Berge, Philippe; B., Jean-Louis; Cardinal, Mireille; Engel, E.**		**GC-MS**
2892	**2-phenoxyethanol in fish**	**Development of an SPME-GC-MS/MS procedure for the monitoring of 2-phenoxyethanol in anaesthetised fish** ***Talanta 75, #4, 1082-1088 (May 30 2008)*** **Hajslova, Jana; Klimankova, Eva; Kocourek, Vladimir; Kolarova, J.; Poustka, Jan; Riddellova, Katerina**	**CAR/DVB 30/50 headspace** **60 min at 30 °C**	**GC-MS**
		Fish and food safety: Determination of formaldehyde in 12		

2587	**Formaldehyde in fish**	**fish species by SPME extraction and GC-MS analysis** ***FOOD CHEM. 100, #3, 1049-1053 (2007)*** **Bianchi, F.; Careri, M.; Musci, M.; Mangia, A.**	**headspace** **pentafluorobenzyl hydroxyamine derivative**	**GC-MS**
2539	**Flavor volaitles in carp fish**	**Analysis of volatile compounds in bighead carp by microwave. Distillation and SPME-GC-MS and olfactometry** ***Se Pu 25, #2, 267-71 (2007 Mar)*** **Zhao, Qingxi; Xue, Changhu; Xu, Jie; Sheng, Wenjing; Xue, Yong; Li, Z.**	**headspace**	**GC-MS**
786	Volaitle amines in fish	New method for the rapid determination of volatile substances: The SPME-direct method. Part II. Determination of the freshness of fish *Sens Actuators, B Chem (2001) 72(3), 204-207* Bene, A.; Hayman, A.; Luisier, J.L.; Reynard, E.; Villettaz, J	 headspace	GC-FID, NPD
2468	**Volatiles from salmonella infected alfalfa sprouts**	**SPME-GC-MS integrated with chemometrics for detection of Salmonella typhimurium contamination in a packaged fresh vegetable** ***Anal. Chim. Acta 581, #1, 63-70 (2 Jan. 2007)*** **Siripatrawan, Ubonrat; Harte, Bruce R**	**headspace**	**GC-MS**
619	Volatiles from salmonellas infected beef	SPME/GC of Salmonella-Infected Beef *J Agric Food Chem, 2000, 48, 2253-2259* Ogihara, H., Horimoto, Y., Hai, Z., Skura, B., Nakai, S.	75µm Carboxen/PDMS 10 min 25% NaCl	GC-FID
393	Volatiles from processed poultry	Use of Digital Aroma Technology and SPME GC-MS to compare Volatile compounds Produced by Bacteria isolated from Processed Poultry J. Sci. food Agric. 1998, 78, 343-348 Arnold, J., Senter, S.	100µm PDMS 30 min @ 37°C headspace stirred	GC-MS
862	Allyl isothiocyanate in rats	Formation of allyl isothiocyanate from sinigrin in the digestive tract of rats monoassociated with a human colonic strain of Bacteroides thetaiotaomicron *FEMS Microbiology Letters (2001) 197(1) 99-103* Rabot, S; Duguay, A; Elfoul, L; Khelifa, N; Quinsac,A; Rimbault, A	 headspace	GC-MS
253	Putrescine, cadaverine in borate buffer solution	An Electrodeposition Device for the Determination of Putrescine and Cadaverine by High-Resolution GC J. High Resolut. Chromatogr. 19 (5): 294-297 (1996) Conte, E., Miller, D.	carbon fibers 0-60 min, immersion stirring pH 8	HPLC (C18 column)
2727	**Oxidative products from milk**	**Measurement of volatile oxidation products from milk using . solvent-assisted flavour evaporation and SPME** ***Intl Dairy Journal 17, #7, 746-752 (2007)*** **Havemose, M. S.; Justesen, P.; Bredie, W. L. P.; Nielsen, J. H.**	**headspace** **40°C**	**GC-MS**
620	Hexanal, pentanal metabolites in milk	Shelf-life prediction of processed milk by SPME -MS and multivariate analysis J. Agric Food chem (2000), 48(8), 3470-3475 Marsili, R.	75µm Carboxen/PDMS 20min. @ 50°C headspace	GC-MS
386	Oxidative byproducts in milk	Comparison of SPME and Dynamic Headspace Methods for the GC-MS Analysis of Lighted Induced Lipid Oxidation Products in Milk J. Chromatogr. Sci. 1999, 37, 17-23 Marsili, R.	75µm Carboxen/PDMS 45°C, 15 min headspace salt added	GC-MS
2274	**Off-flavors in skim milk powder**	**Influence of flavor variability in skim milk powder on consumer acceptability of ingredient applications** ***J Food Science 70 #7, S427-S431 (2005)*** **Caudle, Alissa D.; Yoon, Youngmo; Drake, Maryanne**	**headspace**	**GC/MS**
2301	**Off-flavor compounds in milk**	**Quantitative determination of thermally derived off-flavor compounds in milk using SPME-GC** ***J Dairy Science 88 #11, 3764-3772 (2005)*** **Vazquez-Landaverde, P. A.; Velazquez, G.; Torres, J. A.; Qian, M.**	**headspace**	**GC/MS**
372	Off-flavors	SPME-MS-MVA as an Electronic Nose for the Study of Off-Flavors in Milk	75µm Carboxen/PDMS	GC-MS

	in milk	J. Agric. Food Chem. 1999, 47, 648-654 Marsili, R.	45°C, 12 min headspace	
2627	**Volatile flavors in milk**	**Research advances: Squeezing more shelf life out of milk** ***J Chem Educ 84, #4, 572-574 (April 2007)*** **King, Angela G.**	**headspace**	**GC/MS**
2148	**Odors from peanut milk powder**	**Removal of odours from milk prepared from peanut** ***J Food Sci Technol, 43, #2, 205-209 (2006)*** **Bangoura, Mamadouba; Nong, Zhang Guo**	**headspace**	**GC/MS**
2369	**Musk compounds in breast milk**	**SPE/SPME-GC/MS approach for measuring musk compounds in . serum and breast milk** ***Food Chemistry 102, #4,1156-1162 (2007)*** **Ho, C. W.; Aida, W. M. Wan; Maskat, M. Y.; Osman, H.**		**GC/MS**
621	Chlorinated organics in breast milk	Application of SPME for the rapid analysis of chlorinated organics in breast milk Fresenius, J. Anal.Chem, Jan 2000, 366(1), 106-111 Rohrig, L., Meisch, H.		GC-ECD
749	Acetaldehyde in milk & water	Flavor threshold for acetaldehyde in milk, chocolate milk, and spring water using SPME-GC for quantification J.Agric.FoodChem 2001, 49(3), 1377-1381 vanAardt, M., Duncan, S., Bourne, D., Marcy, J., Long, T., Hackney, C., Heisey, C.,	75µm Carboxen/PDMS 45°C, 15 min headspace salt added	GC-FID
364	Off-flavors in food	Off Flavor and Malodors in Food: Mechanism of Formation and Analytical Techniques Book-Techniques for Analyzing Food Aroma, Marcel Decker ISBN: 0-8247-9788-4 Marsili, R.	various fibers and conditions	GC
376	Volatile metabolites in water	Evaluation of SPME for Analysis of Volatile Metabolites Produced by Staphylococci J. Agric. Food Chem. 1998, 46, 228-234 Vergnais, L., Masson, F., Montel, M., Berdague, J., Talon, R.	85µm polyacrylate 80°C, 15 min headspace, stirring	GC-FID
365	Volatiles in tea	Determination of Volatile Organic Compounds in Tea Industrie de la Bevande XXVI (1997) febbralo, 19-22 Guidotti, M.	100µm PDMS 50°C, 15 min headspace	GC-MS
2699	**Vitamine K from green tea leafs**	**Analysis of vitamin K in green tea leafs and infusions by SPME-GC-FID** ***FOOD CHEM. 100, #1, 405-411 (2006)*** **Reto, M.; Figueira, M. E.; Filipe, H. M.; Almeida, C. M. M.**	**7µm PDMS immersion 40°C, 45 min**	**GC-FID**
2802	**Pesticides in tea samples**	**Application of head-space SPME coupled to comprehensive two-dimensional GC-TOF-MS for the determination of multiple pesticide residues in tea samples** ***Analytica Chimica Acta 611, #2, 163-172 (MAR 24 2008)*** **Schurek, J.; Portoles, T.; Hajslova, J.; Riddellova, K.; Hernandez, F.**	**headspace**	**GC-TOF-MS**
2378	**Aromatic compounds in green tea**	**Analysis of aromatic components in Wuzi green tea by SPME/GC/MS** ***Xibei Zhiwu Xuebao 27, #2, 371-376 (FEB 2007)*** **Liu La-ping; Shi Ya-ge; Zhang Rui-ming; Li Lan; Yang Rong**	**in Chinese**	**GC-MS**
622	Polyphenols in green tea	Comparative Study and Partial characterization of Azorean green Tea Polyphenols J. Food Compos. Anal. (1999), 12(4), 273-287 Baptista, J., da P Tavares, J., Carvalho, R.		
319	Caffeine in tea, coffee	Quantitative Determination of Caffeine in Beverages, Using a Combined SPME-GC-MS Method J. Chem. Educ. 74 (9): 1130-1132 (1997) Yang, M., Orton, M., Pawliszyn, J.	bare fiber	GC-MS

381	Aroma volatiles in coffee	Characterization of Roasted Coffee and Coffee Beverages by SPME-GC and Principal Component Analysis J. Agric. Food Chem. 1997, 45: 4680-4686 Bicchi, C., Panero, O., Pellegrino, G., Vanni, A.	100µm PDMS, 7µm PDMS 60°C, 5 min headspace	GC-MS
302	Volatile aroma in brewed coffee	Obtention of a Brewed Coffee Aroma Extract by an Optimized Supercritical CO2-Based Process J. Agric. Food Chem. 1998, 46, 4011-4016 Ramos, E., Valero, E., Ibanez, E., Reglero, G., Tabera, J.	100µm PDMS 60°C, 10 min headspace	GC-MS
623	Aroma volatiles in coffee	SPME Method Development for Headspace analysis of volatile flavor compounds J. Agri. Food Chem 2000, 48, (6) 2430-2437 Roberts, D., Pollien, P., Milo, C.	PDMS/DVB 60 min headspace pH 2	GC-MS
624	2-Acetyl-1-pyrroline in rice	Screening for 2-Acetyl-1-pyrroline in the Headspace of Rice using SPME/GC-MS J. Agric. Food Chem 2001, 49, 245-249 Grimm, C, Bergman, jC., Delgado, J., Bryant, R.	80µm Carboxen/DVB/PDMS 80°C, 15 min headspace .75gm in 100µl H20	GC-MS
2642	**2-MIB, geosmin in water**	**Removal of geosmin and 2-methylisorboneol (2-MIB) in water from Zuikerbosch Treatment Plant (Rand Water) using β-cyclodextrin polyurethanes** ***Water SA 33, #2, 223-227 (April 2007)*** **Krause, R.; Malefetse, T.; Mamba, B.; Mhlanga, S.; Nxumalo, E.; Salipira, K.L.; Sithole, S.**	**headspace**	**GC-MS**
464	2-MIB, geosmin in water	Microwave mediated distillation with SPME determination off-flavors, geosmin and methylisoborneol, in catfish tissue J. Chromatogr. A (1999), 833(2), 223-230 Zhu, M., Aviles, F., Conte, E., Miller, D., Perschbacher, P.	100µm PDMS 25 min immersed salt added	GC-MS
625	2-MIB, geosmin in water	Microwave Distillation-SPME-GC Analysis of 2-methylisoboreneol and Geosmin in Catfish Am-Lab Feb 2000: 32(3), 40-48 Lloyd, S., Grimm, C.	80µm Carboxen/DVB/PDMS 60°C, 20 min heaspace	GC-IC-MS
	2-MIB, geosmin in water	Analysis of 2-Methylisoboreneol and Geosmin in Catfish by Microwave Distillation-SPME J. Agri. Food Chem., 47, No. 1, pg. 164-169, 1999 Lloyd, S., Grimm, C.	100µm PDMS 40°C, 15 min saturated salt stirring	GC-MS
362	MIB & geosmin in water	Determination of Geosmin and 2-Methylisoboreneol in Water Using SPME and GC-Chemical Ionization/Electron Impact Ionization Ion Trap MS Analyst (Cambridge, U.K.) (1998), 123 (10), 2155-2160 McCallum, R., Pendleton, P., Scumann, R., Trinh, M.	Carboxen/DVB/PDMS 60°C, 30 min headspace stirring salt added	GC-MS
2429	**MTBE in drinking water**	**Evaluating peats for their capacities to extract methyl tertiary butyl ether from contaminated water using SPME-GC** ***J Environ Sci Health A 43, #2, 132-43 (2008 Feb)*** **Rizzuti, Anthony M; Cohen, Arthur D; Nguyen, Dung D**	**headspace**	**GC-MS**
2871	**MTBE in drinking water**	**Evaluating peats for their capacities to extract methyl tertiary butyl ether from contaminated water using SPME-GC** ***J EnviSci and Health Part A 43, #6, 672-673 (2008)*** **Rizzuti, Anthony**	**headspace**	**GC-MS**
2531	**VOCs from poultry manure**	**Evaluation of zeolite for control of odorants emissions from simulated poultry manure storage** ***J. ENVIRON. QUAL. 36, #1,184-193 (2007)*** **Cai, L.; Koziel, J. A.; Liang, Y.; Nguyen, A. T.; Xin, H.**	**headspace**	**GC-MS**
465	C2-C10 acid, aldehydes, phenols	Evaluating Peats for their capacities to remove odorous compounds from liquid swine manure using headspace SPME	85µm polyacrylate 20 min @ 72°C	GC-MS

	in swine manure	J. Environ. Sci.Health, B34(4), 709-748 (1999) Rizzuti, A., Cohen, A., Hunt, P., Vanotti, M.	headspace, pH 2	
2722	**Ethyl esters in wine**	**Headspace-SPME-GC as a tool to define an index that establishes the retention capacity of the wine polymeric fraction towards ethyl esters** ***J.Chromatogr. A 1150, #1-2, 155-161 (2007)*** **Rocha, S. M.; Coutinho, P.; Delgadillo, I.; Coimbra, M. A.**	**headspace**	**GC**
966	Esters in wine	Analysis of esters in wines *J.Chromatogr. A (2002) 963(1-2), 213-223* Rodriguez-Bencomo, J.J.; Conde, J.E.; Rodriguez-Delgado, M.A.; Garcia-Montelongo, F.; Perez-Trujillo, J.P.	Various	GC
967	Aroma in onions	Flavor and odor differences between fresh and preserved onions *J.Chromatogr. A (2002) 963(1-2), 89-93* Mondy, N.; Duplat, D.; Christides, J.P.; Arnault, L.; Auger, J.	Polyacrylate	GC-MS
968	Volatiles in olive oil	Influence of crushing technique on composition of volatiles in olive oil *European Journal of Lipid Science and Technology (2002) 104(8), 483-489* Servili, M.; Piacquadio, P.; de Stefano, G.; Taticchi, A.; Sciancalepore, V.	65 um Carbowax/DVB 30 mins.	GC-MS
969	Volatiles in dry-cured ham	Monitoring volatile compounds during the dry-cured ham ripening process *J.Chromatogr. A (2002) 963(1-2), 83-88* Andres, A.I.; Cava, R.; Ruiz, J.		
970	Bisphenol in food packaging	Bisphenol type contaminants from food packaging materials in aqueous foods. *J.Chromatogr. A (2002) 963(1-2), 375-380* Nerin, C.; Philo, M.R.; Salafranca, J.; Castle, L.		HPLC
992	Odour compounds in food packaging materials	Development of headspace SPME, GC-MS method for the identification of odour causing volatile compounds in packaging materials. *J.Chromatogr. A (2002) 963(1-2), 381-392* Ezquerro, O.; Pons, B.; Tena, M.T.	75 um carboxen/PDMS	GC-MS
996	Photooxidative quality changes of havarti cheese.	Response surface models used for prediction of photooxidative quality changes of havarti cheese. *European Food Research and Technology (2003) 216 (2), 93-98.* Stapelfeldt, Henrik; Mortensen, Grith; Sorensen, John.		GC-MS
997		Solid phase micro-extraction technique and its applications in medical analysis. *Yaoxue Xuebao (2003) 38 (2), 153-158.* Liu Zhen-ling; Wu Cai-ying.		
999	Volatile compounds from scallops	Volatile compounds recovered by solid-phase microextraction from fresh adductor muscle and total lipids from sea scallop (Placopecten magellanicus) from Georges Bank (Nova Scotia). *Journal of Food Science (2002) 67 (6), 2032-2037.* Linder, M.; Ackman, R. G.	PDMS/DVB 250 C, 2 minutes	GC-MS
1007	Insecticides in fruit	Headspace solid-phase microextraction in combination with gas chromatography-mass spectrometry for the rapid screening of organophosphorus insecticide residues in strawberries and cherries *J.Chromatogr. A (2003) 993(1-2), 197-203.* Albanis, Triantafyllos A.; Lambropoulou, Dimitra A.		GC-MS
1012	Mercury in fish	Solid phase microextraction capillary gas chromatography combined with furnace atomization plasma emission spectrometry for speciation of mercury in fish tissues *Spectrochmica Acta - Part B Atomic Spectroscopy (2003) 58 (3), 427-441.* Campos, Reinaldo C.; Grinberg, Patricia; Mester, Zoltan; Sturgeon, Ralph E.		GC-FAPES
2781	**Volatiles in**	**Headspace volatiles of Scutellaria californica A. Gray flowers** ***J. Essent. Oil Res. 20, #2, 169-171 (March/April 2008)***	**headspace**	**GC-MS**

	gray flowers	**Dao, Lan; Patterson, Robert; Rodriguez, David; Takeoka, G.**		
2768	**Volatiles in lavender flowers**	**Analysis of the volatile compounds of flowers and essential oils from Lavandula angustifolia cultivated in northeastern Italy by headspace SPME -GC-MS** ***Planta Medica 74, #2, 182-187 (FEB 2008)*** **Da Porto, Carla; Decorti, Deborha**	**Carboxen/DVB headspace 50 min.**	**GC-MS**
2470	**Volatiles in daffodil flowers.**	**Use of SPME as a sampling technique for the characterization of volatile compounds emitted from Chinese daffodil flowers.** ***J. Anal. Chem. (Transl. Zh. Anal. Khim.) 62, #7, 674-679 (2007-07)*** **Song, G.; Xiao, J.; Deng, C.; Zhang, X.; Hu, Y.**	**headspace**	**GC-MS**
1016	Volatiles in flowers	Volatile constituents of the leaves and flowers of Hypericum triquetrifolium Turra *Flavour and Fragrance Journal (2003) 18 (2), 91-94.* Bertoli, Alessandra; Mazzetti, Michele; Menichini, Francesco; Morelli, Ivano; Spinelli, Guido		GC-MS
1017	Volatile byproducts in wine	Evolution of volatile byproducts during wine fermentations using immobilized cells on grape skins. *Journal of Agricultural and Food Chemistry (2003) 51 (8), 2402-2408.* Komaitis, Michael; Kanellaki, Maria; Koutinas, Athanasios; Mallouchos, Athanasios		
1018	Terpenoids from hemlock	Analysis of terpenoids from hemlock (Tsuga) species by solid-phase microextraction/gas chromatography/ion-trap mass spectrometry. *Journal of Agricultural and Food Chemistry (2003) 51 (8), 2115-21120.* Lagalante, Anthony F.; Montgomery, Michael E.		GC-MS
1027	Volatiles from meats	Volatile components associated with freshly cooked and oxidized off-flavours in turkey breast meat. *Flavour and Fragrance Journal 2002) 17 (5), 327-334.* Brunton, N. P.; Cronin, D. A.*; Monahan, F. J.		GC-MS
1044	Volatiles and semi-volatile in cigarettes.	Analysis of volatile and semivolatile composition in cut tobacco and total particulate matter of cigarettes with SPME-GC-MS. *Fenxi Shiyanshi (2002) 21 (5), 31-35.* Li, R.; Wang, L.; Li, Q.; Tong, X. D.	85 um Polyacrylate	GC-MS
2376	**2-ethylhexanoic acid in baby food**	**Survey of 2-ethylhexanoic acid in baby food** ***Food Additives and Contaminants 24, #7, 792-797 (JUL 2007)*** **Ezerskis, Z.; Pastorelli, S.; Contini, C.; Simoneau, C.**		
1052	Oxidation of infant formula	Comparison of mass spectrometry-based electronic nose and solid phase microextraction gas chromatography-mass spectrometry technique to assess infant formula oxidation. *Journal of Agricultural and Food Chemistry (2003) 51 (9), 2790-2796.* Guy, Philippe A.; Fenaille, Francois; Fumeaux, Rene; Milo, Christian; Visani, Piero		GC-MS
1053	Aroma compounds	Formation of aroma compounds from ribose and cysteine during the maillard reaction. *Journal of Agricultural and Food Chemistry (2003) 51 (9), 2714-2721.* Cerny, Christoph; Davidek, Tomas		GC-MS
2497	**Volatile compounds rapeseed oil**	**A headspace-SPME-MS method for monitoring rapeseed oil autoxidation** ***J Am Oil Chemists' Society 84, #6, 509-517 (JUN 2007)*** **Jelen, H. H.; Mildner-Szkudlarz, S.; Jasinska, I.; Wasowicz, E**	**headspace**	**GC-MS**
1055	Volatile compounds hazelnut oil.	Solid-phase microextraction for studies on the enantiomeric composition of filbertone in hazelnut oils. *Journal of Agricultural and Food Chemistry (2003) 51 (9), 2496-2500.* Ruiz del Castillo, M. L.; Blanch, G. P.; Flores, G.; Herraiz, M.		
1063	Volatile compounds from tea leaves.	Changes in lipoxygenase activity and volatile compounds of fresh tea leaves during early growing season. *Agricultural Chemistry and Biotechnology (2003) 46 (1), 23-27.* Park, Seung-Kook; Kim, Hyun-Jeong; Lee, Sang-Jun; Roh, Jin-Chul; Ryu, Sung-Kwon		GC-MS

1064	Volatile compounds from kimchi.	Optimization of solid-phase microextraction for the analysis of the headspace volatile compounds in kimchi, a traditional Korean fermented vegetable product. *Journal of Food Science (2003) 68 (3), 844-848.* Min, D. B.; Kang, J. H.; Lee, J. H.	100 um PDMS	
1077	Volatile phenols in wine.	Optimisation of headspace solid-phase microextraction for the analysis of volatile phenols in wine *Journal of Chromatography A (2003) 995 (1-2), 11-20.* Castro Mejias, Remedios; Garcia Barroso, Carmelo; Garcia Moreno, Ma. De Valme; Natera Marin, Ramon	Carbowax/DVB	
2344	**Off-flavours from cork**	**Simultaneous headspace SPME analysis of off-flavour compounds from Quercus suber L. cork.** ***J. Sci. Food Agric. 87,#4, 632-640 (2007-03)*** **Neto, P. V.; Rocha, S. M.; Silvestre, A. J. D.**	**headspace**	**GC-MS**
2424	**Chloroanisoles from cork.**	**Fast and sensitive method to determine chloroanisoles in cork using an internally cooled solid-phase microextraction fiber** ***J. Chromatogr., A 1138, #1-2, 10-17 (2007-01-05)*** **Carasek, E.; Cudjoe, E.; Pawliszyn, J.**	**65 µm PDMS/DVB 75 min @ 85°C headspace**	**GC-TOF-MS**
1065	Chloroanisoles from cork.	Optimization of headspace sampling using solid-phase microextraction for chloroanisoles in cork stoppers and gas chromatography-ion-trap tandem mass spectrometric analysis. *Journal of Separation Science (2003) 26 (5), 369-375.* Musci, Marilena; Bianchi, Federica; Careri, Maria; Mangia, Alessandro	75 um Carboxen/PDMS	GC-MS-MS
1066	Volatile free fatty acids in ewe cheese.	Solid-phase microextraction in combination with GC-MS for quantification of the major volatile free fatty acids in ewe cheese. *Analytical Chemistry (2002) 74 (20), 5199-5204.* Pinho, O.; Ferreira, I. M. P. L. V. O.*; Ferreira, M. A.	85 um polyacrylate	GC-MS
1067	Pyrimethanil and kresoxim-methyl in green groceries.	Determination of pyrimethanil and kresoxim-methyl in green groceries by headspace solid-phase microextraction and gas chromatography-mass spectrometry. *Journal of Chromatography, A (2002) 975 (2), 355-360.* Navalon, A.; Prieto, A.; Araujo, L.; Vilchez, J. L.*	85 um polyacrylate	GC-MS
1080	Aroma compounds in mango.	Distribution of aroma volatile compounds in different parts of mango fruit. *Journal of Horticultural Science & Biotechnology (2003) 78 (2), 131-138.* Singh, Zora; Lalel, H. J. D.; Tan, S. C.		GC-MS
1081	Odors from overripe mango.	Identification of odors from overripe mango that attract vinegar flies, Drosophila melanogaster. *Journal of Chemical Ecol (2003) 29 (4), 899-909.* Zhu, Junwei; Baker, Thomas C.; Park, Kye-Chung		GC-EAD
1083	Methyl jasmonate	Prediction correlation of vapor pressure for methyl jasmonate *Journal of Food Engineering (2003) 59 (4), 431-433.* Acevedo, C.; Sanchez, E.; Simpson, R.; Young, M.E.		GC-MS
2545	**Volatiles from mulberry leaves**	**Analysis of volatile chemical composition in mulberry leaves using microwave assisted extraction associated with SPME** ***Chemistry and Industry of Forest Products 27, #3, 107-110 (2007)*** **Li JieHong; Chen DaiWu**	**headspace**	**GC-MS**
2436	**Fenitrothion in poplar leaves**	**Quantification of fenitrothion and its main metabolites in poplar leaves by isotope dilution GC-MS coupled with SPME** ***J. Chromatogr. A 1177, #1, 170-174 (Jan 4 2008)*** **Barrio, R.; Goicolea, M.; Millan, S.; Rodriguez, E.; Sampedro, M.; Sanchez, A.; Unceta, N.**		**GC-MS**

1085	Volatile compounds from cilantro	Changes in volatile compounds of small gamma -irradiated fresh cilantro leaves during cold storage. *Journal of Agricultural and Food Chemistry (2002) 50 (26), 7622-7626.* Fan, X. T.; Sokorai, K. J. B.		GC-MS
1086	Ethanol in Tequila	Tequila authenticity assessment by headspace SPME-HRGC-IRMS analysis of carbon-13/carbon-12 and oxygen-18/oxygen-16 ratios of ethanol. *Journal of Agricultural and Food Chemistry (2002) 50 (26), 7520-7523.* Aguilar-Cisneros, B. O.; Lopez, M. G.; Richling, E.; Heckel, F.; Schreier, P. *		GC-MS
1087	Butyltin compounds in alcoholic beverages	Survey on the presence of butyltin compounds in Chinese alcoholic beverages, determined by using headspace solid-phase microextraction coupled with gas chromatography-flame photometric detection. *Journal of Agricultural and Food Chemistry (2002) 50 (23), 6683-6687.* Liu, J. Y.; Jiang, G. B.*		GC-MS
1088	Ethanediol and diethyl disulfide in wine.	Synthesis and stable isotope dilution assay of ethanethiol and diethyl disulfide in wine using solid phase microextraction. Effect of aging on their levels in wine. *Journal of Agricultural and Food Chemistry (2002) 50 (23), 6653-6658.* Majcenovic, A. B.; Schneider, R.; Lepoutre, J. -P.; Lempereur, V.; Baumes, R. *		GC-MS
1089	Aroma compounds from tomatoes.	Differential effects of tomato (Lycopersicon esculentum Mill) matrix on the volatility of important aroma compounds. *Journal of Agricultural and Food Chemistry (2003) 51 (3), 722-726.* Bezman, Y.; Mayer, F.; Takeoka, G. R.; Buttery, R. G.; Ben-Oliel, G.; Rabinowitch, H. D.; Naim, M.		
2246	**Flavour volatiles in milk**	**Stale flavour volatiles in Australian commercial UHT milk during storage** ***Australian J Dairy Technology 60, #3, 231-237 (2005)*** **Perkins, M.; Elliott, A.; D'Arcy, B.; Deeth, Hilton C.**	**headspace**	**GC-FiD**
1090	Volatile fraction of milk	Volatile fraction of milk: comparison between purge and trap and solid phase microextraction techniques. *Journal of Agricultural and Food Chemistry (2002) 50 (25), 7350-7355.* Contarini, G.; Povolo, M.		
1091	VOC's from eucalyptus.	SPME applied to the study of volatile organic compounds emitted by three species of Eucalyptus in situ. *Journal of Agricultural and Food Chemistry (2002) 50 (25), 7199-7205.* Zini, C. A.; Augusto, F.; Christensen, E.; Caramao, E. B.; Pawliszyn, J. *	65 um PDMS/DVB	GC-MS
1105	Volatiles in mango	Headspace solid-phase microextraction and gas chromatography-mass spectrometry analysis of free volatile compounds in Mango. *Chromatographia (2002) 55(11-12), 737-741* Shang, C. Q.; Deng, C. H.; Zhang, X. Y.; Chen, Z. F.; Hu, Y. M.		GC-MS
2524	**Methylmercury**	**Optimization of headspace SPME-GC-AED analysis of monomethylmercury** ***J Chromatogr A 1174, #1-2, 7-12 (2007 Dec 7)*** **Geerdink, Renoe Bernard; Breidenbach, Rembert; Epema, O.**	**65 µm PDMS/DVB 100 µm PDMS NaBPh4 derivative headspace**	**GC-AED**
2612	**Methylmercury in mussel tissue**	**Certification of methylmercury content in two fresh-frozen reference materials: SRM 1947 Lake Michigan fish tissue and SRM 1974b organics in mussel tissue (Mytilus edulis).** ***Anal Bioanal Chem 387, #7, 2335-41 (2007 Apr)*** **Davis, W .; Christopher, S.; Pugh, R.; Donard, O.; Krupp, E.; Point,D.; Horvat, M.; Gibicar, D; Kljakovic-Gaspic, Z; Porter, B.; Schantz, M.**	**100 µm PDMS NaBPh4 derivative headspace**	**GC-MS GC-ICP-MS**
		Comparison of extraction procedures for methylmercury		

2676	**Methylmercury in marine fish**	**determination by a SPME-GC-AFS system** ***Microchemical Journal 85, #1, 122-126 (JAN 2007)*** **Abranko, Laszlo; Kmellar, Bela; Fodor, Peter**	**immersion** **NaBPh4 derivative**	**GC**
2286	**Methylmercury in marine fish**	**SPME-GC-pyrolysis-AFS determination of methylmercury in marine fish products by alkaline sample preparation and aqueous phase phenylation derivatization** ***J Ag Food Chem 53, #14, 5499-5505 (2005)*** **Jokai, Zsuzsa; Abranko, Laszlo; Fodor, Peter**	**immersion** **NaBPh4 derivative**	**GC**
		Determination of methylmercury in fish tissues by isotope dilution SPME-GC-ICP-MS		
1106	Methylmercury in fish.	*Journal of Analytical Atomic Spectrometry (2003) 18 (5), 431-436.* Mester, Zoltan; Sturgeon, Ralph E.; Yang, Lu	PDMS	GC-ICP-MS
2444	**Acetates in wine**	**GC-MS determination of 3-mercaptohexan-1-ol and 3-mercaptohexyl acetate in wine: A comparison of headspace SPME and solid phase extraction methods** ***Anal. Chim. Acta 596, #2, 291-297 (2007-07-23)*** **Fedrizzi, B.; Versini, G.; Lavagnini, I.; Nicolini, G.; Magno, F.**	**headspace**	**GC/MS**
		Determination of major compounds in sweet wines by headspace solid-phase microextraction and gas chromatography.		
1127	Alcohols, acetates in sweet wines.	*Journal of Chromatography, A (2003) 991 (1), 13-22.* Rodriguez-Bencomo, J. J.; Conde, J. E.; Garcia-Montelongo, F.; Perez-Trujillo, J. P.*		GC
2226	**Off-flavors in wine**	**Detection of 2-aminoacetophenone off-flavor in wine by SPME- and SIM GC-MS** ***American Journal of Enology and Viticulture 56 #3, 302A (2005)*** **Qian, Michael; Fan, Wenlai**	**headspace**	**SIM GC-MS**
		Determination of 2,4,6-trichloroanisole in wines by headspace solid-phase microextraction and gas chromatography-electron-capture detection.		
1128	2,4,6-trichloroanisole in wine.	*Journal of Chromatography, A (2002) 977 (1), 1-8.* Riu, M.; Mestres, M.; Busto, O. *; Guasch, J.		GC-ECD
2312	**Volatiles from wine**	**Contribution to the characterisation of wines from the grape cultivars 'Rotgipfler' and 'Zierfandler' from the winegrowing region Thermenregion in Austria.** ***Mitteilungen Klosterneuburg 55 #5-6, 129-139 (2006) (German)*** **Flak, W.; Krizan, Rudolf; Sturm, Paul; Tscheik, Gabriele; Wallner, Erich**	**headspace**	**GC/MS**
2229	**Volatiles in siriguela fruit**	**Analysis of volatile composition of siriguela (Spondias purpurea L.) by SPME** ***Food Sci. Technol. 39 #4, 436-442 (2006)*** **Antunes, O.; Bizzo, H.; Carvalho, C.; Ceva-Antunes, P.Silva, A.**	**DVB/CAR 50/30µm**	
		Analysis of volatile compounds of tapereba (Spondias mombin L.) and caja (Spondias mombin L.) by simultaneous distillation and extraction (SDE) and solid phase microextraction (SPME).		
1129	VOC's in fruit	*Journal of Agricultural and Food Chemistry (2003) 51 (5), 1387-1392.* Ceva-Antunes, P. M. N.; Bizzo, H. R.; Alves, S. M.; Antunes, O. A. C.*	DVB/CAR/PDMS	
2353	**Volatile organics in human milk**	**Volatile organic compounds in human milk: methods and measurements** ***Envl Sci & Tech 41, # 5, 1662-1667 (2007)*** **Kim, S. R.; Halden, R. U.; Buckley, T. J.**	**headspace**	**GC/MS/SIM**
		Study of light-induced volatile compounds in goat apostrophe s milk cheese.		
1130	Volatile compounds in goat's milk cheese.	*Journal of Agricultural and Food Chemistry (2003) 51 (5), 1405-1409.* Kim, G. Y.; Lee, J. H.; Min, D. B.*		GC-MS
		Optimization of solid phase microextraction analysis for the headspace volatile compounds of Parmesan cheese.		
1131	Volatile compounds in parmesan cheese.	*Journal of Agricultural and Food Chemistry (2003) 51 (5), 1136-1140.* Lee, J. H.; Diono, R.; Kim, G. Y.; Min, D. B.*		

2877	**Aroma volatiles in olive oil**	**Influence of bleaching by ultrasound on fatty acids and minor compounds of olive oil. Qualitative and quantitative analysis of volatile compounds (by SPME coupled to GC/MS)** ***Ultrason. Sonochem. 15, #4, 590-597 (April 2008)*** **Adams, A.; De Kimpe, N.; Frikha, M.H.; Jahouach-Rabai, W.; Trabelsi, M.; Van Hoed, V.;Verhe, R.**	**headspace**	**GC/MS**
2841	**Volatile from virgin olive oil.**	**Characterization of monovarietal virgin olive oils from six crossing varieties** ***Scientia Horticulturae (Amsterdam) 115, #3, 252-260 (FEB 1 2008)*** **Manai, H.; Mahjoub-Haddada, F.; Oueslati, I.; Daoud, D.; Zarrouk, M.**	**headspace**	**GC/MS** **GC/FID**
2736	**Volatile from virgin olive oil.**	**Application of SPME to the analysis of volatile compounds in virgin olive oils from five new cultivars.** ***Food Chemistry 102, #3, 850-856 (2007)*** **Baccouri, B.; Temime, S.; Campeol, E.; Cioni, P.; Daoud, D.; Zarrouk, M.**	**headspace**	**GC/MS**
2827	**Volatile from virgin olive oil.**	**Characterization of virgin olive oil from Southern Tunisia** ***European J. Lipid Science and Tech. 110, #1, 81-88 (JAN 2008)*** **Zarrouk, W.; Haddada, F.; Baccouri, B.; Oueslati, I.; Taamalli, W.; Fernandez, X.; Lizzani-Cuvelier, L.; Daoud, D.; Zarrouk, M.**	**headspace**	**GC/MS**
2475	**Volatile from virgin olive oil.**	**Profiles of volatile compounds from some monovarietal Tunisian virgin olive oils. Comparison with French PDO** ***Food Chemistry 103, #2, 467-476 (2007)*** **Haddada, F.; Manai, H.; Daoud, D.; Fernandez, X.; Zarrouk, M. Lizzani-Cuvelier, L.;**	**headspace**	**GC/MS** **GC-FID**
1132	Volatile from virgin olive oil.	Volatiles from leaves, fruits, and virgin oil from Olea europaea cv. Olivastra Seggianese from Italy. *Journal of Agricultural and Food Chemistry (2003) 51 (5), 1382-1386.* Flamini, G.; Cioni, P. L.; Morelli, I.		
2325	**Hexanal in beef bouillons**	**Accurate determination of hexanal in beef bouillons by headspace SPME-GC-MS** ***European J Lipid Sci Technology 107 #11, 792-798 (2005)*** **Giuffrida, F.; Golay, P.; Destaillats, F.; Hug, B.; Dionisi, F.**	**headspace**	**GC/MS**
1140	Hexanal from pork.	Quantitation of hexanal by automated SPME for studying dietary influences on the oxidation of pork. *Journal of Food Composition and Analysis (2003) 16 (2), 179-188.* Grun, Ingolf U.; Berg, Eric P.; Fernando, Lakdas N.	Carboxen/PDMS	GC
1145	Aroma compounds from pepper.	Aroma compound analysis of Piper nigrum and Piper guineense essential oils from Cameroon using solid-phase microextraction-gas chromatography, solid-phase microextraction-gas chromatography-mass spectrometry and olfactometry. *Journal of Chromatography, A (2002) 976 (1-2), 265-275.* Jirovetz, L.; Buchbauer, G.; Ngassoum, M. B.; Geissler, M.		GC-MS
1146	Flavours from milk	Experimental and modelling studies showing the effect of lipid type and level on flavour release from milk-based liquid emulsions. *Journal of Agricultural and Food Chemistry (2003) 51 (1), 198-195.* Roberts, D. D.; Pollien, P.; Watzke, B.		GC-MS
1147	Volatile flavor compounds	Headspace solid-phase microextraction method for the study of the volatility of selected flavour compounds. *Journal of Agricultural and Food Chemistry (2003) 51 (1), 200-205.* Jung, D. M.; Ebeler, S. E.*		GC-MS
2338	**Volatiles from roasted barley**	**Comparison of comprehensive two-dimensional GC-TOF-MS and GC-MS for the qualitative characterisation of roasted barley by SPME** ***J. Sep. Sci. 30 #4, 527-533 (2007-03)*** **Bianchi, F.; Careri, M. ; Conti, C.; Musci, M.; Vreuls, R.**	**headspace**	**GC-TOF-MS**
2302	**Volatiles from barley flour**	**Analysis of volatile compounds from various types of barley cultivars** ***J Ag Food Chem 53, #19, 7526-7531 (2005)*** **Cramer, A.; Mattinson, D.; Fellman, J.Baik, B.**	**headspace**	**GC/MS**
		Optimisation of HS-SPME to study representativeness of partially		

2584	**Aroma volatiles from baked breads**	**baked bread odorant extracts** ***Food Research Intl. 40, #9, 1170-1184 (2007)*** **Poinot, P.; Grua-Priol, J.; Arvisenet, G.; Rannou, C.; Semenou, M.; Le Bail, Al.; Prost, C.**	**75µm Carboxen 65µm PDMS/DVB headspace 30 min @ 35°C**	**GC**
2420	**Aroma volatiles from sourdough breads**	**Evolution of aroma volatiles during storage of sourdough breads made by mixed cultures of Kluyveromyces marxianus and Lactobacillus delbrueckii ssp. bulgaricus or Lactobacillus helveticus** ***FOOD CHEM. 107, #2, 883-889 (15 MAR 2008)*** **Plessas, S.; Bekatorou, A.; Gallanagh, J.; Nigam, P.; Koutinas, A.; Psarianos, C**	**headspace**	**GC/MS**
2760	**Aroma volatiles in bread crumbs**	**Effect of carrot (Daucus carota) antifreeze proteins on texture properties of frozen dough and volatile compounds of crumb** ***Food Sci. Technol. 41, #6, 1029-1036 (July 2008)*** **Guo, Xiaona; Wang, Li; Zhang, Chao; Zhang, Hui**	**headspace**	**GC/MS**
1160	Volatile compounds in bread crumb	Solid-phase microextraction method for headspace analysis of volatile compounds in bread crumb. *Cereal Chemistry (2003) 80 (3), 255-259.* Ruiz, J. A.; Guasch, J.; Mestres, M.; Quilez, J.	Carboxen/PDMS	
1161	2,4,6-trichloroanisole in wine.	Accurate determination of 2,4,6-trichloroanisole in wines at low parts per trillion by solid-phase microextraction followed by GC-ECD. *Journal of Agricultural and Food Chemistry (2003) 51 (12), 3509-3514.* Alzaga, Roberto; Bayona, Josep Maria; Marco, M.-Pilar; Ortiz, Laura; Sanchez-Baeza, Francisco	PDMS	GC-MS
1174	Halogenated fungicides in wine.	Coupling solid-phase microextraction and high-performance liquid chromatography for direct and sensitive determination of halogenated fungicides in wine. *Journal of Chromatography A (2003) 995 (1-2), 135-142.* Barrio, R. J.; Goicolea, M. A.; Millan, S.; Rodriguez, E.; Sampedro, M. C.; Unceta, N.	PDMS/DVB	HPLC-DAD
2532	**Aroma compounds in apple cider**	**Characterization of aroma compounds in apple cider using solvent-assisted flavor evaporation and headspace SPME** ***J Ag Food Chem 55, #8, 3051-3057 (2007)*** **Yan Xu; Wenlai Fan; Qian, M. C**	**headspace**	**GC/MS**
1178	Flavor characteristics in apple cider.	Effects of processing treatment and sorbate addition on the flavor characteristics of apple cider. *Journal of Agricultural and Food Chemistry (2003) 51 (7), 1924-1931.* Boylston, T. D.; Wang, H.; Reitmeier, C. A.; Glatz, B. A.		
1179	Trans-resveratrol in wine.	Solid-phase microextraction long dash on-fibre derivatization with comprehensive two-dimensional gas chromatography analysis of trans - resveratrol in wine. *Chromatographia (2003) 51 (Supp), S349-S353.* Shao, Y.; Marriott, P. *; Hugel, H.		GC
1180	2-acetyl-1-pyrroline in bread flowers.	Identification and quantification of the rice aroma compound, 2-acetyl-1-pyrroline, in bread flowers (Vallaris glabra Ktze). *Journal of Agricultural and Food Chemistry (2003) 51 (2), 457-462.* Wongpornchai, S.; Sriseadka, T.; Choonvisase, S.		GC-FID
2681	**Volatiles of Chinese noodles**	**Factors affecting solid phase microextraction (SPME) to concentrate the odorants of Chinese white salted noodles for GC-MS analysis.** ***Flavour and Fragrance J. 22, #4, 274-279 (2007)*** **Li-Yun Lin; Chiung-Huei Peng; Hui-Er Wang; Tsung-Han Wu; Cheng-Chang Chen; Tung-Hsi Yu; Cheung-May Wu; Peng, R. Y.**	**75µm Carboxen 65µm DVB/PDMS 16 min @ 30°C headspace**	**GC-MS**
2619	**Volatiles of Italian pasta**	**Electronic nose and GC-MS to investigate the volatile component of an Italian traditional pasta** ***Cereal Foods World 52, #3, 138-143 (MAY-JUN 2007)*** **Baiano, A.; Siciliano, P.; Taurino, M.; Presicce, D.; Gambacorta, G.; Lamacchia, C.; Pati, S.; La Notte, E.**	**headspace**	**GC-MS**

2546	**Volatiles of brewed arabica coffee**	**Analysis of the headspace volatiles of freshly brewed arabica coffee using solid-phase microextraction** ***J Food Science 72, #7, C388-C396 (Sept. 2007)*** **Akiyama, M.; Murakami, K.; Ikeda, M.; Iwatsuki, K.; Wada, A.; Tokuno, K.; Onishi, M.; Iwabuchi, H.**	**DVB/car 50/30µm headspace**	**GC-MS**
2861	**Volatiles in coffee**	**Headspace SPME-GC-TOF-MS methodology for geographical origin verification of coffee** ***Anal. Chim. Acta 617, #1-2, 72-84 (Jun 9 2008)*** **Carasek, Eduardo; Pawliszyn, Janusz; Risticevic, Sanja**	**DVB/car 50/30µm headspace 12 min and 55 °C**	**GC-TOF-MS**
1185	Volatile compounds in ground coffee.	Analysis of volatile compounds released during the grinding of roasted coffee beans using solid-phase microextraction. *Journal of Agricultural and Food Chemistry (2003) 51 (7), 1961-1969.* Akiyama, M.; Murakami, K.; Ohtani, N.; Iwatsuki, K.; Sotoyama, K.; Wada, A.; Tokuno, K.; Iwabuchi, H.; Tanaka, K.	PDMS/DVB	GC-MS
1190	2-pentylfuran and 2-pentenylfuran in soybean oil.	Singlet oxygen oxidation for 2-pentylfuran and 2-pentenylfuran formation in soybean oil. *Journal of Food Science (2003) 68 (4), 1175-1178.* Min, D. B.; Callison, A. L.; Lee, H. O.		GC-MS
1191	Organo-selenium in garlic	SPME for on-line volatile organo-selenium speciation. *Journal of Analytical Atomic Spectrometry (2003), 18 (5), 467-473.* Dietz, C.; Camara, C.; Madrid-Albarran, Y.; Perez-Corona, T.	PDMS	ICP-MS
1197	Aroma compounds in wine.	Aroma compounds of an Italian wine (Ruche) by HS-SPME analysis coupled with GC-ion trap MS. *Food Chemistry (2003) 80 (1), 125-133.* Bonino, M.; Schellino, R.; Rizzi, C.; Aigotti, R.; Delfini, C.; Baiocchi, C. *	Various	GC-MS
1208	Dairy products.	The electronic nose applied to dairy products: A review *Sensors and Actuators, B: Chemical (2003) 94 (1), 1-12.* Ampuero, Silvia; Bosset, J.O.		
2366	**Volatiles from white wine**	**Study of phenolic and volatile composition of white wine during fermentation and a short time of storage** ***Vitis 46, # 2, 77-84 (2007)*** **Komes, D.; Ulrich, D.; Ganic, K. Kovacevic; Lovric, T.**	**headspace**	**GC/FID GC/MS**
2321	**Volatiles from white wine**	**Isolation of white wine volatiles using different sample preparation methods** ***Vitas 44 #4 187-193 (2005)*** **Komes, D.; Ulrich, D.; Lovric, T.; Schippel, K.**		
2417	**Volatiles from white wine**	**Differentiation of certified brands of origins of Spanish white wines by HS-SPME-GC and chemometrics Microfluidics in Cell Analysis** ***Anal. Bioanal. Chem. 390, #3, 961-970 (February 2008)*** **Alcazar, A.; Ballesteros, O.; Jurado, J.M.; Martin, M.J.; Navalon, A.; Pablos, F.; Vilchez, J.L.**	**headspace**	GC-MS
1215	Flavor analysis in wine.	Flavour analysis of Greek white wine by solid-phase microextraction-capillary gas chromatography-mass spectrometry. *Journal of Chromatography, A (2003) 985 (1-2), 233-246.* Demyttenaere, J. C. R.; Dagher, C.; Sandra, P.; Kallithraka, S.; Verhe, R.; de Kimpe, N.	Various	GC-MS
2364	**Volatiles in whisky**	**Comparative study of the whisky aroma profile based on headspace . solid phase microextraction using different fibre coatings** ***J. Chromatogr., A 1150, # 1-2, 198-207 (2007-05-25)*** **Camara, J.; Marques, J. C.; Perestrelo, R.; Rodrigues, F.; Oliveira, L.; Andrade, P.; Caldeira, M**	**75um Carboxen headspace 60 min @ 40°C sat. salt**	**GC- IT MS**

		Analysis of volatiles of malt whisky by solid-phase microextraction and stir bar sorptive extraction.		
1216	Volatiles in malt whisky.	*Journal of Chromatography, A (2003) 985 (1-2), 221-232.* Demyttenaere, J. C. R.; Sanchez Martinez, J. I.; Verhe, R.; Sandra, P.; de Kimpe, N.	Various compared	
		Comparison of solid-phase microextraction and purge-and-trap methods for the analysis of the volatile fraction of butter.		
1217	Volatile fractions in butter.	*Journal of Chromatography, A (2003) 985 (1-2), 117-125.* Povolo, M.; Contarini, G. *		
		Analysis of virgin olive oil volatile compounds by headspace solid-phase microextraction coupled to gas chromatography with mass spectrometric and flame ionization detection.		
1218	Volatile components in virgin olive oil.	*Journal of Chromatography, A (2003) 983 (1-2), 19-33.* Vichi, S.; Castellote, A. I.; Pizzale, L.; Conte, L. S.; Buxaderas, S.; Lopez-Tamames, E. *	DVB/carboxen/PDMS	GC-MS
		A SPME-GC procedure for monitoring peppermint flavour in tablets.		
1224	Peppermint flavor in tablets.	*Journal of Pharmaceutical and Biomedical Analysis 2003) 30 (5), 1469-1477.* Yeung, D. Y. H.; Lee, T.; Grant, G.; Ma, M. H.; Kwong, E. *		GC
		Determination of the disproportionation products of limonene used for the catalytic hydrogenation of castor oil.		
1226	Limonene in castor oil	*Journal of Chromatography, A (2003) 985 (1-2), 313-319.* Schneider, R. C. S.; Baldissarelli, V. Z.; Martinelli, M.; von Holleben, M. L. A.; Caramao, E. B.*		GC-MS
		Effect of Penicillium chryso genum and Debaryomyces hansenii on the volatile compounds during controlled ripening of pork loins.		
1231	Volatile compounds from pork loins.	*International Journal of Food Microbiology (2003) 84 (3), 327-338.* Cordoba, Juan J.; Aranda, Emilio; Asensio, Miguel A.; Benito, Maria J.; Martin, Alberto		GC-MS
		Release of limonene from polysaccharide matrices: Viscosity and synergy effect		
1232	Limonene from polysaccharide matrices.	*Food Chemistry (2003) 82 (2), 227-234.* Grisel, Michel; Decroix, Bernard; Malhiac, Catherine; Secouard, Sebastien		
		Oxidative stability of walnut oils extracted with supercritical carbon dioxide		
1236	Walnut oils	*Journal of the American Oil Chemists' Society (2003) 80 (6), 575-578.* Crowe, Tammy D.; White, Pamela J.		
		Evaluation of headspace solid-phase microextraction for the analysis of volatile carbonyl compounds in spirits and alcoholic beverages.		
1237	Volatile carbonyl compounds from spirits.	*Journal of Chromatography, A (2003) 984 (1), 89-96.* Wardencki, W.; Sowinski, P.; Curylo, J.		GC-ECD
		Truffle aroma analysis by headspace solid phase microextraction.		
1238	Truffle aroma	*Journal of Agricultural and Food Chemistry (2003) 50 (22), 6468-6472.* Diaz, P.; Senorans, F. J.; Reglero, G.; Ibanez, E. *		GC-MS
		Headspace solid-phase micro-extraction gas chromatography method for the determination of methanol in aspartame sweeteners.		
1246	Methanol in aspartame	*Food Additives and Contaminants 92003) 20 (6), 519-523.* de Lourdes Cardeal, Z.; Sales, J. A.	85 um polyacrylate.	GC-FID
2371	**Volatiles from Citrus limon**	**Volatiles emission patterns of different plant organs and pollen of Citrus limon** ***Analytica Chimica Acta 589, #1, 120-124 (APR 18 2007)*** **Flamini, Guido; Tebano, Marianna; Cioni, Pier Luigi**	**headspace**	**GC/MS**

1248	Limonene oxidation products	Determination of limonene oxidation products using SPME and GC-MS. *Journal of Chromatographic Science (2003) 41 (1), 31-35.* Marine, S. S.; Clemons, J.	7 um PDMS	
1249	Geosmin in red beet.	Biosynthetic origin of geosmin in red beets (Beta vulgaris L.). *Journal of Agricultural and Food Chemistry (2003) 51 (4), 1026-1029.* Lu, G. P.; Edwards, C. G.; Fellman, J. K.; Mattinson, D. S.; Navazio, J.		GC-MS
1250	Geosmin in red beet.	Quantitative determination of geosmin in red beets (Beta vulgaris L.) using headspace solid-phase microextraction. *Journal of Agricultural and Food Chemistry (2003) 51 (4), 1021-1025.* Lu, G. P.; Fellman, J. K.; Edwards, C. G.; Mattinson, D. S.; Navazio, J.		GC
2447	**Tetracycline antibiotic in soil**	**On-line coupling of SPME to commercial CE-MS equipment** ***Electrophoresis 28, #9,1312-1318 (2007-05-09)*** **Santos, B.; Simonet, B. M.; Rios, A.; Valcarcel, M.**		**CE-MS**
1251	Acidic pesticides in fruit.	Off-line solid-phase microextraction and capillary electrophoresis mass spectrometry to determine acidic pesticides in fruits. *Analytical Chemistry (2003) 75 (3), 452-459.* Rodriguez, R.; Manes, J.; Pico, Y. *		CE-MS
1252	Pyrethroid in vegetables.	Application of solid-phase microextraction for the determination of pyrethroid residues in vegetable samples by GC-MS. *Analytical and Bioanalytical Chemistry (2003) 376 (4), 502-511.* Beltran, J.; Peruga, A.; Pitarch, E.; Lopez, F. J.; Hernandez, F.		GC-MS
1253	Daidzein and genistein in soybean foods.	Determination of daidzein and genistein in soybean foods by automated on-line in-tube solid-phase microextraction coupled to high-performance liquid chromatography. *Journal of Chromatography, A (2003) 986 (2), 169-177.* Mitani, K.; Narimatsu, S.; Kataoka, H. *		HPLC
2862	**Volatiles from dried honey**	**Development of a rapid and sensitive method for the simultaneous determination of 1,2-dibromoethane,1,4-dichlorobenzene and naphthalene residues in honey using HS-SPME coupled with GC-MS** ***Anal. Chim. Acta 617, #1-2, 64-71 (Jun 9 2008)*** **Dimotikali, D.; Hiskia, A.; Triantis, T.M.; Tsimeli, K.**	**100µm PDMS** **headspace**	**GC-MS**
2510	**Volatiles from dried honey**	**Preparation of dry honey by microwave-vacuum drying** ***J. Food Eng. (UK) 84, #4, 582-90 (Feb. 2008)*** **Zheng-Wei Cui; Li-Juan Sun; Wei Chen; Da-Wen Sun**	**headspace**	**GC-MS**
1266	Volatiles from honey	Analysis of volatile composition of honey by solid phase microextraction and gas chromatography-mass spectrometry *Journal of Separation Science (2002) 26 (9-10), 793-801.* Martinez-Castro, Isabel; Sanz, Jesus; Soria, Ana Cristina		GC-MS
1271	Aroma from truffles	Rebuttal on truffle aroma analysis by headspace solid phase microextraction (wrong information or wrong interpretation?). *Journal of Agricultural and Food Chemistry (2003) 51 (15), 4484.* Ibanez, Elena; Diaz, Paloma; Reglero, Guillermo; Senorans, F. Javier		
1272	Hexanal from chicken	Solid phase microextraction-gas chromatography for quantifying headspace hexanal above freeze-dried chicken myofibrils. *Journal of Agricultural and Food Chemistry (2003) 51 (15), 4185-4190.* Goodridge, Carolyn F.; Beaudry, Randolph M.; Pestka, James J.; Smith, Denise M.		GC-MS
1275	Phenolic compounds in smoked herring.	Optimization of solid-phase microextraction coupled to gas chromatography for determination of phenolic compounds in smoked herring. *Food Chemistry (2003) 82 (4), 513-519.* Serot, T.; Lafficher, C.	85 um polyacrylate, 50 C, 55 minutes.	

		Changes in aromatic components of banana during ripening and air-drying.		
1282	Aromatic components in bananas.	*Lebensmittel-Wissenschaft & Technologie (2003) 36 (6), 633-642.* Bonazzi, C.; Boudhrioua, N.; Giampaoli, P.		GC-MS
1283	Selenium in roasted coffee.	Studies of selenium-containing volatiles in roasted coffee. *Journal of Agricultural and Food Chemistry (2003) 51 (17), 5116-5122.* Caruso, Joseph A.; Bryson, Joshua M.; Meija, Juris; Montes-Bayon, Maria; Vonderheide, Anne P.		GC/ICP-MS
2909	**Aroma from Koreigusu hot sauce**	**Pungent and aroma substances of Koreigusu sauce from Okinawa** ***Nippon Shokuhin Kagaku Kogaku Kaishi 55, #4, 129-136 (2008)*** **Takahashi, Kyoko; Nishime, Anzu; Kakinuma, Mirei; Koitabashi, Y.; Sugaya, Asuka; Tanifuji, Fukuko; Miyamoto, Tomoko**	**headspace**	**GC/MS**
2442	**1,3-dichloro-propan-2-ol in soy sauce**	**Determination of 1,3-dichloro-2-propanol and 3-chloro-1,2-propandiol in soy sauce by headspace derivatization SPME combined with GC-MS** ***Anal. Chim. Acta 591,#2, 167-172 (2007-05-22)*** **Lee, M. R.; Chiu, T. C.; Dou, J. P.**	**85µm polyacrylate 50°C, 15 minutes headspace 0.36g/mL NaCl**	**GC/MS trifluoroacetamide derivative**
2251	**1,3-dichloro-propan-2-ol in soy sauce**	**Determination of 1,3-dichloropropanol in soy sauce and related products by headspace GC with MS detection: Interlaboratory study** ***Journal of AOAC International 88, #5, 1404-1412 (2005)*** **Hasnip, S.; Crews, C.; Potter, N.; Brereton, P.; Diserens, H.; Oberson,J.**	**headspace**	**GC/MS**
2551	**Volatile sulfur compounds from tryptic soy agar**	**Identification of volatile sulfur compounds produced by Shigella sonnei using gas chromatography-olfactometry** ***Food Control (UK) 18, #2, 179-82 (Feb. 2007)*** **Schneider, K. R.; Warren, B. R.; Rouseff, R. L.; Parish, M. E.**	**headspace**	**GC-MS**
2186	**Volatiles from soybean**	**Effect of soybean lipoxygenase on volatile generation and inhibition of aspergillus flavus mycelial growth** ***J Ag Food Chem, 53, #12, 4778-4783 (2005)*** **A.Boue, S.; Shih, B..; Carter-Wientjes, C.H.; Cleveland, T..**	**headspace**	**GC-MS**
2167	**Aroma compounds in soybeans**	**Influence of irradiating bulk soybeans on their future functional and sensory properties in soyfood processing** ***AIChE Annu. Meet. Conf. Proc. (2005) p 12298-12305*** **Boylston, T Chia, C; French, S; Perchonok, M; Wilson, Lester**	**headspace**	**GC-MS**
1284	Volatile compounds in soybeans.	Identification of volatile compounds in soybean at various developmental stages using solid phase microextraction. *Journal of Agricultural and Food Chemistry (2003) 51 (17), 4873-4876.* Boue, Stephen M.; Carter-Wientjes, Carol H.; Cleveland, Thomas E.; Shih, Betty Y.		GC-MS
1285	Chiral compounds in orange juice.	Enantiomeric distribution of chiral compounds in orange juices according to their geographical origins. *Journal of Food Protection (2003) 66 (8), 1448-1454.* Herraiz, M.; Blanch, G. P.; Caja, M. M.; Ruiz del Castillo, M. L.		GC-MS
1289	Methylketone in cognac.	Analysis of microvolatiles in brandy: Relationship between methylketone concentration and Cognac age. *Journal of the Science of Food and Agriculture (2003) 83 (11), 1143-1149.* Watts, Vivian A.; Butzke, Christian E.		
1290	Volatile (flavour) compounds in Raclette cheese.	Distribution of the volatile (flavour) compounds in Raclette cheese produced with different staphylococci in the smear. *Mitteilungen aus Lebensmitteluntersuchung und Hygiene (2003) 94 (3), 192-211.* Bosset, Jacques Olivier; Imhof, Miroslava; Place, Raymond B.; Teuber, Michael		
		Isolation and identification of Physalis philadelphica Lam. volatiles		

2473	**Volatiles from husk tomato**	***Agrociencia 41, #3, 337-346 (APR-MAY 2007)*** **Calyecac-Cortero, H.; Cibrian-Tovar, J.; Soto-Hernandez, M.; Garcia-Velasco, R.**		**GC-MS**
			in Spanish	
1291	Volatiles from tomato shoots.	Volatiles emitted from in vitro grown tomato shoots during abiotic and biotic stress. *Plant Cell Tissue and Organ Culture (2003) 75 (1), 73-78.* Debergh, Pierre C.; Maes, Katrien		
1292	Ethylene in mango fruit.	The role of ethylene in mango fruit aroma volatiles biosynthesis. *Journal of Horticultural Science & Biotechnology (2003) 78 (4), 485-496.* Singh, Zora; Lalel, H. J. D.; Tan, S. C.		GC-MS
1295	Postharvest fungicides in fruits.	Solid-phase microextraction liquid chromatography-tandem mass spectrometry to determine postharvest fungicides in fruits. *Analytical Chemistry (2003) 75 (14), 3606-3615.* Blasco, C.; Font, G.; Manes, J.; Pico, Y. *	50 um carbowax/template	LC-MS-MS
1296	Volatile components in cheese.	Volatile components of Grana Parmigiano-Reggiano type hard cheese. *Food Chemistry (2003) 83 (1), 55-61.* Bellesia, F.; Pinetti, A. *; Pagnoni, U. M.; Rinaldi, R.; Zucchi, C.; Caglioti, L.; Palyi, G.		GC-MS
2559	**PCBs in human milk**	**Neuro-genetic multioptimization of the determination of PCBs cogeners in human milk by headspace SPME-GC-ECD** ***Anal. Chim. Acta 585, #1, 66-75 (2007-02-28)*** **Kowalski, C. H.; da Silva, G. A.; Poppi, R.; Godoy, H.; Augusto, F**	**headspace 60 min @ 90C sat. NaCl**	**GC-ECD**
1306	PCBs in milk.	Application of Strategically Designed Sample Composition to the Rapid Analytical Screening of Milk Samples for Polychlorinated Biphenyls *Journal of AOAC International (2003) 86 (4), 846-855.* Carro, Antonia M.; Cela, Rafael; Llompart, Maria; Martinez, Elena; Pazos, Manuel		
1307	Polyphenols in grapes/wine.	Mass spectrometry in grape and wine chemistry. Part I: Polyphenols *Mass Spectrometry Reviews (2003) 22 (4), 218-250.* Flamini, Riccardo		LC-MS
1315	Ochratoxin A, cyclopiasonic acid in cornflakes.	Simultaneous determination of ochratoxin A and cyclopiazonic, mycophenolic, and tenuazonic acids in cornflakes by solid-phase microextraction coupled to high-performance liquid chromatography. *Journal of Agricultural and Food Chemistry (2003) 51 (18), 5232-5237.* Palmisano, Francesco; Aresta, Antonella; Cioffi, Nicola; Zambonin, Carlo G.	PDMS/DVB	LC-UV/DAD
1319	Iberian ham	Challenges and prospects of Iberian pork products: Verification of the sensorial and nutritional quality of Iberian ham. *Alimentaria (2003) 40 (345), 45-58.* Ventanas, S.; Ventanas, J.; Petron, M. J.; Jurado, A.; Carrapiso, A.		
1323	Organochlorine pesticides in Chinese teas.	Application of polyphenylmethylsiloxane coated fiber for solid-phase microextraction combined with microwave-assisted extraction for the determination of organochlorine pesticides in Chinese teas *Journal of Chromatography, A (2003) 1015 (1-2), 11-21.* Cai, Lingshuang; Dong, Li; Wu, Caiying; Xing, Jun	polyphenylmethylsiloxane	GC-ECD
1325	Pesticides in foods	Analyses of pesticides and their metabolites in foods and drinks. *Trends in Analytical Chemistry (2002) 20(11), 649-661* Ahmed, Farid E.		LC-MS
1330	Oil aroma compounds in Ocimem species.	Chemotaxonomical analysis of the essential oil aroma compounds of four different Ocimum species from southern India. *European Food Research and Technology (2003) 217 (2), 120-124.*		GC-MS

		Jirovetz, Leopold; Buchbauer, Gerhard; Kaniampady, Molikutty M.; Shafi, Mohamed		
1338	Volatile compounds in ewe cheese.	Solid-phase microextraction of volatile compounds in left dbl quote Terrincho right dbl quote ewe cheese: comparison of different fibres. *Journal of Chromatography, A (2003) 1011 (1-2), 1-9.* Pinho, O.; Peres, C.; Ferreira, I. M. P. L. V. O.*	CAR-PDMS	GC-MS
1339	Methylmercury in fish.	Application of isotope dilution to the determination of methylmercury in fish tissue by solid-phase microextraction gas chromatography-mass spectrometry. *Journal of Chromatography, A (2003) 1011 (1-2), 135-142.* Yang, L.; Colombini, V.; Maxwell, P.; Mester, Z.; Sturgeon, R. E.	PDMS	GC-MS
1347	Volatile compounds in coffee	Comparison of two SPME fibres for differentiation of coffee by analysis of volatil compounds. Chromatographia (2001) 54(9-10), 647-652. Costa Freitas, A. M.; Parreira, C.; Vilas-Boas, L.	Carbowax/DVB, PDMS	GC-MS
1348	Fungicides in wine	Solid-phase microextraction-gas chromatographic-mass spectrometric method for the determination of the fungicides cyprodinil and fludioxonil in white wines. *Journal of Chromatography A (2002) 942(1-2), 41-52* Simal Gandara, J.; Cancho Grande, B.; Rial Otero, R.; Yague Ruiz, C.	50/30um DVB/Carboxen PDMS	GC-MS
1356	Volatiles in wines	Classification of Nebbiolo-based wines from Piedmont (Italy) by means of solid-phase microextraction-gas chromatography-mass spectrometry of volatile compounds. *Journal of Chromatography A (2002) 943(1), 123-137* Aceto, Maurizio; Marengo, Emilio; Maurino, Valter		GC-MS
1362	Cyclopiazonic acid in cheese.	Determination of cyclopiazonic acid in cheese samples using solid-phase microextraction with high performance liquid chromatography. Food Chemistry (2001) 75(2), 249-254. Zambonin, C. G.; Monaci, L.; Aresta, A. *	Carbowax/TPR	HPLC
1367	Off flavours in orange juice.	2-Methyl-3-furanthiol and methional are possible off-flavours in stored orange juice: aroma-similarity, NIF/SNIF GC-Olfactometry, and GC analyses. Journal of Agricultural and Food Chemistry (2001) 49(11), 5425-5432. Bezman, Y.; Rouseff, R. L.; Naim, M. *		GC-O
1368	Flavour compounds in wine.	Headspace solid phase microextraction (SPME) analysis of flavour compounds in wines. Effect of the matrix volatile composition in the relative response factors in a wine model. Journal of Agricultural and Food Chemistry (2001) 49(11), 5142-5151. Rocha, S.; Ramalheira, V.; Barros, A.; Delgadillo, I.; Coimbra, M. A.		GC
1370	Volatiles in solid foods.	New device for direct extraction of volatiles in solid samples using SPME Journal of Agricultural and Food Chemistry (2001) 49(11), 5115-5121. Ruiz, J.; Ventanas, J.; Cava, R.		GC-MS
1372	Coffee aroma	The use of an electronic aroma-sensing device to assess coffee differentiation. Comparison with SPME gas chromatography-mass spectrometry aroma patterns. Journal of Food Composition and Analysis (2001) 14(5), 513-522. Costa Freitas, A. M.; Parreira, C.; Vilas-Boas, L.	100 um PDMS	GC-MS
1377	PAH in rice.	Dynamics analysis for the distribution of PAH in rice. Journal of Health Science (2001) 47(5), 446-451. Liu, X. X.; Korenaga, T.		GC-MS
1378	Fatty acids in milk.	Quantitative determination of short-chain free fatty acids in milk using solid-phase microextraction and gas chromatography. Journal of Agricultural and Food Chemistry (2001) 49(10), 4603-4608.	Polyacrylate	GC

		Gonzalez-Cordova, A. F.; Vallejo-Cordoba, B. *		
1382	Volatile flavour compounds.	Comparison of simultaneous distillation extraction and solid-phase microextraction for the determination of volatile flavour components. Journal of Chromatography, A (2001) 930(1-2), 1-7. Cai, J. B.; Liu, B. Z.; Su, Q. D.*		GC-MS
1387	Cucumber flavour compounds	Solid-phase microextraction (SPME) technique for measurement of generation of fresh cucumber flavour compounds. Journal of Agricultural and Food Chemistry (2001) 49(9), 4203-4207. Palma-Harris, C.; McFeeters, R. F.*; Fleming, H. P.	PDMS	GC
2330	**Volatile fraction of distilled gins**	**Characterization of volatiles in different dry gins** ***J Ag Food Chem 53, #26, 10154-10160 (2005)*** **Vichi, S.; Riu-Aumatell, M.; Mora-Pons, M.; Buxaderas, S.; Lopez-Tamames, Elvir**	**headspace**	**GC/MS**
1389	Scotch whiskies	Headspace congeners of blended scotch whiskies of different product categories from SPME analysis. Journal of the Institute of Brewing (2001) 107(5), 315-332. Lee, K. -Y. M.; Paterson, A. *; Birkmyre, L.; Piggott, J. R	PDMS, polyacrylate	GC-FID
1390	Volatiles in potato tubers	Volatile fingerprinting (SPME-GC-FID) to detect and discriminate diseases of potato tubers. *Plant Disease (2002) 86(2), 131-137* Kushalappa, A. C.; Chen, C. R.; Lee, B.; Lui, L. H.		GC-FID
1399	PCBs in food.	Fast extraction, clean-up and detection methods for the rapid analysis and screening of seven indicator PCBs in food matrices. *Trends in Analytical Chemistry (2002) 21(1), 39-52* Anklam, E.; von Holst, Christoph; Bjorklund, E.		
1401	Aroma from wine must.	Optimization of solid phase microextraction analysis of aroma compounds in a Portuguese muscatel wine must. Journal of Microcolumn Separations (2001) 13(6), 236-242. Relva, A. M.; Freire, Luis M. T. Vaz; Freitas, A. M. Costa	85 um polyacrylate	
1402	Lipid degeneration products in oils	Monitoring of lipid degradation products by solid-phase microextraction Journal of Microcolumn Separations (2001) 13(6), 215-220. Doleschall, Fruzsina; Kemeny, Zsolt; Kovari, Katalin; Recseg, Katalin	100 um PDMS	GC-FID
1403	Volatiles in bananas	Optimization of solid-phase microextraction analysis for studying change of headspace flavor compounds of banana during ripening. *Journal of Agricultural and Food Chemistry (2002) 50(4), 653-657* Liu, Tai-Ti; Yang, Tsung-Shi		
1414	Volatiles from fruit.	Solid phase microextraction and gas chromatography-olfactometry analysis of internal volatiles from intact citrus fruits and their aroma activity Abstracts of Papers American Chemical Society (2001) 222(1-2), AGFD142. Rouseff, Russell L.; Lin, Jianming		GC-O
1415	Off-flavors from milk	SPME GC-MS-based testing for monitoring off-flavor development in processed milk. Abstracts of Papers American Chemical Society (2001) 222(1-2), AGFD27. Marsili, Ray T.		
1418	Volatiles in soybean and corn oils	Solid phase microextraction of volatile soybean oil and corn oil compounds. *Journal of Food Science (2002) 67(1), 71-76* Min, D. B.; Lee, J. H.; Steenson, D. F.	Various fibers compared	GC-MS
		Polydimethylsiloxane solid-phase microextraction-gas chromatography method for the analysis of volatile compounds in wines. Its application to the characterization of varietal wines.		

1420	Volatile compounds in wine.	Journal of Chromatography A (2001) 922(1-2), 267-275. Polo, M. C.; Martin-Alvarez, P. J.; Pozo-Bayon, M. A.; Pueyo, E.	PDMS	GC
1421	Pesticides in strawberries.	Determination of organochlorine pesticides and chlorobenzenes in strawberries by using accelerated solvent extraction combined with sorptive enrichment and gas chromatography/mass spectrometry. Journal of AOAC International (2001) 84(4), 1194-1201. Wennrich, Luise; Breuste, Juergen; Koeller, Gabor; Popp, Peter		
1422	Volatile compounds from oranges.	Analysis of volatile compounds released from embryogenic cultures and somatic embryos of sweet oranges by head space SPME Plant Cell Tissue and Organ Culture (2001) 66(1), 31-34. Del Bosco, S. Fatta; Alonzo, G.; Saiano, F.; Tusa, N.		GC-MS
1423	Volatiles from turkey breast.	The effects of temperature and pressure on the performance of Carboxen/PDMS fibres during solid phase microextraction (SPME) of headspace volatiles from cooked and raw turkey breast. Flavour and Fragrance Journal (2001) 16(4), 294-302. Cronin, D. A.; Brunton, N. P.; Monahan, F. J.	Carboxen/PDMS	
1424	Volatiles of gourd flowers.	Headspace-SPME analysis of volatiles of the ridge gourd (Luffa acutangula) and bitter gourd (Momordica charantia) flowers. Flavour and Fragrance Journal (2001) 16(4), 289-293. Grun, I. U.; Fernando, L. N.		GC-MS
1426	Aroma of strawberry drink.	Changes in the aroma of a strawberry drink during storage. Journal of Agricultural and Food Chemistry (2001) 49(7), 3244-3252. Siegmund, Barbara; Derler, Karin; Pfannhauser, Werner		
1440	Truffle aroma	Truffle aroma characterization by headspace solid-phase microextraction *Journal of Chromatography A (2003) 1017(1-2), 207-214* Diaz, P.; Ibanez, E.; Reglero, G.; Senorans, F.J	50/30um DVB/Carboxen PDMS headspace 13.6 mins.	GC-MS
1441	Propionic acid in feed	Analysis of total propionic acid in feed using headspace solid-phase microextraction and gas chromatography *Journal of Chromatography A (2003) 1017(1-2), 161-166* Ibanez, Carlos	85um Polyacrylate headspace	GC-FID, GC-MS
1442	Volatiles in Italian Vinegars	Quantitative analysis of 2-furfural and 5-methylfurfural in different Italian vinegars by headspace solid-phase microextraction coupled to gas chromatography-mass spectrometry using isotope dilution *Journal of Chromatography A (2003) 1017(1-2), 141-149* Calabrese, Roberto; Davoli, Enrico; Giordano, Lucia; Rotilio, Domenic	50/30um DVB/Carboxen PDMS headspace	GC-MS
1448	Garlic flavor components	Comparative study of extraction techniques for determination of garlic flavour components by gas chromatography-mass spectrometry. *Analytical and Bioanalytical Chemistry (2003) 377(4), 749-756* Lee, S. N.; Kim, N. S.; Lee, D. S.	50/30um DVB/Carboxen PDMS, headspace	GC-MS
2731	**Volatiles in Olive Oil**	**Comparative study of different extraction techniques for the analysis of virgin olive oil aroma** ***Food Chemistry 105, #3, 1171-1178 (2007)*** **Vichi, S.; Guadayol, J.; Caixach, J.; Lopez-Tamames, E.; Buxaderas, S.**	**headspace**	**GC-MS**
1451	Volatiles in Olive Oil	Solid-phase microextraction in the analysis of virgin olive oil volatile fraction: Characterization of virgin olive oils from two distinct geographical areas of northern Italy. *Journal of Agricultural and Food Chemistry (2003) 51(22), 6572-6577* Lopez-Tamames, Elvira; Buxaderas, Susana; Conte, Lanfranco S.; Pizzale, Lorena; Vichi, Stefania		GC-FID, GC-MS

		Solid-phase microextraction in the analysis of virgin olive oil volatile fraction: Modifications induced by oxidation and suitable markers of oxidative status.		
1452	Volatiles in Olive Oil	*Journal of Agricultural and Food Chemistry (2003) 51(22), 6564-6571* Lopez-Tamames, Elvira; Buxaderas, Susana; Conte, Lanfranco S.; Pizzale, Lorena; Vichi, Stefania		GC-FID, GC-MS
1453	Free fatty acids in ewe cheese	Quantification of short-chain free fatty acids in "Terrincho" ewe cheese: Intravarietal comparison. *Journal of Dairy Science (2003) 86(10), 3102-3109* Ferreira, I. M. P. L. V. O.; Ferreira, M. A.; Pinho, O.	85um Polyacrylate 65 degrees C, 45 mins. Headspace	GC-FID
1454	Aroma volatiles in beef	Evaluation of two commercial solid-phase microextraction fibres for the analysis of target aroma compounds in cooked beef meat *Talanta (2003) 61(4), 529-537* Istasse, Louis; Machiels, David	50/30um DVB/Carboxen PDMS, Carboxen PDMS, headspace	GC-MS
2346	**Volatiles in sparkling wine**	**Volatile profiles of sparkling wines obtained by three extraction methods and gas chromatography-mass spectrometry** ***Food Chemistry 105, #1, 428-435 (2007)*** **Bosch-Fuste, J.; Riu-Aumatell, M.; Guadayol, J. M.; Caixach, J.; Lopez-Tamames, E.; Buxaderas, S.**	**50/30µm DVB/Car headspace 30 min @ 35 C**	GC-MS
1457	Volatiles in sparkling wine	Volatile compounds by SPME-GC as age markers of sparkling wines. *American Journal of Enology and Viticulture (2003) 54(3), 158-162* Buxaderas, Susana; Francioli, Sonia; Lopez-Tamames, Elvira; Riu-Aumatell, Montserrat; Torrens, Jordi		GC-MS
1463	Long chain alcohols from food-borne bacteria	Comparison of long-chain alcohols and other volatile compounds emitted from food-borne and related Gram positive and Gram negative bacteria. *Journal of Basic Microbiology (2002) 42(6), 373-380* Hamilton-Kemp, T. R.; Archbold, D. D.; Collins, R. W.; Elgaali, Hesham; Newman, M. C.; Yu, Keshun		GC-MS
1465	Thymol in honey	Application of solid phase microextraction to evaluate traces of thymol in honey. *Apidologie (2002) 33(6), 545-552* Conte, Lanfranco S.; Bogdanov, Stefan; Gracco, Luisa; Piasenzotto, Lara		
1471	VOCs in Riseling wine	Analysis of Riesling wine volatiles by a novel headspace solid-phase microextraction gas chromatography method. *American Journal of Enology and Viticulture (2002) 53(3), 251A*		
1472	Volatiles in dry-cured ham	Optimisation of solid phase microextraction (SPME) for the analysis of volatile compounds in dry-cured ham. *Journal of the Science of Food and Agriculture (2002) 82(14), 1703-1709* Flores, Monica; Gianelli, Maria Pia; Toldra, Fidel	50/30um DVB/Carboxen PDMS	
1473	Carvone in dill seeds	Estimation of the main dill seeds odorant carvone by solid-phase microextraction and gas chromatography. *Nahrung (2002) 46(5), 357-359* Zawirska-Wojtasiak, Renata; Wasowicz, Erwin	85um Polyacrylate, 100um PDMS	GC-FID
1474	Volatiles from soybean leaves	Clean recovery and HRGC-MS/HRGC-FTIR identification of volatiles from soybean (Glycine max). *Italian Journal of Food Science (2002) 12(2), 175-182* Damiani, P.; Bin, F.; Castellini, M.; Cossignani, L.		GC-MS
		Binding properties of 2-pentyl pyridine to soy protein as measured by solid phase microextraction		

1481	2-pentyl pyridine binding to soy proteins	*Journal of Food Science (2002) 67(1), 142-145* Boatright, W. L.; Johnson, L. A.; Reuber, M.; Zhou, A.		
1482	Aroma compounds in Vinegar	Headspace solid-phase microextraction analysis of aroma compounds in vinegar. Validation study. *Journal of Chromatography A (2002) 967(2), 261-267* Castro Mejias, Remedios; Garcia Barroso, Carmelo; Garcia Moreno, Ma. de Valme; Garcia Rowe, Fernando; Natera Marin, Ramon	75um Carboxen/PDMS	
1496	Mycophenolic acid in cheese	Solid-phase microextraction-high performance liquid chromatography and diode array detection for the determination of mycophenolic acid in cheese. *Food Chemistry (2002) 78(2), 249-254* Zambonin, C. G.; Aresta, A.; Monaci, L.	50um Carbowax TPR	HPLC-PAD
1499	Characterization of flavors in coffee	Characterization of flavor compounds during grinding of roasted coffee beans. *Abstracts of Papers American Chemical Society (2002) 224(1-2), AGFD 68* Sotoyama, Kazuyoshi; Ohtani, Noboru; Murakami, Kazuya; Iwatsuki, Keiji; Akiyama, Masayuki; Iwabuchi, Hisakatsu; Tanaka, Kiyofumi; Tokuno, Katsuya; Wada, Akira		
1500	Volatiles in orange juice	Variables affecting SPME headspace analysis of orange juice volatiles *Abstracts of Papers American Chemical Society (2002) 224(1-2), AGFD 49* Goodrich, Renee M.; Bryan, Charles R.; Braddock, Robert J.		
1516	Voltiles in pineapple	Volatile compounds in hydrolyzed pineapple (Ananas comosus L. Merryl) perola variety and clarified pasteurized juices obtained by solid-phase microextraction *Alimentaria (2002) 39(333), 129-132* de Carvalho, Lucia Maria Jaeger; da Silva, Carlos Alberto Bento; de Oliveira Godoy, Ronoel Luiz; Abadio, Fernanda Dias Bartolomeu; Figueira, Jose Americo A.	65um PDMS DVB	GC-MS
1517	Aroma compounds in wine	Headspace solid-phase microextraction gas chromatography/mass spectrometry in the analysis of the aroma constituents of 'Cannonau of Jerzu' wine. *Rapid Communications in Mass Spectrometry (2002) 16(11), 1086-1091* Podda, Gianni; Begala, Michela; Corda, Luciana; Fedrigo, Maria Anna; Traldi, Pietro		GC-MS
2405	**Volatile flavors of sardine**	**Analysis of volatile flavor compounds of sardine (Sardinops melanostica) by solid phase microextraction.** ***J Food Sci 73, #1, S83-88 (2008 Jan)*** **Ganeko, N; Shoda, M; Hirohara, I; Bhadra, A; Ishida, T; Matsuda, H; Takamura, H; Matoba, T**	**headspace**	**GC-MS**
2548	**MIB and geosmin in fish**	**Natural origins of off-flavours in fish related to feeding habits** ***Water Science and Technology 55, #5, 301-309 (2007)*** **Papp, Zs. Gy.; Kerepeczki, E.; Pekar, F.; Gal, D.**	**headspace**	**GC-MS**
2173	**Volatiles from fish powder**	**Patterns in volatile components over heated fish powders** ***Food Research International 39, #2, 190-202 (2006)*** **Mjos, Svein A.; Solvang, Marianne**	**headspace 0.5-4 h at 40° to 140°C**	**GC-MS**
2299	**Volatiles from smoked fish**	**Headspace volatile components of smoked swordfish (Xiphias gladius) and cod (Gadus morhua) detected by means of spme-gc-ms** ***Food Chemistry 94 #1, 151-156 (2006)*** **Guillen, M. D.; Errecalde, W. C.; Salmeron, J.; Casas, C.**	**headspace**	**GC/MS**
1520	Volatiles in smoked fish	Volatile components of raw and smoked black bream (Brama raii) and rainbow trout (Oncorhynchus mykiss) studied by means of solid phase microextraction and gas chromatography/mass spectrometry. *Journal of the Science of Food and Agriculture (2002) 82(9), 945-952* Guillen, Maria D.; Errecalde, Maria C.		
2567	**Aroma volatiles in watermelon**	**Characterization and semiquantitative analysis of volatiles in seedless . watermelon varieties using solid-phase microextraction** ***J. Agric. Food Chem. 54, #20, 7789-7793 (2006-10-04)***	**50/30µm DVB/Car headspace**	**GC/MS**

		Beaulieu, J. C.; Lea, J. M.		
2311	**Volatile Esters in melons & apples**	**Effect of cutting and storage on acetate and nonacetate esters in convenient, ready-to-eat fresh-cut melons and apples** ***HortScience 41 #1, 65-73 (2006)*** **Beaulieu, John C.**	**headspace**	**GC/MS**
1521	Aroma volatiles in cantaloupe	Effect of storage on some volatile aroma compounds in fresh-cut cantaloupe melon. *Journal of Agricultural and Food Chemistry (2002) 50(14), 4043-4047* Lamikanra, Olusola; Richard, Olga A.	headspace	GC-MS
1525	Fatty acid ethyl ethers in rum	Headspace solid-phase microextraction of higher fatty acid ethyl esters in white rum aroma. *Journal of Chromatography A (2002) 954(1-2), 51-57* Guasch, J.; Busto, O.; Marti, M. P.; Mestres, M.; Perez, J.; Pino, J.		
2466	**Volatiles from white grapes**	**Screening of variety- and pre-fermentation-related volatile compounds during ripening of white grapes to define their evolution profile** ***ANAL. CHIM. ACTA 597, #2, 257-264 (10 AUG 2007)*** **Coelho, E.; Rocha, S. M.; Barros, A. S.; Delgadillo, I.; Coimbra, M. A.**	headspace	GC-MS
2803	**Volatiles from grapes**	**Applications of GCxGC-TOF-MS to targeted analyses of volatiles in grapes during berry development** ***American J Enology and Viticulture 59, #1, 115A (2008)*** **Sacks, Gavin L.; Pan, Bruce S.; Ryona, Imelda**	**headspace**	**GCxGC-TOF-MS**
2810	**Volatiles from grapes**	**Effect of vertical shoot-positioned, smart-dyson, and Geneva double-curtain training systems on Viognier grape and wine composition** ***American J Enology and Viticulture 59, #1, 11-21 (2008)*** **Zoecklein, B.; Wolf, T.; Pelanne, Lisa.; Miller, M. ; Birkenmaier, S.**	**headspace**	**GC-MS**
1526	Volatiles in alcoholic fermentation of grapes	Investigation of volatiles evolution during the alcoholic fermentation of grape must using free and immobilized cells with the help of solid phase microextraction (SPME) headspace sampling. *Journal of Agricultural and Food Chemistry (2002) 50(13), 3840-3848* Komaitis, Michael; Kanellaki, Maria; Koutinas, Athanasios; Mallouchos, Athanasios		
1527	Odors in cheese	Optimization of headspace solid-phase microextraction (SPME) for the odor analysis of surface-ripened cheese. *Journal of Agricultural and Food Chemistry (2002) 50(13), 3810-3817* Ducruet, Violette; Feigenbaum, Alexandre; Gratadoux, Jean Jacques; Jouquand, Celine; Lecanu, Laurent	headspace	GC-OLFACTOMETRY
1534	Butyltin in wines	Headspace solid-phase micro-extraction gas chromatography-mass detection method for the determination of butyltin compounds in wines. *Analytica Chimica Acta (2002) 458(1), 231-239* Azenha, Manuel; Vasconcelos, Maria Teresa	headspace	GC-MS
1535	Ethylphenol in wine	Determination of ethylphenol compounds in wine by headspace solid-phase microextraction in conjunction with gas chromatography and flame ionization detection. *Analytica Chimica Acta (2002) 458(1), 111-117* Nepveu, Francoise; Gastine, Valerie; Monje, Marie-Carmen; Privat, Christelle	85um Polyacrylate, NaCl added, 40mins.	GC-FID
2347	**Aroma compounds in peach**	**Changes in quality parameters and volatile aroma compounds in fairtime-peach during fruit development and ripening** ***Italian Journal of Food Science 19, #1, 3-13 (2007)*** **Agozzino, P.; Avellone, G.; Filizzola, F.; Farina, V.; Lo Bianco, R.**	**headspace**	**GC/MS**
2317	**Ethyl carbamate in fruit spirits**	**Automated determination of ethyl carbamate in stone-fruit spirits using headspace SPME-GC-MS** ***J. Chromatogr. A 1108 #1, 116-120 (2006)*** **Kuballa, Thomas; Lachenmeier, Dirk W.; Nerlich, Uta**	**65µm CW/DVB headspace 30 min at 70**	**GC/MS**

1537	Ethyl carbamate in wine	Determination of ethyl carbamate in wine by solid-phase microextraction and gas chromatography/mass spectrometry. *American Journal of Enology and Viticulture (2002) 53(1), 60-63* Zoecklein, B. W.; Whiton, R. S.	65um Carbowax DVB, 30mins, headspace	GC-MS
2907	**3-alkyl-2-methoxy pyrazines in in wine and juice**	**Quantitative analysis of 3-alkyl-2-methoxypyrazines in juice and wine using stable isotope labelled internal standard assay** ***J. Chromatogr., A 1190,#1-2, 294-301 (May 9 2008)*** **Blake, A.J.; Brindle, I.D.; Chen, X.; Inglis, D.; Kotseridis, Y.S.; Pickering, G.J.; Sears, M.; Soleas, G.; Spink, M.**	**50/30µm DVB/CAR Headspace pH 6**	**GC-MS**
2901	**3-alkyl-2-methoxypyrazines in wine**	**Implementation of headspace SPME-GC-MS/MS methodology for determination of 3-alkyl-2-methoxypyrazines in wine** ***Eur. Food Res. Technol 227, #2, 449-461 (June 2008)*** **Godelmann, Rolf; Kuballa, Thomas; Limmert, Susanne**	**75µm Carboxen 30-80 min 30-80 °C**	**GC-MS**
2806	**3-alkyl-2-methoxypyrazine in wine**	**Determination of 3-alkyl-2-methoxypyrazines in lady beetle-infested wine by SPMEheadspace sampling** ***J of Agri and Food Chemistry 56(3), 1065-1071 (FEB 13 2008)*** **Galvan, Tederson Lutz; Kells, Stephen; Hutchison, William Dale**	**headspace**	**GC**
1539	3-alkyl-2-methoxypyrazines in wine	Headspace solid-phase microextraction analysis of 3-alkyl-2-methoxypyrazines in wines. *Journal of Chromatography A (2002) 953(1-2), 1-6* Guasch, J.; Busto, O.; Marti, M. P.; Mestres, M.; Sala, C.		
1541	Butyltin in Portuguese wines	Butyltin compounds in Portuguese wines. *Journal of Agricultural and Food Chemistry (2002) 50(9), 2713-2716* Azenha, Manuel; Vasconcelos, Maria Teresa		GC-MS
1542	Volatiles in Spanish honey	Analysis of volatiles from Spanish honeys by solid-phase microextraction and gas chromatography-mass spectrometry. *Journal of Agricultural and Food Chemistry (2002) 50(9), 2633-2637* Tadeo, Jose L.; Calvo, Rosa M.; Perez, Rosa A.; Sanchez-Brunete, Consuelo	75um Carboxen PDMS, 70 degrees C, 30mins.	GC-MS
1546	Short-chain fatty acids in cane and beet sugars	Semiquantitative determination of short-chain fatty acids in cane and beet sugars. *Journal of Chromatographic Science (2002) 40(3), 127-132* Grimm, Casey C.; Batista, Rebecca B.; Godshall, Mary An		
2415	**Sulfur compounds in wines**	**Quantitative determination of wine highly volatile sulfur compounds by using automated headspace SPME-GC-pulsed FPD: Critical study and optimization of a new procedure** ***J. Chromatogr., A 1143, #1-2, 8-15 (-2007-03-02)*** **Lopez, R.; Lapena, A. C.; Cacho, J.; Ferreira, V.**	**75µm Carboxen 20 MIN @ 35°C headspace saturated NaCl**	**GC-FPD**
2225	**Sulfur compounds in wines**	**Volatile sulfur compounds in oregon wines determined by SPME-pulsed flame photometric detection** ***American Journal of Enology and Viticulture 56 #3, 309A (2005)*** **Fang, Yu; Qian, Michael**	**headspace**	**GC-FPD**
1555	Sulfur compounds in wines	Application of headspace solid-phase microextraction to the determination of sulphur compounds with low volatility in wines. *Journal of Chromatography A (2002) 945(1-2), 211-219* Mestres, M.; Busto, O.; Guasch, J.	50/30um DVB/Carboxen PDMS	GC-MS
1196		Analysis of chemical constituents of capsicol by GC-MS. *Fenxi Ceshi Xuebao (2003) 22 (1), 67-70.* Zhu, X. L.; Liu, B. Z.; Zong, R. W.; Yun, G. O.		GC-MS

1211		Identification of 2-bromo-3,4,5,6-tetrachloroaniline and its quantification in the color additives D&C Red Nos. 27 and 28 (phloxine B) using solid-phase microextraction and gas chromatography-mass spectrometry *Journal of Chromatography A (2003) 1005 (1-2), 143-153.* Andrzejewski, Denis; Weisz, Adrian		GC-MS
1243	Nicotine in cigarettes	Determination of nicotine and other minor alkaloids in international cigarettes by solid-phase microextraction and gas chromatography/mass spectrometry. *Analytical Chemistry (2003) 74 (19), 4878-4884.* Wu, W. J.; Ashley, D. L.; Watson, C. H.*		GC-MS
1274		Determination of the volatile constituents of Chinese Coriandrum sativum L. by gas chromatography-mass spectrometry with solid-phase microextraction. *Chromatographia (2003) 57 (5-6), 357-361.* Deng, C. H.; Song, G. X.; Hu, Y. M.*; Zhang, X. M.	100 um PDMS, 250 C, 3 r	GC-MS
1314		Aroma dilution method using GC injector split ratio for volatile compounds extracted by headspace solid phase microextraction. *Food Chemistry (2003) 83 (1), 151-158.* Lee, Hyong Joo; Kim, Kyoung Heon; Kim, Tae Hwan; Kim, Young-Suk; Lee, Sang Mi; Oh, Sangsuk		GC-O
1409	Disulfide flavors from proteins	Flavor-protein binding: Disulfide interchange reactions between ovalbumin and volatile disulfides. Journal of Agricultural and Food Chemistry (2001), 49(9), 4333-4336. Mottram, Donald S.; Adams, Rachel L.; Brown, Helen M.; Parker, Jane K.		
1559	Esters in wine	Analysis of esters in wines *J.Chromatogr. A (2002) 963(1-2), 213-223* Rodriguez-Bencomo, J.; Conde, J.; Rodriguez-Delgado, M.A.; Garcia-Montelongo, F.; Perez-Trujillo, J.P.	Various	GC
1560	Dimethyl sulfide in wine	Contribution of dimethyl sulfide to the aroma of Syrah and Grenache Noir wines and estimation of its potential in grapes of these varieties *J Agr Food Chem, 52, #23, 7084-7093* Segurel, M.; Razungles, A.; Riou, C; Salles, M; Baumes, R	headspace	GC-MS
1561	Volaitles in apple leaves	Hydrolysis of glycosidically bound volatiles from apple leaves (cv. Anna) by Aspergillus niger beta-glucosidase affects the behavior of codling moth (Cydia pomonella L.) *J Agril and Food Chem, 52, #26, 6212-6216* Wei, Shu; Reuveny, Haim; Bravdo, Ben-Ami; Shoseyov, Oded	headspace	GC-MS
2547	**Volaitles in apples**	**Genetic diversity of volatile components in Xinjiang Wild Apple (Malus sieversii)** ***Journal of Genetics and Genomics 34, #2, 171-179(FEB 2007)*** **Chen, X.; Feng, T.; Zhang, Y.; He, T.; Feng, Jianrong; Zhang, Chunyu**	**Headspace**	**GC-MS**
1562	Volaitles in apples	Monitoring seasonal variation in apple fruit volatile emissions in situ using SPME *Phytochemical Analysis, 14, No 4, 232-240* Hern, Alan; Dorn, Silvia	in situ	GC
1563	Esters in apples	Ester variability in apple varieties as determined by SPME-GC-MS *J Agril and Food Chem, 52, #26, 8086-8093* Young, J. C.; Chu, C. L. G.; Lu, X. W.; Zhu, H. H.	PDMS fiber Headspace	GC-MS
1564	Volaitles in stawberry vs a puree	Potential of SPME-GC and chemometrics to detect adulteration of soft fruit purees. *J Agr Food Chem, 52, #3, 421-427* Reid, L.; Oapostrophe Donnell, C.; Downey, G.	Headspace	GC-FID GC-MS
1565	Solvents in edible oils, pharmaceutics	Development of headspace SPME-GC method for the determination of solvent residues in edible oils and pharmaceuticals *J. Chromatogr. A, 1071, #1-2, 119-124* Michulec, M.; Wardencki, W.	various fibers headspace	GC-FID GC-ECD
2701	**Volatiles in safflower oil**	**Rapid determination of volatile constituents in safflower by microwave distillation and simultaneous SPME-GC-MS** ***Annali di Chimica 97, #10, 1075-1084 (OCT 2007)*** **Yu, Yingjia; Yang, Bei; Zhou, T.; Zhang, H.; Shao, Luping; Duan, G.**	**65µm PDMS/DVB headspace**	**GC/MS**

1566	Volatiles in safflower oil	Identification of volatile compounds in structured lipid of safflower oil using electronic nose and SPME-GC-MS *Agr Chem&Biotechnogy, 46, #4, 152-155* Shin, Jung-Ah; Lee, Jong-Ho; Lee, Ki-Teak	headspace	GC-MS
2708	**Terpenes in olive oil**	**Monoterpene and sesquiterpene hydrocarbons of virgin olive oil by . headspace SPME coupled to gas chromatography/mass spectrometry** ***J. Chromatogr., A 1125, #1, 117-123 (2006-08-25)*** **Vichi, S.; Guadayol, J.; Caixach, J.; Lopez-Tamames, E.; Buxaderas, S.**	**headspace**	**GC/MS**
2248	**Halogenated solvents in olive oil**	**Determination of halogenated solvents content in olive oil by two completely automated headspace techniques coupled to GC-MS** ***Analytica Chimica Acta (2005) 552 #1-2, 60-66*** **Arrebola, F. ; Gonzalez-Rodriguez, M.; Garrido Frenich, A.; Marin-Juan, A.; Martinez Vidal, J.;**	**headspace**	**GC/MS**
2515	**Volatiles from Virgin olive oil**	**Characterization of olive paste volatiles to predict the sensory quality of virgin olive oil** ***European J Lipid Sci Tech 109, #7, 663-672 (JUL 2007)*** **Garcia-Gonzalez, Diego L.; Tena, Noelia; Aparicio, Ramon**	**headspace**	**GC/MS**
2300	**Volatiles from Virgin olive oil**	**Effect of the matrix volatile composition in the headspace SPME analysis of extra virgin olive oil** ***Food Chemistry 94 #1, 143-150 (2006)*** **Contini, Marina; Esti, Marco**	**65µm PDMS/DVB headspace**	**GC/MS**
1567	Volatiles in olive oils	Comparative study on volatile analysis of extra virgin olive oil by dynamic headspace and SPME *Food Chemistry, 90, #1-2, 69-79* Kanavouras, A.; Kiritsakis, A.; Hernandez, R. J.	100µm PDMS 65µm PDMS-DVB headspace	GC-MS-TOF
2738	**Volatiles in olive oils**	**Application of SPME to virgin olive oil quality control** ***J Chromatogr A, 1121, #1, 140-144 (2006-07-14)*** **Jimenez, A.; Aguilera, M. P.; Beltran, G.; Uceda, M.**	**65µm PDMS/DVB headspace 30 min @ 40°C**	**GC/MS**
1568	Volatiles in olive oils	Application of SPME in the analysis of volatile oils compounds in virgin olive oils. *J Chromatogr A, 1028, #2, 321-324* Jimenez, A.; Beltran, G.; Aguilera, M. P.	100µm PDMS 15 min @ 45°C headspace	GC
1569	Volatiles in olive oils	Analysis of virgin olive oil volatiles by a novel electronic nose based on a miniaturized SAW sensor array coupled with SPME enhanced headspace enrichment *J AgriFood Chem, 52, #25, 7475-7479* Garcia-Gonzalez, D.; Barie, N; Rapp, M; Aparicio, R	headspace	SAW GC
1570	Terpenes in olibanum	A chemical investigation by headspace SPME and GC-MS of volatile and semi-volatile terpenes ir various olibanum samples *Phytochemistry (Amsterdam), 66, #12,1499-1514* Hamm, S; Bleton, J; Connan, J; Tchapla, A	headspace	GC-MS
2450	**Terpenes from live branches**	**Quantifying sesquiterpene and oxygenated terpene emissions from live vegetation using solid-phase microextraction fibers.** ***J. Chromatogr., A 1161, #1-2, 113-120 (2007-08-17)*** **Bouvier-Brown, N. C.; Holzinger, R.; Palitzsch, K.; Goldstein, A. H.**	**65µm PDMS-DVB headspace 10-45 min**	**GC-MS**
2522	**Volatiles from Rock-rose**	**Simultaneous distillation-extraction of high-value volatile compounds from Cistus ladanifer L** ***Anal. Chim. Acta 584, #2, 439-446 (Feb 19 2007)*** **Alves, Arminda; Mendes, Adelio; Santos, Lucia; Teixeira, Salome**	**85µm Polyacrylate 60 min @ 40°C headspace 20% NaCl**	**GC-FID**
2479	**Phytohormones from plants**	**Simultaneous determination of phytohormones in plant extracts using SPME and HPLC** ***Chromatographia 66, #7/8, 515-520 (2007)*** **Liu HongTao; Li YanFen; Luan TianGang; Lan ChongYu; Shu WenSheng**	**50µm CW**	**GC, HPLC**
2288	**Volatiles from plants**	**Volatile profiling of Arabidopsis thaliana - Putative olfactory compounds in plant communication** ***Phytochemistry (Amsterdam) 66 #16, 1941-1955 (2005)*** **Rohloff, Jens; Bones, Atle M.**	**headspace**	**GC/IMS**
2202	**Volatiles from plants**	**Evaluation of extracts and oils of mosquito (Diptera : Culicidae) repellent plants from Sweden and Guinea-Bissau** ***J Medical Entomology 43, #1, 113-119 (2006)*** **Jaenson, Thomas G. T.; Palsson, Katinka; Borg-Karlson, Anna-Karin**	**headspace**	**GC-MS**
		Characterization of three Agave species by GC		

1571	Terpenes & fatty acids in plants	and SPME-GC-MS *J Chromatogr A, 1027, #1-2, 131-136* Pena-Alvarez, A.; Diaz, L.; Medina, A.; Labastida, C.; Capella, S.; Vera,L..	headspace steam distillation	GC, GC-MS
2628	**Volatiles in camu-camu fruit**	**Analysis of volatile compounds of camu-camu (Myrciaria dubia (HBK) Mcvaugh) fruit isolated by different methods** ***J. Essent. Oil Res. 19, #6, 527-533 (Nov/Dec 2007)*** **Pino, Jorge A.; Quijano, Clara E.**	**headspace**	**GC-MS**
1572	Volatiles in fruit	Analysis of volatile secondary metabolites from Colombian Xylopia ronatica (Lamarck) by different extraction and headspace methods and GC *J Chromatogr A, 1025, #1, 105-113* Stashenko, E.; Jaramillo, B.; Martinez, J	headspace	GC-MS
1573	Volatiles in corn oil	Comparison of volatile compounds of corn oil and modified corn oil by electronic nose and SPME-GC-MS *Agri Chem and Biotechnology, 47, #3, 153-156* Vu, Phuong-Lan; Shin, Jung-Ah; Lee, Ki-Teak	headspace	GC-MS
1574	Review	Application of the SPME and in food analysis *Polish J Food and Nutrition Sci, 13, #4, 355-361* Ligor, Magdalena; Wojcik, Jan; Buszewski, Boguslaw	100µm PDMS 85µm polyacrylate headspace	GC-MS
2812	**Volatiles from essential oils**	**Essential oil in fruits of Peucedanum alsaticum L. and Peucedanum cervaria (L.) Lap.Composition and antibacterial activity** ***Planta Medica 73, #9, 883-884 (AUG 2007)*** **Skalicka-Wozniak, K.; Los, R.; Glowniak, K.; Malm, A.**		
2318	**Volatiles from essential oils**	**Use of SPME in diffusive sampling of the atmosphere generated by different essential oils** ***Anal. Chim. Acta 559 #2, 97-104 (2006)*** **Batlle, R.; Huerga, M.A.; Lopez, P.; Nerin, C.**	**headspace** **30 min @ 20°C**	**GC/MS**
2222	**Volatiles in essential oils**	**High-throughput analysis of bergamot essential oil by fast SPME capillary GC-FID** ***J. Chromatogr. A, 1103, #1, 162-165 (2006)*** **Costa, R.; Dugo, G.; Dugo, P.; Mondello, L.; Presti, M.; Tranchida, P.**	**30 and 7µm PDMS** **headspace**	**GC-FID**
1575	Volatiles from essential oils	Steam distillation-SPME for the detection of Ephedra sinica in herbal preparations *J Chromatogr A, 1025, #1, 51-56* Tellez, M.; Khan, I.; Schaneberg, B.; Crockett, S.; Rimando, A.; Kobaisy,M	headspace	GC-MS
1576	Volatiles from essential oils	Testing of microencapsulated flavours by electronic nose and SPME-GC *Food Chem, 92, #1, 45-54* Baranauskiene, R; Venskutonis, P, Galdikas,A., Senuliene, Daiva; Setkus, Arunas	headspace	GC-MS
1577	Organo-phosphorus pesticides in wine/juice	SPME-GC-MS a fast and simple screening method for the assessment of organophosphorus pesticides residues in wine and fruit juices. *Food Chemistry, 86,#2, 269-274* Zamabonin, C; Quinto, M; deVietro, N; Palmisano, F	headspace	GC-MS
1578	Volatiles from wheat	Metabolites of lesser grain borer in grains. *J Agrl Food Chem, 52, #4, 898-908* Seitz, L. M.; Ram, M. S.	headspace 0-240min @ 20°-40°C	GC-MS
1579	Volatiles of essential oils	Headspace SPME-GC-Mass spectrometric analysis of the essential oils of two traditional Chinese medicines, Angelica pubescens and Angelica sinensis. *Chromatographia, 59, #5-6, 343-349* Song, G. X.; Deng, C. H.; Wu, D.; Hu, Y. M.*	headspace	GC-MS
2853	**Volatiles from chinese grandiflora**	**Comparative study on volatile components of Nardostachys Rhizome** ***Journal of Natural Medicines 62, #1, 112-116 (JAN 2008)*** **Tanaka, Ken; Komatsu, Katsuko**	**headspace**	**GC-MS**
2704	**Active ingredients from chinese medicine**	**Fast determination of curcumol, curdione and germacrone in three species of Curcuma rhizomes by microwave-assisted extraction followed by headspace SPME-GC-MS** ***J. Chromatogr., A 1117, #2, 115-120 (2006-06-09)*** **Deng, C. H.; Ji, J.; Li, N.; Yu, Y. J.; Duan, G. L.; Zhang, X.**	**100 µm PDMS** **20min @ 80°.** **headspace** **30% NaCl**	**GC-MS**

2589	**Volatiles from chinese medicines**	**Analysis of the volatile compounds in Ligusticum chuanxiong Hort. using HS-SPME-GC-MS** ***J. PHARM. BIOMED. ANAL. 44, #2, 464-470 (28 JUN 2007)*** **Zhang, C.; Qi, M.; Shao, Q.; Zhou, S.; Fu, R.**	**65µm PDMS-DVB headspace**	**GC-MS**
2570	**Essential oils in Chinese medicine**	**GC-MS following microwave distillation and headspace SPME for fast analysis of essential oil in dry traditional Chinese medicine** ***J. Chromatogr., A 1133, #1-2, 29-34 (2006-11-10)*** **Li, N.; Deng, C. H.; Li, Y.; Ye, H.; Zhang, X. M.**	**headspace**	**GC-MS**
2166	**Essential oils in Chinese medicine**	**Rapid determination of essential oil compounds in Artemisia Selengensis Turcz by GC-MS with microwave distillation and simultaneous SPME** ***Anal. Chim. Acta, 556, #2, 289-294 (2006)*** **Deng, Chunhui; Xu, Xiuqin; Yao, Ning; Li, Ning; Zhang, Xiangmin**	**headspace**	**GC-MS**
2553	**Volatiles from chinese medicines**	**Headspace SPME-GC-MS for analysis of volatile components from Atractylodes macrocephala Koidz** ***Sepu 25, #1, 43-47 (2007-01)*** **Guo, F. Q.; Huang, L. F.; Zhou, S. Y.**	**65µm PDMS-DVB 30 min @ 70°C headspace**	**GC-MS**
2500	**Review article**	**Recent developments in sample preparation techniques for chromatography analysis of traditional Chinese medicines.** ***J Chromatogr A 1153, #1-2, 90-96 (2007 Jun 15)*** **Deng, Chunhui; Liu, Ning; Gao, Mingxia; Zhang, Xiangmin**		
1580	Organo-selenium in yeast	SPME-multicapillary GC coupled to different detection systems and applied to volatile organo-selenium speciation in yeast. *J Analytical Atomic Spectrometry, 19, #2, 260-266* Dietz, C.; Sanz Landaluze, J.; Ximenez-Embun, P.; Madrid-Albarran, Y.; Camara, C.	headspace	ICP-MS, MIP-AES, AFS
1581	Organo-selenium in yeast	Volatile organoselenium monitoring in production and gastric digestion processes of selenized yeast by SPME-multicapillary GC coupled microwave-induced plasma atomic emission spectrometry *Appl. Organomet. Chem., 18, #12, 606-613* Camara, C.; Dietz, C.; Madrid, Y.; Sanz Landaluze, J.	headspace	MIP-AES
1582	Sulfur compd in yeast	Production of volatile organic sulfur compounds (VOSCs) by basidiomycetous yeasts *FEMS Yeast Research, 5, #4-5, 379-385* Buzzini, Pietro; Romano, Sergio; Turchetti, Benedetta; Vaughan, Ann; Pagnoni, Ugo Maria; Davoli, Paolo	headspace	GC-MS
1583	Methyl mercury in seafood	Direct coupling of SPME and quartz tube-atomic absortpion spectrometry for selective and sensitive determination of methylmercury in seafood: An assessment of chloride & hydride generation *J Analytical Atomic Spectrometry, 19, #2, 220-254* Fragueiro, S; Lavilla, I; Bendicho, C.	65µm PDMS-DVB bare silica fiber headspace chloride derivative.	GC-MS, AA
2258	**Flavor volatiles in cantaloupe**	**Volatile changes in cantaloupe during growth, maturation, and in stored fresh-cuts prepared from fruit harvested at various maturities** ***J Am Society for Horticultural Sci. 131, #1, 127-139 (2006)*** **Beaulieu, John**	**headspace**	**GC-MS**
1584	Flavor volatiles in cantaloupe	Volatile profile, sensory attributes, and quality of freshcut cantaloupe is maturity-at-cutting dependent *Hortscience, 38, #5, 833* Beaulieu, John C.; Bett, Karen L.	headspace	GC-MS
1585	Fatty acids in tomatos	Fatty acid composition of tomato affects fruit and leaf biosynthesis of C6 aldehydes and alcohols *Hortscience, 38, #5, 833* Canoles, M; Li, C; Howe, Gg; Beaudry, R		GC-MS
1586	C6 aldehydes in tomatos	Rapid determination of C6-aldehydes in tomato plant emission by GC-MS and SPME with on-fiber derivatization *J Sep Science, 28, #2, 172-176* Deng, Chunhui; Li, Ning; Zhu, Weimin; Qian, Ji; Yang, Xiaofeng; Zhang, Xiangmin	65µm PDMS-DVB 5 min @ 25ºC PFBHA derivatives headspace	GC-MS
1587	Sulfur aroma from Beer	The measurement of sulfur-containing aroma compounds in samples from production-scale brewery operations *JAm Society of Brewing Chemists, 63, #3, 129-134* Miracle, R. E.; Ebeler, S. E.; Bamforth, C. W.	headspace	GC-FPD

1588	Aldehydes in beer	Determination of C3-C10 aliphatic aldehydes using PFBHA derivatization and SPME.Application to the analysis of beer *Chemia Analityczna, 49, #6, 869-880* Jelen, H.; Dabrowska, A.; Klensporf, D.; Nawrocki, J.; Wasowicz,E.	PFBHA derivatives 20min @ 20°C headspace	GC
1589	Volatiles from wheat grain	Volatile compounds of Aspergillus strains with different abilities to produce ochratoxin A *J Agri Food Chem, 53, #5, 1678-1683* Jelen, Henryk H.; Grabarkiewicz-Szczesna, Jadwiga	headspace @ 20° to 27°C	GC
2697	**Volatiles from strawberries**	**Quantification of selected aroma-active compounds in strawberries by headspace SPME-GC and correlation with sensory descriptive analysis** ***J Food Science 72, #7, S487-S496 (2007)*** **Jetti, R. R.; Yang, E.; Kurnianta, A.; Finn, C.; Qian, M. C.**	**headspace**	**GC-MS**
1590	Volatiles from strawberries	Comparison of methodologies for the identification of aroma compounds in strawberry *Turk. J. Agric. For., 29, #5, 383-390* Bar, E; Kafkas, E; Kafkas, S; Koch-Dean, M.Larkov, O; Lavid, N Lewinsohn, Efraim; Ravid, Uzi; Schwab, Wilfried	headspace	GC-MS
1591	Volatiles from strawberries	Analysis of strawberry volatiles using comprehensive two dimensional gas chromatography with headspace SPME *J Chromatogr, B:817, # 1, 97-107* Williams, A.; Ryan, D.; Guasca, A.; Marriott, P.; Pang, E.	headspace	GC-GC
1592	Off-odour in strawberries	Main compounds responsible for off-odour of strawberries infected by Phytophthora cactorum *Letters in Applied Microbiology, 40, #4, 255-259* Jelen, H. ; Krawczyk, J.; Larsen, T. ; Jarosz, A.; Golebniak, B.	headspace	GC-olfactometry
1593	Volatiles from strawberries	Volatile compounds as markers for coliforms inoculated on strawberry fruit. *Hortscience, 38, #5, 831* Yu, K; Elgaali, H; Hamilton-Kemp, T; Newman, M; Collins, R; Archbold,D.	15 min headspace	GC
1594	Sulfur volatiles from garlic	SPME-GC-MS analysis of garlic oil obtained by hydrodistillation *J. Chromatogr. A, 1036, #1, 91-93* Calvo-Gomez, O.; Lopez, M.; Morales-Lopez, J.	various fibers headspace	GC-MS
1595	Garlic flavor components	Comparative study of extraction techniques for determination of garlic flavor components by GC-MS *Anal. Bioanal. Chem., 377, #4, 749-756* Kim, Nam-Sun; Lee, Dong-Sun; Lee, Sun-Neo	50/30µm DVB/CAR headspace	GC-MS
1596	Volatiles from avocado	SPME and GC-MS of volatile compounds from avocado puree after microwave processing *J. Chromatogr. A, 1036, #1, 87-90* Dorantes, A.; Guzman, G; Lopez, M.	headspace 30sec microwave pH 5.5	GC-MS
2462	**Oxidative byproducts in sunflower oil**	**Sensory evaluation of the odour of a sunflower oil emulsion throughout oxidation** ***European J.Lipid Sci. Tech. 109, #1, 38-48 (JAN 2007)*** **Villiere, A.; Rousseau, Florence; Brossard, Chantal; Genot, C.**	headspace 50°C in dark	GC-MS
1597	Oxidative byproducts in sunflower oil	Synergistic Effect of BSA on Antioxidant Activities in Model Food Emulsions *J Am Oil Chem Soc, 81, #3, 275-280* Almajano, M. Pilar; Gordon, Michael H.		GC+G742
2912	**Oxidative byproducts in sunflower oil**	**Evidence of the formation of light PAHs during the oxidation of edible oft in closed containers at room temperature** ***J Agr& Food Chemistry, 56, #6, 2028-2033 (MAR 26 2008)*** **Guillen, M.; Goicoechea, E.; Palencia, Gemma; Cosmes, Nerea**	**headspace**	**GC-MS**
1598	Oxidative byproducts in sunflower oil	Study of both sunflower oil and its headspace throughout the oxidation process. Occurrence in the headsapce of toxic oxygenated aldehydes *J Agr& Food Chemistry, 53, #4, 1093-1101* Guillen, Maria D.; Cabo, Nerea; Ibargoitia, Maria L.; Ruiz, A	headspace @ 70°C	GC-MS
2847	**Permethrin and cyfluthrin in surface waters**	**Bioavailability of permethrin and cyfluthrin in surface waters with low levels of dissolved organic matter** ***J Environmental Quality 36, #6, 1678-1685 (NOV-DEC 2007)*** **Yang, W. C.; Hunter, W.; Spurlock, F.; Gan, J.**		**GC**
		SPME of permethrin residues from cucumber using		

1599	Permethrin on cucumbers	a silica-bonded phase-coated stainless steel fibre *Food Additives & Contaminants, 21, #3. 222-231* Noroozian, E.; Kazemipour, M.; Tehrani, M.; Mahmoudian, M.	75µm Carboxen/PDMS 100µm PDMS headspace	GC
1600	Volatiles in herbal mixture	Application of headspace SPME and comprehensive two-dimensional gas chromatography (GC x GC) for the chemical profiling of volatile oils in complex herbal mixtures *J. Sep. Sci., 27, #5-6, 451-458* Di, Xin; Huie, C.; Marriott, P.; Shellie, R.	headspace	GC-GC
1601	Solvents in plant oil	Determination of residual solvents content (hexane residue) in plant oil by headspace SPME *Fenxi Shiyanshi, 23, #4, 70-72* Lan, F.; Xie, L. Q.; Yang, Z.; Pan, K. Y.; Wu, C.	headspace	GC-FID
2795	**Volatiles from Fungus**	**Volatile organic compounds released by the entomopathogenic fungus Beauveria bassiana** ***Microbiological Research 163, #2, 148-151 (2008)*** **Crespo, R.; Pedrini, N.; Juarez, M. P.; Dal Bello, G. M.**	headspace	GC/MS
2874	**Rancidity in backery products**	**HS-SPME-GC applied to rancidity assessment in bakery foods** ***European Food Res Tech 227, #1, 1-6 (May 2008)*** **Purcaro, G.; Moret, S.; Conte, L. S.**	**headspace**	**GC/MS**
1602	Fungus backery products	Early detection of fungal growth in bakery products by use of an electronic nose based on mass spectrometry *J Agr Food Chem, 52, #20, 6068-6074* Vinaixa, M.; Marin, S.; Brezmes, J.; Llobet, E.; Vilanova, X.; Correig, X.; Ramos, A.; Sanchis, V.	headspace	GC/MS
2192	**Aroma compounds from food**	**Mechanisms of extraction of aroma compounds from foods, using adsorbents. Effect of various parameters** ***Food Reviews International 22, #1, 51-94 (2006)*** **Nongonierma, A.; Cayot, P.; Le Quere, J.; Springett, M.; Voilley, A.**	**headspace**	**GC-MS**
2737	**Odors from wood packaging**	**Potential of SPME-GC for quarantine-required detection of wood packaging in shipping containers.** ***J. Sep. Sci.30, #7, 1044-1051 (2007-05)*** **More, N. A.; Braggins, T. J.; Goldson, S. L.**	**headspace**	**GC-FID**
1603	Odors from packaging	Investigation of the interaction of active packaging material with food aroma compounds *Sens Actuators, B Chem, 106, #1, 83-87* Pastorelli, S.; Simoneau, C.; Strathmann, S.	headspace	GC-MS
2566	**N-nitrosamines from water**	**Solid-phase microextraction of N -nitrosamines.** ***J. Chromatogr., A 1117, #1, 11-18 (2006-06-02)*** **Grebel, J. E.; Young, C. C.; Suffet, I. H.**		**CI-MS, NCD NPD**
2565	**N-nitrosamines in gelatine system**	**On-site analysis of volatile nitrosamines in food model systems by solid-phase microextraction coupled to a direct extraction device** ***Talanta 70, #5, 1017-1023 (2006-12-15)*** **Ventanas, S.; Ruiz, J.**	**DVB/CAR 50/30µm 75µm Carboxen 25°C**	
1604	N-nitrosamines in sausage	A method for the determination of volatile N -nitrosamines in food by HS-SPME-GC-TEA. *Food Chemistry, 91, #1, 173-179* Andrade, R.; Reyes, F. G. R.; Rath, S.	65µm PDMS-DVB 85µm polyacrylate headspace	GC-TEA
2474	**Flavor Volatiles from honey**	**SPME-comprehensive two-dimensional gas chromatography-TOF-MS for the analysis of honey volatiles** ***J. Sep. Sci. 30, #4, 534-546 (2007-03)*** **Cajka, T.; Hajslova, J. ; Cochran, J.; Holadova, K.; Klimankova, E.**	**DVB/CAR 50/30µm headspace**	**GC-MS**
2359	**Flavor Volatiles from honey**	**SPME/GC/MS and sensory flavour profile analysis for estimation of authenticity of thyme honey** ***Intl J of Food Sci & Tech 42, #2, 133-138 (FEB 2007)*** **Mannas, Demet; Altug, Tomris**	headspace	**GC-MS**
1605	Flavor Volatiles from honey	SPME-GC-MS analysis of volatile organic compounds in honey from Basilicata. Evidence for the presence of pollutants from anthropogenic activities *Intl J Food Sci & Tech; 39, #10, 1079-1086* Bentivenga, G; D'Auria, M; Fedeli, P; Mauriello, G; Racioppi, R		GC-MS
1606	Monoterpenes	SPME-GC-MS determination of monoterpenes in honey *J. Sep. Sci.,27, #17-18, 1540-1544*	100µm PDMS	GC-MS

	in honey	Pena, Rosa M.; Barciela, Julia; Herrero, C; Garcia-Martin, S	15min @ 20°C agitated, 25% salt	
1607	Aroma Volatiles from honey	Evaluation of four isolation techniques for honey aroma compounds. *J Sci of Food and Agriculture, 85, #1,91-97* Alissandrakis, E.; Tarantilis, P. A.; Harizanis, P.; Polissiou, M.	headspace	GC
1608	Aroma Volatiles from honey	Characterization of Spanish unifloral honeys by SPME-GC-MS *J. Sep. Sci., 28, #9-10, 1093-1100* de la Fuente, Esther; Martinez-Castro, Isabel; Sanz, Jesus	headspace	GC-MS
1609	Aroma Volatiles from honey	Estimation of the honeydew ratio in honey samples from their physicochemical data and from their volatile composition obtained by SPME and GC-M *J Sci of Food and Agriculture, 85, #817-824* Soria,A; Gonzalez, M; deLorenzo, C; MartinezCastro,I; Sanz, J	headspace	GC-MS
2848	**Flavors in vinegars**	**Stir bar sorptive extraction of volatile compounds in vinegar: validation study and comparison with SPME** ***J Chromatogra, A, 1167, #1, 18-26 (OCT 5 2007)*** ***Duran Guerrero, E.; Natera Marin, R.; Castro Mejias, R.; Garcia Barroso,C.***	**headspace**	**GC**
2431	**Flavors in vinegars**	**Three-way principal component analysis of the volatile fraction by HS-SPME/GC of aceto balsamico tradizionale of modena** ***Talanta 74, #4, 547-554 (Jan 15 2008)*** **Cocchi, M.; Durante, C.; Grandi, M.; Manzini, D.; Marchetti, A.**	**headspace**	**GC**
2360	**Flavors in vinegars**	**Vinegar classification based on feature extraction and selection from headspace SPME/GC volatile analyses: a feasibility study.** ***Anal Chim Acta 608, # 1, 38-47 (2008 Feb 4)*** **Pizarro, C; Esteban-Doez, I; Soaenz-Gonzoalez, C; Gonzoalez-Soaiz, J**	**headspace**	**GC-MS**
1610	Flavors in potato crisps	Profiling flavor compounds of potato crisps during storage using SPME *J Chromatogra, A, 1064, #2, 239-245* Sanches-Silva, A; Lopez-Hernandez, J; Paseiro-Losada, P	65µm PDMS-DVB 20min @ 70°C headspace	GC-MS
1611	Rancidity in potato crisps	Fast detection of rancidity in potato crisps using e-noses based on mass spectrometry or gas sensors *Sens Actuators, B Chem, 106, #1, 67-75* Badia, C.; Brezmes, J.; Correig, X.; Duran, C.; Llobet, E.; Vergara, A.; Vilanova, X.; Vinaixa, M.	headspace	GC-MS
1612	Rancidity in potato crisps	A fuzzy ARTMAP- and PLS-based MS e-nose for the qualitative and quantitative assessment of rancidity of crisps *Sens Actuators, B Chem, 106, #2, 677-686* Brezmes, J.; Correig, X.; Llobet, E.; Vilanova, X.; Vinaixa, M.	headspace	GC-MS
2416	**Fatty acids from cheese**	**Flavouring of imitation cheese with enzyme-modified cheeses (EMCs): Sensory impact and measurement of aroma active short chain fatty acids (SCFAs)** ***FOOD CHEM. 106, #3, 905-913 (01 FEB 2008)*** **Noronha, N.; Cronin, D. A.; O'Riordan, E. D.; O'Sullivan, M.**	**headspace**	**GC**
1613	PAHs in smoked cheese	Headspace SPME as a tool to estimate the contamination of smoked cheeses by polycyclic aromatic hydrocarbons *J of Dairy Science, 88, #1, 13-20* Guillen, M. D.; Sopelana, P.	85µm polacrylate 60min @ 70°C headspace	GC-MS
1614	Terpenes from cheese	Application of artificial neural network on mono-and sequiterpenes compounds determined by headspace SPME-GC-MS for the Piedmont ricotta cheese traceability *J Chromatogra, A, 1071, #1-2, 247-253* Giuseppe, Z; Manuela, G; Marta, Bo; Vincenzo, G	headspace	GC-MS
1615	Review of technique	Calibration of gas chromatography inlet splitting for GC olfactometry dilution analysis *Flavour Fragrance J., 19, #6, 518-521* Acree, T.; Deibler, K.; Lavin, E.; Llesca, F.		GC
1616	Volatile free fatty acids in cheese	Volatile free fatty acids as ripening indicators for Serra da Estrela cheese *J Dairy Sci, 87, #12, 4064-4072* Tavaria, F. K.; Ferreira, A. C. Silva; Malcata, F.	headspace	GC
1617	Aroma of cheese	Composition and aroma compounds of Ragusano cheese: Native pasture and total mixed rations. *J Dairy Sci, 87, #4, 816-830*	headspace	GC

		Carpino, S.; Mallia, S.; LaTerra, S.; Melilli, C.; Licitra, G.; Acree, T.; Barbano, D.; VanSoest, P.		
1618	Aroma of cheese	Comparison of purge and trap and SPME techniques for studying the volatile aroma compounds of three European PDO hard cheeses *International Dairy Journal, 15, #6-9, 741-758* Mallia, S.; Fernandez-Garcia, E.; Bosset, J. Olivier	headspace	GC
1619	Aroma of cheese	Characterization of "Provola dei Nebrodi", a typical Sicilian cheese, by volatiles analysis using SPME-GC/MS *International Dairy Journal, 15, #6-9, 585-593* Ziino, M.; Condurso, C.; Romeo, V.; Giuffrida, D.; Verzera, A.	headspace	GC-MS
2878	**Aroma of cheese**	**Optimization of headspace SPME for the analysis of specific flavors in enzyme modified and natural Cheddar cheese using factorial design and response surface methodology** ***J Chromatogr A, 1195, #1-2, 16-24 (Jun 27 2008)*** **Azarnia, Sorayya; Januszkiewicz, Julien; Lee, Byong; Sabik, Hassan**	**75µm Carboxen headspace 50 min at 55 °C 3 M NaCl**	**GC-MS**
1620	Aroma of cheese	SPME and GC-MS for rapid characterisation of semi-hard cheeses *Anal. Bioanal. Chem., 380, #7-8, 930-936* Condurso, C.; Romeo, V.; Verzera, A.; Zappala, M.; Ziino, M.	headspace	GC-MS
1621	Sulfur compd in cheese	Volatile sulfur compounds in Cheddar cheese determined by headspace SPME and GC-pulsed FPD *J Chromatogr A, 1066, #1-2, 149-157* Burbank, Helen M.; Qian, Michael C.	75µm Carboxen headspace	GC-PFPD
1622	Aroma of chilli	Analysis of volatile aroma compounds of fresh chilli (Capsicum annuum) during stages of maturity using SPME *J Food Composition & Analysis, 18, #5, 427-437* Mazida, M. M.; Salleh, M. M.; Osman, H.	headspace 30min @ 60°C	GC-MS
1623	Volaitles from cheese	SPME Ccmbined with GC and olfactometry-MS for characterization of cheese aroma compounds. *Lebensmittel-Wissenschaft & Technologie, 37, #2, 139-154* Frank, D.; Owen, C.; Patterson, J.	75µm Carboxen headspace 9-16hr extract	GC-MS GC-olfactometry
2879	**Volatiles from Siciliano cheese**	**Effect of wild strains used as starter cultures and adjunct cultures on the volatile compounds of the Pecorino Siciliano cheese** ***Intl J of Food Microbiology 122, #3, 269-278 (MAR 20 2008)*** **Randazzo, C. L.; Pitino, I.; De Luca, S.; Scifo, G. O.; Caggia, C.**	**headspace**	**GC/MS**
2898	**Flavors from Kuflu cheese**	**Characterization of the chemistry, biochemistry and volatile profile of Kuflu cheese, a mould-ripened variety** ***Food Sci. Technol. 41, #7, 1323-1334 (September 2008)*** **Brechany, E.Y.; Deegan, K.C.; Hayaloglu, A.A.; McSweeney, P**	**headspace**	**GC/MS**
1624	Flavors from butter	Improved determination of flavour compounds in butter by SPME & comprehensive two-dimensional GC *J. Chromatogr. A 1086, #1-2, 99-106* Adahchour, M., Brinkman, U.; Verdel, R., Vreuls, R.; Wiewel, J.	headspace	GC-GC-TOFMS GC-FID
1625	Aroma compounds in yoghurt	Effect of thickeners and sweeteners on the release of blended aroma compounds in fat-free stirred yoghurt during shear conditions *Intl Dairy Journal, 14, #9, 783-789* Decourcelle, N.; Lubbers, S.; Vallet, N.; Rondeau, P.; Guichard, E.	headspace	GC
1626	Volaitles from milk	Optimization of SPME for the analysis of volatile compounds in milk. *Journal of Dairy Science, 86, Supplement 1, 294* Clarkson, H.; Duncan, S.; O'Keefe, S.	headspace	GC
1627	Volaitles from milk	Volatile compounds and chemical changes in ultrapasteurized milk packaged in polyethylene terephthalate containers *J of Food Science, 70. #6, C407-C412* Solano-Lopez, C.; Ji, T.; Alvarez, V.	headspace @ 5°C	GC-MS
2808	**Volaitles from raw cow milk**	**Quality control of raw cows' milk by headspace analysis** ***Int. Dairy J. 18, #5, 506-513 (May 2008)*** **van Hooijdonk, A.C.M.; van Valenberg, H.J.F.; Hettinga, K.A.**	**headspace**	**GC**

1628	Phthalate esters in cow milk	Development of a headspace SPME method combined w/ GC-MS for the determination of phthalate esters in cow milk *Analytica Chimica Acta, 538, #1-2, 41-48* Feng, Yong-Lai; Zhu, Jiping; Sensenstein, R.	60min @ 90°C. headspace NaCl added	GC-MS
2814	**Aromatic amines in food**	**Analytical methods applied to the determination of heterocyclic aromatic amines in foods** ***J Chromatogr B, 862, #1-2, 15-42 (FEB 1 2008)*** **Sanz Alaejos, M.; Ayala, J. H.; Gonzalez, V.; Afonso, A. M.**	Review article	
1629	Aromatic amines in food	SPME coupled with HPLC for the analysis of heterocyclic aromatic amines. *J Chromatogr A, 1030, #1-2, 87-93* Cardenes, L.; Ayala, J.; Afonso, A.; Gonzalez, V.	50µm CW-TPR methanolic NaOH	LC-diode array
1630	Isothiocynates in horseradish	SPME-GC-MS analysis of horseradish (Armoracia rusticana) *Italian J Food Sci, 16, #4,487-490* D'Auria, M.; Mauriello, G.; Racioppi, R.		GC-MS
2451	**Volatiles from basil cultivars**	**Aroma profiles of five basil (Ocimum basilicum L.) cultivars grown under conventional and organic conditions** ***FOOD CHEM. 107, #1, 464-472 (01 MAR 2008)*** **Klimankova, E.; Holadova, K.; Hajslova, J.; Cajka, T.; Poustka, J.; Koudela, M.**	**headspace**	**GC-ITMS GC-TOFMS**
1631	Volatiles from cultivars	Volatile compounds in different cultivars of Apium graveolens L. *Italian J Food Sci, 16, #4, 477-482* Tirillini, B.; Pellegrino, R.; Pagiotti, R.; Pocceschi, N.; Menghini, L.	headspace	GC-MS
1632	Volatiles in tequila	Tequila volatile characterization and ethyl ester determination by SPME-GC-MS analysis *J Agri and Food Chem, 52, #18, 5567-5571* Vallejo-Cordoba, B.; Gonzalez-Cordova, A.; . del Carmen Estrada-Montoya, M.	100µm PDMS 60min @ 40°C immersed	GC-MS
1633	Volatile aroma compounds in grapes	Rapid determination of volatile compounds in grapes by HS-SPME coupled with GC-MS Talanta, 66, #5, 1152-1157 Sanchez-Palomo, E.; Diaz-Maroto, A. ; Perez-Coello, A.	65µm DVB-PDMS 20 min @ 70°C headspace	GC
1634	Fermentation products of wines	Stable isotope dilution analysis of wine fermentation products by HS-SPME-GC *Anal. Bioanal. Chem., 381, #4, 937-947* Capone, D.; Herderich, M.; Neuwohner, C.; Pardon, K.; Pollnitz, A.; Sefton, M; Skouroumounis, G.; Smyth, H.; Siebert, T.	headspace salt addition	GC-MS
1635	Monoter-penoids in wine	Comparison of ultrasound-assisted extraction and direct immersion SPME method for the analysis of monoterpenoids in wine *Talanta, 67, #1, 129-135* Barciela, J.; Garcia-Martin, S.; Herrero, C.; Pena, R.	immersion	GC-MS
2873	**Volatiles from white wine**	**Impact odorants of Chardonnay dry white wine from Changli County** ***European Food Res and Tech 227, #1, 287-292 (May 2008)*** **Li, Hua; Tao, Yong-Sheng; Wang, Hua; Zhang, Li**	**headspace**	**GC/MS**
2282	**Ester compd in Chardonnay juice.**	**Dynamic changes in ester formation during chardonnay juice fermentations with different yeast inoculation and initial brix conditions** ***American J Enology and Viticulture 55 #3, 346-354 (2004)*** **Lee, Seung-Joo; Rathbone, Da.; Asimont, S.; Adden, R.; Ebeler, S.**	**headspace**	**GC-MS**
1636	Volatiles in white wine	Analytical method for determination of some aroma compounds on white wines by SPME-GC *J of Food Sci, 68, #9, 2817-2820* Ferreira, A.; Guedes de Pinho, P.	50/30µm DVB/CAR Headspace	GC
1637	Methoxy-pyrazine in wine	Analysis of methoxypyrazines in wine using headspace SPME with isotope dilution and comprehensive two dimensional GC *J. Sep. Sci., 28, #9-10, 1075-1082* Allen, M.; Marriott, P.; Ryan, D.; Smith, J.; Watkins, P.	Headspace	GC-GC-NPD GC-GC-TOFMS

1638	Volatiles in cheese	GC profile of volatiles in cheese induced by different fat globule surface coatings. *J of Dairy Science, 86, Supplement 1, 43* Everett, D. ; Crownshaw, J.; Ginestet, A.; Leus, M.; Dufour, J..	headspace	GC
1639	Flavors in milk products	Flavor stability of skim and whole milk powder *J of Dairy Science, 86, Supplement 1, 40* Whetstine, M.; Drake, M..; Karagul-Yuceer, Y.; Avsar, Y.		GC
1640	Methyl salicylate in tomato leaves	GC-MS with SPME method for determination of methyl salicylate and other volatile compounds in leaves of Lycopersicon esculentum. *Anal. Bioanal. Chem., 378, #2, 518-522* Deng, C; Zhang, X; Zhu, W; Qian, J	100µm PDMS Headspace	GC-MS
1641	Flavors in Harari Khat stimulant	SPME for flavor analysis in Harari Khat (Catha edulis) stimulant. *J. Zhejiang Univ: Sci, 5, #4, 428-431* Abdulsalam, Al-Flahi; Yin, Xue-Feng; Zou, Jian-Kai	100µm PDMS 30min @ 20°C	GC-MS
1642	Nonvolatiles from brewed coffee	Interactions between volatile and nonvolatile coffee components. Screening of nonvolatile components *J Agr Food Chem., 53, #11, 4417-4425* Charles-Bernard, M.; Kraehenbuehl, K.; Rytz, A.; Roberts, D.	headspace	GC
2649	**Volatiles in coffee beans**	**Impact of "ecological" post-harvest processing on the volatile fraction of coffee beans: I. Green coffee** ***J. Food Compos. Anal. (UK) 20, #3-4, 289-96 (May 2007)*** **Schorr-Galindo, S.; Gonzalez-Rios, O.; Suarez-Quiroz, M. L.; Boulanger, R.; Barel, M.; Guyot, B.; Guiraud, J.-P.**	**headspace**	**GC-MS**
2517	**Volatiles in coffee beans**	**Quality determination and group discrimination of shade grown coffee using solid phase microextraction** **21st International Conference on Coffee Science, Montpellier, France, 11-15 September, 2006 PP 306-309** **Jackson, M.; Steiman, S.; Gautz, L.; Bittenbender, H.; Idol, T.**	**headspace**	**GC-FID**
1643	Volatiles in coffee beans	Comprehensive multidimensional GC for the characterization of roasted coffee beans *J. Sep. Sci., 27, #5-6, 442-450* Casilli, A., Costa, R.; Dugo, G., Dugo, P.; Festa, S.; Mondello, L.; Tranchida, P.	headspace	GC-GC
1644	Volatiles in coffee beans	Analysis of roasted coffee bean volatiles by using comprehensive two-dimensional GC-TOF-MS *J. Chromatogr. A, 1054, #1-2, 57-65* Casilli, A.; Marriott, P.; Mondello, L.; Ryan, D.; Shellie, R.; Tranchida, P.	headspace	GC-GC-TOF-MS
1645	Volatiles in coffee beans	Reliable characterization of coffee bean aroma profiles by automated headspace SPME-GC-MS with the support of a dual-filter mass a dual-filter spectra library *J. Sep. Sci., 28, #9-10, 1101-1109* Casilli, A, Costa, R; Dugo, G, Dugo, P; Festa, S; Mondello, L; Tranchida, P.	headspace	GC-MS
2401	**Furan in food**	**Analysis of furan in foods by headspace SPME-GC-IT-MS** ***J. Chromatogr., A 1146, #1,103-109 (2007-03-30)*** **Altaki, M. S.; Santos, F. J.; Galceran, M. T.**	75µm Carboxen headspace	GC-IT-MS
2160	**Furan in baby-food**	**Development and validation of a SPME-GC-MS method for the determination of furan in baby-food** ***J. Chromatogr. A, (2006) 1102, #1-2, 268-272*** **Bianchi, Federica; Careri, Maria; Mangia, Alessandro; Musci, Marilena**		**GC-MS**
2276	**Furan in fruit juice**	**Impact of ionizing radiation and thermal treatments on furan levels in fruit juice** ***J Food Science (2005) 70 #7, E409-E414*** **Fan, Xuetong**	**headspace**	**GC-MS**
1646	Furan in coffee	Determination of furan levels in coffee using automated SPME-GC-MS *JAOAC Intl, 88, #2,574-576* Ho, I-Pin; Yoo, Seong-Jae; Tefera, Sebhat	headspace	GC-MS
1647	Volatiles in	SPME-GC-MS and multivariate analysis for the characterization of roasted coffees	headspace	GC-MS

	roasted coffee	*Talanta, 66, #1, 261-265* Zambonin, C.; Balest, L.; De Benedetto, G.; Palmisano, F.		
2212	**Volatiles from broom snakeweed**	**Volatile composition of Gutierrezia sarothrae (broom snakeweed) as determined by steam distillation and SPME** ***J. Essent. Oil Res.18 #2, 121-125 (2006)*** **Estell, R.; Fredrickson, E.; Lucero, M.; Morrison, A.; Richman, D.**		**GC-MS** **GC-FID**
1648	Essential oils from leaves	A direct liquid, non-equilibrium SPME application for analysing chemical variation of single peltate trichomes on leaves of Salvia officinalis *Phytochemical Analysis, 15, #3, 198-203* Grassi, P.; Novak, J.; Steinlesberger, H.; Franz, C.	100µm PDMS fiber immersed	GC-MS
1649	Aroma from Tarhana	GC-olfactometric characterization of aroma active compounds in sun-dried and vacuum-dried tarhana *European Food Res &Tech, 218, #6, 573-578* Goemen, D; Gurbuz, O; Rouseff, R; Smoot, J.; Dagdelen, A	Headspace	GC-FID
1650	Aroma from fermentation process	Lactic acid fermentation of Brassica rapa: chemical and microbial evaluation of a typical Italian product (brovada) *European Food Res &Tech, 218, #5, 469-473* Maifreni, Michela; Marino, Marilena; Conte, L	headspace	GC-FID
2687	**Acetaldehyde in red wine**	**Monitoring acetaldehyde concentrations during micro-oxygenation of . red wine by headspace SPME with on-fiber derivatization** ***J Agr Food Chem 55, #14, 5620-5625 (2007)*** **Carlton, W. K.; Gump, B.; Fugelsang, K.; Hasson, A. S.**	**headspace** **PFBH derivative**	GC-FID
2728	**Haloanisoles from packaging**	**Determination of haloanisoles in paper samples for food packaging by solid-phase microextraction and gas chromatography** ***Microchim. Acta 159, #3-4, 229-234 (2007)*** **Martendal, E.; Budziak, D.; Debastiani, R.; Carasek, E.**	**DVB/CAR 50/30µm** **headspace** **30min @ 70°C**	**GC-MS**
2792	**Haloanisoles and halophenols in water**	**Comparison of stir bar sorptive extraction and SPME to determine halophenols and haloanisoles by GC-iontrap MS** ***Talanta 75, #3, 753-759 (May 15 2008)*** **Alonso, G.; Maggi, L.; Mazzoleni, V.; Salinas, M..; Zalacain, A.**	**headspace**	**GC-iontrap MS**
2686	**Haloanisoles and halophenols in wine**	**Multiple headspace solid-phase microextraction for eliminating matrix effect in the simultaneous determination of haloanisoles and volatile phenols in wines** ***J. Chromatogr., A 1166, #1-2, 1-8 (2007)*** **Pizarro, C.; Perez-del-Notario, N.; Gonzalez-Saiz, J. M.**	**DVB/CAR 50/30µm** **headspace**	**GC-MS/MS**
2407	**Haloanisoles and halophenols in wine**	**Optimisation of a headspace SPME with on-fiber derivatisation method for the direct determination of haloanisoles and halophenols in wine.** ***J. Chromatogr., A 1143, #1-2, 26-35 (2007-03-02)*** **Pizarro, C.; Perez-del-Notario, N.; Gonzalez-Saiz, J. M.**	**85µm polacrylate** **60min @ 70°C** **headspace** **MSTFA derivative**	**GC-ECD**
2289	**Trichloroanisole from wine & cork stoppers**	**Study of chloroanisoles assay and TCA assay validation in wine and cork stoppers soaked in dilute alcohol solution using SIDA-HSSPME-GC-MS/EI-SIM** ***J Intl des Scie de la Vigne et du Vin 39 #3, 137-147 (2005)*** **Chatonnet, P.; Labadie, Dominique; Boutou, S.**	**headspace**	**GC-MS/ EI-SIM**
2542	**2,4,6-trichloro anisole in cork**	**Matrix effect during the application of a rapid method using HS-SPME followed by GC-ECD for the analysis of 2,4,6-TCA in wine and cork soaks** ***Food Chemistry 105, #2, 681-690 (2007)*** **Vlachos, P.; Kampioti, A.; Kornaros, M.; Lyberatos, G.**	**Headspace**	**GC-ECD**
1651	2,4,6-trichloro anisole in wine/cork	Relationship between sensory and instrumental analysis of 2,4,6-trichloroanisole in wine and cork stoppers *Anal. Chim. Acta, 513, #1, 291-297* Antico, E.; Garcia Regueiro, J.A.; Guerrero, L.; Insa, S.; . Juanola, R.; Salvado, V.; Subira, D	Headspace	GC-ECD
2452	**Floride in toothpaste**	**Determination of fluoride in toothpaste using headspace SPME-GC-FID** ***J. Chromatogr., A 1150, #1-2, 173-177 (2007-05-25)*** **Wejnerowska, G.; Karczmarek, A.; Gaca, J.**	**75µm Carboxen** **Headspace** **TMCS derivative**	**GC/FID**
1652	Chlloro-hexidine in saliva	Assay of stability, free and total concentration of chlorhexidine in saliva by solid phasemicroextraction *J Pharma and Biomed Analysis, 37, #5, 1015-1024* Musteata, Florin Marcel; Pawliszyn, Janusz	headspace	GC
		Improving headspace-SPME of 3-isobutyl-2-		

1653	Pyrazines in wine	methoxypyrazine by experimental design with regard to stable isotope dilution GC-MS analysis of wine *Anal. Chim. Acta, 513, #1, 223-227* Lucchese, Y.; Nepveu, F.; Prouteau, C.; Renard, R.; Schneider, R.;Vaca-Garcia, C.	headspace saturated salt	GC-MS
2575	**Terpenes in tequila**	**Determination of terpenes in tequila by SPME-GC-MS** ***J. Chromatogr., A 1134, #1-2, 291-297 (2006-11-17)*** **Pena-Alvarez, A.; Capella, S.; Juarez, R.; Labastida, C.**	**100µm PDMS 30min @ 25°C headspace, sat salt**	**GC-MS**
1654	Terpenes in wine	Optimization of SPME methods for GC-MS determination of terpenes in wine *J Sci of Food and Agr, 85, #7, 1227-1234* Pena, R.; B, Julia; Herrero, C; Garcia-Martin, S.	100µm PDMS 15min @ 20°C immersed 25% NaCl	GC-MS
2677	**Volatiles in Spanish wine**	**Comparative study of sampling systems combined with gas sensors for wine discrimination** ***Sens. Actuators B, Chem. (Switzerland) 126, #2, 616-23 (1 Oct. 2007)*** **Lozano, J.; Santos, J.P.; Gutierrez, J.; Horrillo, M.C.**	**headspace**	**GC**
2692	**Volatiles in Greek wine**	**Sensory profiling of aroma in Greek dry red wines using rank-rating and monadic scoring related to headspace composition** ***European Food Res. and Technology 225, #5-6, 749-756 (SEP 2007)*** **Koussissi, Elisabeth; Paterson, Alistair; Piggott, John R.**	**headspace**	**GC**
2845	**Volatiles in wine yeast**	**A survey of Saccharomyces populations associated with wine fermentations from the Apulia region (South Italy)** ***Annals of Microbiology 57, #4, 545-552 (2007)*** **Tofalo, R.; Torriani, S.; Chaves-Lopez, C.; Martuscelli, M.; Paparella,Antonello; Suzzi, Giovanna**	**headspace**	**GC**
2614	**Aromatic volatiles in red wines**	**Comparative study of aromatic compounds in young red wines from cabernet sauvignon, cabernet franc, and cabernet gernischet varieties in China.** ***J Food Sci 72, #5, C248-52 (2007 Jun)*** **Zhang, M; Xu, Q; Duan, C; Qu, W; Wu, Y**	**headspace**	**GC**
2419	**Volatiles in red wine**	**Factors influencing sensory quality in red wines of the variety Aghiorghitiko (Vitis vinifera L.) from Nemea** ***Eur. Food Res. Technol. 226, #4, 745-753 (February 2008)*** **Koussissi, Elisabeth; Paraskevopoulos, Yiannis; Paterson, Alistair**	**headspace**	**GC-MS**
1655	Volatiles in red wine	Characterization of the aroma profile of Madeira wine by sorptive extraction techniques *Anal. Chim. Acta, 546, #1, 11-21* Alves, R.F.; Nascimento, A.M.D.; Nogueira, J.M.F.	headspace	GC-MS
2193	**Terpenoids in Madeira wines**	**Development of headspace SPME-GC-MS methodology for analysis of terpenoids in Madeira wines** ***Anal. Chim. Acta 555. #2, 191-200 (2006)*** **Camara, J. S.; Alves, M. Arminda; Marques, J. C.**	**85µm polyacrylate headspace 60-120min @ 40°C w/salt**	**GC-MS**
2180	**Flavors from Madeira wine**	**Multivariate analysis for the classification and differentiation of Madeira wines according to main grape varieties** ***Talanta 68,#5, 1512-1521 (2006)*** **Alves, M. Arminda; Camara, Jose S.; Marques, Jose C. Vasconcelos, T.**	**headspace**	**GC-MS**
1656	Flavors from Madeira wine	Varietal flavour compounds of four grape varieties producing Madeira wines *Analytica Chimica Acta, 513, #1, 203-207* Camara, J.; Herbert, P.; Marques, J.; Alves, M.	dynamic headspace	GC-MS
1657	Volatiles in red wine	Elimination of matrix effects for headspace SPME of important volatile compounds in red wine using a novel coating *Anal. Chim. Acta, 540, #2, 341-353* Liu, Mingming; Tian, Yun; Zeng, Zhaorui	65µm PDMS-DVB, 85µm polyacrylate 100µm PDMS headspace	GC
1658	Sulfur compounds in wine	Sensitive quantification of sulfur compounds in wine by headspace solid-phase microextraction technique *J. Chromatogr. A, 1080, #-2, 177-185* Fang, Yu; Qian, Michael C.	headspace	GC-FPD
1659	Fungicides on grapes	Screening of grapes and wine for azoxystrobin, kresoxim-methyl and trifloxystrobin fungicides by HPLC with diode array detection *Food Additives and Contaminants, 22, #6, 549-566* Abreu, S.; Correia, M.; Herbert, P.;	headspace	GC-MS

		Santos, L.; Alves, A.		
1660	Tribromo-aniline in color additives	Determination of 2,4,6-tribromoaniline in the color additives D&C Red Nos. 21 and 22 (Eosin Y) using SPME-GC-MS *J. Chromatogr. A, 1057, #1--2, 185-191* Andrzejewski, Denis; Rasooly, Irit R.; Weisz, Adrian	headspace	GC-MS
1661	Ochratoxin A in foods	Determination of Ochratoxin A in foods: State-of-the-art and analytical challenges *Anal. Bioanal. Chem., 378, #1, 96-103* Monaci, Linda; Palmisano, Francesco		LC-FLD
1662	Volatiles in sherry wine	Comparative analysis of volatile compounds of "fino" sherry wine by rotatory and continuous liquid· liquid extraction and SPME in conjunction w/GC-MS *Anal. Chim. Acta, 513, #1, 141-150* Barroso, C.G.; Benitez, P.; Castro, R.; Natera, R.	headspace	GC-MS
1663	Volatiles in vinegars	Application of a wavelet-based algorithm on headspace SPME-GC signals for the classification of balsamic vinegars. *Chemometrics and Intelligent Lab Systems, 71, #2, 129-140* Cocchi, M.; Durante, C.; Foca, G.; Manzini, D.;. Marchetti, A.; Ulrici, A.	headspace	GC-MS
1664	Flavors from yogurt	Flavour release and rheology behaviour of strawberry fat-free stirred yogurt during storage. *J Agri and Food Chemistry, 52, #10, 3077-3082* Lubbers, S.; Decourcelle, N.; Vallet, N.; Guichard, E.	headspace @ 10°C stirred	GC
1665	Aroma of coffee beans	Solid-phase aroma concentrate extraction (SPACE): a new headspace technique for more sensitive analysis of volatiles *Flavour & Fragrance Journal, 19, #3, 183-187* Ishikawa, M.; Ito, O.; Ishizaki, S.; Kurobayashi, Y.; Fujita, A.	headspace	GC-MS
1666	Volatiles from cod liver oil	Comparison of volatile compounds formed by autoxidation and photosensitized oxidation of cod liver oil in emulsion systems *Fisheries Science (Tokyo), 71, #3, 639-647* Pan, Xiang-Qing; Ushio, Hideki; Ohshima, Toshiak	40°C headspace ferrous chloride added foil lined sample vial	GC-MS GC-FID
1667	2,4,6-trichloroanisole in raisins	Detection of 2,4,6-trichloroanisole in microorganism-free irradiated raisins by SPME-GC-MS *J Stored Products Res, 40, #4, 451-459* Aung, L. H.; Jenner, J. F.	50/30µm DVB/CAR headspace	GC-MS
2283	**Haloanisoles in wine**	**Use of multiple headspace SPME and pervaporation for the determination of off-flavours in wine** ***J. Chromatogr. A, 1112, #1-2,133-140 (2006)*** **Beltran, R.; Garcia-Barrera, T.; Gomez-Ariza, J.L.; Lorenzo, F.**	**headspace**	**GC-MS**
1668	Anisoles in wines	Simultaneous separation, clean-up and analysis of musty odorous compounds in wines by on-line coupling of a pervaporation unit to GC- tandem MS *Anal. Chim. Acta, 516, #1-2, 165-170* Garcia-Barrera, T.; Gomez-Ariza, J.L.; Lorenzo, F.	headspace	GC-MS-MS
1669	Anisoles in wines	Optimisation of a two-dimensional on-line coupling for the determination of anisoles in wineusing ECD and ICP-MS after SPME-GC separation *Jof AnalyAtomic Spectrometry, 20, #9, 883-888* Gomez-Ariza, J. L.; Garcia-Barrera, T.; Lorenzo, F.	headspace	GC-ECD-ICP-MS
1670	Aroma volatile from stawberry juice	Aroma profile of strawberry juice cocktail produced in industrial conditions *Kem Ind, 54, #3, 135-141* Cosic, B.; Ganic, K. Kovacevic; Komes, D.; Lovric, T.	100µm PDMS headspace	GC-FID and GC-MS
1671	Aroma volatiles from stawberry	Assessment of strawberry aroma through SPME-GC and artificial neuron network methods. Variety Classification versus growing years. *J Agri Food Chemistry, 52, #9, 2472-2478* deBoishebert, V.; Urruty, L.; Giraudel, J.; Montury, M.	headspace	GC-MS
1672	Triazine herbicides in	Hollow fiber membrane-protected SPME of triazine herbicides in bovine milk and sewage sludge samples *J. Chromatogr. A, 1047, #2, 189-194*	65µm PDMS-DVB	GC-MS

	milk/ sludge	Basheer, Chanbasha; Lee, Hian Kee		
2455	**Acrylamide in water solutions**	**Determination of acrylamide in food by SPMEGC posittive chemical ionization tandem mass spectrometry.** ***Anal. Chim. Acta 582, #1, 19-23 (2007-01-16)*** **Lee, M. R.; Chang, L. Y.; Dou, J. P.**	**50µm CW/DVB immersion 20 min @ pH 7**	**GC-PCI-MS-MS**
1673	Acrylamide in cereals	Silylation of acrylamide for analysis by SPME-GC ion-trap mass spectrometry *J Agri and Food Chem, 52, #12, 3744-3748* Lagalante, Anthony F.; Felter, Matthew A.	100µm PDMS BSTFA derivative headspace	GC-MS
1674	Quinoxyfen pesticide in grape musts	Influence of quinoxyfen residues on Saccharomyces cerevisiae fermentation of grape musts *Food Tech and Biotechnology, 42, #2, 89-97* Lopez, C; Boselli, E; Piva, A; Ndaghijimana, M; Paparella, A; Antonello; S; Mastrocola, D		GC
1675	Pyrazine in musts/wines	Influence of vine training and sunlight exposure on the 3-alkyl-2-methoxypyrazines content in musts and wines from Vitis vinifera variety cabernet sauvignon *J Agri and Food Chemistry, 52, #11, 3492-3497* Sala, C; Busto, O; Guasch, J; Zamora, Fernando	headspace	GC
1676	Volatiles from oak in wine	The effects of sample preparation and GC injection techniques on the accuracy of measuring quaiacol, 4-methylguaiacol and other volatile oak compounds in oak extracts by stable isotope dilution analyses *J Agri and Food Chemistry, 52, #11, 3244-3252* Pollnitz, A.; Pardon, K.; Sykes, M; Sefton, M.	headspace	GC-MS
1677	Volatiles from Oak	Analysis of oak volatiles by GC-MS after ozone sanitization *American J Enology & Viticulture, 56, #1, 46-51* Marko, S.; Dormedy, E.; Fugelsang, K.; Dormedy, D.; Gump, B.; Wample, Robert	headspace 5, 10, 15min sampling 82°C	GC-MS
1678	Volatiles from Oak wood	Fast screening method for volatile compounds of oak wood used for aging wines by headspace SPME-GC-MS (SIM) *J Agri and Food Chemistry, 52, #23, 6857-6861* Diaz-Maroto, M.; Sanchez-Palomo, Eva; Perez-Coello, M.	50/30µm DVB/CAR 40min @ 70°C Headspace	GC-MS (SIM)
1679	Volatiles in apple wine	Rapid analysis of flavor volatiles in apple wine using headspace SPME *J Institute of Brewing, 110, #1, 57-65* Wang, L.; Xu, Y.; Zhao, G.; Li, J.	75µm Carboxen Headspace	GC-MS
1680	Volatiles from irradiated food	Markers for irradiated food *Chem. World, 2, #2, 20* Down, Steve	headspace	GC
2833	**Flavor compounds from red-cooked beef**	**Effects of cooking conditions on sensory characteristics of red-cooked beef flavor and identification of the flavor compounds** ***J Food Process Eng 31, #1, 51-65 (Feb 2008)*** **Cui, Chun; Wang, Jinshui; Wu, Jinwei; Wu, Xiao; Yang, Bao; Zhao, M.**	**headspace**	**GC/MS**
2257	**Odor-active components of beef flavor**	**Analysis of odor-active components of simulated beef flavor by SPME-GC-olfactometry** ***Abstracts of Papers Am Chem Society (2004) 228, #1, U68*** **Moon, Soo Yeun; Cliff, Margaret A.; Li-Chan, Eunice C. Y.**		**GC/MS**
1681	Volatiles from Beef extract	Development of SPME methodology for analysis of headspace volatile compounds in simulated beef flavour. *Food Chemistry, 88, #1, 141-149* Moon, S. Y.; Li-Chan, E. C. Y.*	50/30µm DVB/CAR 60min @ 60°C headspace	GC
1682	Volatiles from Beef extract	Identification of radiolytic marker compounds in the irradiated beef extract powder by volatile analysis *Microchemical Journal, 80. #2, 127-137* Kim, Hun; Cho, Woo-; Ahn, Jun-; Cho, Dooe; Cha, Yong-	headspace @ 30°C	GC
1683	Volatiles from fruit juices	Characterization of volatile compounds of fruit juices and nectars by headspace SPMEand GC-MS. *Food Chemistry, 87, #4, 627-637* Riu-Aumatell, M.; Castellari, M.; Lopez-Tamames, E.; Galassi, S.; Buxaderas, S. *	headspace	GC/MS
		Effect of fat nature and aroma compound hydrophobicity		

1684	Volatiles from food emulsions	on flavor release from complex food emulsions *J Agr and Food Chem, 52, #20, 6257-6263* Relkin, Perla; Fabre, Marjorie; Guichard, Elisabeth	headspace	GC-MS
1685	Volatiles from olive oil	Characterization of volatile compounds of French and Spanish virgin olive oils by HS-SPME: I. identification of quality-freshness markers *Food Chemistry, 88, #1, 151-157* Cavalli, J; Fernandez, X.; Lizzani-Cuvelier, L; Loiseau, A	headspace	GC-RI and GC-MS,
1686	Oxidative byproducts from lipids	Oxidation of lipids in food *Polish JFood and Nutrition Sci, 13, #1, 87-100* Wasowicz, E; Gramza, A; Hes, M; Jelen, H;Korczak,J; Malecka, M; Mildner-Szkudlarz, S; Rudzinska, M; Samotyja, U; Zawirska-Wojtasiak, R	headspace	GC
1687	Volatiles from sea weed	Photo-oxidation of lipids impregnated on the surface of dried seaweed (porphyra yezoensis ueda). Characterization of volatiles *JAOCS, 81, #8, 773-781* Ohshima, Toshiaki; Pan, Xiangqing; Ushio, Hideki	headspace @ 45°C	GC-FID and GC-MS,
1688	Oxidation byproducts from chicken	Lipid oxidation in high-pressure processed chicken breast during chill storage andsubsequent heat treatment: effect of working pressure, packaging atmosphere and storage time *European Food Res and Tech, 219, #2, 167-170* Wiggers, S.; Kroeger-Ohlsen, M.; Skibsted, L.	10min @ 80°C headspace	GC-MS
1689	Volatiles in Citric acid	Determination of organic volatile impurities in citric acid by SPME-GC *Fenxi Shiyanshi, 24, #1, 43-45* Li, L. H.; Zheng, L.; Guo, W.		GC-MS
1690	Hexanal in potato crisps	Determination of hexanal as indicator of the lipidic oxidation state in potato crisps using GC and HPLC *J. Chromatogr. A, 1046, #1-2, 75-81* Lopez-Hernandez, J.; Paseiro-Losada, P.; Rodriguez-Bernaldo De Quiros, A.; Sanches-Silva, A.	headspace 2,4-dinitrophenyl-hydrazone derivative.	GC-MS HPLC
1691	Volatile thiol from wine	Variation in 4-mercapto-4-methyl-pentan-2-one release by Saccharomyces cerevisiae commercial wine strains *FEMS Microbiology Letters, 240, #2, 125-129* Howell, K.; Swiegers, J.; Elsey, Go.; Siebert, T.; Bartowsky, E.; Fleet, G.; Pretorius, I.; Lopes, M.	headspace	GC-AED
1692	Volatiles in wine	Determination of volatile compounds in wine by automated SPME-GC *Chromatographia, 59, #11-12, 733-738* Cabredo-Pinillos, S.; Cedron-Fernandez, T.; Parra-Manzanares, A.; Saenz-Barrio, C.	headspace	GC-FID
1693	Off taste of soft drink	Evaluation of the antimicrobial activity of citrus essences on Saccharomyces cerevisiae *J Agrl and Food Chemis, 52. #23, 6932-6938* Belletti, Nicoletta; Ndagijimana, Maurice; Sisto, C Guerzoni, Maria E.; Lanciotti, Rosalba; Gardini, F.	headspace	GC-MS
1694	Methyloxime in grapefruit leaves	Phenylacetaldehyde O-methyloxime: A volatile compound produced by grapefruit leaves infected with the citrus canker pathogen, Xanthomonas axonopodis pv. citri *J Agrl and Food Chemis, 53. #13, 5134-5137* Zhang, Aijun; Hartung, John S.	oxime methyl ether derivatives headspace	GC-MS
1695	Aroma of leaves	Analysis and characterization of aroma-active compounds of Schizandra chinensis (omija) leaves. *J Sci of Food and Agriculture, 85, #1, 161-166* Zheng, C. H.; Kim, K. H.; Kim, T. H.; Lee, H. J.*	headspace	GC-MS
1696	Essential oils from yacon leaves	Comparison of three different SPME fibres for analysis of essential oils in yacon (Smallanthus sonchifolius) leaves *J. Chromatogr. A, 1084, #1-2, 2-6* Adam, M.; Bajer, T.; Eisner, A.; Juklova, M.; Ventura, K.	100µm PDMS 65µm PDMS-DVB 50/30µm DVB/CAR headspace	GC-FID
2856	**Volatiles from argyi flowers**	**Separation and identification of volatile constituents in Artemisia argyi flowers by GC-MS with SPME and steam distillation** ***J. Chrom. Sci 46, #5, 401-405 (MAY-JUN 2008)*** **Li, Ning; Mao, Yu; Deng, Chunhui; Zhang, Xiangmin**	**headspace**	**GC-MS**

1697	Essential oils from argyi leaves	Comparison of essential oil composition of Artemisia argyi leaves at different collection times by headspace SPME-GC-MS *Chromatographia, 59, #11-12, 729-732* Zheng, X. H.; Deng, C. H.; Song, G. X.; Hu, Y. M.*	headspace	GC-MS
1698	Essential oils from Eucalyptus leaves	A SPME method to fingerprint dissolved organic carbon released from Eucalyptus camaldulensis Dehnh (River Red Gum) leaves *Analytica Chimica Acta, 530, #2, 325-333* Zander, Alek; Bishop, Andrea G.; Prenzler, Paul D.	100µm PDMS 15min @ 40°C, pH 2 saturated salt rapid stirring	GC
1699	Off flavors in catfish	Instrumental versus sensory detection of off-flavors in farm-raised channel catfish *Aquaculture, 236, #1-4, 309-319* Grimm, Casey; Lloyd, Steven; Zimba, Paul	headspace	GC-MS
1700	Volaitiles from essential oils	Composition of the essential oils and in vivo emission of volatiles of four Lamium species from Italy: L. purpureum, L hybridum , L bifidum & L.amplexicaule. *Food Chemistry, 91, #1, 63-68* Flamini, G.; Cioni, P. L.; Morelli, I.	headspace	GC-MS
1701	Volatiles from essential oils	The use of a non-equilibrated SPME method to quantitativelydetermine the off-notes in mint and other essential oil *J Sci Food & Agri, 84, #10, 1223-1228* Coleman, W. M., III.; Lawrence, B. M.; Craven, S. H.	headspace	GC/SIM-MS
2277	**Volatiles in red pepper**	**Effect of gamma-irradiated red pepper powder on the chemical and volatile characteristics of kakdugi, a Korean traditional fermented radish kimchi** ***J Food Science 70 #7, C441-C447 (2005)*** **Lee, Jeung Hee; Lee, Ki-Teak; Kim, Mee Ree**	**headspace**	
1702	Volatiles in red pepper	Effect of gamma-irradiation on color, pungency, and volatiles of Korean red pepper powder *Journal of Food Science, 69, #8, C585-C592* Lee, J. H.; Sung, T. H.; Lee, K. T.; Kim, M. R.	headspace	GC-MS
1703	Isothiocyanate in cabbage leaves	Analysis of the isothiocyanates present in cabbage leaves extract and their potential application to controlAlternaria rot in bell peppers *Food Res Intl., 38, #6, 701-708* Troncoso, R.; Espinoza, C.; Sanchez-Estrada, A.;S. Tiznado, M. E.; Garcia, Hugo S.	headspace	GC-MS
1704	Organo-phosphate in cabbage	New approach for the detection of organophosphorus pesticide in cabbage using SPME/SnO2 gas sensor: Principle and preliminary experiment *Sens Actuators, B Chem, 102, #2, 235-240* Huang, Xingjiu; Liu, Jinhuai; Meng, Fanli; Sun, Yufeng	headspace	GC
1705	Off flavor in apple juice	Determination of off-flavour compounds in apple juice caused by microorganisms using headspace SPME-GC-MS *Anal. Chim. Acta, 520, #1-2, 3-11* Pfannhauser, W.; Siegmund, B.; Zierler, B.	headspace	GC-MS
1706	Volatiles from cured ham	Study of the effect of different fiber coatings and extraction condition on dry cured ham volatile compounds extracted by SPME *Talanta, 64, #2, 458-466* Ansorena, D.; Astiasaran, I.; Garcia-Esteban, M.; Ruiz, J.	75µm Carboxen 50/30µm DVB/CAR 15, 30, 60min extraction headspace saturated NaCl	GC
1707	Volatiles in cured ham	Comparison of simultaneous distillation extraction and SPME for the analysis of volatile compounds in dry-cured ham. *J Sci Food and Agri, 84, #11, 1364-1370* Garcia-Esteban, M.; Ansorena, D.; Astiasaran, I.; Martin, D.; Ruiz, J. *	75µm Carboxen headspace	GC-MS
1708	Volatiles from hams	Characterization of French and Spanish dry-cured hams: influence of the volatiles from the muscles and the subcutaneous fat quantified by SPME-GC *Meat Science, 69, #4, 635-645* Sanchez-Pena, C.; Luna, G; Garcia-Gonzalez, D.; Aparicio, R	headspace	GC
1709	Chloroanisoles	Optimisation of a headspace SPME method for the direct determination of chloroanisoles related to cork taint in red wine	headspace	GC-ECD

	in wine	*J. Chromatogr. A, 1056, #1-2, 49-56* Gonzalez-Saiz, J.; Martinez-Urunuela, A.; Pizarro, C.		
2485	**Pentachlorophenol in food**	**A sensitive SPME-GC-based procedure for determining . pentachlorophenol in food** ***Food Addit Contam 24, #7, 777-83 (2007 Jul)*** **Campillo, Natalia; Peonalver, Rosa; Hernoandez-Coordoba, Manuel**	**headspace as derivative**	**MIP-AED**
1710	Chlorophenols in wine	Multiple SPME in a non-equilibrium situation: Application in quantitativeanalysis of chlorophenols and chloroanisoles related to cork taint in wine *J. Chromatogr. A, 1089, #1-2, 31-38* Gonzalez-Saiz, J.; Martinez-Urunuela, A.; Pizarro, C.	headspace	GC-MS
2206	**Chlorophenols in cork**	**Ethanol/water extraction combined with SPE and SPME concentration for determination of chlorophenols in cork stoppers** ***J Ag Food Chem, 54, #3, 627-632 (2006)*** **Insa, S.; Besalu, E.; Iglesias, C.; Salvado, V.; Antico, E.**		
1711	Chlorophenols in cork/wine	Development of solid-phase extraction and SPME methods for the determination of chlorophenols in cork macerate and wine samples *J. Chromatogr. A, 1047, #1, 15-20* Antico, E.; Insa, S.; Salvado, V.	100µm PDMS Acetylation derivative headspace	GC-ECD
1712	2,4,6-Trichloro-anisole in wine	Migration of 2,4,6-trichloroanisole from cork stoppers to wine *European Food Research and Tech, 220, #3-4,347-352* Juanola, R.; Subira, D.; Salvado, V.; Regueiro, J.; Antico, E.	headspace	GC-ECD
2668	**Monoterpenoids in wine**	**Classification of Boal, Malvazia, Sercial and Verdelho wines based on terpenoid patterns** ***FOOD CHEM. 101, #2, 475-484, (2007)*** **Camara, J. S.; Alves, M. A.; Marques, J. C.**	**headspace**	**GC-MS**
1713	Volatile esters in wine	Inhibition of the decline of volatile esters and terpenols during oxidative storage of Muscat-white and Xinomavro-red wine by caffeic acid and N-acetyl-cysteine *Food Chemistry, 93. #3, 485-492* Roussis, I.; Lambropoulos, I; Papadopoulou, D	headspace 20°C heated sample	GC-MS
1714	Volatiles in wine	Volatile compounds of red and white wines by headspace SPME using different fibres. *J of Chromatographic Sci, 42, #6, 310-316* Torrens, J.; Riu-Aumatell, M.; Lopez-Tamames, E.; Buxaderas, S. *	50/30µm DVB/CAR 40min @ 35°C headspace	GC
1715	Haloanisoles in wine	Optimisation of a two-dimensional on-line coupling for the determination of anisoles in wine using ECD and ICP-MS after SPME-GC separation *J Anal At Spectrom, 20, #9, .883-888* Garcia-Barrera, T.; Gomez-Ariza, J.L.; Lorenzo, F.	headspace	GC-ICP-MS GC-ECD
1716	Impurities constituents additives flavours	A review of theoretical and practical aspects of SPME in food analysis *IntL J Food Sci & Technology, 39, #7, 703-717* Wardencki, Waldemar; Michulec, Magdalena; Curylo, J.	headspace	GC
2432	**Flavour from cocoa**	**Evaluation of SPME-GC-MS for the headspace analysis of volatile compounds in cocoa products** ***Talanta 74, #5, 1166-1174 (Feb 15 2008)*** **Ducki, S.; Miralles-Garcia, J.; Storey, D..; Tornero, A.; Zumbe, A.**	**50/30µm DVB/CAR** **60°C for 15 min** **headspace** **25% NaCl**	**GC-MS**
2849	**Pyrazine in chinese liqours**	**Characterization of pyrazines in some Chinese liquors and their approximate concentrations** ***J Agri Food Chemistry, 55, #24, 9956-9962 (NOV 28 2007)*** **Fan, Wenlai; Xu, Yan; Zhang, Yanhong**	**headspace** **50°C for 30 min** **Satr.NaCl**	**GC-FTD**
1717	Flavour from cocoa liqours	Relationship between procyanidin and flavour contents of cocoa liquors from different origins. *J Agri Food Chemistry, 52, #20, 6243-6249* Counet, C.; Ouwerx, C.; Rosoux, D.; Collin, S.	headspace	HPLC-UV
1718	Methylpyrazine in cocoa	Cocoa quality and processing: A study by SPME and GC analysis of methylpyrazines *Food Bioprod. Process., 82, #4C, 291-297*	headspace	GC-MS

		Cavicchioli, M.; Del Borghi, M.; Fabiano, B.; Perego, P.		
1719	Chlorophenol in red wine	Optimisation of the derivatisation reaction and subsequent headspace SPMEmethod for the direct determination of chlorophenols in red wine *J. Chromatogr. A, 1048, #2, 141-151* Gonzalez-Saiz, J; Martinez-Urunuela, A; Pizarro, C.	headspace acetylated derivaties	GC
1720	Volatiles from dried fruit	Headspace SPME-GC-MS analysis of the volatile compounds of Evodia species fruits *J. Chromatogr. A, 1087, #1-2, 265-273* Benvenuti, S; Bertelli, D; Pellati, F; Rossi, M; Yoshizaki, F.	50/30µm DVB/CAR 18min @ 80°C headspace	GC-MS
1721	Volatiles from dried ripe fruit	Comparison of SPME, SFE, steam distillation, and solvent extraction techniques for analysis of volatile consituents in Fructus amomi *J AOAC Intl, 88, #2, 418-423* Shen, S; Sha, Y; Deng, C; Fu, D; Chen, ; Zhang, Xian	headspace	GC-MS
1722	Volatiles from dried ripe fruit	Rapid analysis of essential oil from Fructus Amomi by pressurized hot water extraction followed by SPME-GC-MS *J Pharma& Biomedical Analysis, 38, #2, 326-331* Deng, C; Wang, A; Shen, S; Fu, D; Chen, J; Zhang, X	headspace 15min @ 80°C	GC-MS
1723	Volatiles from sweet marjoram	Sensory and instrumental evaluation of sweet marjoram (Origanum majorana L.) aroma *Flavour Fragrance J., 20, #5, 492-500* Baranauskiene, R.; Demyttenaere, J.C.R.; Venskutonis, P.	headspace	GC
2688	**Arom compouonds apricots**	**Characterization of aroma potential of apricot varieties using different extraction techniques** ***Food Chem 105, #2, 829-837 (2007)*** **Solis-Solis, H. M.; Calderon-Santoyo, M.; Schorr-Galindo, S.; Luna-Solano, G.; Ragazzo-Sanchez, J. A.**	**headspace**	**GC-MS**
2629	**Arom compouonds apricots**	**Discrimination of eight varieties of apricot (Prunus armeniaca) by electronic nose, LLE and SPME using GC-MS and multivariate analysis** ***Sens. Actuators B, Chem. (Switzerland) 125, #2, 415-21 (8 Aug. 2007)*** **Solis-Solis, H.M.; Calderon-Santoyo, M.; Gutierrez-Martinez, P.; Schorr-Galindo, S.; Ragazzo-Sanchez, J.A.**	**headspace**	**GC-MS**
1724	Arom compouonds apricot puree	Trehalose improves flavour retention in dehydrated apricot puree *Intl J Food Science & Tech, 40, #4, 425-435* Komes, D; Lovric, T; Kovacevic G, Karin; Gajdos Kljusuric, Jasenka; Banovic, Mara	headspace	GC-FID GC-MS
2651	**Aroma Volatiles from white truffle**	**Rapid white truffle headspace analysis by proton transfer reaction mass spectrometry and comparison with SPME-GC-MS** ***Rapid Comm Mass Spectrometry 21, #6, 2564-2572 (2007)*** **Aprea, E.; Biasioli, F.; Carlin, S.; Versini, G.; Maerk, T.; Gasperi, F.**	**headspace**	**GC-MS**
2203	**Aroma Volatiles from white truffle**	**Aroma characterisation of white truffle by GC-MS and GC-O** ***Italian J Food Sci., 17 #4, 463-468 (2005)*** **Piloni, M.; Tat, L.; Tonizzo, A.; Battistutta, F.**	**headspace**	**GC-MS**
1725	Volatiles from truffles	Volatile components of truffle species collected in Basilicata *Micologia Italiana, 30, #3, 11-29* Mauriello, G.; Marino, R.; D'Auria, M.; Cerone, G.; Rana, G. L.	headspace	GC-MS
1726	Volatiles from mould	Sensitive detection of volatile organic compounds (MVOC) produced by mould by means of SPME-GC-MS *Naunyn-Schmiedeberg's Archives of Pharmacology 369, Suppl 1, R145* Schuetz, E.	headspace	GC-MS
1727	Phenylurea herbicides on vegetables	Application of SPME for determining phenylurea herbicides and their homologous anilines from vegetables. *J Chromatogr, A, 1042, #1-2, 9-14* Berrada, H.; Font, G.; Molto, J. C.*	85µm polyacrylate headspace 14% salt, pH 11	GC-NPD GC-MS-SIM
2512	**Volatiles from French beans**	**Chemical analysis of French beans (Phaseolus vulgaris L.) by headspace SPME and simultaneous distillation/extraction** ***Food Chem. 101, #3, 1279-1284 (2007)*** **Barra, A.; Baldovini, N. ; Loiseau, A.; Albino, L.; Lesecq, C.; Cuvelier, L.**	**65µm DVB/PDMS headspace**	**GC-MS**
2354	**Volatiles in**	**Development of GC-MS with microwave distillation and simultaneous SPME for rapid determination of volatile constituents in ginger**	**65µm DVB/PDMS**	**GC-MS**

	ginger	***J. Pharm. Biomed. Anal. 43, #1, 24-31 (2007-01-04)*** **Yu, Y. J.; Huang, T. M.; Yang, B.; Liu, X.; Duan, G. L.**	**microwave digested**	
1728	Volatiles in ginger	GC-mass Spectrometry coupled with SPME for determination of volatile constituents of chinese ginger *Fudan Xuebao Zirankexueban, 42, #6, 939-949* Song Guo-xin; Deng Chun-hui; Wu Dan; Hu Yao-ming	100µm PDMS headspace	GC-MS
1729	MIBP in red wine	Yield effects on 2-methoxy-3-isobutylpyrazine concentration in Cabernet Sauvignon using a SPME-GC-MS *J of Agri Food Chemistry, 52, #17, 5431-5435* Chapman, D. M.; Thorngate, J. H.; Matthews, M. A.; Guinard, J. -X.; Ebeler, S. E.*	50/30µm DVB/CAR 30min @ 40°C 30% NaCl immersed sampling	GC-MS
2280	**MIBP in red wine**	**Pruning effects on 2-methoxy-3-isobutylpyrazine concentration in cabernet sauvignon using a new SPME GC-MS quantification method** ***American J Enology and Viticulture 55 #3, 296A (2004)*** **Chapman, D.; Matthews, M.; Guinard, J.; Ebeler, S.**		
2281	**MIBP in wine**	**Simplified method for detection and quantification of 2-methoxy-3-isobutylpyrazine in wine** ***American J Enology and Viticulture 55 #3, 276-278 (2004)*** **Wampfler, Daniel J.; Howell, G. S.**	**headspace**	**GC-MS**
2463	**Review article**	**Techniques of preparing plant material for chromatographic separation and analysis** ***J of Biochem Biophysical Methods 70, #2, 253-261 (MAR 10 2007)*** **Romanik, G.; Gilgenast, E.; Przyjazny, A.; Kaminski, M.**		
2198	**Volatiles from plants**	**Practical approaches to plant volatile analysis** ***Plant J. 45, #4, 540-560 (2006)*** **Boland, W.; Hansel, A.; Loreto, F.; Rose, U..; Schnitzler, J.;Tholl, D.**	**headspace**	**GC-MS**
1730	Essential oils from plants	Volatile constituents of micropropagated plants of Bupleurum fruticosum L *Plant Science (Oxford), 167, #4, 807-810* Bertoli, Alessandra; Pistelli, Luisa; Morelli, Ivano; Fraternale, Daniele; Giamperi, Laura; Ricci, Donata	headspace	GC and GC-MS
2580	**Volatiles in frankfurters**	**Oxidation of lipids and proteins in frankfurters with different fatty acid compositions and tocopherol and phenolic contents** ***FOOD CHEM. 100, #1, 55-63 (2007)*** **Estevez, M.; Ventanas, S.; Cava, R.**	**headspace**	**GC**
2304	**Volatiles in porcine frankfurters**	**Influence of the addition of rosemary essential oil on the volatiles pattern of porcine frankfurters** ***J Ag Food Chem 53, #21, 8317-8324 (2005)*** **Estevez, Mario; Ventanas, Sonia; Ramirez, Rosario; Cava, Ramon**	**headspace**	**GC/MS**
2896	**Volatiles in pork meat**	**Effect of pork meat proteins on the binding of volatile compounds** ***FOOD CHEM. 108, #4, 1226-1233 (JUN 15 2008)*** **Perez-Juan, Maria; Flores, Monica; Toldra, Fidel**	**headspace**	**GC/MS**
2603	**Volatiles in porcine meats**	**Effect of ionic strength of different salts on the binding of volatile compounds to porcine soluble protein extracts in model systems** ***Food Res. Int. 40, #6, 687-693 (July 2007)*** **Flores, Monica; Perez-Juan, Maria; Toldra, Fidel**	**headspace**	**GC/MS**
1731	Volatiles from liver pates	Analysis of volatiles in porcine liver pates with added sage and rosemary essential oils by using SPME-GC-MS *J Agri Food Chemistry, 52, #16, 5168-5174* Estevez, Mario; Ventanas, Sonia; Ramirez, R; Cava, R	headspace	GC-MS
2669	**Volatiles in marinated duck**	**Comparative study of volatile compounds in traditional Chinese Nanjing marinated duck by different extraction techniques** ***Intl J Food Sci & Tech 42, #5, 543-550 (MAY 2007)*** **Liu, Yuan; Xu, Xing-lian; Zhou, Guang-hong**	**75µm Carboxen headspace**	**GC-MS**
2600	**Volatiles in rosemary oil**	**Relative characterization of rosemary samples according to their . geographical origins using microwave-accelerated distillation, . solid-phase microextraction and Kohonen self-organizing maps.** ***Anal Bioanal Chem 389, #2, 631-641 (2007)*** **Tigrine-Kordjani, N.; Chemat, F.; Meklati, B. Y.; Tuduri, L.; Giraudel, J. L.; Montury, M.**	**headspace**	**GC-MS**
1732	Volatiles in	Determination of volatile compounds in antioxidant rosemary extracts by SPME-GC	50/30µm DVB/CAR	GC-MS, GC-FID

	rosemary	*Analytical Letters, 38, #7, 1193-1212* Carrillo, Jose David; Tena, Maria Teresa	Preheat 15min @ 70C Extract 60min @ 20C headspace	
1733	Volatiles from plantlets	Kinetin enhanced linalool production by in vitro plantlets of Lippia alba *J. Essent. Oil Res., 16, #5, 405-408* Bizzo, Humberto R.; Lage, Celso L.S.; Leitao, Suzana G.; Lopes, Daise; Tavares, Eliana S.	headspace	GC
1734	Volatiles in wine	Optimization of wine headspace analysis by SPME capillary GC-w/MS & FID *Food Chemistry, 93, #2, 361-369* Tat, L.; Comuzzo, P.; Stolfo, I.; Battistutta, F.	50/30µm DVB/CAR headspace	GC-MS
1735	Chloroanisole in red wine	Determination of chloroanisole compounds in red wine by headspace SPME AND GC-mass spectrometry *J. Chromatogr. A, 1052, #1-2, 145-149* Belsue, V; Gonzalez-Penas, E; Irigoyen, A; Lizarraga, E	headspace	GC-MS
2207	**Volatiles from strawberry wine**	**Identification of volatile aroma compounds of strawberry wine using SPME techniques coupled with GC-MS** ***Flavour and Fragrance Journal 21, #1, 68-71 (2006)*** **Kafkas, E.; Cabaroglu, T.; Selli, S.; Bozdogan, A.; Kurkcuoglu, M.; Paydas, S.; Baser, K.**	**headspace & immersion**	**GC-MS**
1736	Flavor volatiles in madarin wine	Volatile flavour components of mandarin wine obtained from clementines (Citrus reticula Blanco) extracted by SPME *Flavour and Fragrance Journal. 19, #5, 413-416* Selli, S.; Kurkcuoglu, M.; Kafkas, E.; Cabaroglu, T.; Demirci, B.; Baser, K. H. C.; Canbas, A.	headspace & immersion sampling	GC-MS
1737	Aroma components in wine	Validation of a SPME method for headspace analysis of wine aroma components *Am J of Enology & Viticulture, 56, #1, 37-45* Howard, Karen L.; Mike, James H.; Riesen, Roland	50/30µm DVB/CAR headspace	GC-MS
2178	**Chiral volatiles in foods**	**Effect of sample freezing on the SPME performance in the analysis of chiral volatile compounds in foods** ***Food Chemistry 96, #2, 334-339 (2006)*** **Flores, G.; del Castillo, M.; Blanch, G. Herraiz, M.**	**headspace**	**GC-MS**
2525	**Heterocyclic amines in meat**	**Determination of less polar heterocyclic amines in meat extracts: Fast sample preparation method using SPME prior to HPLC-fluorescence quantification** ***Analytica Chimica Acta 582, #2, 259-266 (2007)*** **Martin-Calero, A.; Ayala, J. H.; Gonzalez, V.; Afonso, A. M.**	**50µm CW-TPR**	**LC-fluorescence**
2577	**Sulfonamides in meat**	**Trace determination of sulfonamides residues in meat with a combination of SPME-LC-MS** ***Talanta 72, #3,1082-1087 (2007-05-15)*** **Lu, K. -H.; Chen, C. -Y.; Lee, M. -R.**	**65µm PDMS-DVB**	**LC-MS**
1738	Volatiles from meat curing agents	Interaction of soluble peptides and proteins from skeletal muscle with volatile compounds in model systems as affected by curing agents *J Agr Food Chem, 53, #5, 1670-1677* Gianelli, M. Pia; Flores, Monica; Toldra, Fidel	headspace	GC
2590	**Volatiles from meat curing agents**	**Headspace concentration of selected dry-cured aroma compounds in model** ***FOOD CHEM. 101, #4, 1588-1593 (2007)*** **Flores, M.; Gianelli, M. P.; Perez-Juan, M.; Toldra, F.**	**headspace**	**GC-MS**
2179	**Volatiles in sausages**	**Optimization of multiple headspace SPME for the quantification of volatile compounds in dry fermented sausages** ***J Agr Food Chem 55, #21, 8688-8695 (OCT 17 2007)*** **Flores, Monica; Hernandez, Delia**	**headspace**	**GC-MS**
2224	**Volatiles in sausages**	**Effect of calcium chloride on the volatile pattern and sensory acceptance of dry-fermented sausages** ***European Food Res and Tech 221 #5, 624-630 (2005)*** **Flores, Monica; Nieto, Pablo; Ferrer, Jose Manuel; Flores, Jose**	**headspace 0.05% calcium chloride**	GC
2503	**Volatiles in sausages**	**Quantitation of selected odor-active constituents in dry fermented sausages prepared with different curing salts** ***J Ag Food Chem 55, #8, 3058-3065 (APR 18 2007)*** **Marco, Aurora; Navarro, Jose Luis; Flores, Monica**	**headspace**	**GC**

1739	Volatiles from sausages	Effect of Debaryomyces spp. on aroma formation and sensory quality of dry-fermented sausages *Meat Science, 68, #3, 439-446* Flores, Monica; Dura, M-Asuncion; Marco, Aurora; Toldra, Fidel	headspace	GC-MS
1740	Volatiles from sausages	Analysis of volatile components of fermented sausage before and after ripeness by SPME-GC-MS *Fenxi Ceshi Xuebao, 23, #6, 40-43* Zhang, C. H.	headspace	GC-MS
1741	Volatiles from pig loin	Volatile compounds in Iberian dry-cured loin *Meat Science, 68, #3, 391-400* Muriel, E.; Antequera, T.; Petron, M.; Andres, A.; Ruiz, J.	headspace	GC-MS
2291	**Flavors in goat cheese**	**Determination of flavor components in Sicilian goat cheese by automated HS-SPME-GC** ***Flavour Fragrance J. 20 #6, 659-665 (2005)*** **Chiofalo, B.; Costa, R.; Dugo, G.; Dugo, P.; Mondello, L.; Tranchida, P.; Quinto; Zumbo, Alessandro**	**headspace**	**GC/MS**
2533	**Flavors in goat milk**	**Effects of ultraviolet irradiation on chemical and sensory properties of goat milk** ***J Dairy Sci 90, #7, 3178-86 (2007 Jul)*** **Matak, K ; Sumner, S S; Duncan, S E; Hovingh, E; Worobo, R W; Hackney, C R; Pierson, M D**	**headspace**	**GC/MS**
1742	Flavors in goat milk cheese	Characterization of Maltese goat milk cheese flavour using SPME-GC/MS *South African J of Animal Sci, 34, Suppl. 1, 176-180* Chiofalo, B.; Zumbo, A.; Costa, R.; Liotta, L.; Mondello, L.; Dugo, P.; Chiofalo, V.	headspace	GC-MS
1743	Volatiles from cheese	Comparison of efficiency and stability of two preconcentration techniques (SPME and INDEx) coupled to an MS-based "Electronic Nose" *Mitteilungen aus Lebensmitteluntersuchung und Hygiene Hygiene, 95, #1, 85-90* Pillonel, L; Altieri, D; Tabacchi, R; Bosset, J	headspace	GC-MS
1744	2-heptanone in goats milk	Significance of 2-heptanone in evaluating the effect of microfiltration/pasteurisation applied to goats' milk *International Dairy Journal, 14, #10, 915-921* Avalli, Andrea; Povolo, Milena; Carminati, D; Contarini, G	headspace	GC-MS
1745	Volatiles from fruit	Qualitative and quantitative composition of the flavour components of Taiwan calamondin and Philippine Calamansi fruit *European J of Horticultural Science, 69, #3, 117-124* Yo, S.-P.; Lin, C.-H.	headspace	GC-MS
1746	Off flavors from soy protein	Properties of soy protein isolate prepared from aqueous alcohol washed soy flakes *Food Res. Int., 38,#3, 273-279* Hua, Yufei; Huang, Youru; Liu, Xiaoya; Qiu, Aiyong	headspace	GC-MS
1747	Volatiles from olives	SPME analysis of volatile compounds from unfermented olives sujected to thermal treatment. *Anal & Bioanal Chem, 379, #5, 812-817* Navarro, T.; de Lorenzo, C.; Perez, R. A.*	65µm PDMS-DVB headspace	GC-MS
1748	Volatiles from olive & walnut oils	A multivariate study of the relationship between fatty acids and volatile flavor components in olive and walnut oils *J AO C Society, 82, #2, 105-110* Torres, M.; Martinez, M.; Maestri, D.		GC-MS
1749	Volatiles from olive oil	Simultaneous determination of volatile and semi-volatile aromatic hydrocarbons in virgin olive oil by headspace SPME coupled to GC-MS *J. Chromatogr. A, 1090. #1-2, 146-154* Buxaderas, S.; Conte, L.; LopezTamames, E.; Pizzale, L.; Vichi, S.	headspace	GC-MS
1750	Cannabinoids in food	Determination of cannabinoids in hemp food products by use of headspace SPME-GC-MS *Anal. Bioanal. Chem., 378, #1, 183-189* Kroener, L.; Lachenmeier, ; Madea, B.; Musshoff,	MSTFA derivative headspace	GC-MS
		Use of SPME analysis for adsorption of the volatile		

1751	Flavors from pineapple juice	compounds in juices clarified by microfiltration. *Alimentaria, 41, #355, 35-39* Carvalho, L.; Godoy, R..; Silva, C.; Miranda, R.; Figueira, J.	65µm PDMS-DVB headspace	GC-MS
1752	Volatiles in Brazilian fruits and juices	Analysis of volatile compounds in some typical Brazilian fruits and juices by SPME-GC method *Food Additives and Contaminants, 22, #6, 508-513* Cardeal, Z.; Guimaraes, E.; Parreira, F.	100µm PDMS 20min @ 50°C headspace	GC-MS
1753	Flavors from pineapple	Storage and ultraviolet-induced tissue stress effects on fresh-cut pineapple. *J Sci Food and Agri, 84, #14, 1812-1816* Lamikanra, O.; Richard, O. A.	headspace	GC
2355	**Benzoylureas in orange juice**	**SPME For the determination of benzoylureas in orange juice using LC combined with post-column photochemically induced fluorimetry derivatization and fluorescence detection** ***J Sep Sci 31, #1, 56-63 (Jan -2008)*** **Parrilla Voazquez, Piedad; Mughari, A; Martonez Galera, M.**	**60µm DVB/PDMS immersion fluorimetric derivative**	**HPLC fluorescence**
1754	Flavors from navel oranges	High pressure processing of Australian navel orange juices: Sensory analysis and volatile flavor profiling *Innovative Food Sci. Emerg. Tech., 6, #4, 372-387* Baxter, I.; Easton, K; Schneebeli, K; Whitfield, F	headspace 4°C and 10°C	GC-MS
2850	**Aroma compounds fermented whey**	**Evaluation of the thermally dried immobilized cells of Lactobacillus delbrueckii subsp bulgaricus on apple pieces as a potent starter culture** ***J Agr Food Chem 55, #24, 9829-9836 (NOV 28 2007)*** **Kopsahelis, N.; Panas, P.; Kourkoutas, Y.; Koutinas, A.**	**headspace**	**GC**
2774	**Thiabendazole carbendazim in apples**	**A sensitive determination method for carbendazim and thiabendazole in apples by SPME-LC with fluorescence detection** ***Food Additives and Contaminants 25, #3, 314-319 (2008)*** **Hu, Yanxue; Yang, X.; Wang, Chun; Zhao, Jin; Li, Weining; Wang, Zhi**	**60µm DVB/PDMS 35min @ 20°C**	**HPLC fluorescence**
1755	Thiabendazole in orange juice & rind	Determination of thiabendazole in orange juice and rind by LC w/fluorescence detection and confirmation by GC-MS after extraction by matrix solid-phase dispersion *J AOAC Int, 87, #3, 664-670* Albero, B; Sanchez-Brunete, C; Tadeo, Jose L.	headspace	GC-MS-SIM
2842	**Volatiles from aniseed-flavored spirits**	**Determination of the principal volatile compounds of Turkish Raki** ***Journal of the Institute of Brewing 113, #3, 302-309 (2007)*** **Anli, R. Ertan; Vural, Nilufer; Gucer, Yalcin**	**headspace**	**GC-MS**
2402	**Volatiles from aniseed-flavored spirits**	**Characterization of aniseed-flavoured spirit drinks by headspace SPME-GC-MS and chemometrics** ***Talanta 72, #2, 506-511 (2007-04-30)*** **Jurado, J. ; Ballesteros, O.; Alcazar, A.; Pablos, F. ; Martin, M. ; Vilchez, J. L.; Navalon, A.**	headspace	GC-MS
1756	Sweetners in orange spirits	Effects of carbohydrate and noncarbohydrate sweeteners on the orange spirit volatile compounds *Food Sci. Technol., 39, #2, 159-165* Cordaro, F.; Da Porto, C.; Marcassa, N.	headspace	GC
1757	Volatiles in orange juice	Comparison of two headspace SPME fibres for the detection of volatile chemical concentration changes due to industrial processing of orange juice *J Sci of Food & Agi, 85, #6, 1065-1071* Jordan, M.; Goodner, K.; Castillo, M; Laencina, J.	100µm PDMS 85µm polyacrylate headspace	GC
1758	Volatiles in liquor	Studies on the aroma of cupuassu liquor by headspace SPME and gas chromatography. *J Chromatogr A, 1025, #1, 115-124* de Oliveira, A; Pereira, N; Marsaioli, A; Augusto, F	75µm Carboxen headspace	GC-MS, GC-AED
1759	Volatils from oregano plants	Seasonal, populational and ontogenic variation in the volatile oil content and composition of individuals of Origanum vulgare subsp. Hirtum , assessed by GC headspace analysis and by SPME sampling of individual oil glands. *Phytochemical Analysis, 15,#5, 286-292* Johnson, C; Kazantzis, A.; Skoula, M.; Mitteregger, U.; Novak, J.	headspace	GC

Polymers & Coatings

		Application of headspace SPME-GC-MS in characterisation of odorous		
2620	**Volatiles from polyester magnetic tape**	**volatile organic compounds emitted from magnetic tape coatings based on poly(urethane-ester) after natural and artificial ageing** ***Polym. Test. (UK) 26, #2, 243-56 (April 2007)*** **Thiebaut, B.; Lattuati-Derieux, A.; Hocevar, M.; Vilmont, L.-B.**	**headspace**	**GC**
2643	**Odor from new cars**	**Variations in amounts and potential sources of volatile organic chemicals in new cars** ***Sci. Total Environ. 382, #2-3, 228-239 (Sep 1 2007)*** **Chien, Yeh-Chung**	**headspace**	**GC-MS**
791	Organics in packaging materials	The simplest sample treatment techniques to assess the quality and safety of food packaging materials. *Reviews in AnalChem (2000) 19(6), 435-465* Nerin, C.; Rubio, C.; Salafranca, J.; Batlle, R.	Review article	
254	Degradation products in polymers	SPME as an Effective Means to Isolate Degradation Products in Polymers J. Environ. Polym. Degrad. 5 (2): 67-73 (1997) Hakkarainen, M., Karlsson, S., Albetsson, A.		
2662	**Ink solvents on paper**	**Ballpoint pen inks: the quantitative analysis of ink solvents on paper by solid-phase microextraction** ***J Forensic Sci 52, #1, 209-15 (2007 Jan)*** **Brazeau, Luc; Gaudreau, Marc**	**headspace**	**ink solvents on**
2489	**Volatile in water-based + solvent borne coatings**	**Comprehensive VOC analysis method for architectural coatings** ***JCT CoatingsTech 4, #1, 48-55 (Jan. 2007)*** **Brickweg, Lukas; Guillermo, Audrey; Jones, Dane; Wills, Max**	headspace	GC-MS GC-FID
361	Volatile solvents in water-based coatings	Direct VOC Analysis of Water-Based Coating by GC and SPME J. Coating Technology, June 1997 Censullo, A., Jones, D., Wills, M.	65µm Carbowax/PDMS 5 min headspace salt added	GC-FID
626	Volatile solvents in water-based coatings	Analysis of exempt paint solvents by GC using SPME J. Coat Technol. (2000), 72(900), 69-74 Bodrian, R., Censullo, A., Jones, D., Rashkin, M., Wills, M.	65µm Carbowax/PDMS 5 min headspace salt added	GC-FID
466	Volatiles from varnished wire	Analysis of volatile varnishes of coated wires by SPME Fresenius' J. Anal. Chem. 1999, 364(7), 641-642 Hinz, D., Kwarteng-Acheampong, W., Wenclawiak, B.	headspace	GC-MS
426	Acetaldehyde in polyethylene bottles	Determination of Residual Acetaldehyde in Polyethylene Terephthalate Bottles on SPME Czech J. Food Sci. (1998), 36(8), 401-405 Cizkova, H., Voldrich, M., Dobias, J.		
761	Terephthalic acid, vinyl acetate in water	Determination of plastic monomers in water by SPME coupled with liquid chromatography *J.AOAC Intl. Vol 84, No. 2, 2001, 432-436* Batlle, R., Sanchez, C., Nerin, C.	85µm polyacrylate 65µm DVB/PDMS 20min. Immersed 5% salt, pH 5.7	LC-UV
853	Vinyl chloride in plastic and water	Vinyl chloride analysis with (SPME)-GC-MS applied to analysis in materials and aqueous samples. *Analusis (2000) 28(10) 980-987* Charvet, R.; Cun, C.; Leroy, P	75µm Carboxen/PDMS headspace	GC-MS
467	Bisphenol A in plastic	Abbreviated analysis of bisphenol A with SPME in tableware and food containers Shigen Kankyo Taisaku, 1999, 35(5), 447-451 Takao, Y., Arizono, K.		
		Characterization by SPME-GC-MS of matrix changes of		

876	Poly(L-lactide)	poly(L-lactide) exposed to outdoorsoil environment *Polym. Degrad Stab, 71(2000) 147-151* Gallet, G., Lempianinen, R., Karlsson, S		GC-MS
943	Off odors pharmceutical packaging	Identification of a pharmaceutical packaging off-odor using solid phase microextraction GC/MS *J Pharm Biomedical Analysis (2001), 25(3-4), 379-386* Burinsky, D.; Polowy, K.; Sides, S.; Thornquest, A.	100µm PDMS heaspace	GC-MS
902	Residual solvents pharmaceutical samples	Residual solvents determination in pharmaceutical products by GC-HS and Gc-MS-SPME *J Pharm & Biomedical Analysis 1998, 18(4-5), 623-638* Camarasu, C., Mezei, M., Varga, G.		
468	Residual solvents pharmaceutical samples	Headspace SPME method optimization for residual solvent analysis Acta pharm. Hung., 1999, 69(2), 77-84 Camarasu, C., Mezei, M., Szabo, A	65µm DVB/PDMS 30 min headspace 2gm NaCl,	
823	Residual solvents pharmaceutical samples	Improving GC determination of residual solvents in pharmaceuticals by the combined use of headspace SPME and isotopic delution *J. Chromatogr A, 915 (2001) 209-216* Coran, S,, Giannellini, S., Massimo, B., Pinzauti, S.	100µm PDMS 16min. @ 20°C heaspace	GC-MS
845	Degradation product of diphenhydramine-HCl	The use of SPME-GC-MS for the determination of degradation products of volatile and semivolatile compounds *J Microcolumn Separations (2001) 13(1), 1-7* Snow, Nicholas H.; Karaisz, Kenneth		GC-MS
1035		New PVC materials for medical applications - The release profile of PVC/polycaprolactone-polycarbonate aged in aqueous environments *Polym Degradation Stab (2003) 80 (3), 451-458.* Hakkarainen, Minna		GC-MS
1084		Solid-phase microextraction (SPME) in polymer characterization - Long-term properties and quality control of polymeric materials *Journal of Applied Polymer Science (2003) 89 (3), 867-873.* Albertsson, Ann-Christine; Groning, Mikael; Hakkarainen, Minna		GC-MS
1109	VOCs in multi-layer packaging.	Multiple headspace solid-phase microextraction for the quantitative determination of volatile organic compounds in multilayer packagings *Journal of Chromatography A (2003) 999 (1-2), 155-164.* Ezquerro, Oscar; Pons, Begona; Tena, Maria Teresa	Carboxen/PDMS, DVB/carboxen/PDMS	
1176	Polyamide thermooxidation	Headspace solid-phase microextraction with gas chromatography/mass spectrometry reveals a correlation between the degradation product pattern and changes in the mechanical properties during the thermooxidation of in-plant recycled polyamide 6,6 *J. Appl. Polym. Sci (2002) 86(13), 3396-3407* Groning, Mikael; Hakkarainen, Minna		GC-MS
1321		Qualitative and quantitative solid-phase microextraction gas chromatographic-mass spectrometric determination of the low-molecular-mass compounds released from poly(vinyl chloride)/polycaprolactone-polycarbonate during ageing. *Journal of Chromatography, A (2003) 1010 (1), 9-16.* Hakkarainen, M.		GC-MS
2691	**Organics from water**	**Determination of poly(dimethyl)siloxane-water partition coefficients . for selected hydrophobic organic chemicals using 14C-labeled analogs** ***J Chromatogr A 1148, #1, 23-30 (2007 Apr 27)*** **Yang, Ze-Yu; Greenstein, Darrin; Zeng, Eddy Y; Maruya, Keith A**	**PDMS fibers immersed**	**GC-MS**
1345		Effect of polymer concentration on partitioning and molecular recognition in plasticized poly(vinyl chloride). Analytical Chemistry (2003) 75 (16), 4257-4264. Zhang, X.; Zhao, H.; Chen, Z.; Nims, R.; Weber, S. G.*		

2159	**Volatiles from polymers**	**Emission of volatiles from polymers - A new approach for understanding polymer degradation** ***J Polymers Environ. 14. #1, 9-13 (2006)*** **Albertsson, Ann-Christine; Groening, Mikael; Hakkarainen, Minna**	**headspace**	**GC-MS**
1366		Headspace solid-phase microextraction long dash a tool for new insights into the long-term thermo-oxidation mechanism of polyamide 6.6. Journal of Chromatography, A (2001) 932(1-2), 1-11. Groening, M.; Hakkarainen, M. *		GC-MS
1437	Polymer/additives	Direct solid sampling methods for gas chromatographic analysis of polymer/additive formulations Polymer Testing (2001) 20(7), 729-740. Bart, J.C.J.		GC-FTIR-MS
1518	Residual styrene monomer	Analysis of residual styrene monomer and other volatile organic compounds in expanded polystyrene by headspace solid-phase microextraction followed by gas chromatography and gas chromatography/mass spectrometry. *Journal of Separation Science (2002) 25(8), 539-542* Kusch, Peter; Knupp, Gerd	75um Carboxen PDMS, headspace	GC-MS
1302		Headspace solid-phase micro-extraction - gas chromatography - mass spectrometry applied to quality control in multilayer-packaging manufacture. *Journal of Chromatography, A (2003) 1008 (1), 123-128.* Ezquerro, O.; Pons, B.; Tena, M. T.*		GC-MS
1209	Diethyl sulfide	TiO/sub2/ reactivation in photocatalytic destruction of gaseous diethyl sulfide in a coil reactor *Applied Catalysis B: Environmental (2003) 44 (1), 25-40.* Lion, Claude; Savinov, Evgueni N.; Smirniotis, Panagiotis G.; Vorontsov, Alexandre V.		
1268	Monocyclic aromatic compounds in heavy fuel oil.	A GC-MS method for analysis of volatile monocyclic aromatic compounds in heavy fuel oil using headspace-solid phase microextraction. *Chromatographia (2003) 58 (1-2), 115-117.* Mangani, G.; Berloni, A.; Maione, M. *		
1434	Methylcyclopentadienyl manganese tricarbonyl	Determination of methylcyclopentadienyl-manganese tricarbonyl by solid phase microextraction-direct thermal desorption-quartz furnace atomic absorption spectrometry Spectrochim Acta Part B At Spectrosc (2001) 56(2), 215-221. Alava-Moreno, Fausto; Bendicho, Carlos; Fragueiro, Maria Sandra; Lavilla, Isela		
1760	Organo-silicates from polyurethane	Thermal stability analysis of organo-silicates, using solid phase microextraction techniques *Thermochim Acta, 429, #1, 13-18* Edwards, G.; Halley, P.; Kerven, G.; Martin, D.	headspace	TGA, GC-MS
1761	Volatiles from polymer pyrolysis	Use of SPME to monitor gases resulting form thermal plasma pyrolysis. *Chromatographia, 60, #1-2, 85-88* Cubas, A.; Carasek, E; Debacher, N. ; de Souza, I.	headspace	GC
1762	Volatiles from phenolic polymers	Probing the microwave degradation mechanism of phenol-containing polymeric compounds by sample pretreatment and GC-MS analysis *Analytica Chimica Acta, 526, #2, 121-129* Chang, Yu-Cheng; Chu, Tieh-Chi; Ko, Chu-Jung; Ko, Fu	heaspace from 20° to 80°C	GC-MS
2822	**Thermal byproducts of polypropylene**	**Use of the SPME-GC-MS technique to study the thermal degradation of isotactic polypropylene: Effects of temperature and reaction time, and analysis of the reaction mechanism** ***E-Polymers Jan 30 2008*** **Bortoluzzi, J.; Carasek, E.; Cristiano, R.; Gallardo, H..; Soldi, V.**	**heaspace**	**GC-MS**

1763	Thermal byproducts of polypropylene	SPME to concentrate volatile products from thermal degradation of polymers *Polym Degradation Stab, 89, #1, 33-37* Bortoluzzi, J.; Carasek, E; Pinheiro, E.; Soldi, V	100µm PDMS, 75µm Carboxen	GC-MS
2880	**Degradation products of polymers**	**Comparison of extraction methods for sampling of low molecular compounds in polymers degraded during recycling** ***Eur Polym J 44, #6, 1583-1593 (June 2008)*** **Karlsson, Sigbritt; Moller, Johanna; Stromberg, Emma**	**headspace**	**GC**
1764	Odours from polypropylene composites	Emission of possible odourous low molecular weight compounds in recycled biofibre/polypropylene composites monitored by head-space SPME-GC-MS *Polym Degradation Stab, 90. #3, 555-562* De Las Heras, Luis A.; Espert, Ana; Karlsson, Sigbritt	heaspace	GC-MS
1765	Odor removal by Zn ricinoleate	Development and analytic of odor absorber *Tenside Surfactants Deterg, 41, #6, 282-286* Bohmer, Thomas; Muller, Felix; Peggau, Jorg	headspace	GC
1766	Volatiles from polystyrene	Headspace-SPME-GC-MS identification of volatile organic compounrds released from expanded polystyrene *J. Polym. Environ., 12, #2, 83-87* Knupp, Gerd; Kusch, Peter	75µm Carboxen headspace	GC-MS
1767	2-cyclopentyl-cyclo-pentanone in polamide 6.6	Correlation between emitted and total amount of 2-cyclopentyl- cyclopentanone in polamide 6.6 allows rapid assessment by Head Space and HS-SPME . under non-equilibrium conditions *J. Chromatogr. A, 1052, #1-2, 151-159* Groning, Mikael; Hakkarainen, Minna	headspace	GC-MS GC-RI
2864	**Degradation compounds of Polamide 6**	**Identification and migration of degradation compounds from irradiation of multilayer polyamide 6 films for meat foodstuffs and cheese** ***Anal. Bioanal. Chem. 391, #3, 847-857 (June 2008)*** **Felix, J.S.; Manzoli, J.E.; Monteiro, M.; Nerin, C.; Padula, M.; Pezo, D.; Romero, J.**	**100µm PDMS 20 min, 80 °C**	**GC-MS**
1768	2-cyclopentyl-cyclopentanone in polamide 6.6	Multiple headspace SPMEof 2-cyclopentyl- cyclopentanone in polyamide 6.6: Possibilities and limitations in the headspace analysis of solid hydrogen-bonding matrices *J. Chromatogr. A, 1052, #1-2, 61-68* Groning, Mikael; Hakkarainen, Minna	headspace	GC-MS
2308	**Volatiles from Asphalt release agents**	**Chemical characterization of oil-based asphalt release agents and their emissions** ***Fuel 85 #9, 1232-1241 (2006)*** **Isacsson, Ulf; Tang, Bing**	**headspace**	**GC/MS**
1769	Hydrocarbons from asphalt	Determination of aromatic hydrocarbons in asphalt release agents using headspace SPME-GC-MS *J Chromatogra, A, 1069, #2, 235-244* Isacsson, Ulf; Tang, Bing	headspace	GC-MS

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401	Volatiles in tobacco	Analysis of Tobacco Volatiles with SPME Dr. W.D. Koller, Federal Research Centre for Nutrition, Institute of Process Engineering, Engesserstr. 20, 76131 Karlsruhe/Deutschland	100µm PDMS 10 min headspace	GC-MS
402	Pesticides in water/MeOH extract	A Simple Screening for Pesticide Residues in Tobacco Dr. W.D. Koller, Federal Research Centre for Nutrition, Institute of Process Engineering, Engesserstr. 20, 76131 Karlsruhe/Deutschland	100µm PDMS 10 min immersion	GC-MS
102	Flavor additives in tobacco	Qualitative and Quantitative Analysis of Flavor Additives on Tobacco Products Using SPME-GC-MS J. Agric. Food Chem. 45: 844-849 (1997) Clark, J., Bunch, J.	65µm Carbowax/DVB 95°C, 15 min KCl added	GC-FID
430	Alkaloids	Determination of Tobacco Alkaloids Using SPME and GC-NPD Chromatographia (1998), 47(7/8), 443-448	100µm PDMS	GC-NPD

	in tobacco	Yang, S., Smetena, I.	12 min, immersed	
627	Acetates in cigarette tobacco	Quantitative analysis of acetates in cigarette tobacco using SPME-GC-MS *J. Chromatogr. Sci (2000), 38(4), 137-144* Watson, C., Ashley, D.	headspace	GC-MS
2554	**Volatile Organics found in cigarette smoke**	**Analysis of volatile organic compounds in mainstream cigarette smoke** ***ENVIRON. SCI. TECHNOL. 41, #4, 1297-1302 (15 FEB 2007)*** **Polzin, G. M.; Kosa-Maines, R. E.; Ashley, D. L.; Watson, C. H.**	**headspace**	**GC-MS**
2434	**Organics found in cigarette smoke**	**Identification and determination of mainstream and sidestream smoke components in different brands and types of cigarettes by means of SPME-GC-MS** ***J. Chromatogr. A 1180, #1-2,138-150 (Feb 8 2008)*** **Bartolucci, G.; Furlanetto, S.; Giannini, I.; Moneti, G.; Orlandini, S.; Pieraccini, G.; Pinzauti, S.**		**GC-MS**
137	Phenols in cigarette smoke	Quantitative Determination of Phenols in Mainstream Smoke with SPME-GC-Selected Ion Monitoring Mass Spectrometry J. Chromatogr. Sci. 34: 272-275 (1996) Clark, J., Bunch, J.	85µm polyacrylate 60 min stirring	GC-FID
2863	**Formaldehyde in incense smoke**	**Determination of particulate-bound formaldehyde from burning incense by solid phase microextraction** ***Bull. Environ. Contam. Toxicol. 80, #4, 324-328 (April 2008)*** **Chen, C.Y.; Lin, J.M.; Liou, S.W.; Yang, T.T.**	**65µm PDMS/DVB headspace PFBHA derivative**	**GC-ECD**
2652	**Volatiles in incense smoke**	**Characterization of incense smoke by SPME - Comprehensive two-dimensional (GC x GC)** ***Atmospheric Env 41, #27, 5756-5768 (SEP 2007)*** **Tran, Tin C.; Marriott, Philip J.**	**65µm PDMS/DVB headspace**	**GC-GC-FID**
628	Azo dyes in leather & textiles	Study on determination of prohibited azo dyes by SPME *Fenxi Deshi Xuebao (2000), 19(1), 76-78* Xu, H., Tong, H.	reduced to aromatic amines w/Na2SO4	GC-MS
	Azo dyes in leather & textiles	Development of a SPME method for detection of the use of banned Azo dyes in coloured tectiles and leather *Rapid Commun.Mass Spectrom. 13, pp1833-1837* Cioni, G., Bartolucci, G., Pieraccini, G., Meloni, S., Moneti, G.		
916	Hexachlorobenzene in color additives	Rapid Quantification of hexachlorbenzene in the color additives D&C Red Nos. 27 & 28 (phloxine B) using SPME GC-MS *J Chromatogr A (1999) 863(1) 37-46* Andrezejewski, D., Weisz, A.	100µm PDMS 25min @ 26°C immersed stirred	GC-MS
210	Solvents in water-based coatings	Derivatization Solid-Phase Microextraction Gas Chromatographic Mass Spectrometric Determination of Organic Acids in Tobacco J. Chromatogr. Sci. 35 (5): 209-212 (1997) Clark, T., Bunch, J.	65µm Carbowax/DVB 5 min headspace stirring salt added	GC-FID
836	Biproducts from carvone enantiomers	Screening of biotransformation products of carvone enantiomers by headspace-SPME/GC-MS *Z. Naturforsch., C: J. Biosci(2001) 56(1/2) 58-64* Demirci, F; Kirimer, N; Demirci, B; Noma, Y; Baser, K	headspace	GC-MS
72	Monoterpenes in conifer needles	Analysis of Monoterpenes from Conifer Needles Using SPME J. High Res. Chromatogr. 18: 587-592 (1995) Schafer, B., Hennig, P., Engewald, W.	100µm PDMS 40°C, 5 min headspace	GC-FID
399	Monoterpenes in conifer needles	Changes in the Flavor of Monoterpenes During Their Autoxidation Under Storage Conditions Dept. of Food Chemistry, Prague Institute of Chemical	65µm Carbowax/DVB 40°C, 10 min	GC-MS

		Technology, Technicka 5, CZ-16628 Prague 6, Czechia Pokorny, J., Pudil, F., Volfova, J., Valentova, H.	headspace	
806	Monoterpenes	SPME for the determination of volatile organics in the foliage of Fraser fir Vereen, D. A.; McCall, J. P.; Butcher, D. J		
2772	**Volatiles from mushrooms**	**Correlation between the pattern volatiles and the overall aroma of wild edible mushrooms** **J. Agric.Food Chem. 56, #5, 1704-1712 (MAR 12 2008),** ***De Pinho, P. ; Ribeiro, B.; Goncalves, R.; Baptista, P.; Valentao, P.; Seabra, Rosa M.; Andrade, Paula B.***	**headspace**	**GC-MS**
2481	**Volatiles from herbs**	**Headspace SPME, Headspace Solid Phase Dynamic Extraction (HS-SPDE) and Headspace Sorptive Extraction (HSSE) - comparing the methods applied to the analysis of volatile components in herbs.** ***Zeitschrift fur Arznei- & Gewurzpflanzen 12, #3, 147-153 (2007)*** **Wolff, A. C.; Schellenberg, I.; Bansleben, D.**	**headspace**	**GC-MS**
159	Terpenoids in herbs	Head-Space SPME for the GC-MS Analysis of Terpenoid in Herb-Base Formulations Fresenius' J. Anal. Chem. 356: 80 (1996) Czerwinski, J., Zygmunt, B., Namiensnik, J.		GC-MS
629	Terpenoids in plant materials	SPME of Volatile Components from Natural Grassland Plants J. Agric.Food Chem. 2001, 49, 203-209 Cornu, A., Carnat, A., Martin, B., Coulon, J., Lamaison, J, Berdague,J	100µm PDMS 15 min @ 44°C headspace, 1 gm in 40mL vial	GC-MSD
848	Monoterpens in essential oils	Monoterpene biosynthesis in Agathosma crenulata (Buchu) Flavour and Fragrance Journal (2001) 16(2), 123-135 Mosandl, Armin; Fuchs, Sabine; Sewenig, Sabine		GC-MS
320	Terpenoids in herbs	Head Space SPME for the GC-MS Analysis of Terpenoids in Herb-Based Formulations J. Anal. Chem. 356 (1): 80-83 (1996) Czerwinski, J., Zygmunt, B., Namiesnik, J.		GC-MS
630	Monoterpens in essential oils	Examination of the enatomeric distribution of certain monoterpene hydrocarbons in selected essential oils by automated SPME-chiral GC -Mass spectrometry. J. Chromatogr. Sci., Mar.2000, 38(3), 95-99 Coleman, W., Lawrence, B.	6 se. headspace	GC-MS
631	Monoterpens & essential oils in peppermint	Monoterpene composition essential oil from peppermint (Mentah x piperita L.) w/regard to Leaf position using SPME and GC-MS Analysis *J.Agric. Food Chem 1999, 3782-3786*	100um PDMS 1 min @ 25°C headspace	GC-MS
632	Monoterpens & essential oils in mint plant	Biogenesis study of essential oils by SPME enatio-multidimensional GC-MS (MDGC/MS) *GIT Lbor-Gachz (2000), 44(4), 358-362* Fuchs, S., Beck, T., Mosandl, A.		GC-MS
859	Review article	Sample preparation for chromatographic analysis of plant material *J Planar Chromatog- Modern TLC (2000) 13(6) 404-413* Namiesnik, Jacek; Gorecki, Tadeusz		
2513	**Trace residue contaminants from food**	**Sample preparation techniques for the determination of trace residues and contaminants in complex matrices** ***J. CHROMATOGR. A 1153, #1-2, 36-53 (15 JUN 2007)*** **Ridgway, K.; Lalljie, S. P. D.; Smith, R. M.**	**review article**	
863	Volatiles from seeds	Emission of volatile compounds by seeds under different environmental conditions *American Midland Naturalist (2001) 145(2) 419-422*		GC-MS

		Jorgensen, Eric		
633	Essential oils in quava fruit	Chemical composition of the essential oil and headspace SPME of the quava fruit J. Essent. Oil Res (2000), 12(2), 153-158 Paniandy, J., Chane-Ming, J., Pieribattesti, J.	headspace	GC-MS
469	Essential oils from aromatic plants	Rapid GC with resistance heated capillary columns. Analysis of essential oils from aromatic plants Git Spez. Sep. (1999), 19(1), 40-43 Theuerl, T., Kleibohmer,W., Blanke, R.		
2599	**Cuticular hydrocarbons from insects**	**Investigation of cuticular hydrocarbons from Bagrada hilaris genders by SPME/GC-MS** ***Anal Bioanall Chem 389, #4, 1259-1265 (OCT 2007)*** **De Pasquale, C.; Guarino, S.; Peri, E.; Alonzo, G.; Colazza, S.**	**85µm polyacrylate** **headspace**	**GC-MS**
2323	**Cuticular hydrocarbons from insects**	**Perception of cuticular hydrocarbons by the olfactory organs in Periplaneta americana (L.) (Insecta : Dictyoptera)** ***Journal of Insect Physiology 51 #12, 1384-1389 (2005)*** **Said, Imen; Gaertner, Cyril; Renou, Michel; Rivault, Colette**	**headspace**	**GC**
389	Cuticular hydrocarbons in Dinoponera quadriceps ants	Solid Phase Microextraction and Cuticular Hydrocarbon Differences Related to Reproductive Activity in the Queenless Ant J. Chemical Ecology, 24: 473-490, 1998 Monnin, T., Malosse, C., Peeters, C.		GC-MS
89	Pheromones in insects	Solid Phase Microextraction, an Alternative Method for the Study of Airborne Insect Pheromones (Metamasius hemipterus, Coleoptera, Curculionidae) J. High Res. Chromatogr. 18: 669-670 (1995) Malosse, C., Ramirez-Luca, P., Rochat, D., Morin, J.	100µm PDMS 5 min headspace	GC-FID
818	Pheromones in insects	Use of SPME in the investigation of chemical communication in social wasps *J Chromatogr A, 873, (2000), 73-77* Sldege, M., Moneti, G., Pieraccini, G., Turillazzi, S.	7µm PDMS 10min @ 170C	GC-MSD
2919	**Pheromones in insects**	**Identification of the sex pheromone of Sesamia cretica Lederer** ***Journal of Chemical Ecology 34, #1, 103-106 (JAN 2008)*** **Avand-Faghih, Arman; Frerot, Brigitte**		**GC-MS**
434	Pheromones in insects	SPME, A New Tool in Pheromone Identification in Lipidoptera J High Resolut. Chromtogr. (1997), 20(6), 340-342 Frerot, B., Malosse, C., Cain, A.	7µm PDMS 5 min rubbed on fiber	GC-FID or GC-FTD
850	Pheromones in termite trail	(Z)-dodec-3-en-1-ol, a novel termite trail pheromone identified after SPME from Macrotermes annandalei. *J Insect Physiology (2001) 47(4-5) 445-453* Bordereau, C; Bonnard, O; Ginies, C; Lettere, M; Peppuy, A; Robert, A; Semon, E		GC-MS
2819	**Pheromones of male beetles**	**Ethyl 4-methyl heptanoate: A male-produced pheromone of Nicrophorus vespilloides** ***Journal of Chemical Ecology 34, #1, 94-98 (Jan 2008)*** **Haberer, Wolf; Schmitt, T.; Peschke, K.; Schreier, P.; Mueller, J.**	**headspace**	
2813	**Pheromones tenebrionid beetles**	**1-Tridecene - male-produced sex pheromone of the tenebrionid beetle Parastizopus transgariepinus** ***Naturwissenschaften 95, #3 247-251 (MAR 2008)*** **Geiselhardt, Sven; Ockenfels, Peter; Peschke, Klaus**	**100µm PDMS** **headspace**	**GC-MS**
2723	**Pheromones Harmonia axyridis beetles**	**Determination of characteristic odorants from Harmonia axyridis beetles using in vivo solid-phase microextraction and multidimensional gas chromatography-mass spectrometry-olfactometry** ***J Chromatogr A, 1147, #1, 66-78, 73-77 (2007),***	**headspace**	**GC-MS**

		Lingshuang Cai; Koziel, J. A.; O Neal, M. E. O		
2406	**Pheromones of red flour beetles**	**Detection of Tribolium castaneum (Herbst) volatile defensive secretions by SPME-capillary gas chromatography (SPME-CGC).** ***J Stored Products Research 43, #4, 540-545 (2007)*** **Villaverde, M. L.; Juarez, M. P.; Mijailovsky, S.**	**75µm Carboxen headspace 15-min**	**GC-MS**
634	Pheromones of Rhinoceros beetles	Role of SPME in the identification of highly volatile Pheromones of two Rhinoceros beetles Scapanes australis and Strategus aloeus (Coleoptera, Scarabaeidae, Dynastinae) *J Chromatogr. A, 885 (2000) 433-444, Rochat, D,* Ramirez-Lucas,P., Malosse,C., Aldana,R. Kakul,T. Morin,J	Carboxen/PDMS 30 min immersion NaCl, borax buffer (pH9.2)	GC-MS
2262	**Pheromones from fire ant**	**Preparation for the analysis of fire ant trail pheromones using SPME-gas chromatography/mass spectrometry.** ***Abstracts of Papers Am Chem Society 229 #1, U131 (2005)*** **Smith, Suncerae I.; Mazitelli, Carolyn; Brodbelt, Jennifer S.**		**GC/MS**
945	Insecticides	Measurement of Insecticide Uptake and Effective Fraction in a Beneficial Insect Using SPME *Anal. Chem (2001) 73(13), 3107-3111* Alix, A.; Collot, D.; Nenon, J.; Anger, J.		
635	Volatiles in insecticide	The measurement of volatile compounds in Foray 48B, an insecticide prepared from Bacillus thuringiensis var. kurstaki *Sci. Total Env., (2000) Vol. 263, No. 1-3, 155-160* van Netten, C., Bartlett, K., Chow, Y., Leung, V., Teschke, K.		
120	NH3, putrescine, methylamine in lure cultures	Solid Phase Microextraction Analysis of Static-Air Emissions of Ammonia, Methylamine, and Putrescine from a Lure for the Mexican Fruit Fly J. Agric. Food Chem. 44: 3554-3559 (1996) Robacker, D., Bartelt, R.	100µm PDMS 10 min headspace	FID
825	Fly Pheromones in insects	SPME-GC-direct depostioon infrared spectrometry as a convenient method for the determination of volatile compounds from living organisms *J. Chromatogr. A 819 (1998) 45-50* Auger, J., Rousset, S., Thibourt, E., Jaillais, B.	100µm PDMS 1min.	GC-MS
937	Chemical attractants from cyanobacterial mats.	The use of (SPME) devices in analysis for potential mosquito oviposition attractant chemicals from cyanobacterial mats. *Aquatic Ecology (2000), 34(4), 413-420* Rejmankova, E.; Lege, M.; Andre, R.; Higashi, .; Roberts, D.		GC-MS
398	Chemical attractants in soy broth culture	Chemicals Attractive to Mexican Fruit Fly from Klebsiella pneumonia and Citrobacter freundii Cultures Sampled by SPME J. Chemical Ecology, Vol. 23, No., 12, 1997, 2897-2915 Robacker, D., Bartelt, R.	100µm PDMS 27°C, 30 min headspace	GC-MS
470	Pheromones	Pheromone analysis using capillary GC techniques J. Chromatogr., A 1999, 843(1+2), 199-236 Jones, G., Oldham, N.	review of use of SPME	GC
124	Pheromones in insects	Solid Phase Microextraction Technique Used for Collecting Semiochemicals, Identification of Volatiles Released by Individual Signaling Phylionorycter sylvella Moths Z. Nturforsch. C: Giosci. 51: 599 (1996) Karlson-Borg, A., Mozuaitis, R.	100µm PDMS 1-3 hr headspace	GC-MS
2484	**Pheromones in honey bees**	**The scent of the waggle dance** ***PLoS Biology 5, #9, 1862-1867 (SEP 2007)*** **Thom, Corinna; Gilley, David C.; Hooper, Judith; Esch, Harald E.**	**headspace**	**GC/MS**
2332	**Phermones African elephant**	**Use of SDS page, SPME, and GC-MS for chemical analysis of temporal gland secretions from African elephants.** ***Abstracts of Papers Am Chem Society (2004) 227 Part1, U443*** **Freyaldenhoven, D.; Kopper, R.; Goodwin, T.; Lichti, C.;Rasmussen, L.**		**GC/MS**

2333	**Urine from African elephant**	**Chemical analysis of urine from male african elephants by SDS PAGE, SPME, and GC-MS.** ***Abstracts of Papers Am Chem Society (2004) 227 Part1, U425*** **Carver, A.; Davis, B.; Kopper, R.; Goodwin, T.; Lichti, C.; Rasmussen, L..; Hollister-Smith, Julie; Alberts, S.**		**GC/MS**
410	Pheromones in elephant urine	Purification, Identification, Concentration and Bioactivity of (Z)-7-dodecen-1-yl acetate: Sex Pheromone of the Female Asian Elephant, Elephas maximus Chem. Senses 22: 417-437 Rasmussen, L.E.L., Lee, T.D., Zhang, A., Roelofs, W.L., and Daves Jr., G.D.		GC-MS
773	Fungal volatiles	Application of SPME for the determination of fungal volatile metabolites *Prog. Biotechnol (2000) 17, 369-377* Jelen, H.; Wasowicz, E		
394	Free fatty acids in exocrine secretions	Sampling Techniques for GC-MS Analysis of Long-Chain Free Fatty Acids from Insect Exocrine Glands J. Chromatogr. A 816 (1998) 169-175 Maile, R., Dani, F., Jones, G., Morgan, D., Orthius, D.	100µm PDMS, 65µm Carbowax/DVB 140°C, 30 min headspace	GC-MS
382	Volatile attractants in cultures	Attractants from Stryphylococcus aureus Cultures from Mexican Fruit Fly, Anastrepha ludens J. Chemical Ecology, Vol. 21, No. 11, 1861-1874 (1995) Robacker, D., Flath, R.	100µm PDMS 5 min - 24 hr headspace	GC-MS
471	Volatile attractants in bracket fungi	Volatiles of bracket fungi Fomtopsis pinicola and Fomes fomentarius and their functions as insect attractants J. Chem. Ecol. (1999), 25(3), 567-590 Faldt, J., Jonsell, M., Norlander, G., Borg-Karlson, A.		GC-MS
584	Alcholols, aldehydes in air	Volatiles from Fusarium verticillioides (Sacc.) Nirenb. and their attractiveness to Nitidulid beetles. J-Agric-Food-Chem. Jun 1999; 47(6): 2447-2454 Bartelt,-RJ; Wicklow,-DT	100µm PDMS 30 min	GC-FID/MS
472	Volatile attractants from apples	Identification of a new blend of apple volatiles attractive to the apple maggot, Rhagoletis pomonella J. Chem. Ecol., 1999, 25(6), 1221-1232 Zhang, A., Linn, C., Wright, S., Prokopy, R. Reissig, W., Roelogs, W.		GC-FID
889	Volatile attractants from apples	Volatiles from apple (Malus domestica) eliciting antennal antennal responses in female codling moth Cydia pomonella (L.) (Lepidoptera: Tortricidae): Effect of plant injury and s sampling technique *Zeitschrift fuer Naturforschung Sec C (2001) 56(3-4) 262-268* Backman, A; Bengtsson, M; Karlsson, A; Liblikas, I; Witzgall, P		GC-Electro-antennography
636	Pyrazine in Must	Headspace SPME method for determining 3-akyl-2 methoxy-pyrazine in musts by PDMS fibers *J Chromatogr. Sci (2000), 880(1+2), 93-99* Sala, C., Mestres, M, Marit, M., Busto, O., Guasch, J.	100µm PDMS/DVB 4 hr.@30°C headspace NaCl added	GC-NPD
892	Pesticides in must & wine	Development of a SPME-GC-ECD methodology for selected pesticides in must and wine samples *Fresenius' J Anal Chem) 369(7-8) 647-651* Alves, A; Correia, M; Delerue-Matos, C		GC-ECD
211	Musk compounds in cosmetic products	Headspace SPME and Gas Chromatography with Atomic-Emission Detection Chromatographia 45: 138-144 (1997) Struppe, C., Schaefer, B., Engewald, W.	100µm PDMS 80°C, 30 min headspace	GC-AED
835	Volaitles from	SPME-GC-MS analyses of hazelnut creams *Lab. 2000 (2000) 14(7), 86-88*		GC-MS

	hazelnut creams	Saba, A.; Cuzzola, A.; Raffaelli, A.; Salvadori, P.		
821	Fragrances on skin	A novel technology to study the emission of fragrance from the skin *Perfumer& Flavorist, vol. 23 (1998) 1-11* Mookherjee, B., Patel, S., Trenkle, R., Wilson, R.	100µm PDMS 30-60min headspace	GC-MS
637	Volatiles in Gardenia flower	Analysis of headspace constituents of Gardenia flower by GC-MS with SPME and dynamic headspace sampling *Sepu, (2000-09) 18(5) 425-455* Liu, B., Gao, Y.	100µm PDMS 60 min @ 28°C headspace	GC-MS
2811	**Volatiles in flower**	**Composition of the volatiles from flowers of Bystropogon moderensis Webb by SPME** ***Planta Medica 73, #9, 949-950 (AUG 2007)*** **Castilho, P. C.**		
2568	**Fragrance in Syringa oblata flowers**	**Analysis of volatile compounds emitted from fresh Syringa oblata flowers in different florescence by headspace SPME-GC-MS** ***Anal. Chim. Acta 576, #1, 43-49 (2006-08-18)*** **Li, Z. G.; Lee, M. R.; Shen, D. L.**	**65µm PDMS/DVB** **headspace** **30 min @ 25°C**	**GC-MS**
882	Fragrance in Lavender flowers	On-site field sampling and analysis of fragrance from living Lavender (Lavandula angustifolia L.) flowers by SPME coupled to GC and io-trap mass spectrometry *J. chromatogr. A 917(2001) 245-250* An, M., Haig, T., Hatfield, P.	100µm PDMS 10 min @ 28°C headspace	GC-MS
2555	**Furfural in Air**	**Diffusive sampling of airborne furfural by SPMEdevice with on-fiber derivatization** **J. Chromatogr., A 1129. #1, 29-33 (2006-09-29)** **Tsai, S. W.; Kao, K. Y.**	**65µm PDMS/DVB** **25°C** **PFBHA derivative**	**GC-MS**
2469	**Aroma volatiles from treacle**	**Application of headspace-SPME-HPLC for the analysis of the aroma Volatile components of treacle and determination of its content of 5-hydroxymethylfurfural (HMF).** ***Food Chemistry 104, #3, 1310-1314 (2007)*** **Edris, A. E.; Murkovic, M.; Siegmund, B.**	**headspace**	**HPLC**
2428	**Fragrance in flowers**	**Isolation and characterization of the volatile aroma compounds from the concrete headspace and the absolute of Jasminum sambac (L.) Ait. (Oleaceae) flowers grown in Egypt** ***Eur. Food Res. Technol. 226, #3, 621-626 (January 2008)*** **Chizola, Remigus; Edris, Amr E.; Franz, Chlodwig**	**100µm PDMS** **headspace**	**GC-MS**
125	Fragrance in flowers	IFF Announces New Method for Living Flower Analysis Spray Technology & Marketing Oct. 1996, pp 26-30 Anon	75µm Carboxen/PDMS headspace	GC-MS
126	Fragrance in flowers	Flavors of Heliotrope Flowers, Analyzed by SPME Method Gakkaishi 2: 6 (1995) Nippon, Shokuhin Kagaku		GC-MS
2365	**Aroma compounds in durian pulp**	**The study of the aroma profile characteristics of durian pulp during storage by the combination sampling method coupled with GC-MS.** ***Flavour and Fragrance J. 22, #1, 71-77 (2007)*** **Zhang ZhuoMin; Zeng DanDan; Li GongKe**	**headspace**	**GC-MS**
874	Aroma compounds in pulp	Analysis of the aroma compunds of the pulp of Borassus aethiopum L (Palmaceae) from Cameroon using GC-MS, SPME-GC-MS and olfactormetry *Ernaehung (Vienna) 24(2000) 159-161* Jirovetz, L., Buchbauer, G., Ngassoum, M.		GC-MS
2796	**Volatiles from vegetables**	**Headspace sampling of the volatile fraction of vegetable matrices** ***J.Chromatogr. A 1184,#1-2, 220-233 (MAR 14 2008)*** **Bicchi, C.; Cordero, C.; Liberto, E.; Sgorbini, B.; Rubiolo, P.**		

746	Volatiles from plants	Influence of fiber coating in headspace SPME-GC analysis of aromatic and medicinal plants *J.Chromatogr. A (2000) 892, 469-485* Bicchi, C., Drigo, S., Rubiolo, P.	Carboxen/DVB/PDMS 1hr, headspace	GC-FID
2828	**Organochlorine pesticides in mud samples**	**Application of microwave-assisted micellar extraction combined with SPME-HPLC with UV detection for the determination of organochlorine pesticides in different mud samples** ***Int. J. Environ. Anal. Chem.88, #3, 185-197 (March 2008)*** **Santana-Rodriguez, Jose Juan; Sosa, Zoraida; Vega, Daura**	**65µm DVB/PDMS**	**LC-UV**
2373	**Organochlorine pesticides in seaweed**	**SPME and SPE comparative study for coupling with microwave-assisted micellar extraction in the analysis of organochlorine pesticides residues in seaweed samples** ***Microchemical Journal 87, #2, 139-146 (DEC 2007)*** **Moreno, Daura Vega; Ferrera, Zoraida Sosa; Rodiriguez, Jose**		LC-PAD
792	Pesticides in medicinal plants	SPME associated with microwave assisted extraction of organochlorine pesticides in medicinal plants *Anal. Chim. Acta (2001) 428(1), 111-120* Ho, W.-H.; Hsieh, S.-J	PDMS 90min,	GC-ECD
465	C2-C10 Acid, phenols, aldehydes in swine manure	Evaluating Peats for their capacities to remove odorous compounds from liquid swine manure using headspace SPME J. Environ. Sci.Health, B34(4), 709-748 (1999) Rizzuti, A., Cohen, A., Hunt, P., Vanotti, M.	85µm Polyacrylate 20 min @ 72°C headspace, pH 2	GC-MS
127	Cinnamon	Classification of the Botanical Origin of Cinnamon by SPME-GC Chromatographia 42: 2187 (1996) Miller, K,. Poole, C., Pawlowski, T.		
321	Epicuticular hydrocarbons in insect culture	SPME of Insect Epicuticular Hydrocarbons for GC-MS Analysis Rapid Commun. Mass Spectrom. 11 (8): 857-862 (1997) Moneti, G., Dani, F., Pieraccini, G., Turillazzi, S.		GC-MS
2252	**Antimicrobial activitie of essential oils**	**Solid- and vapor-phase antimicrobial activities of six essential oils: Susceptibility of selected foodborne bacterial and fungal strains** ***J Ag Food Chem, 53, #17, 6939-6946 (2005)*** **Lopez, P.; Sanchez, C.; Batlle, R.; Nerin, C.**	**headspace**	**GC/MS**
2217	**Volatile organics in bacteria**	**Determination of microbial volatile organic compounds from Staphylococcus pasteuri against Tuber borchii using SPME-GC-MS** ***Rapid Communications Mass Spectrometry 19 #22, 3411-3415 (2005)*** **Barbieri, E.; Gioacchini, A. M.; Zambonelli, A.; Bertini, L.; Stocchi, V.**		**GC-MS**
2372	**poly(3-hydroxy -butyrate) in microbial cells**	**Use of headspace solid-phase microextraction for the quantification of poly(3-hydroxybutyrate) in microbial cells** ***J. Chromatogr., A 1154, #1-2, 34-41 (2007-06-22)*** **Monteil-Rivera, F.; Betancourt, A.; van Tra, H.; Yezza, A.; Hawari, J**	**headspace**	**GC-FID**
811	Volatile hydrocarbon from bacterial growth	Development of a method for the application of SPME to monitor biodegradation of volatile hydrocarbons during bacterial growth on crude oil *J Indus Microb & Biotech (2000) 25(3), 155-162* Van Hamme, J. D.; Ward, O	45min @ 30°C headspace	GC-FID
1054	Volatile compounds from Eucalyptus.	Solid-phase microextraction of volatile compounds from the chopped leaves of three species of Eucalyptus. *Journal of Agricultural and Food Chemistry (2003) 51 (9), 2679-2686.* Pawliszyn, Janusz; Caramao, Elina B.; Christensen, Eva; Zanin, Kelen D.; Zini, Claudia A.		
1082	Aromas and fragrances	Sampling and sample preparation for analysis of aromas and fragrances. *Trends in Analytical Chemistry (2003) 22 (3), 160-169.* Augusto, Fabio; Leite e Lopes, Alexandre; Zini, Claudia Alcaraz		

2169	**Selenium, mercury in plants**	**Localization and speciation of selenium and mercury in Brassica juncea - Implications for Se-Hg antagonism** ***J Anal At Spectrom 21, #4, 404-412 (2006)*** **Caruso, J.; Meija, J.; Mounicou, S.; Shah, M.; Shann, J.; Vonderheide,A.**	**headspace**	**GC-ICP-MS** **GC-TOFMS**
1092	Selenium and sulfur from plants.	Simultaneous monitoring of volatile selenium and sulfur species from Se accumulating plants (wild type and genetically modified) by gas chromatography mass spectrometry and gas chromatography-inductively coupled plasma mass spectrometry using solid-phase microextraction for sample introduction. *Analytical Chemistry (2002) 74 (22), 5837-5844.* Meija, J.; Montes-Bayon, M.; Le Duc, D. L.; Terry, N.; Caruso, J. A.*		GC-ICP MS
1120	Volatiles from flowers	Use of solid-phase micro-extraction as a sampling technique in the determination of volatiles emitted by flowers, isolated flower parts and pollen *Journal of Chromatography A (2003) 1000 (1-2), 229-233.* Cioni, Pier Luigi; Flamini, Guido; Morelli, Ivano		
2598	**Volatile organics from Jasminum leaves**	**Enantiomeric purity of (+/-)-methyl jasmonate in fresh leaf samples and commercial fragrances** ***J. Sep. Sci.30, #13, 2117-2122 (August 2007)*** **Blanch, Gracia P.; Ruiz del Castillo, Maria Luisa**	**headspace**	**GC/MS.**
2220	**Volatiles from califonica leaf**	**Composition and antimicrobial activity of Anemopsis californica leaf oil** ***J Ag Food Chem, 53, #22, 8694-8698 (2005)*** **Medina, A.; Lucero, M.; Holguin, F.; Estell, R.; Posakony, J.; Simon,J.; O'Connell, M**		**GC**
2228	**Volatile organics in dalea formosa oil**	**The composition of dalea formosa oil determined by steam distillation and SPME** ***J. Essent. Oil Res. 17 #6, 645-647 (2005)*** **Estell, Rick E.; Lucero, Mary E.; Sedillo, Ruth L.**	**100um PDMS**	**GC-FID and GC/MS.**
1121	Methyl jasmonate	Identification and quantification of methyl jasmonate in leaf volatiles of Arabidopsis thaliana using solid-phase microextraction in combination with gas chromatography and mass spectrometry. *Phytochemical Analysis (2003) 14 (3), 155-159.* Dubery, Ian A.; Meyer, Riaan; Rautenbach, George F.		GC-MS
1139	Sulcatol from beetles	Identification of sulcatol, a potential pheromone of the ambrosia beetle Gnathotrichus materiarius (Col., Scolytidae). *Journal of Applied Entomology (2003) 127 (4), 189-194.* Flechtmann, C. A. H.; Berisford, C. W.		
1165	Mercury and tin	Elevated lead levels: A possible factor behind the forest die back of Montane forests in Sri Lanka? *Journal De Physique. IV : JP (2003) 107 (II), 1439.* Dissanayake, C.B.; Ranasinghe, P.N.	PDMS	GC-MIP/AES
2902	**Methanol from biodiesel**	**Determination of methanol in biodiesel by headspace SPME** ***Bioresour. Technol. 99, #13, 5901-5905 (September 2008)*** **Alley, E.; Armbrust, K.; French, W.; Hernandez, R.; Paraschivescu, M.**	**75µm Carboxen** **headspace**	**GC-FID**
1170	Ethanol from wood pulp	Determination of methanol released from wood and mechanical pulp by headspace solid-phase microextraction *J Pulp Pap Sci (2002) 28(6), 199-203* Eckerman, C.; Holmbom, B.; Pranovich, A.V.		
2377	**Chlorophenols in wood samples**	**Focused microwave-assisted micellar extraction combined with SPME-GC-MS to determine chlorophenols in wood samples** ***Anal. Chim. Acta 582,#1, 10-18 (2007-01-16)*** **Pino, V.; Ayala, J. H.; Gonzalez, V.; Afonso, A. M.**		**GC-MS**
2504	**Pentachlorophenol 2,4-dichlorophenol**	**Removal of 2,4-dichlorophenol and pentachlorophenol from waters by sorption using coal fly ash from a Portuguese thermal power plant** ***J Hazardous Materials 143, #1-2, 535-540 (MAY 8 2007)***		**GC-ECD**

	in water	**Estevinho, B.; Martins, Isabel; Ratola, Nuno; Alves, Arminda; Santos, L.**		
2264	**Pentachlorophenol in paper samples**	**Development of a SPME method for direct determination of pentachlorophenol in paper and board samples: Comparison with conventional extraction method** ***J. Chromatogr. A, 1095 #1-2, 8-15 (2005)*** **Domeno, C.; Munizza, G.; Nerin, C.**	**PDMS & PA**	**GC-ECD**
2661	**Pentachlorophenol in plasma**	**Development of a SPME-GC-MS method for the determination of pentachlorophenol in human plasma using experimental design.** ***Chemosphere 70, #2, 256-62 (2007 Dec)*** **Zhou, Ying; Jiang, Qingwu; Peng, Qian; Xuan, Dongliang; Qu, Weidong**	**headspace** **acetylation**	**GC-MS**
2604	**Volatiles from tatami mats**	**The composition of volatiles from tatami mats containing hinoki (Chamaecyparis obtusa) wood-wool and its decline over the long term** ***J. Wood Sci. 53, #6, 529-532 (December 2007)*** **Hiramatsu, Y.; Imai, Y.; Matsui, N.; Miyazaki, Y.; Ohira, T.**	**headspace**	**GC**
1171	Volatiles in wood	On-line wood species sensor *Process Control News Pulp Paper Industry (2002) 22(1), 10-11* Fuhr, B.; Henry, D.; Sedgwick, G.; Smith, G.; Woolley, J.		GC
1173		Reevaluation of the chemical secretion of the sternal glands of Polistes social wasps (Hymenoptera Vespidae). *Ethology Ecology & Evolution (2003) 15 (1), 73-82.* Dani, F. R.; Jones, G. R.; Morgan, E. D.; Turillazzi, S.		
1181		Characterization of Citrus unshiu (C. unshiu Marcov. forma Miyagawa-wase) blossom aroma by solid-phase microextraction in conjunction with an electronic nose. *Journal of Agricultural and Food Chemistry (2003) 51 (2), 418-423.* Choi, H. S.		GC-MS
1183	VOCs in herbal drug preparations	Chemical composition of some traditional herbal drug preparations: Essential oil and aromatic water of costmary (Balsamita suaveolens Pers.). *Journal of Agricultural and Food Chemistry (2001) 49(12), 5907-5910* Gallori, Sandra; Bilia, Anna Rita; Flamini, Guido; Landini, Andrea; Morelli, Ivano; Vincieri, Franco Francesco		GC-MS
2920	**Floral aroma from lilac blossoms**	**Rapid determination of floral aroma compounds of lilac blossom by fast GC combined with surface acoustic wave sensor** ***Journal of Chromatography A (Mar 7 2008) 1183(1-2), 170-178*** **Oh, Se Yeon; Du Shin, Hyun; Kim, Sung Jean; Hong, Jongki**	headspace	GC-MS
1195	Floral scent	SPME - A valuable tool for investigation of flower scent *Journal of Separation Science (2003) 26 (8), 715-721.* Bartak, Petr; Bednar, Petr; Cap, Lubomir; Ondrakova, Lenka; Stransky, Z.	Carboxen/PDMS	GC-MS
1204	Catnip aroma.	Sensory and instrumental evaluation of catnip (Nepeta cataria L.) aroma. *Journal of Agricultural and Food Chemistry (2003) 51 (13), 3840-3848.* Venskutonis, Rimantas P.; Baranauskiene, Renata; Demyttenaere, Jan C. R.		
1239	Alpha pinene, ocimene.	Analysis of volatile components of Chrysanthemum coronarium L. by gas chromatography-mass spectrometry with solid-phase microextraction. *Fenxi Ceshi Xuebao (2003) 22 (3), 87-89.* Weng, X. X.; Deng, C. H.; Song, G. X.; Hu, Y. M.; Zheng, X. H.		GC-MS
1276	Volatile compounds in Brazilian aromatic plants.	Application of headspace solid-phase microextraction and gas chromatography to the screening of volatile compounds from some Brazilian aromatic plants. *Chromatographia (2003) 57 (5-6), 351-356.*	100 um PDMS	GC-MS

		Sartoratto, A.; Augusto, F. *		
		Volatile compound analysis of ageing Pinus sylvestris L. (Scots pine) seeds.		
1318	Volatile compounds from Scots pine seeds.	*Flavour and Fragrance Journal (2003) 18 (4), 290-295.* Tammela, P.; Hiltunen, R.; Hopia, A.; Laakso, I.; Nygren, M.; Vuorela, H.		GC-MS
1324	VOC's in coniferous needle litter.	HS-SPME analysis of volatile organic compounds of coniferous needle litter *Atmospheric Environment (2003) 37 (33), 4645-4650.* Isidorov, V.A.; Rafalowski, K.; Vinogorova, V.T.		GC-MS
1327	Volatiles in tobacco	Optimization of headspace sampling using solid-phase microextraction for volatile components in tobacco. *Journal of Chromatography A (2002) 942(1-2), 33-39* Yang, S. S.; Huang, C. B.; Smetena, I.		
1352	Volatiles in *Michelia alba*	Rapid determination of volatile constituents of Michelia alba flowers by gas chromatography-mass spectrometry with solid-phase microextraction *Journal of Chromatography A (2002) 942(1-2), 283-288* Hu, Yaoming; Deng, Chunhui; Hu, Keji; Shang, Chunqing	100um PDMS, 25 degrees C, 4 hours, headspace	GC-MS
1379	Biogenic VOC's	Monitoring biogenic volatile compounds (BVOC) emitted by Eucalyptus citriodora using SPME Analytical Chemistry (2001) 73(19), 4729-4735. Alcaraz Zini, C.; Augusto, F.; Christensen, E.; Smith, B. P.; Caramao, E. B.; Pawliszyn, J. *	PDMS/DVB	GC
1398		Volatiles from potential hosts of Rhopalicus tutela a bark beetle parasitoid. Journal of Chemical Ecology (2001) 27(11), 2219-2231. Pettersson, Eva M Species specificity of trail pheromones of fungus-growing termites from northern Vietnam.	Carbowax/DVB	GC-MS
1404	Pheromones in termites	Insectes Sociaux (2001) 48(3), 245-250. Bordereau, C.; Bonnard, O.; Peppuy, A.; Robert, A.; Semon, E.; Son, Ngo Truong		GC-MS
1455	Terpenoids in olibanum	Optimization of headspace solid phase microextraction for gas chromatography/mass spectrometry analysis of widely different volatility and polarity terpenoids in olibanum. *Journal of Chromatograpy A (2003) 1018(1), 73-78* Hamm, S.; Lesellier, E.; Bleton, J.; Tchapla, A.	Various fibers compared	GC-MS
1458	Terpenes in black currant	Influence of stage of ripeness on the enantiomeric distribution of chiral terpenes in blackcurrant fruits (Ribes nigrum L.). *Journal of Food Science (2002) 67(9), 3284-3288* Ruiz del Castillo, M. L.; Dobson, G.		GC-FID
2486	**Volatiles from agro-industrial wastes**	**Fungal Biotransformation of Monoterpenes Found in Agro-Industrial Residues from Orange and Pulp Industries into Aroma Compounds: Screening Using SPME** ***Food Sci. Biotech. 16, #1, 37-42 (2007-02-00)*** **Marostica, M. R.,Jr.; Mota, N. O.; Baudet, N.; Pastore, G. M.**	**headspace**	**GC**
2511	**Aroma compound in natural products**	**Sampling volatile compounds from natural products w/headspace/SPME** ***J. Biochem. Biophys. Meth. 70, #2, 235-242 (2007-03-10)*** **Stashenko, E. E.; Martinez, J. R.**	**headspace**	**GC**
2441	**Aroma compound in roses**	**Development of a headspace-SPME method to monitor changes in volatile profile of rose (Rosa hybrida , cv David Austin) petals during processing**	**60µm PDMS/DVB headspace**	**GC**

		J. Chromatogr., A 1150, #1-2, 190-197 (2007-05-25) **Bianchi, G.; Nuzzi, M.; Leva, A. A.; Rizzolo, A.**	**30 min** @ 60°C	
1466	Aroma compounds in roses	Analysis of rhythmic emission of volatile compounds of rose flowers. *Molecular Methods of Plant Analysis (2002) 21, 199-221* Verstappen, F. W. A.; Helsper, J. P. F. G.; Davies, J. A.		
1467	Volatiles in flowers	Detection of physiologically active flower volatiles using gas chromatography coupled with electroantennography. *Molecular Methods of Plant Analysis (2002) 21, 173-198* Schiestl, F. P.; Marion-Poll, F.		
1469	Fragrance compounds from *Lavandula*	Comparison of different extraction methods for the analysis of fragrances from Lavandula species by gas chromatography-mass spectrometry. *Journal of Chromatography A (2002) 982(1), 31-47* Lee, Dong-Sun; Kim, Nam-Sun	100um PDMS	GC-MS
1477	Selenium in plants	Selenium in plants by mass spectrometric techniques: Developments in bio-analytical methods. Plenary Lecture. *Journal of Analytical Atomic Spectrometry (2002) 17(9), 1015-1023* Caruso, Joseph A.; Grant, Tyre D.; Meija, Juris; Montes-Bayon, Maria		GC-ICP-MS
2654	**Selenium in cytotoxic drugs**	**Chemosensitization of B-cell lymphomas by methylseleninic acid involves nuclear factor-kappa B inhibition and the rapid generation of other selenium species** ***CANCER RES 67, #22, 10984-10992 (15 NOV 2007)*** **Juliger, S.; Goenaga-Infante, H.; Lister, T. A.; Fitzgibbon, J.; Joel, S. P.**	**headspace**	**GC**
2655	**Ochratoxin A in human urine**	**Determination of ochratoxin A in human urine by SPME-HPLC-fluorescence detection.** ***J Pharm Biomed Anal 44, #4, 1014-8 (2007 Aug 15)*** **Vatinno, R,; Aresta, Antonella; Zambonin, Carlo G; Palmisano, Francesco**	**65µm PDMS-DVB**	**LC-FD**
2762	**Ochratoxin A green coffee beans**	**Determination of Ochratoxin A in green coffee beans by SPME-LC with fluorescence detection** ***J. Chromatogr., A 1187, #1-2, 145-150 (APR 11 2008)*** **Aresta, Antonella; Palmisano, F.; Vatinno, Rosa; Zambonin, C.**	**headspace**	**LC-FD**
2382	**Volatiles from medicinal plants**	**Reliability of fibres in SPME for routine analysis of the headspace of aromatic and medicinal plants** ***J. Chromatogr., A 1152, #1-2, 138-149 (2007-06-08)*** **Bicchi, C.; Cordero, C.; Liberto, E.; Sgorbini, B.; Rubiolo, P.**	**Car/DVB 50/30µm headspace**	
1508	Volatiles from medicinal plants	A review of modern sample-preparation techniques for the extraction and analysis of medicinal plants. *Analytical and Bioanalytical Chemistry (2002) 373(1-2), 23-30* Huie, Carmen W.		
1510	Capsaicin	Extraction methods for Capsaicin encountered in aerosol defense sprays; a comparative analysis. *Abstracts of Papers American Chemical Society (2002) 223(1-2), ANYL 76* Spicer, Oliver; Almirall, Jose R.		
1512	Fragrances from *Laurus nobilis*	Differences in the fragrances of pollen and different floral parts of male and female flowers of Laurus nobilis. *Journal of Agricultural and Food Chemistry (2002) 50(16), 4647-4652* Flamini, Guido; Cioni, Pier Luigi; Morelli, Ivano		
1513	Aroma volatiles from *Eruca stavia*	Aroma compound analysis of Eruca sativa (Brassicaceae) SPME headspace leaf samples using GC, GC-MS, and olfactometry. *Journal of Agricultural and Food Chemistry (2002) 50(16), 4643-4646* Jirovetz, Leopold; Buchbauer, Gerhard; Smith, David	headspace	GC-MS
		Automation of solid-phase microextraction-gas chromatography-mass spectrometry extraction of eucalyptus volatiles.		

1544	Volatiles in *Eucalyptus*	*Journal of Chromatographic Science (2002) 40(3),140-146* Zini, Claudia A.; Pawliszyn, Janusz; Lord, Heather; de Assis, Teotonio F.; Caramao, Elina B.; Christensen, Eva		GC-ITMS
1545	Volatiles in mint oils	Semiquantitative determination of off-notes in mint oils by solid-phase microextraction *Journal of Chromatographic Science (2002) 40(3), 133-139* Coleman, W. M., III; Cole, S. K.; Lawrence, B. M.		
1549	Volatiles from flowers	Analysis of the essential oil of the aerial parts of Viola etrusca from Monte Labbro (South Tuscany, Italy) and in vivo analysis of flower volatiles using SPME *Flavour and Fragrance Journal (2002) 17(2), 147-149* Flamini, Guido; Cioni, P. L.; Morelli, I.		
1553	Volatiles in sachalinmint	Essential oil composition of sachalinmint from Norway detected by solid-phase microextraction and gas chromatography-mass spectrometry analysis. *Journal of Agricultural and Food Chemistry (2002) 50(6), 1543-1547* Rohloff, Jens		GC-MS
1138	Volatiles from fungal cultures	Production of volatile compounds by hairy root cultures of Cichorium intybus L under the influence of fungal elicitors and their analysis using solid-phase micro extraction gas chromatography-mass spectrometry. *Journal of the Science of Food and Agriculture (2003) 83 (8), 769-774.* Bais, Harsh Pal; Dattatreya, B. S.; Ravishankar, G. A.		GC-MS
2208	**Volatiles from benzoin gums**	**Volatile constituents of benzoin gums: Siam and Sumatra, part 2. Study of headspace sampling methods** ***Flavour and Fragrance Journal 21, #1, 59-67 (2006)*** **Castel, C.; Fernandez, X.; Lizzani-Cuvelier, L.; Loiseau, A.; Perichet, C.; Delbecque, C.; Arnaudo, J.**	**DVB/Car 50/30µm** **headspace**	**GC-MS**
1317	Volatiles from benzoin gums	Volatile constituents of benzoin gums: Siam and Sumatra. Part 1. *Flavour and Fragrance Journal (2003) 18 (4), 328-333.* Lizzani-Cuvelier, Louisette; Delbecque, Claire; Fernandez, Xavier; Loiseau, Andre-Michel; Perichet, Christine	Carboxen/PDMS, carbowax/DVB	GC-MS
1397	Terpenoids	Quantitative analysis of terpenoids in the gas phase using headspace solid-phase microextraction (HS-SPME). *Flavour and Fragrance Journal (2001) 16(6), 411-416.* Zabaras, D.; Wyllie, S. G.	PDMS	
1022	Lindane and heptachlor	The use of pine bark as a natural adsorbent for persistent organic pollutants: Study of lindane and heptachlor adsorption. *J Chemical Technology and Biotechnology (2003) 78 (2-3), 347-351.* Alves, Arminda; Botelho, Cidalia; Ratola, Nuno		GC-ECD
1094		Bioconcentration of organic chemicals: is a solid-phase microextraction fibre a good surrogate for biota? *Environmental Science and Technology (2002) 36 (24), 5399-5404.* Leslie, H. A.; Ter Laak, T. L.; Busser, F. J. M.; Kraak, M. H. S.; Hermans, J. L. M.	15 um PDMS	GC-ECD
1333		Classification of Duvernay sourced oils from central and southern Alberta using Compound Specific Isotope Correlation (CSIC) *Bulletin of Canadian Petroleum Geology (2003) 51 (5), 357-368.* Fowler, Martin G.; Harris, Scott A.; Whiticar, Michael J.		CF-IRMS
1039	Pyrene	Sorption of pyrene to dissolved humic substances and related model polymers. 2. Solid-phase microextraction (SPME) and fluorescence quenching technique (FQT) as analytical methods. *Environmental Science and Technology (2002) 36 (20), 4403-4409.* MacKenzie, K.; Georgi, A.; Kumke, M.; Kopinke, F. -D.*	PDMS	GC-FID
1198		Analysis of the volatile constituents of Apium graveolens L. and Oenanthe L. by gas chromatography-mass spectrometry, using headspace solid-phase microextraction. *Chromatographia (2003) 57 (11-12), 805-809.*	PDMS/DVB	GC-MS

		Deng, C. H.; Song, G. X.; Zheng, X. H.; Hu, Y. M.*; Zhang, X. M.		
1343		Analysis of the volatile constituents of Schisandra chinensis (Turz.) Bail by gas chromatography-mass spectrometry, using headspace solid-phase microextraction. *Chromatographia (2003) 58 (5-6), 289-294.* Deng, C. H.; Song, G. X.; Hu, Y. M.*; Zhang, X. M.	PDMS, carbowax/DVB	GC-MS
1770	Cuticular hydrocarbons from wood	Diet-mediated inter-colonial aggression in Formosan subterranean termite Coptotermes formosanus *J Chemical Ecology, 30, #12, 2559-2574* Florane, C.; Bland, J.; Husseneder, C; Raina, A.	headspace	GC-MS
1771	Pheromones from wasp	Evaluation of the major female Eurytoma amygdali sex pheromone components, (Z,Z)6,9-tricosadiene and (Z,Z)-6,9-pentacosadiene for male attraction in field tests *J Chemical Ecology, 30, #6, 1245-1255* Mazomenos, B.; Athanassiou, C; Kavallieratos, N; Milonas, P	headspace	GC
1772	Volatiles from secretion	Avian exocrine secretions. I. Chemical characterization of the volatile fraction of the uropygial secretion of the green woodhoopoe, Phoeniculus purpureus *J Chemical Ecology, 30, #8, 1603-1611* Burger, B.; Reiter, B.; Borzyk, O.; Du Plessis, M.	dimethyl disulfide derivatization	GC-MS
1773	Essential oil P. bituminosa from leaves	Volatile constituents of different organs of Psoralea bituminosa L *Flavour Fragrance J., 19,#2, 166-171* Bertoli, A; Menichini, F; Morelli, I; Noccioli, C; Pistelli, L	Headspace	GC, GC-MS
2363	**Volatiles from roots**	**Volatile constituents of the roots of Echinops kebericho mesfin** ***Flavour Fragrance J. 22. #1, 35-38 (2007)*** **Hymete, A.; Rohloff, J.; Iversen, T. -H.; Kjøsen, H.**	**Headspace**	**GC-MS**
1774	Volatiles from plants	Volatile constituents of different parts (roots, stems and leaves) of Smyrnium olusatrum L *Flavour Fragrance J., 19,#6, 522-525* Bertoli, A.; Fraternale, D.; Giamperi, L..; Morelli, I.; Pistelli, L.; Ricci, D.	Headspace	GC, GC-MS
2153	**Volatiles in cosmetics**	**Headspace SPME-GC-MS method for the identification of cosmetic ingredients causing delamination of packagings** ***J. Chromatogr. A, 1101, #1-2, 32-37 (2006)*** **Ortiz, Gustavo; Tena, Maria Teresa**	**75u Carboxen headspace 40°C**	**GC-MS**
1775	Formaldehyde in cosmetics	Quantitative determination of formaldehyde in cosmetics using a combined SPME-isotope dilution mass spectrometry method. *J. Chromatogr. A, 1029, #1-2, 217-222* Rivero, R. T.; Topiwala, V.	65µm PDMS-DVB pentafluorophenyl hydrazine derivative headspace	GC-MS
1776	Solvent esters	Vapor-phase analysis of isobutyl acetate, isopropyl acetate, n-propyl acetate and their respective alcohols using SPME-GC w/ mass selective detector *J Chromatography, A, 1066, #1-2, 225-230* Cobb, G.; Cox, S.; Polydore, C.; Radtke, C.	headspace	GC-MS
2387	**Volatiles from paint**	**Sensory and analytical evaluations of paints with and without texanol** ***Environ. Sci. Technol. 42, #1. 243-248 (01 Jan 2008)*** **Gallagher, M.; Dalton, P.; Sitvarin, L.; Preti, G.**	headspace	GC-MS
1777	Solvents in paint	Disposable ionic liquid coating for headspace SPME of benzene, toluene, ethylbenzene, and xylenes in paints followed by GC-FID *J. Chromatogr. A, 1066, #1-2, 27-32* Liu, Jing-Fu; Li, Ning; Jiang, Gui-bin; Liu, Jie-min; Jonsson, Jan Ake; Wen, Mei-juan	headspace	GC-FID
1778	Terpenes in spruce trees	Comparison of terpene composition in Engelmann spruce (Picea engelmannii) using hydrodistillation, SPME and PLE *Zeitschrift fuer Naturforschung, 59, #9-10, 641-648* Mardarowicz, M; Wianowska, D., A.; Sawicki, R.	headspace	GC
1779	Fugal volatiles on Agar	Use of headspace SPMEand headspace sorptive extraction for the detection of the volatile metabolites produced by toxigenic Fusarium species. *J Chromatogr A, 1027, #1-2, 147-154* Demyttenaere, J; Morina, R; De Kimpe,N; Sandra, P	headspace	GC-MS

1780	Terpenes in plant emissions	Natural variability of the enantiomeric compositior of bioactive chiral terpenes in Mentha piperita *J Chromatogr A, 1054,#1-2, 87-93* Blanch, G.P.; Herraiz, M.; Ruiz Del Castillo, M.L.	headspace	GC-MS
2391	**Terpenes from Scots pine**	**Enantiomeric monoterpene emissions from natural and damaged Scots pine in a boreal coniferous forest measured using SPME-GC-MS** ***J. Chromatogr., A 1141 #1, 138-144 (2007-02-02)*** **Yassaa, N.; Williams, J.**	**65µm PDMS-DVB 1 min air sample**	**GC-MS**
1781	Terpenes in plant emissions	Analysis of enantiomeric and non-enantiomeric monoterpenes in plant emissions using portable dynamic air sampling/SPME and chiral GC-MS *Atmos. Environ., 39, #27, 4875-4884* Williams, Jonathan; Yassaa, Noureddine	65µm PDMS-DVB direct air sampling	GC-MS
1782	Terpenes in biomass	The release of terpenes during storage of biomass *Biomass Bioenergy, 28, #1, 29-34* Rupar, Katarina; Sanati, Mehri	headspace	GC-MS
1783	Volatiles from trees	Analysis of Platycladus orientalis volatiles and their electroantennogram responses with Semanotus bifasciatus *Forest Research, 18, #3, 260-266* Kong X; Zhang Z; Wang H; Yang Jie; Hu Y	headspace in situ	GC-MS
1784	Volatiles of dried fruit Amomum villosium	Determination of volatile components of Amomum villosum Lour. by GC-MS with head-space SPME *Fudan Xuebao Zirankexueban, 43, #4,676-679* Song Guo-xin; Deng Chun-hui; Wu Dan; Hu Y	headspace	GC-MS
1785	Volatiles from leaves	A direct quantitative analysis method for monitoring biogenic volatile organic compounds released from leaves of Pelargonium hortorum in situ. *Anal and Bioanal Chemistry, 380, #7-8, 950-957* Deng, X.; Peng, J.; Luo, B.; Wei, M.; Hu, W.; Du, J.	50/30µm DVB/CAR 20 min extract headspace	GC-MS
2334	**Volatiles from food products**	**(SPME) with GC/MS and GC/matrix isolation-IR analysis in the identification of volatile organic compounds in food products.** ***Abstracts of Papers Am Chem Society (2004) 227 Part1, U99*** **Schneider, J.; Reed, Larry; Sytsma, Louis F.; Anderson, Ken B.**		**GC/MS**
1786	Ocytl-, nonyl-phenol in paper	Determination of nonylphenol and octylphenol in paper by microwave-assisted extraction coupled to headspace SPME and GC-MS *J Chromatogra, A, 1065, #2, 251-256* Barcelo, D.; Lacorte, S.; Latorre, A.; Montury, M.	Headspace	GC-MS
1787	Nicotine in cigarette smoke	SPME-based approach to determine free-base nicotine in trapped mainstream cigarette smoke total particulate matter. *J Agr Food Chem, 52, #24, 7240-7245* Watson, C. H.; Trommel, J. S.; Ashley, D. L.	headspace	GC-MS
1788	Flavour aroma in tobacco	Analysis of aroma constituents in tobacco flavour by GC-MS with solid-phase microextraction. *Fenxi Shiyanshi, 23, #10, 22-25* Dong, L.; Zhu, S. K.; Su, X. L.; Wu, C. Y.; Xiong, G. X.; Chen, Z. G.; Li, D.	100µm PDMS 85µm polyacrylate headspace	GC-MS
1789	Diterpenes from moss	The moss Physcomitrella patens releases a tetracyclic diterpene *Plant Cell Reports, 22, #10, 780-786* von Schwartzenberg, K.; Schultze, W.; Kassner, H.	Headspace	GC
1790	Volatiles from crocatus	Identification and synthesis of volatiles released by the myxobacterium Chondromyces crocatus *Tetrahedron, 60, #17, 3863-3872* Schulz, Stefan; Fuhlendorff, Jens; Reichenbach, H.	headspace	GC
2151	**Phenolic & sesquiterpenoids in birch bark tar**	**Molecular characterisation of birch bark tar by headspace SPME-GC-MS: A new way for identifying archaeological glues** ***J. Chromatogr. A, 1101, #1-2, 245-253 (2006)*** **Regert, A; Alexandre, V.; Thomas, N.; Lattuati-Derieux, A.**	**headspace**	**GC-MS**
1791	Volatiles in magnolia	Determination of volatile compounds in Magnolia bark by microwave-assisted extraction coupled to headspace SPME and GC-MS	headspace	GC-MS

	bark	*Analytical Sciences, 20, #5, 857-859* Sha, Y. F.; Huang, T. M.; Shen, S.; Duan, G. L.*		
1792	Volatils of zizanioides	Chemical components of Vetiveria zizanioides volatiles. *Yingyong Shengtai Xuebao, 15, #1, 170-172* Huang Jinghua; Li Huashou; Yang Jun; Chen Yufen; Liu Yinghu; Li Ning; Nie Chengrong	headspace	GC-MS
1793	Terpens in coniferos needles	Headspace solid-phase microextraction (HS-SPME): A microscale sampling technique for determination of monoterpene hydrocarbons in coniferous needles by GC-MS *Anal. Bioanal. Chem., 378, #1, 150-158* Chvilickova, I.; Kuban, V.	headspace	GC/MS
2673	**2,4,6-trichloranisole in wines**	**Comparative study of two chromatographic methods for quantifying 2,4,6-trichloranisole in wines** ***J. CHROMATOGR. A 1138, #1-2, 18-25 (05 JAN 2007)*** **Riu, M.; Mestres, M.; Busto, O.; Guasch, J.**	**headspace**	**ECD GC-MS**
2319	**Chloroanisoles in cork stoppers**	**Quantification of chloroanisoles in cork using headspace SPME gas chromatography with electron capture detection** ***J. Chromatogr. A 1107 #1-2, 240-247 (2006)*** **Busto, O.; Guasch, J.; Mestres, M.; Riu, M.**	**headspace**	**ECD**
2155	**Chloroanisoles in cork stoppers**	**Determination of total chloroanisoles in different kinds of cork stoppers** ***Anal. Chim. Acta, 563, #1-2, 310-314 (2006)*** **Busto, O.; Guasch, J.; Mestres, M.; Riu, M.**	**headspace**	**GC-MS**
1794	Volatile odors from cork	Determination of odour-causing volatile organic compounds in cork stoppers by multiple headspace SPME *J. Chromatogr. A, 1068, #2, 201-208* Ezquerro, Oscar; Tena, Maria Teresa	50/30µm DVB/CAR 45min @ 100°C headspace	GC-MS
2414	**Volatiles from Eucalyptol**	**GC-MS following pressurized hot water extraction and SPME for quantification of eucalyptol,** ***J. Sep. Sci. 30, #1, 86-89 (2007-01)*** **Dong, L.; Wang, J. Y.; Deng, C. H.; Shen, X. Z.**	**headspace**	**GC-MS**
1795	Essential oils from chinese medicine	Rapid determination of essential oil in Acorus tatarinowii Schott. by pressurized hot water extraction followed followed by SPME-GC-MS *J. Chromatogr. A, 1059, #1-2, 149-155* Deng, Chunhui; Li, Ning; Zhang, Xiangmin	10min @ 60°C headspace	GC-MS
1796	Volatiles from aged book	Identification of volatile organic compounds emitted by a naturally aged book using SPME-GC-MS. *J. Chromatogr. A, 1026, #1-2, 9-18* Lattuati-Derieux, A.; Bonnassies-Termes, S.; Lavedrine, B.	headspace contact sampling	GC-MS
1797	Volatiles from wood fungi	Identification by GC-MS of the volatile organic compounds emitted from the wood-rotting fungi Serpula lacrymans and Coniophora puteana, and from Pinus sylvestris timber *Mycological Research, 108, #7, 806-814* Ewen, Richard J.; Jones, Peter R. H.; Ratcliffe, N.; Spencer-Phillips, Peter	headspace	GC-MS
1798	t-2-hexenal from acacia leaves.	Chemical released from host Acacia by feeding herbivores is detected by symbiotic Acacia-ants. *Caribbean J of Science, 40, #3, 396-399* Wood, William F.; Wood, Brenda	headspace	GC
1799	volatile flavor changpo	Aroma evaluation of an aquatic herb, changpo (Acorus calamus var. angustatus Bess), by AEDA and SPME *J Agr Food Chem, 52, #26, 8099-8104* Choi, H. S.	headspace	GC-MS
2182	**Volatiles from pine tree**	**Characterization of the volatile fraction emitted by phloems of four pinus species by SPME-GC-MS** ***J. Chromatogr. A, 1105, #1-2,191-198 (2006)*** **Branco, M.; Farrall, M.; Gomes Da Silva, M.; Mateus, E.; Paiva, M.R.; Santos, A.M.;Vasconcelos, T.**	**headspace 50/30µm PDMS/ Carboxen**	**GC-MS**
1800	Volatiles from pine needles	Aroma-active compounds of Pinus densiflora (red pine) needles *Flavour Fragrance J., 19, #6, 532-537* Kim, Kyoung Heon; Kim, Tae Hwan; Lee, Hyong Joo; Yu, E	100µm PDMS 75µm Carboxen headspace	GC-MS

2622	**Hydrocarbons emissions from wood**	**Headspace-SPME analysis of the sapwood and heartwood of Picea Abies, Pinus Sylvestris and Larix Decidua** ***J. Essent. Oil Res. 19. #2, 125-133 (March/April 2007)*** **Holmbom, B.; Pranovich, A.; Reunanen, M.; Wajs, A.; Willfor, S.**	**headspace**	**GC-MS**
1801	Hydrocarbons emissions from pine	Evaluation of hydrocarbon emissions from heart-And sapwood of Scots pine using a laboratory-scale wood drie *Holzforschung, 58, #6, 660-665* Bengtsson, Peter; Sanati, Mehri	headspace @ 50°, 70°, and 90°C	GC-MS
1802	Odors from packaging	Representativeness of extracts of offset paper packaging and analysis of the main odor-active compounds *J Agr Food Chem, 52, #8, 2326-2334* Landy, P.; Nicklaus, S.; Semon, E.; Mielle, P.; Guichard, E.	100µm PDMS 3 min @ 40°C headspace	GC-MS
2189	**Dimethyl selenodisulfide from Escherichia coli**	**Identification of biogenic dimethyl selenodisulfide in the headspace gases above genetically modified Escherichia coli** ***Analytical Biochemistry 348, #1, 115-122 (2006)*** **Swearingen, J.; Frankel, D.; Fuentes, D.; Saavedra, C.;Vasquez, C., Chasteen, Thomas**	**headspace**	**GC-MS**
2267	**Alcohols from Escherichia coli**	**Production of the long-chain alcohols octanol, decanol, and dodecanol by Escherichia coli** ***Current Microbiology 51 #2, 82-86 (2005)*** **Hamilton-Kemp, T.; Newman, M.; Collins, R.; Elgaali, H. Yu, K; Archbold, Douglas**	**headspace**	
1803	E coli volatiles coli from brooth	SPME, GC, and MS coupled w/discriminant factor analysis and multilayer perceptron neural network for detection of Escherichia coli *J of Food Protection, 67, #8, 1597-1603* Siripatrawan, Ubonratana; Linz, John E.; Harte, Bruce R.	headspace @ 37°C	GC-MS
1804	Floral volatiles from catnip	Catnip, Nepeta cataria (Lamiales: Lamiaceae) A closer look: Seasonal occurrence of epetalactone isomers and comparative repellency of three terpenoids to insects *Environmental Entomology, 33, #6, 1562-1569* Schultz, G; Simbro, E; Belden, J; Zhu, J; Coats, Joel	headspace	GC-MS
2190	**Volatiles from tick**	**Optimization of the SPME method in the determination of Ixodes ricinus (L.) volatiles** ***J. Sep. Sci., 29, #2, 236-241 (2006)*** **Bouman, Edwin A.P.; Zahradnickova, Helena**	**100um PDMS headspace 15 min**	**GC-MS**
2156	**Volatiles in plants**	**Practical approaches to plant volatile analysis** ***Plant Journal, 45, #4, 540-560 (2006)*** **Tholl, D.; Boland, W.; Hansel, A.; Loreto, F.; Roese, U..;Schnitzler, J.**	**headspace**	**GC-MS**
1805	**Volatiles from plants**	**Comparison of different extraction methods for the analysis of volatlle secondary metabolites of Lippia alba)Mill) N.E. Brown, grown in Colombia, and evaluation of its in vitro antioxidant activity.** ***J Chromatogr A, 1025, #1, 93-103*** **Stashenko, E.; Jaramillo, B.; Martinez, J**	**headspace**	**GC-MS**
1806	**Rose/nerol oxides**	**Biotransformation of (R)-(+)-and (S)-(-)-citronellol by Aspergillus sp. and Penicillium sp, and the use of SPME for screening.** ***J Chromatogr A, 1027,#1-2, 137-146*** **Demyttenaere, J; Vanoverschelde, J; De Kimpe, N**	**headspace steam distillation @ 3.5 pH**	**GC-MS**
1807	**Fragrances from Artemicia plants**	**Headspace-SPME & hydrodistillation of two fragrant Artemisia** ***Flavour Fragrance J., 20. #4, 395-398*** **Baser, K. Husnu Can; Demirci, Betul; Demirci, Fatih**	**headspace**	**GC, GC-MS**
1808	**Volatiles from slash/ loblolly pine**	**Volatiles associated with preferred and non-preferred hosts of the Nantucket pine tip moth, Rhyacionia frustrana** ***J Chemical Ecology, 30, #5, 977-990*** **Asaro, C.; Sullivan, B.; Dalusky, M.; Berisford, C.**	**direct sampled**	**GC-EAD**
1809	**Pheromone of canalifrons**	**Neocembrene A, a major component of the trail-following pheromone in the genus Prorhinotermes (Insecta, Isoptera, Rhinotermitidae)** ***Chemoecology, 15, #1, 1-6*** **Sillam-Dusses, D.; Semon, E.; Moreau, C.;**	**headspace**	**GC-MS**

		Valterova, I.; Sobotnik, J.; Robert, A.;Bordereau, C		
1810	**Pheromone from wasp**	**Partial elucidation of Trichogramma putative sex pheromone at trace levels by SPME-GC-MS studies** ***J. Chromatogr. A, 1067, #1-2, 311-321*** **Melo, R; Posthumus, M.; Silva, I.; Van Beek, T**	**headspace for 20-50hr**	**GC-MS**
1811	**Sesiidae sex pheromone from hornet moth**	**New type of sesiidae sex pheromone identified from the hornet moth Sesia apiformis** ***J Chemical Ecology, 30, #4, 805-817*** **Francke, W.; Karalius, V.; Plass, E.; Lehmann, L.; dos Santos, A.; Buda, V.; Mozuraitis, R. Borg-Karlson, A.;**	**headspace 2-alkenals derivative**	**GC-MS**
1812	**Pheromone emission from leaf midge**	**Flight activity and further evidence for a female-produced sex pheromone of the apple leaf midge, Dasineura mali, in Nova Scotia** ***Northeastern Naturalist, 12, #1, 93-102*** **Heath, J.; Zhang, Aijun; R., Wendell L.; Smith, R.**	**headspace**	**GC-EAD**
1813	**Pheromone emission from traps**	**Effect of aging on pheromone emission from a commercial beet armyworm (Lepidoptera : Noctuidae) lure and trap efficiency** ***J Economic Entomology, 98, #2, 373-377*** **Showler, A..; Salgado, E.; Fraser, I.; Robacker, D.**	**headspace**	**GC-MS**
2395	**Volatiles released from Norway spruce**	**Semiochemicals related to the aphid Cinara pilicornis and its host, Picea abies: A method to assign nepetalactone diastereomers** ***J. CHROMATOGR. A 1180, #1, 165-170 (2 -08 FEB 2008)*** **Pettersson, M.; Unelius, C. R.; Valterova, I.; Borg-Karlson, A. -K**	**headspace**	**GC/MS**
2825	**Volatiles from Essential oils of aromatic plant**	**Tick repellent substances in the essential oil of Tanacetum vulgare** ***Journal of Medical Entomology 45, #1, 88-93 (JAN 2008)*** **Palsson, K.; Jaenson, Thomas G.; Baeckstrom, P.; Borg-Karlson, A.**	**headspace**	**GC/MS**
2322	**Volatiles from leaf extracts**	**Evaluation of extracts and oils of tick-repellent plants from Sweden** ***Medical and Veterinary Entomology 19 #4, 345-352 (2005)*** **Jaenson, T. G. T.; Palsson, K.; Borg-Karlson, A.-K.**	**headspace**	**GC/MS**
2253	**Volatile releases from aphids and plants**	**Role of (E)-beta-farnesene in systematic aphid prey location by Episyrphus balteatus larvae (Diptera : Syrphidae)** ***European Journal of Entomology 102 #3, 431-436 (2005)*** **Francis, Frederick; Martin, Thibaut; Lognay, Georges; Haubruge, E.**	**headspace**	**GC/MS**
1814	Pheromone from aphids	A cost of alarm pheromone production in cotton apids, Aphis gossypii *Naturwissenschaften, 92, #2, 69-72* Byers, John A.	headspace	GC-MS
2254	**Sex pheromone of pine sawfly**	**Release of sex pheromone and its precursors in the pine sawfly Diprion pini (Hym., Diprionidae)** ***Chemoecology 15 #3, 147-151 (2005)*** **Anderbrant, O.; Ostrand, F.; Bergstrom,G .; Wassgren, A.; Auger-Rozenberg, M.; Geri, C.; Hedenstrom, E.; Hogberg, H.; Hertz, Annette; Heitland, Werner**	**headspace**	**GC/MS**
2279	**Acetate esters from wheat stem sawfly**	**Acetate esters of saturated and unsaturated alcohols (C12-C20) are major components in Dufour glands of Bracon cephi and Bracon lissogaster (Hymenoptera : Braconidae), parasitoids of the wheat stem sawfly, Cephus cinctus (Hymenoptera : Cephidae)** ***Biochemical Systematics and Ecology 33 #8 757-769 (2005)*** **Baker, J.; Howard, R.; Morrill, W.; Meers, S.; Weaver, D.**	**headspace**	**GC-MS**
1815	Pheromone from fruit borer	SPME for the investigation of sex pheromone of Eucosam notanthes Meyrick *Talanta, 65, #3, 743-749* Chu, T. Y.; Hung, C. C.; Hsu, C. Y.	headspace 5min @ 20°C	GC-MS
1816	Fragrance from flowers	Rapid determination of volatile compounds emitted from Chimonanthus praecox flowers by headspace SPME-GC-MS *Zeitschrift fuer Naturforschung, 59, #9-10, 636-640* Deng, Chunhui; Song, Guoxin; Hu, Yaoming	headspace	GC-MS
1817	Fragrance from flowers	Single step determination of fragrances in Cucurbita flowers by coupling headspace SPME low-pressure GC-tandem mass spectrometry	65µm PDMS-DVB 5min @ 60°C	GC-MS-MS

		J. Chromatogr. A, 1045, #1-2, 173-179 Egea Gonzalez, F.; Garrido Frenich, A.; Guerra Sanz, J.; Martinez Vidal, J.L.; Mena Granero, A.	headspace	
2776	**Volatiles from shoot-cultures**	**Headspace-SPME of in vitro shoot-cultures and micropropagated plants of Lavandula viridis** ***Biologia Plantarum (Prague) 52, #1, 133-136 (MAR 2008)*** **Goncalves, S.; Serra, H.; Nogueira, J.; Almeida, R.; Custodio, L.; Romano, A.**	**headspace**	**GC-MS**
1818	Fragrance from Carob flower	Sex and developmental stage of carob flowers affects composition of volatiles *J Horticultural Sci & Biotechnology, 79, #5, 689-692* Custodio, L.; Nogueira, J. M. F.; Romano, A.	headspace	GC-MS
2690	**Volatiles from cooked rice**	**Direct extraction of volatiles of rice during cooking using SPME** ***Cereal Chemistry 4, #5, 423-427 (2007)*** **Zeng Zhi; Zhang Han; Chen JieYu; Zhang Tao; Matsunaga, R.**		
2476	**Volatiles from scented rice**	**Determination of flavour profile in Iranian fragrant rice samples using cold-fibre SPME-GC-TOF-MS** ***Flavour and Fragrance J. 22, #5, 377-391 (SEP-OCT 2007)*** **Ghiasvand, Ali Reza; Setkova, Lucie; Pawliszyn, Janusz**	**100um PDMS headspace**	**GC-TOF-MS**
2418	**Volatiles from scented rice**	**Rapid discrimination of scented rice by SPME, mass spectrometry, and multivariate analysis used as a mass sensor** ***J. Agric. Food Chem. 55, #4, 1077-1083 (2007-02-21)*** **Laguerre, M.; Mestres, C.; Davrieux, F.; Ringuet, J.; Boulanger, R.**	headspace	**GC-MS**
1819	Essential oils from Chinese rose oil	SPME-GC and olfactory analysis of the scent and fixative properties of the essential oil of Rosa damascena L. from China *Flavour and Fragrance J, 20, #1, 7-12* Jirovetz, Leopold; Buchbauer, Gerhard; S, A; Balinova, A.; Guangjiun, Z.; Xihan, Ma	headspace	GC-FID and GC-MS
1820	Volatiles from compost	Comparison of odorous volatile compounds from fourteen different commercial composts using SPME. *Trans. Am. Soc. Agric. Eng., 48, #1, 315-320* Kim, H.; McConnell, L.L.; Millner, P.	headspace	GC
1821	Nectar odors from flowers	Why are some floral nectars scented? *Ecology (Washington D C), 85, #6, 1486-1494* Raguso, Robert A.	headspace	GC-MS
1822	Volatiles from China medicine	Quality assessment of Flos Chrysanthemi Indici from different growing aras in China by SPME-GC-MS *J. Chromatogr. A, 1047, #2, 281-287* Chen, J; Deng, C; Fu, D; Sha, Y; Shen, S Zhang, X	65µm PDMS-DVB 30min @ 60°C headspace	GC-M
1823	Volatiles from China medicine	SPME-GC-MS analysis of volatile compounds in compounded Chinese medicinal prescription, Xiao-Cheng-Qi-Tang *Journal of Pharma Biomed Analysis, 36, #2, 381-385* Sha, Yunfei; Shen, Shun; Duan, Gengli	100µm PDMS 20min @ 90°C stirring, headspace	GC-MS
1824	Volatiles from osmanthus flowers	Application of HS-SPME and GC-MS to characterization of volatile compounds emitted from osmanthus flowers *Annali di Chimica, 94, #12, 921-927* Deng, Chunhui; Song, Guoxin; Hu, Yaoming	65µm CW/DVB 10 min @ 22°C headspace	GC-MS
1825	Odors from biosolids	An evaluation of SPME for analysis of odorant emissions from stored biosolids cake *Water Res., 38, #17, 3800-3808* Parker, W.J.; Visan, M.	75µm Carboxen headspace	GC-MS
1826	Volatiles from maize plants	Effects of petroleum spray oils on oviposition behaviour and larval survival of Helicoverpa armigera Hubner (Lepidoptera Noctuidae) and Ostrinia nubilalis Hubner (Lepidoptera:Pyralidae) *Intl J of Pest Mgmt, 51, #2, 111-119* Mensah, Robert; Frerot, Brigitte; Al Dabel, Faiza	headspace	GC

Pharmaceuticals

147	Volatiles in biological fluids	Application of Head-Space SPME for the Analysis of Volatile Metabolites J. Microbiol. Methods 25: 245 (1996) Milsson, T., Larsen, T., Montanarella, L., Madsen, J.		GC-MS
		Determination of Residual Solvents in Pharmaceuticals		

338	Solvents in pharmaceutical products	with Automated SPME Chem. N. Z. 61 (4): 10-12 (1997) Penton, Z.	100µm PDMS 15 min headspace	GC-FID
149	Components in drugs	Analysis of Components in Crude Drugs by Headspace SPME Method Zasshi 16: 251 (1996) Yakugaku		
473	Residual solvents pharmaceutical samples	Headspace SPME method optimization for residual solvent analysis Acta pharm. Hung., 1999, 69(2), 77-84 Camarasu, C., Mezei, M., Szabo, A	65µm DVB/PDMS 30 min headspace 2gm NaCl,	GC
919	Residual solvents pharmaceutical samples	Headspace SPME method development for the analysis of volatile polar residual solvents by GC-MS *J. Pharm. & Biomediecal Aanlysis 2000, 23(1) 197-210* Camarasu, C.		
1002	Verapamil	Verapamil drug metabolism studies by automated in-tube solid phase microextraction. *Jnl of Pharmaceutical and Biomedical Analysis (2002) 30 (2), 307-319.* Walles, M.; Mullett, W. M.; Levsen, K.; Borlak, J.; Wuensch, G.; Pawliszyn, J.		LC-MS
1006	Trends	New trends in sample preparation for clinical and pharmaceutical analysis TrAC-Trends in Analytical Chemistry (2003) 22 (4), 232-244. Kataoka, Hiroyuki		
1024	clenbuterol	Solid-phase micro extraction (SPME) and headspace derivatization of clenbuterol followed by GC-FID and GC-SIMMS quantification. *Analytical and Bioanalytical Chemistry (2003) 375 (3), 460-464.* Wenclawiak, B. W.; Engelmann, M. D.; Hinz, D.	85 µm polyacrylate	GC-FID, GC-SIMMS
1032	Review	Residual solvent testing: A review of gas-chromatographic and alternative techniques. *Pharmaceutical Research (Dordrecht) (2003) 20 (3), 337-344.* B'Hymer, Clayton		
1101	MPHP in urine	New designer drug 4'-methyl-alpha-pyrrolidinohexanophenone: Studies on its metabolism and toxicological detection in urine using gas chromatography-mass spectrometry. *Journal of Chromatography B (2003) 789 (1), 79-91.* Maurer, Hans H.; Fritschi, Giselher; Peters, Frank T.; Springer, Dietmar		GC-MS
1107	Residual solvents	Use of solid-phase microextraction coupled with gas chromatography for the determination of residual solvents in pharmaceutical products *Journal of Chromatography A (2003) 999 (1-2), 195-201.* Dugay, Jose; Legrand, Stephanie; Vial, Jerome	Various	
1133	Residual solvents in drug products	Unknown residual solvents identification in drug products by headspace solid phase microextraction gas chromatography-mass spectrometry. *Chromatographia (2002) 56(supplement), S131-S135* Camarasu, C. C.	headspace	GC-MS
1142	Volatile residual solvents in Chinese medicines.	Determination of volatile residual solvents in traditional Chinese medicines by headspace solid-phase microextraction and cryogenic gas chromatography with flame ionization detection *Journal of AOAC International (2003) 86 (3), 461-466.* Jiang, Guibin; Liu, Jiemin; Liu, Jingfu; Liu, Jiyan; Wen, Meijuan; Zhou, Qunfang	PDMS/DVB	GC-FID
2608	**Methylmalonic & glutaric acid in urine**	**Determination of methylmalonic acid and glutaric acid in urine by aqueous-phase derivatization followed by headspace SPME-GC-MS** ***J. Sep. Sci. 30, #2, 266-271 (2007-02)*** **Li, N.; Deng, C. H.; Zhang, X. M.**	**100 µm PDMS 55°C for 30 min, diethyl sulfate derivatives**	**GC/MS**
		Development of SPME-GC method to determine		

2324	**Methylformamide in urine**	**N-hydroxymethyl-N-methylformamide and N-methylformamide in urine** ***J. Chromatogr. B, 828 #1-2, 103-107 (2005)*** **Knupp, V.; Alvarez Leite, Edna Maria; de Lourdes Cardeal, Zenilda**	**65µm DVB/PDMS headspace 80°C for 15 min,**	**GC-NPD**
2247	**Clenbuterol in urine**	**Determination of clenbuterol in urine using headspace SPME or liquid-liquid-liquid microextraction** ***Analytica Chimica Acta 552 #1-2, 67-75 (2005)*** **Melwanki, Mahaveer B.; Hsu, Wei-Hsun; Huang, Shang-Da**	**headspace HMDS derivatives**	**GC/MS**
1169	Clenbuterol in urine	Quick analysis of small beta -agonists in urine by solid-phase microextraction with headspace derivatization and gas chromatography-mass spectrometry. *Fenxi Huaxue (2003) 37 (3), 326-328.* Liang, Y. L.; Yin, B. Z.; Hu, X. Z.*; Yu, J. X.; Liu, H. W.; Lin, Y. F.; Wu, T.	Polyacrylate	GC-MS
1279	Endocrine disruptor contaminants.	Simple and rapid analysis of endocrine disruptors in liquid medicines and intravenous injection solutions by automated in-tube solid-phase microextraction/high performance liquid chromatography. *Journal of Pharmaceutical and Biomedical Analysis (2003) 32 (3), 469-478.* Mitani, K.; Narimatsu, S.; Izushi, F.; Kataoka, H. *		HPLC
1308	Drug analysis	Solid-phase microextraction and liquid chromatography/mass spectrometry in drug analysis *Analytica Chimica Acta (2003) 492 (1-2), 49-67.* Kumazawa, Takeshi; Lee, Xiao-Pen; Sato, Keizo; Suzuki, Osamu		LC-MS
1312	Pharma process impurities	Determination of pharmaceutical process impurities by solid phase microextraction gas chromatography *Journal of Separation Science (2003) 26 (12-13), 1097-1103.* Frost, Richard P.; Hussain, Mumtaz S.; Raghani, Anil R.	Carboxen/PDMS/DVB	GC
2445	**Drugs in biological fluids**	**In vivo sampling with solid phase microextraction** ***J. Biochem. Biophys. Meth. 70, #2, 181-193 (2007-03-10)*** **Musteata, F. M.; Pawliszyn, J.**		
1336		Development and evaluation of a solid-phase microextraction probe for in vivo pharmacokinetic studies *Analytical Chemistry (2003) 75 (19), 5103-5115.* Fahie, Brian; Grant, Russell P.; Incledon, Bev; Lord, Heather L.; Pawliszyn, Janusz B.; Walles, Markus	polypyrrole	
1361	Drugs in biological fluids	Automated sample preparation using in-tube solid-phase microextraction and its applications long dash a review. Analytical and Bioanalytical Chemistry (2002) 373(1-2), 31-45. Kataoka, H.		LC-MS
2753	**Drugs in plasma**	**Comparison of SPME and liquid-liquid extraction in 96-well format for the determination of a drug compound in human plasma by LC-MS** ***J. PHARM. BIOMED. ANAL. 45, #4, 599-608 (30 NOV 2007)*** **Xie, W.; Pawliszyn, J.; Mullett, W. M.; Matuszewski, B. K.**		**LC-MS**
2562	**Asarones in plasma**	**Development of GC-MS following headspace SPME for fast . determination of asarones in plasma** ***Rapid Commun. Mass Spectrom.20, #14, 2120-2126 (2006-06-09)*** **Deng, C. H.; Lin, S.; Huang, T. M.; Duan, G. L.; Zhang, X. M.**	**headspace**	**GC-MS**
2905	**Nitromethane in blood**	**Method for quantifying nitromethane in blood as a potential biomarker of halonitromethane exposure** ***Environ. Sci. Technol. 42, #7, 2522-2527 (Apr 1 2008)*** **Alwis, K. ; Blount, Be.; Loose, K; Silva, Lalith K.; Smith, M.**	**headspace**	**GC/MS**
2561	**Carboxylic acid in plasma**	**SPME method for carbon isotopic analysis of volatile carboxylic acids in human plasma byGC/combustion/isotope ratio mass spectrometry.** ***Rapid Commun. Mass Spectrom. 20, #23, 3573-3578 (2006-11-13)*** **Ferchaud-Rocher, V.; Albert, C.; Champ, M.; Krempf, M.**	**75µm Carboxen headspace**	**GC/C/IRMS**
		Simultaneous determination of selegiline and desmethylselegiline in		

2707	**Selegiline in human blood**	**human body fluids by headspace SPME-GC-MS** ***J. Chromatogr., B: 844, #2, 283-291 (2006-12-05)*** **Kuriki, A.; Kumazawa, T. ; Lee, X. P,; Hasegawa, C.; Kawamura, M.; Suzuki, O.; Sato, K.**	**headspace**	**GC/MS**
2456	**Paeonol in plasma**	**Fast determination of paeonol in plasma by headspace SPME followed by gas chromatography-mass spectrometrY** ***Anal. Chim. Acta 585, #1, 76-80 (2007-02-28)*** **Dong, L.; Deng, C. H.; Wang, J. Y.; Shen, X. Z.**	**headspace**	**GC/MS**
2425	**Fluoxetine and norfluoxetine in plasma**	**SPME-LC determination of fluoxetine and norfluoxetine in plasma using a heated liquid flow through interface** ***J. Chromatogr., B: 847, #2, 217-223 (2007-03-01)*** **Fernandes, C.; dos Santos Neto, A.; Rodrigues, J.; Alves, C.; Lancas, F.**	**65µm PDMS/DVB**	**LC-MS**
1392	Drugs in plasma	Application of solid-phase micro-extraction technology to drug screening and identification. Annals of Clinical Biochemistry (2001) 38(5), 541-547. Mosaddegh, M. H.; Richardson, T.; Stoddart, R. W.; McClure, J.	Polyacrylate, carbowax/D	GC-MS
1470	Amphetamine-like drugs	Simultaneous detection of amphetamine-like drugs with headspace solid-phase microextraction and gas chromatography-mass spectrometry. *Journal of Chromatography B (2002) 780(1), 183-192* Macchia, Teodora; Chiarotti, Marcello; Gentili, Stefano; Marsili, Remo; Torresi, Alessio		GC-MS
1497	Residual solvents in pharmaceuticals	High-speed gas chromatographic analysis of solvents in pharmaceuticals using solid phase microextraction *Journal of Pharmaceutical and Biomedical Analysis (2002) 29(3), 507-518* Raghani, A. R.	50/30um DVB/Carboxen PDMS, 65um PDMS DVB	GC
2769	**citalopram, fluoxetine in human urine**	**Simultaneous determination of citalopram, fluoxetine and their main metabolites in human urine samples by SPME-LC** ***J Pharma and Biomedical Analysis 46(4), 763-770 (MAR 13 2008)*** **Unceta, Nora; Gomez-Caballero, Alberto; Sanchez, Alicia; Millan, S.; Carmen Sampedro, M.; Aranzazu Goicolea, M.; Salles, J.; Barrio, R.**		**HPLC-UV**
1514	Delorazepam in urine	Determination of delorazepam in urine by solid-phase microextraction coupled to high performance liquid chromatography. *Journal of Pharmaceutical and Biomedical Analysis (2002) 28(5), 965-972* Zambonin, Carlo Giorgio; Aresta, Antonella; Monaci, Linda	50um Carbowax TPR, 60um PDMS DVB	HPLC-UV
1201		Rapid screening of 2-"fluorine-18"-fluoro-2-deoxy-D-glucose infusions for volatile organic compound contaminants by solid phase microextraction with gas chromatography-selective ion monitoring mass spectrometry (SPME-GC-SIMMS). *Applied Radiation and Isotopes (2003) 58 (2), 193-200.* Kanu, A. B.; Dixon, M.; Zu, Y. Y.; Bailey, J.; Gillies, J. M.; Zweit, J.; Thomas, C. L. P.*		
1280		Determination of trace retinoic acid by capillary electrophoresis-solid-phase microextraction with direct UV detection. *Journal of Chromatographic Science (2003), 41 (6), 301-304).* Fang, M.; Xu, G. W.		CE
1827	Pharmaceuticals in urine	Study of multiple SPME combined off-line w/HPLC Application in analysis of pharmaceuticals in urine *Anal. Chim. Acta, 516, #1-2, 197-204* Aikaterini Lontou, M.; Gondova, T.; Michopoulos, F.; Sucha, M.; Theodoridis, G.	100µm PDMS & 85µm polyacrylate immersed salt added	HPLC

Biological

2205	**Phosphoric acid triesters in human plasma**	**Determination of phosphoric acid triesters in human plasma using SPME and GC coupled to inductively coupled plasma MS** ***J. Chromatogr. A, 1103, #2, 329-336 (2006)*** **Shah, Monika; Meija, Juris; Cabovska, Baiba; Caruso, Joseph A.**	**65µm DVB/PDMS** **immersion** **30min @40°C** **deproteinization**	**GC-MS**
		Sample preparation techniques for mass spectrometry in proteomics		

2204	**Proteomics**	**using recently developed highly selective materials** ***Current Proteomics 2 #4, 269-285 (2005)*** **Huck, Christian W.; Bakry, Rania; Bonn, Guenther K.**		**MS**
638	Anesthetics in plasma	Evaluation of SPME for the study of protein binding in human plasma samples *J. Chromatogr. Sci. (2000), 38(10), 458-464* Abdel-Rehim, M., Calsson, G., Bielenstein, M., Arvidsson, T., Blomberg, L.	60µm Carbowax/DVB 32°to 40°C pH 6.4-9.4	NPD
2613	**Pyrene diffusion serum albumin**	**Influence of albumin on sorption kinetics in SPME: Consequences for chemical analyses and uptake processes** ***Anal. Chem. 79,#18, 6941-6948 (Sep 15 2007)*** **Hermens, Joop L. M.; Kramer, Nynke I.; Van Eijkeren, Jan C. H.**		
2227	**Drugs in serum albumin**	**Application of SPME in the investigation of protein binding of pharmaceuticals** ***J. Chromatogr. B 830 #2, 238-244 (2006)*** **Theodoridis, Georgios**		**HPLC**
99	Aniline, nitrobenzene, 4-n-pentylphenol, 4-chloro-3-methylphenol in bovine serum albumin	Measurement of the Free Concentration Using SPME: Binding to Protein J. Anal. Chem. 68: 4463-4467 (1996) Vaes, W., Ramos, E., Verhaar, H., Seinen, W., Hermens, J.	85µm polyacrylate 24°C, 9-14 min stirring K2PO4 buffered	GC-MS
2843	**Flavor compounds bovine serum**	**Modeling bovine serum albumin binding of flavor compounds (alcohols, aldehydes, esters, and ketones) as a function of molecular properties** ***Journal of Food Science 73, #1, S56-S63 (JAN-FEB 2008)*** **Tan, Y.; Siebert, K. J.**	**headspace**	**GC**
2888	**Estradiol in organic matter**	**Quantification of solute-solute interactions using negligible-depletion SPME: Measuring the affinity of estradiol to bulk organic matter** ***Environ. Sci. Technol. 42, #8, 2886-2892 (Apr 15 2008)*** **Escher, Beate I.; Neale, Peta A.; Schafer, Andrea I.**		
2320	**Estradiol from bovine serum albumin**	**The binding constant of estradiol to bovine serum albumin. An upper-level experiment utilizing tritium-labeled estradiol and liquid scintillation counting** ***J Chem Educ 83 #2, 294-295 (2006)*** **Adhyaru, Bhavin; Liang, Peihong; Pearson, Wright L.; Williams, K.**	**headspace**	**GC**
140	Protein in bovine serum albumin	Solid Phase Microextraction of Biopolymers, Exemplified with Adsorption of Basic Proteins onto a Fiber Coated with Polyacrylic Acid J. Microcolumn Sep. 8: 1 (1996) Liao, J., Zeng, C., Hjerten, S., Pawliszyn, J.	85µm polyacrylate 5-240 sec immersion	HPLC-UV
2899	**Review article**	**Sorbent preconcentration procedures coupled to capillary electrophoresis for environmental and biological applications** ***Anal. Chim. Acta 616, #1, 1-18 (May 26 2008)*** **Aguilar, Carme; Borrull, Francesc; Calull, Marta; Puig, Patricia**		
411	Proteins	Optimization of SPME-Capillary Zone Electrophoresis-MS for High Sensitivity Protein Identification Electrophoresis (1998), 19(13), 2338-2347 Figeys, D., Ahang, Y., Aebersold, R.		capillary zone electrophoresis-MS
988	Drugs in human serum	Bio-compatible in-tube SPME capillary for the direct extraction and HPLC determination of drugs in human serum. *J.Chromatogr. A (2002) 963(1-2), 325-334* Mullett, W.M.; Levsen, K.; Lubda, D.; Pawliszyn, J.		HPLC
2237	**Volatiles from stool samples**	**Rapid diagnosis of ulcerative colitis and Crohns disease by the analysis of flatus** ***Gastroenterology 126, #4 Suppl 2, A203 (2004)*** **Probert, Christopher S. J.; Garner, C. E.; Ratcliffe, Norman**	**headspace**	**GC/MS**

1020		Rapid diagnosis of GI infection from flatus. *Gut (2003) 52 (Supplement 1), A93.* Probert, C. S.; Jones, P.; Ratcliffe, N.		
1036	Semi-volatiles in saliva	Solid-phase micro-extraction-gas chromatography-mass spectrometry and headspace-gas chromatography of tetrahydrocannabinol, amphetamine, methamphetamine, cocaine and ethanol in saliva samples *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences (2003) 789 (1), 73-78.* Alves Silva, Ovandir; De Moraes Moreau, Regina Lucia; Tawil, Nadia; Yonamine, Mauricio	PDMS	GC-MS
2711	**Amphetamines in hair.**	**Single hair analysis of methamphetamine and amphetamine by solid phase microextraction coupled with in matrix derivatization** ***Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences 842 #2, 106-110. (2006-10-02)*** **Nishida, M.; Yashiki, M.; Namera, A.; Kimura, K.**	**N-propoxycarbonyl derivatives**	**GC**
1037	Amphetamines in hair.	Determination of amphetamines in human urine by headspace solid-phase microextraction and gas chromatography *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences (2003) 789 (1), 59-63.* Christopoulou, Klio; Psaroulis, Dimitrios; Raikos, Nikolaos; Theodoridis, Georgios; Tsoukali, Heleni	100 um PDMS	GC-FID
2869	**2-Pentylfuran in breath**	**Investigation into the production of 2-Pentylfuran by Aspergillus fumigatus and other respiratory pathogens in vitro and human breath samples** ***Medical Mycology 46, #3, 209-215 (2008)*** **Syhre, Mona; Scotter, Jennifer M.; Chambers, Stephen T.**	**headspace**	**GC/MS**
2743	**Aldehydes in breath**	**Determination of aldehydes in human breath by on-fibre derivatization, solid-phase microextraction and GC-MS** ***J Chromatogr B 860, #1, 86-91 (2007 Dec 1)*** **Svensson, S.; Larstad, M.; Broo, K.; Olin, A. -C.**	**65µm PDMS/DVB headspace** **PFBHA derivative**	**GC/MS-SIM**
2785	**Benzene in breath**	**An optimized method for determination of benzene in exhaled air by GC-MS using SPME as a sampling technique** ***J Chromatogr B, 865, #1-2, 141-146 (Apr 1 2008)*** **Amorim, Leiliane C.A.; Cardeal, Zenilda L.; Carneiro, Joana P.**		**GC/MS**
2647	**Organics in breath**	**Breath air analysis and its use as a biomarker in biological monitoring of occupational and environmental exposure to chemical agents.** ***J Chromatogr B, 853, #1-2, 1-9 (2007 Jun 15)*** **Amorim, Leiliane Coelho A; de L Cardeal, Zenilda**	**air sampling**	**GC**
2249	**Aroma compounds in human breath**	**Evaluation of the SPME technique for the analysis of human breath during eating** ***Sciences des Aliments 25 #3, 193-206 (2005)*** **Pionnier, E.; Semon, E.; Chabanet, C.; Salles, C.**	**PDMS headspace**	**GC/MS**
1038	Volatiles in breath	Application of low-temperature glassy carbon-coated macrofibers for solid-phase microextraction analysis of simulated breath volatiles *Analytical Chemistry (2003) 75 (7), 1604-1614.* Giardina, Matthew; Olesik, Susan V.	PDMS-DVB	
2501	**VOCs in hand odor samples**	**The frequency of occurrence and discriminatory power of compounds found in human scent across a population determined by SPME-GC/MS** ***J. CHROMATOGR. B, 846, #1-2, 86-97 (01 FEB 2007)*** **Curran, A. M.; Ramirez, C. F.; Schoon, A. A.; Furton, K. G.**	**headspace**	**GC/MS**
2250	**Volatile organic in human odor**	**Comparison of the volatile organic compounds present in human odor using SPME-GC/MS** ***Journal of Chemical Ecology 31 #7, 1607-1619 (2005)*** ***Curran, Allison M.; Rabin, Scott I.; Prada, Paola A.; Furton, K.***	**headspace**	**GC/MS**
2271	**Perfluorobutane from exhaled air**	**A respiration-metabolism chamber system and a GC-MS method for studying exhalation of perfluorobutane in rats after intravenous injection of the ultrasound contrast agent Sonazoid ™** ***J Pharma Biomedical Analysis, 39, #3-4, 746-751 (2005)*** **Uran, S.; Landmark, K.; Normann, P.; Hals, P.l Toft, K.;Skotland, T.**	**75µm Carboxen Headspace**	**GC-MS**
2342	**2-heptanone**	**Urine from stressed rats increases immobility in receptor rats forced to swim: role of 2-heptanone**	**headspace**	**GC-MS**

	from rat urine	***Physiol Behav 91, #1, 166-172 (2007 May 16)*** **Gutioerrez-Garcoa, A; Contreras, C.; Mendoza-Loopez, M.; Garcoa-Barradas, O.; Cruz-Soanchez, J**		
2872	**Pheromones from triatomine bugs**	**Metasternal gland volatiles and sexual communication in the triatomine bug, Rhodnius prolixus** ***Journal of Chemical Ecology 34, #4, 450-457 (APR 2008)*** **Pontes, Gina B.; Bohman, Bjorn; Unelius, C. Rikard; Lorenzo, Marcelo G.**	**headspace**	**GC-MS**
1056	Pheromones from male bugs.	Male bugs modulate pheromone emission in response to vibratory signals from conspecifics. *Journal of Chemical Ecology (2003) 29 (3), 561-574.* Renou, Michel; Lasnier, Therese; Miklas, Nadege		
1057	Review article	New developments and applications of solvent-free sampling and sample preparation technologies for the investigation of living systems *Australian Journal of Chemistry (2003) 56 (2-3), 155-158.* Pawliszyn, Janusz		LC-MS
1076	Organophosphorus pesticides in blood	Simple determination of 22 organophosphorus pesticides in human blood using headspace solid-phase microextraction and gas chromatography with mass spectrometric detection. *Journal of Chromatographic Science (2002) 40(1), 29-34* Musshoff, F.; Junker, H.; Madea, B.		GC-MS
1060	Phthalic monoesters in urine.	Determination of phthalic monoesters in aqueous and urine samples by solid-phase microextraction-diazomethane on-fibre derivatization-gas chromatography-mass spectrometry. *Journal of Separation Science (2003) 26 (1-2), 87-96.* Alzaga, R.; Pena, A.; Bayona, J. M.*	PDMS-DVB 25 C, 20 minutes, headspace	GC-MS
1104	PAHs in urine.	Determination of polycyclic aromatic hydrocarbons in urine of coke oven workers by headspace solid phase microextraction and gas chromatography-mass spectrometry. *Chemico-Biological Interactions (2003) 145 (2), 165-174.* Rappaport, Stephen M.; Waidyanatha, Suramya; Zheng, Yuxin		GC-MS
2326	**1,8-cineole in blood**	**Rapid absorption of dietary 1,8-cineole results in critical blood concentration of cineole and immediate cessation of eating in the common brushtail possum (Trichosurus vulpecula)** ***J Chemical Ecology 31 #12, 2775-2790 (2005)*** **Boyle, Rebecca R.; McLean, Stuart; Brandon, Sue; Wiggins, Natasha**	**headspace**	**GC/MS**
1158	1,8-cineole in blood	Application of solid-phase microextraction to the quantitative analysis of 1,8-cineole in blood and expired air in a Eucalyptus herbivore, the brushtail possum (Trichosurus vulpecula). *Journal of Chromatography, B: Analytical Technologies in the Biomedical and Life Sciences (2002) 780 (2), 397-406.* Boyle, R. R.; McLean, S.; Brandon, S.; Pass, G. J.; Davies, N. W.		GC
1162	Fatty acid esters in hair.	Fatty acid ethyl esters in neonatal hair: A possible biomarker for in utero ethanol exposure. *Alcoholism Clinical and Experimental Research (2003) 27 (5 supp), 39A.* Koren, G.; Klein, J.; Caprara, D.		
1163	Phermomens from female elephant	Headspace solid-phase microextraction (SPME) and gas chromatography-mass spectrometry (GC-MS) for the determination of 5alpha-androst-2-en-17-one and -17beta-ol in the female Asian elephant: Application for reproductive monitoring and prediction of parturition. *Journal of Steroid Biochemistry and Molecular Biology (2003) 84 (2-3), 383-391.* Dehnhard, M.; Eulenberger, K.; Hatt, J.-M.; Ochs, A.; Strauss, G.		GC-MS
2840	**Pheromones from African elephant**	**Use of automated solid phase dynamic extraction (SPDE)/GC-MS and novel macros in the search for African elephant pheromones** ***Chemical Signals in Vertebrates 11, 25-35 (2008)*** **Goodwin, T.; Brown, P.; Eggert, M.; Evola, M.; House, S.; Weddell, M.; Chen, C.; Jackson, S.; Aubut, Y.; Eggert, J. Schulte, B.; Rasmussen, L.; Morshedi, R.;**		

2259	**Pheromones from African elephant**	**Use of SPME, reverse phase SPE, and GC-MS in a search for African elephant urinary pheromones** ***Abstracts of Papers Am Chem Society 229 #1, U395 (2005)*** **Brown, P.; Eggert,M.; Evola,M.; Goodwin,T.; Rasmussen,L.,,Schulte,B.**		**GC/MS**
1205	Busulphan in plasma	On-line derivatization utilizing solid-phase microextraction (SPME) for determination of busulphan in plasma using gas chromatography-mass spectrometry (GC-MS). *Therapeutic Drug Monitoring (2003) 25 (3), 400-406.* Abdel-Rehim, Mohamed; Blomberg, Lars; Hassan, Moustapha; Hassan, Zuzana	Carbowax/DVB	GC
1207	Midazolam in human plasma	Determination of midazolam in human plasma by solid-phase microextraction and gas chromatography/mass spectrometry. *Rapid Communications in Mass Spectrometry (2001) 15(24), 2497-2501* Davide Ferrara, Santo; Frison, Giampietro; Maietti, Sergio; Tedeschi, Luciano	85um Polyacrylate	GC-MS
1261	Elephant urine	Use of SPME and GC-MS for chemical analysis of urine from African elephants in musth. *Abstracts of Papers American Chemical Society (2003) 225 (1-2), CHED 614.* Hicks, Adam R.; Goodwin, Thomas E.; Dill, Whitney M.; Davis, Ben L.; Alberts, Susan C.; Hollister-Smith, Julie		
2255	**Sex pheromone mouse urine**	**Monitoring potential semiochemicals in individual mouse urine samples** ***Chemoecology 15 #3, 139-146 (2005)*** **Kayali-Sayadi, M. N.; Polo-Diez, L. M.; Salazar, I.**	**headspace**	**GC/MS**
1262	Pheromones in urine.	Chemical analysis of preovulatory female African elephant urine: A search for putative pheromones. *Abstracts of Papers American Chemical Society (2003) 225 (1-2), CHED 409.* Hicks, Adam R.; Goodwin, Thomas E.; Dill, Whitney M.; Davis, Ben L.; Loizi, Helen; Rasmussen, L. E. L.; Schulte, Bruce A.		
1301	Odours in human armpit.	Analysis of odours in human armpit by GC-MS with headspace solid-phase microextraction. *Fenxi Ceshi Xuebao (2003) 22 (4), 21-24.* Wu, D. H.; Xu, H. K.; Wang, Z. P.; Zhang, L.; Wang, X. L.*	70 um DVB/carbowax	GC-MS
1310	Amitraz in canine plasma.	Determination of amitraz in canine plasma by solid-phase microextraction-gas chromatography with thermionic specific detection *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences (2003) 794 (2), 337-342.* Carvalho, D.; Farias, A.; Lancas, F.M.; Queiroz, M.E.C.; Valadao, C.A.A.	PDMS	GC-TSD
1344	VOC's in exhaled breath	Application of solid-phase microextraction and gas chromatography-mass spectrometry to the determination of volatile organic compounds in end-exhaled breath samples. *Journal of Chromatography, A (2003) 1011 (1-2), 125-134.* Prado, C.; Marin, P.; Periago, J. F.		GC-MS
2492	**Pheromones from moths**	**Mating disruption of codling moth Cydia pomonella with high densities of Ecodian sex pheromone dispensers** ***Journal of Applied Entomology 131, #5, 311-318 (JUN 2007)*** **Angeli, G.; Anfora, G.; Baldessari, M.; Germinara, G. S.; Rama, F.; De Cristofaro, A.; Ioriatti, C**	field sampling	
1346	Pheromones in ants.	Investigation by solid-phase microextraction and gas chromatography/mass spectrometry of trail pheromones in ants. *Rapid Communications in Mass Spectrometry (2003) 17 (18), 2071-2074.* di Tullio, A.; de Angelis, F. *; Reale, S.; Grasso, D. A.; Visicchio, R.; Castracani, C.; , A.; le Moli, F.		GC-MS
1359	Volatile aldehydes	SPME determination of volatile aldehydes for evaluation of in-vitro antioxidant activity. Analytical and Bioanalytical Chemistry (2002) 373(1-2), 70-74. Stashenko, E. E.; Puertas, M. A.; Martinez, J. R.		GC-MS

1360	VOCs in body fluids	Cryogenic oven-trapping gas chromatography for analysis of volatile organic compounds in body fluids. Analytical and Bioanalytical Chemistry (2002) 373(1-2), 75-80. Watanabe-Suzuki, K.; Ishii, A.; Suzuki, O.		GC-MS
1365	Hydrocarbons in cuticles	Solid-phase microextraction for the detection of termite cuticular hydrocarbons. Journal of Chromatography, A (2001) 932(1-2), 119-127. Bland, J. M.; Osbrink, W. L. A.; Cornelius, M. L.; Lax, A. R.; Vigo, C. B.		GC-MS
1375	p,p'-DDE in biological samples	Solid-phase microextraction and GC-MS analysis of p, p' -DDE in biological samples. Journal of Chromatography, B: Biomedical Applications (2001) 761(1), 93-98. Kusakabe, T.; Saito, T. *; Takeichi, S.	PDMS	GC-MS
1380	Perfluorocarbons in blood.	Detection of perfluorocarbons in blood by headspace solid-phase microextraction combined with gas chromatography-mass spectrometry. Biomedical Chromatography (2001) 15(7), 443-451. Mathurin, J. -C.; de Ceaurriz, J.; Audran, M.; Krafft, M. -P.		GC-MS
1396	Ropivacaine in plasma	Determination of ropivacaine and its metabolites in human plasma using solid phase microextraction and GC-NPD/GC-MS. *Journal of Microcolumn Separations (2001) 13(8), 313-321.* Abdel-Rehim, M.; Andersson, M.; Portelius, E.; Norsten-Hoog, C.; Blomberg, L. G.	Various	Gc-MS
2729	**Volatiles from dairy gel**	**Effect of thickeners on aroma compound behavior in a model dairy gel** ***J Agri Food Chem 55, #12, 4835-4841 (JUN 13 2007)*** **Lubbers, S; Decourcelle, N.; Martinez, D.; Guichard, E.; Tromelin, A.**	**headspace**	GC-MS
2343	**Volatiles from milk, cheese**	**Study on the Influence of Pasture on Volatile Fraction of Ewes' Dairy Products by SPME-GC-MS** ***J. Dairy Sci. 90, # 2, 556-569 (2007-02-00)*** **Povolo, M.; Contarini, G.; Mele, M.; Secchiari, P.**	**headspace**	GC-MS
2883	**Volatiles from milk**	**SPME-GC-MS analysis of dairy product volatiles for the determination of shelf-life** ***Int. Dairy J. 18, #8, 819-825 (August 2008)*** **Condurso, C.; Conte, F.; Romeo, V.; Verzera, A.; Ziino, M.**	**headspace**	**GC-MS**
2882	**Volatiles from milk**	**Characterization of volatile compounds in ultra-high-pressure homogenized milk** ***Int. Dairy J. 18, #8, 828-834 (August 2008)*** **Ferragut, V.; Guamis, B.; Jaramillo, D.P.; Pereda, J.; Quevedo, J.M.; Trujillo, A.J.**	**headspace**	**GC-MS**
2705	**Volatiles from soymilk**	**Identification of volatile compounds in soymilk using SPME-GC** ***Food Chem. 99, #4, 759-766 (2006-07-07)*** **Achouri, A.; Boye, J. I.; Zamani, Y.**	**75µm Carboxen. 20 min @ 40°C headspace**	**GC**
2490	**Volatiles from soymilk**	**Selected odor compounds in cooked soymilk as affected by soybean materials and direct steam injection** ***J of Food Science 72, #7, S481-S486 (SEP 2007)*** **Yuan, S. H.; Chang, S. K. C.**	**headspace**	GC-MS
1413	Naltrexone, 6,beta-naltrexol in milk	Quantification of naltrexone and 6,beta-naltrexol in plasma and milk using gas chromatography-mass spectrometry. Application to studies in the lactating sheep. Journal of Chromatography B (2001) 761(1), 85-92. Ilett, Kenneth F.; Bencini, Roberta; Chan, Chooi Fen; Chiswell, Gregory M.; Dusci, Leon J.; Hackett, L. Peter		GC-MS
1225		Monitoring and fast detection of mycotoxin-producing fungi based on headspace solid-phase microextraction and headspace sorptive extraction of the volatile metabolites. *Journal of Chromatography, A (2003) 985 (1-2), 127-135.* Demyttenaere, J. C. R.; Morina, R. M.; Sandra, P.		GC-MS

1159	Phthalates from toys	Determination of bis(2-ethylhexyl) phthalate of plastic toys leached in stimulant saliva by gas chromatography with solid-phase microextraction *Fenxi Ceshi Xuebao (2003) 22 (2), 34-36.* Yang, Z. J.; Zhang, W. Y.; Pan, K. Y.; Yu, J. X.; Wu, C. Y.; Wang, C. Y.	PDMS-fullerene	GC
1210	Volatile fatty acids in rumen.	Characterizing volatile fatty acids and other gases in a rumen closed in vitro fermentation system using solid phase microextraction *Transactions of the American Society of Agricultural Engineers (2003) 46 (2), 585-588.* Chirase, Norbert K.; Koziel, Jacek A.; Spinhirne, Jarett P.	DVB/Carboxen/PDMS	GC-MS
2798	**Crude oil**	**A comparison of results obtained using liquid injection and headspace SPME for crude oil analysis by GC-MS** ***J of Chrom Sci. 46, #4, 332-338 (APR 2008)*** **D'Auria, Maurizio; Racioppi, Rocco; Velluzzi, Vincenzina**	headspace	GC-MS
1412	Volatile hydrocarbons	Volatile hydrocarbon biodegradation by a mixed-bacterial culture during growth on crude oil. Journal of Industrial Microbiology & Biotechnology (2001) 26(6), 356-362. Van Hamme, J. D.; Ward, O. P		
1311		Production of flavoured volatile organic compounds (VOCs) by Candida oleophila GK10: Optimisation using factorial design and response surface analysis *Enzyme and Microbial Technology (2003) 33 (5), 668-675.* Buzzini, Pietro; Davoli, Paolo; Martini, Alessandro; Pagnoni, Ugo Maria		GC-MS
2791	**Bromocyclen in fish tissue**	**Enantioselective determination of the organochlorine pesticide bromocyclen in spiked fish tissue using SPME-GC-ECD and ICP-MS** ***Talanta 75, #3, 710-716 (May 15 2008)*** **Blanco-Gonzalez, E.; Fidalgo-Used, N.; Montes-Bayon, M.; Sanz-Medel, A**		**GC-ECD** **ICP-MS**
1443	Organochlorine pesticides in fish	Solid-phase microextraction as a clean-up and preconcentration procedure for organochlorine pesticides determination in fish tissue by gas chromatography with electron capture detection *Journal of Chromatography A (2003) 1017(1-2), 35-44* Blanco-Gonzalez, Elisa; Centineo, Giuseppe; Fidalgo-Used, Natalia; Sanz-Medel, Alfredo		GC-ECD
1456	Pheremones in mouse urine	Identification of pheromones in mouse urine by head-space solid phase microextraction followed by gas chromatography-mass spectrometry. *Journal of Chromatography B (2003) 796(1), 55-62* Kayali-Sayadi, M. N.; Bautista, Jose M.; Polo-Diez, L. M.; Salazar, Ignacio	85um Carboxen PDMS	GC-MS
1468	Sufentanil in human plasma	Solid-phase microextraction of human plasma samples for determination of sufentanil by gas chromatography-mass spectrometry. *Therapeutic Drug Monitoring (2002) 24(6), 768-774* Boulieu, Roselyne; Bolon, Magali; Dufresne, Christelle; Paradis, Chantal	65um PDMS DVB, 10mins, immersion	GC-MS
1485	Volatiles in live biological samples	Applications of solid-phase microextraction to chemical analysis of live biologica samples. *Trends in Analytical Chemistry (2002) 21(6-7), 428-438* Augusto, Fabio; Valente, Antonio Luiz Pires		
1487	Pheremones from *Lepidoptera*	Lepidoptera (Sesamia nonagrioides (Lefebvre) (Lepidoptera Noctuidae)) by solid-phase microextraction *Redia (2001) 84, 7-18* Rotundo, Giuseppe; Germinara, Giacinto Salvatore; De Cristofaro, Antonio	100µm PDMS, 20mins, 120 degrees C, headspace	GC-MS
1503	Organic compounds in elephant urine	Implementation of SPME and GC-MS to identify organic compounds in African elephant urine. *Abstracts of Papers American Chemical Society (2002) 223(1-2), CHED 234* dwin, Thomas E.; Dowdy, Nichole C.; Rasmussen, L. E. L.		

		Determination of petroleum contamination in shellfish using solid phase micro-extraction with gas chromatography-mass spectrometry.		
1506	C9-C20 hydrocarbons in shellfish	*Analytical and Bioanalytical Chemistry (2002) 373(3), 147-152* *Stack, Mary A.; James, Kevin J.; O'Connell, Sharon*	100um PDMS	GC-MS
1519	Thymol in humans	Systemic availability and pharmacokinetics of thymol in humans. *Journal of Clinical Pharmacology (2002) 42(7) 731-737* Veit, Markus; Abel, Gudrun; Brinkhaus, Benno; Derendorf, Hartmut; Graefe, Eva-Ulrike; Kohlert, Claudia; Maerz, Reinhard W.; Schindler, Gernot		LC-MS-MS
2201	**Volatile organics in blood**	**Quantification of 31 volatile organic compounds in whole blood using SPME-GC-MS** ***J. Chromatogr. B Anal. 832, #2, 292-301 (2006)*** **Ashley, D.; Blount, B.; Cardinali, F.; Chambers, D.;Kobelski, R.; McElprang, David O.; Morrow, John C.**	**headspace**	**GC-MS**
1529	Ethanol in blood	Optimization of solid-phase microextraction conditions for gas chromatographic determination of ethanol and other volatile compounds in blood. *Journal of Chromatography B (2002) 773(1), 75-82* Zuba, Dariusz; Parczewski, Andrzej; Reichenbacher, Manfred	65um Carbowax DVB, 60 degrees C, 10mins, stirring, NaCl addtion, headspace	GC-FID
2361	**Hydroxychloro-quine metabolites in human urine**	**Stereoselective determination of hydroxychloro-quine and its major . metabolites in human urine by SPMEand HPLC** ***J. Sep Sci 3, #15, 2351-2359 (Oct-2007)*** **Moraes del Oliveira, A*l*; Sueli Bonato, P.**	**60µm PDMS-DVB** **40 min at 25°C** **pH 11** **10% NaCl**	**HPLC**
2272	**Naproxen in human urine**	**Determination of naproxen in human urine by SPME coupled LC** ***J Pharma Biomedical Analysis, 39, #3-4, 643-647 (2005)*** **Aresta, Antonella; Palmisano, Francesco; Zambonin, Carlo G.**	**50µm CW/TPR**	**LC**
1532	2-chlorovinylarsonous acid in human urine	Quantitation of 2-chlorovinylarsonous acid in human urine by automated solid-phase microextraction-gas chromatography-mass spectrometry. *Journal of Chromatography B (2002) 772(1), 147-153* Calafat, Antonia M.; Ashley, David L.; Wooten, Joe V.		GC-MS
1533	Fluoroacetic acid in biological samples	Headspace solid-phase microextraction with 1-pyrenyldiazomethane on-fibre derivatization for analysis of fluoroacetic acid in biological samples. *Journal of Chromatography B (2002) 772(1), 45-51* Pragst, Fritz; Huebner, Sandra; Mills, Graham; Sporkert, Frank	85um Carboxen PDMS Stableflex, on-fiber derivatization with 1-pyrenyldiazomethane	
1540	carbamazepine, carbamazepine epoxide, phenytoin, phenobarbital, and primidone in human plasma	Determination of lamotrigine simultaneously with carbamazepine, carbamazepine epoxide, phenytoin, phenobarbital, and primidone in human plasma by SPME-GC-TSD. *Journal of Chromatographic Science (2002) 40(4), 219-223* Lancas, F. M.; Carvalho, D.; Queiroz, M. E. C.; Silva, S. M.		
1427	Microcystins	Determination of microcystins in cyanobacterial blooms by solid-phase microextraction : High-performance liquid chromatography. Environmental Toxicology and Chemistry (2001) 20(8), 1648-1655. Lam, Michael Hon-wah; Lam, Paul K. S.; Poon, Ka-Fai; Wong, Bryan S. F.		HPLC
2597	**Review of Trends forensic analysis**	**New trends in hair analysis and scientific demands on validation and technical notes** ***Forensic Sci Intl 165, #2-3, 204-215 (JAN 17 2007)*** **Musshoff, Frank; Madea, Burkhard**		

		Simple and sensitive determination of tetrahydrocannabinol, cannabidiol		
2516	**Cannabinols in hair**	**and cannabinol in hair by combined silylation, headspace SPME-GC-MS** ***J. CHROMATOGR. B 846, #1-2, 78-85 (01 FEB 2007)*** **Nadulski, T.; Pragst, F**	**Headspace trifluoroacetamide derivative**	GC-MS
1828	Drugs in hair	Rapid screening procedure based on headspace SPME-GC-MS for the detection of many recreational drugs in hair. *J. Chromatogr. B, 801, #2, 289-296* Gentili, S.; Cornetta, M.; Macchia, T. *	Headspace, 5min @ 90°C	GC-MS
2273	**Sulfonic acids esters in pharmaceutical ingredients**	**Determination of methyl and ethyl esters of methanesulfonic, benzenesulfonic and p-toluenesulfonic acids in active pharmaceutical ingredients by solid-phase microextraction** ***J Pharma Biomedical Analysis, 39, #3-4, 477-485 (2005)*** **Colon, Ivelisse; Richoll, Stephen M.**		**GC-MS**
2709	**Parabens in water**	**Optimisation of a SPME method for the determination of parabens in water samples at the low ng per litre level** ***J. Chromatogr. A, 1124, #1-2, 3-10 (2006-08-18)*** **Canosa, P.; Rodriguez, I. ; Rubi, E.; Bollain, M. H.; Cela, R.**	**85µm polyacrylate immersed TBMS derivative sat. salt**	**GC-MS/MS**
1829	Parabens in pharmaceutics	Determination of parabens in pharmaceutical formulations by SPME ion-mobility spectrometry *Anal. Chem., 77, #18, 5938-5946* Lokhnauth, John; Snow, Nicholas		GC-IMS
1830	Amphetamine drugs in urine	Simultaneous derivatization and extraction of amphetamine-like drugs in urine with headspace SPME followed by GC-MS *Anal. Chim. Acta, 539, #1-2, 49-54* Chia, Kan-Jung; Huang, Shang-Da	100µm PDMS 30min @ 90°C HFBA derivative headspace	GC-MS
1831	Amphetamine drugs in urine	Poly(methacrylic acid-ethylene glycol dimethacrylate) monolith in-tube SPME coupled to HPLC and analysis of amphetamines in urine samples *J. Chromatogr. A, 1074, #1-2, 9-16* Da, Shi-Lu; Fan, Yi; Feng, Yu-Qi; Zhang, J; Zhang, M	polycrylate coated capillary tube	HPLC-UV
1832	Amphetamine drugs in urine	Application of SPME combined with derivatization to the determination of amphetamines by liquid chromatog *Analytical Biochemistry, 333, #2, 328-335* Chafer-Pericas, C.; Campins-Falco, P.; Herraez-Hernandez, R.	50µm CW-TPR FMOC derivative	HPLC-UV
1833	Amphetamine drugs in urine	Enantiomeric determination of amphetamines: Exploring A novel one-step SPME-based approach *J. Chromatogr. B, 825, #1, 79-87* Wang, Sheng-Meng	100µm PDMS 10min @ 70°C prolyl chloride derivative	GC-SIM-MS
1834	Amphetamine in serum	SPME with LC-electrospray ionization-tandem MS for analysis of amphetamine and methamphetamine in serum *Anal. Chim. Acta, 538, #1-2, 49-56* Chou, Chi-Chi; Lee, Maw-Rong		LC-ESI-MS/MS
2800	**Methyl amphetamine**	**Comparison and classification of methamphetamine seized in Japan and Thailand using GC with liquid-liquid extraction and SPME** ***Forensic Science International 175, #2-3, 85-92 (MAR 5 2008)*** **Kuwayama, K.; Inoue, H.; Phorachata, J.; Kongpatnitiroj, K.; Puthaviriyakorn, V.; Tsujikawa, K.; Miyaguchi, H.; Kanamori, T.; Iwata, Yuko T.;Kamo, Naoki; Kishi, Tohru**		**GC-FID**
2836	**Volatile organics in human urine**	**Excretion of unchanged volatile organic compounds (toluene, ethylbenzene, xylene and mesitylene) in urine as result of experimental human volunteer exposure** ***Intl Archives of Occupational Environ. Health 81, #4, 443-449 (2008)*** **Janasik, Beata; Jakubowski, Marek; Jalowiecki, Piotr**	**headspace**	**GC**
1835	BTX solvents in urine	Quantitative analysis of benzene, toluene, and xylenes in urine by headspace SPME *J Chromatogr A, 1027, #1-2, 37-40* Alkalde, T; Peralba, M; Zini, C; Caramao, E.	headspace	GC-MS
1836	PCB metabolite in urine	SPME w/ on-fiber derivatization for the determination of hydroxy-polychlorinated biphenyl compounds in urine *Anal. Chim. Acta, 539, #1-2 55-60* Hong, Jee Eun; Lee, Won; Park, Song-Ja; Pyo, Heesoo	65µm PDMS-DVB 60min @ 90°C BSTFA derivative headspace	GC/MS
		Single drop microextraction or SPME-GC-MS		

1837	Iodine in various matrices	for the determination of iodine in pharmaceuticals, iodized salt, mil powder and vegetables involving conversion into 4-iodo-N,N-dimethylaniline *J Chromatogr A, 1023, #1, 33-39* Das, P; Gupta, M; Jain, A; Verma, K.	iodate derivatives	GC
2315	**Quinalphos in blood**	**Determination of quinalphos in blood and urine by direct SPME combined with GC-MS** ***J. Chromatogr. B 832 #1, 162-168 (2006)*** **Barroso, M.; Cruz, A.; Gallardo, E.; Lopez-Rivadulla, M.; Margalho, C.; Vieira, D.N**	**100µm PDMS direct**	**GC/MS**
2290	**Thujone in blood**	**Investigations on the medico-legal relevance of spirits containing thujone with special regard to toxicological-analytical aspects** ***Blutalkohol 42 #4, 263-271 (2005) (German)*** **Kroner, L.; Padosch, S.; Lachenmeier, D.; Madea, B.**	**headspace**	**GC/MS**
1838	Diazipenes in biological fluid	Monitoring of drugs and metabolites in whole blood by restricted-access SPME coupled to LC-MS *J Chromatogr A, 1025, #1, 85-92* Walles, M.; Mullett, W. M.; Pawliszyn, J.	restricted access coated fibers headspace	LC-MS
1839	Methyl mercury from biological specimens	An accurate and sensitive method for determination methylmercury in biological specimens using GC-ICP-MS with solid phase microextraction *J Anal At Spectrom, 19, #12, 1546-1551* Christopher, S.J.; Davis, W. Clay; Day, Rusty D.; Long, S.E.; Schantz, Michele M.; Vander Pol, Stacy S.	100µm PDMS methyl, ethyl, phenyl derivatives microwave extraction	ICP-MS
1840	Volatiles in bovine breath	Sampling and analysis of volatile organic compounds in bovine breath by SPME-GC-MS *J Chromatogr A, 1025, #1, 63-69* Spinhirne, J.; Koziel, J.; Chirase, N.	50/30µm DVB/CAR 15min @ 22°C headspace	GC-MS
1841	Phlated esters in serum	High-throughput analysis of phthalate esters in human serum by direct immersion SPME followed by isotope dilution-fast GC/MS *Anal. Bioanal. Chem., 380,#2, 275-283* Colon, Ivelisse; Dimandja, Jean-Marie D.	85µm polyacrylate direct immersion	GC-MS
1842	Ligustilides in Chinese medicines	Development of pressurized hot water extraction followed by headspace SPME-GC-MS determination ligustilides in Ligusticum chuanxiong and Angelica sinensis *J. Sep. Sci., 28, #11, 1237-1243* Deng, Chunhui; Ji, Jie; Wang, Xiaochuan; Zhang, X	headspace	GC-MS
1843	Benzene from urine	Urinary benzene determination by SPME/GC-MS: A study of variables by fractional factoria design and response surface methodology *J. Chromatogr. B, 804, #2, 255-261* Garrido, J.; Periago, J.F.; Prado, C.	1 min @ 15°C headspace	GC-MS
1844	Faty Acids in plasma	Rapid measurement of C13-enrichment of acetic, propionic and butyric acids in plasma with SPME coupled to GC-MS *Anal. Chim. Acta, 512, #2, 305-310* Champ, M.; Delepee, R.; Dumon, H.; LeBizec, B.; Martin, L.; Maume, D.; Moreau, N.; Nguyen,P	75µm Carboxen 5min extract headspace	GC-MS
1845	Monoterpenes from Perilla frutescens	cDNA isolation and functional expression of myrcene synthase from Perilla frutescens *Biological & Pharmaceutical Bulletin, 27, #12, 1979-1985* Hosoi, Madoka; Ito, Michiho; Yagura, Toru; Adams, Robert Phillip; Honda, Gisho		GC
2735	**Acetone in seawater**	**Determination of acetone in seawater using derivatization SPME** ***Anal. Bioanal. Chem., 388, #5-6, 1272-1282 (2007-07)*** **Hudson, E. D.; Okuda, K.; Ariya, P. A.**	**headspace** **PFBHA derivative**	**GC-MS**
1846	Acetone in plasma	Rapid determination of acetone in human plasma by GC-MS and SPME with on-fiber derivatization *J. Chromatogr. B, 805, #2, 235-240* Deng, Chunhui; Zhang, Jie; Zhang, Wei; Zhang, Xiangmin	65µm PDMS-DVB PFBHA derivative	GC-MS
1847	Amino acids in blood	Rapid determination of amino acids in neonatal blood samples based on derivatization with isobutyl chloroformated followed by SPME-GC-MS *Rapid Communications in Mass Spec, 18, #21, 2558-2564* Deng, C. H.; Li, N.; Zhang, X. M.*	headspace chloroformate derivative	GC-MS

1848	Trimethylamine in plasma	Quantifying trimethylamine and trimethylamine- N -oxide in human plasma: interference from endogenous quaternary endogenous quaternary ammonium compounds. *Analytical Biochemistry, 334, #2, 403-405* Bain, M. A.; Faull, R.; Fornasini, G.; Milne, R. W.; Schumann, R.; Evans, A. M.		GC
1849	Anigotensin from blood	Fast assay of angiotensin 1 from whole blood by cation-exchange restricted-access SPME *Anal. Chim. Acta, 537, #1-2, 231-237* Musteata, F.; Pawliszyn, Janusz; Walles, M.	alkyl diol silica coating immersed sampling	HPLC LC-MS
2287	**Fatty acid ethyl esters in hair**	**Comparison of the concentration of fatty acid ethyl esters in hair and phosphatidyl ethanol in blood of alcoholics with other biological state markers and self reported ethanol intake *Alcoholism Clinical and Experimental Res 28 #5, 158A (2004)* Wurst, F.; Alling, C.; Aradottir, S; Alexson, S; Wolfersdorf, M.; Jachau, K.; Huber, P.; Auwaerter, V.; Allen, J.; Pragst, F.**	**Headspace Ethyl ester derivatives**	**GC**
1850	Fatty acid ethyl esters in hair	Concentration of fatty acid ethyl esters in hair of alcoholics: Comparison to other biologica state markers and self reported-ethanol intake. *Alcohol and Alcoholism, 39, #1, 33-38* Wurst, F.; Alexson, S.; Wolfersdorf, M.; Bechtel, G; Forster, S.' Alling.C.; Aradottir, S.; Jachau, K.; Huber, P.; Allen, J.; Auwaerter, V.; Pragst, F.	Headspace Ethyl ester derivatives	GC-MS
1851	Fatty acid ethyl esters in hair	Comparison of ethyl glucuronide and fatty acid ethyl ester concentrations in hair of alcoholics, social drinkers, and teetotallers *Forensic Science Intl,145, #2-3, 167-173* Yegles, M.; Labarthe, A.; Auwarter, V.; Hartwig, S.; Vater, H.; Wennig, R.; Pragst, F.	Headspace Ethyl ester derivatives	GC-MS/NCI
1852	Anti-inflamatory drugs in water	SPME with on-fiber derivatization for the analysis of anti-inflammatory drugs in water samples. *J Chromatogr A, 1024, #1-2, 1-8* Rodriguez, I.; Carpinteiro, J.; Quintana, J. B.; . Carro, A. M.; Lorenzo, R. A.; Cela, R	85µm polyacrylate MTBSTFA derivative Headspace	GC-MS
1853	Fluoroacet-amide in body fluids	Application of SPME-GC-MS in analysis of poison *Zhipu Xuebao, 25, Suppl, 151-152* Cai, X. L.; Wu, G. P.		LC-MS
1854	Fluoroacet-amide in body fluids	Fast detection of fluoroacetamide in body fluid using GC-MS after SPME. *J Chromatogr, B:802, #2, 239-245* Cai, X.; Zhang, D.; Ju, H. X.; Wu, G.; Liu, X.	100µm PDMS 25min @ 70°C immersed	GC-MS
1855	Trichloro-ethylene in blood/tissues	Sensitive methods for trace level analysis of trichloroethylene (TCE) in rat blood and tissues. *Proc. 50th ASMS Conf. Mass Spectrom. Allied Top.* 2002, p629-630 Bartlett, Michael G.; Brown, Stacy D.; Bruckner, James V.; Dixon, Amy M.; Muralidhara, S.	headspace @ 55°C	GC-MS
2916	**Trichloro-ethylene in water**	**Photocatalytic oxidation of aqueous trichloroethylene using dye sensitized buoyant photocatalyst monitored via micro-headspace SPME-GC-ECD and MS *Microchemical Journal 88, #1, 38-44 (FEB 2008)* Alexander, Matt V.; Rosentreter, Jeffrey J.**	**100µm PDMS headspace**	**GC/ECD**
2794	**Trichloro-ethylene in biological samples**	**Trace level determination of trichloroethylene in biological samples by headspace SPME-GC/negative chemical ionization MS *Rapid Communications in Mass Spectrometry 22, #6 797-806 (2008)* Liu, Yongzhen; Muralidhara, S.; Bruckner, James V.; Bartlett, M.**	**100µm PDMS headspace**	**GC-MS**
2770	**Trichloro-ethylene in biological samples**	**Determination of trichloroethylene in biological samples by headspace SPME-GC-MS *J Chromatogr, B: 863, #1, 26-35 (2008)* Liu, Yongzhen; Muralidhara, S.; Bruckner, James V.; Bartlett, M.**	**100µm PDMS headspace**	**GC-MS**
2457	**Benzodiaze-pines in blood**	**A study of the performance characteristics of immunoaffinity SPME probes for extraction of a range of benzodiazepines. *J. Pharm. Biomed. Anal. 44, #2, 506-519 (2007-06-28)* Lord, H. L.; Rajabi, M.; Safari, S.; Pawliszyn, J.**		
1856	Benzodiaze-	Analysis of benzodiazepines from whole blood by SPME coupled to LC-MS-MS	50µm CW-TPR	LC-MS-MS

	pines in whole blood	*Proc. 50th ASMS Conf. Mass Spectrom. Allied Top.* 2002, p513-514 Grant, R; Incledon, B; Lord, H; Pawliszyn, Janusz		
1857	Benzene in urine	Application of the standard addition approach for the quantification of urinary benzene *J. Chromatogr. B, 818, #2, 293-299* Acampora, A.; Basilicata, P.; Miraglia, N; Pieri, M.; Sannolo, N.; Soleo, L.	headsapce	GC-MS
1858	Cresols in urine	Determination of urinary ortho- and meta-cresol in humans by headspace SPME-GC-MS *J. Chromatogr. B, 817, #2, 309-317* Campo, L.; Foa, V.; Fustinoni, S.; Mercadante, R.; Scibetta, L.; Valla, C.	100µm PDMS headsapce	GC-MS
1859	Ibuprofen in urine	SPME and chiral HPLC analysis of ibuprofen in urine *J. Chromatogr.B, 818, #2, 285-291* Bonato, P.; Cesarino, E.; De Oliveira, A.	65µm PDMS- DVB immersion sampling	HPLC-UV
1860	Ibuprofen metabolites in urine	Stereoselective determination of the major ibuprofen metabolites in human usrine by off-linecoupling SPME-HPLC *Anal. Chim. Acta, 538, #1, 25-34* De Oliveira, A;, DeSantana, Fo; Bonato, P	50µm CW-TPR immersion sampling	HPLC
1861	Barbiturates in blood/urine	Simultaneous determination of barbiturates in human biological fluids by direct immersion SPME and GC-MS *J. Chromatogr. B, 806, #1, 65-73* Arinobu, T.; Hattori, H.; Ishii, A.; Iwai, M.; Suzuki, O.; Kumazawa, T., Noguchi, H., Noguchi, H.; Seno, H.	immersion sampling salt added	GC-MS
1862	Acrolein in urine	Monitoring of urinary acrolein concentration in patients receiving cyclophosphamide and ifosphamide *J. Chromatogr. B, 806, #1, 59-63* Namera, A.; Sakura, N.; Takamoto, S.; Yashiki, M.	headsapce	GC-MS
1863	Rivastigmine in plasma	Headspace SPME and capillary GC-MS determination of rivastigmine in canine plasma samples *J. Chromatogr. B, 806, #2, 271-276* Deng, Chunhui; Duan, Gengli; Huang, Taomin; Liu, Zhen; Sha, Yunfei; Yang, Bei	65µm PDMS/DVB 30min @ 100°C headspace $NaOH/NaCO_3$ buffer	GC-MS
1864	Mycophnolic acid in serum	Determination of the immunosuppressant mycophenolic acid in human seum by SPME coupled to LC *J. Chromatogr. B, 806, #2, 89-93* Aresta, A; Palmisano, F; Zambonin, C	50µm CW-TPR headspace	HPLC-UV
2660	**Neat Fuels**	**Fuzzy rule-building expert system classification of fuel using SPME in two-way GC differential mobility spectrometric data** ***Anal. Chem. 79, #4, 1485-1491 (Feb 15 2007)*** **Bunker, C.; Harrington, Peter B.; Karnes, John J.; Rearden, P.**	**headspace**	**GC-DMS**
2910	**JP-8 fuel from soil**	**Determination of JP-8 components in soils using SPME-GC-MS** ***Fuel 87, #10-11, 2334-2338 (August 2008)*** **Brown, Stacy; Caldwell, Thomas; Rickrode, Mark**	**headspace**	**GC-MS**
2379	**JP-8 fuel from rat tissue**	**A PBPK modeling assessment of the competitive metabolic interactions of JP-8 vapor with two constituents, m-xylene and ethylbenzene** ***INHAL. TOXICOL. 19, #3, 265-273 (MAR 2007)*** **Campbell, Jr J. L.; Fisher, J. W.**	**headspace**	**GC-MS**
1865	JP-8 fuel on porcine skin	Dose related absorption of JP-8 jet fuel hydrocarbons through porcine skin w/ quantitative structure permeability relationship analysis *Toxic Mechanisms & Methods 14, #3, 159-166* Muhammad, F.; Baynes, R.; Monteiro-Riviere, N.; Xia, X.; Riviere, J.		GC-FID
1866	Volatiles in Houttuynia cordata thunb	GC-MS analysis of volatile compounds from Houttuynia cor-data Thunb after extraction by SPME, flash evaporation and steam distillation *Analytica Chimica Acta, 531, #1,07-104* Liang, M; Qi, M; Zhang, C; Zhou, S; Fu, R; Huang, J	100µm PDMS headspace	GC-MS
1867	Serotonin in urine	Rapid screening of selective serotonin re-uptake inhibitors in urine samples using SPME-GC-MS *Anal. Bioanal. Chem., 382, #6, 1351-1359* Cela, R.; Garcia-Jares, Carmen; Lamas, J.; Llompart, M.; Salgado-Petinal, C.	65µm PDMS-DVB in-situ derivatization 30min analysis	GC-MS

1868	Chlorinated hydrocarbons in urine	Determination of dichloromethane, trichloroethylene and perchloroethylene in urine samples by HD-SPME-GC-MS *J. Chromatogr. B, 820, #1, 95-102* Andreoli, R; Franchini, I; Manini, P; Mutti, A; Poli, D	75µm Carboxen 22°C, saturated salt headspace agitated	GC-MS
1869	Organo-phosphorus pesticides in blood, urine	SPME-GC analysis of organophosphorus pesticides in biological samples *J. Chromatogr. B,822, #1-2, 194-200* Grigoratou, I; Raikos, N; Theodoridis, G; Tsoukali, H	headspace	GC-NPD
1870	Tramadol in plasma	Rapid determination of tramadol in human plasma by headspace SPME and capillary GC-MS *J Pharma and Biomed Analysis, 37, #1, 143-147* Sha, Y. F.; Shen, S.; Duan, G. L.	65µm PDMS-DVB 30min @ 100°C 0.1 M NaOH headspace	GC/MS
2779	**Lung Cancer Biomakers in breath**	**Lung cancer diagnosis method by detecting metabolic gases of lung cells** ***Zhejiang Daxue Xuebao 42, #2, 294-298+348 (Feb 2008)*** **Cao, Ming-Fu; Chen, Xing; Hao, Yan; Wang, Ping; Wang, Yong-Qing; Wang, Yue; Xu, Feng-Juan; Zhang, Wei-Min**	**headspace**	**GC**
2911	**Volatile organics from stomach tissue**	**Identification of volatile organic compounds secreted from cancer tissues and bacterial cultures** ***J. Chromatogr. B, 868, #1-2, 88-94 (Jun 1 2008)*** **Buszewski, B.; Jackowski, M.; Klodzinska, E.; Ligor, T.; Szeliga, J. Ulanowska, A.**	**headspace**	**GC/MS**
2881	**Cancer Biomakers in liver cancer**	**Investigation of volatile biomarkers in liver cancer blood using SPME-GC-MS** **Rapid Comm Mass Spectrometry 22, #8, 1181-1186 (APR 2008)** **Xue, Ruyi; Dong, Ling; Zhang, Si; Deng, Chunhui; Liu, Taotao; Wang, Jiyao; Shen, Xizhong**	**headspace**	**GC/MS**
2350	**Cancer Biomakers in breath**	**A study of the volatile organic compounds exhaled by lung cancer cells in vitro for breath diagnosis** ***Cancer 110, #4, 835-44 (2007 Aug 15)*** **Chen, X.; Xu, F.; Wang, Y.; Pan, Y.; Lu, D.; Wang, P.; Ying, K.; Chen, E.; Zhang, W**	headspace	GC
1871	Cancer Biomakers in blood	Investigation of volatile biomarkers in lung cancer blood using SPME and capillary GC-MS J. Chromatogr. B, 808, #2, 269-277 Deng, Chunhui; Li, Ning; Zhang, Xiangmin	headspace	GC/MS
1872	Cancer Biomakers in blood	A study of an electronic nose for detection of lung cancer based on a virtual SAW gas sensorsarray and imaging recognition method *Meas. Sci. Technol., 16, #8, 1535-1546* Cao, M.; Chen, X.; Hu, W.; Li, Yi.; Pan, H.; Wang, P.; Ying, K.	headspace	GC/MS
2146	**Dinitrotoluenes in tissue**	**Solid phase microextraction of aminodinitrotoluenes in tissue** ***Chemosphere, 63. #1, 58-63 (Feb 2008)*** **Bowen, Alethea T.; Conder, Jason M.; La Point, Thomas W.**	**85µm Polyacrylate immersed agitated**	**GC**
2883	**Trichloro-ethylene in rat blood**	**In situ derivatization/SPME-GC negative CI-MS for the determination of trichloroethylene metabolites in rat blood** ***Rapid Communications in Mass Spectrometry 22, #7, 1021-1031 (2008)*** **Liu, Y.; Muraildhara, Srinivasa; Bruckner, James V.; Bartlett, M.**	**headspace ethyl esters**	**GC/CI-MS**
1873	Trichloro-ethylene in rat blood	Optimization of SPME for analysis of trichloroethylene in rat blood and tissues by SPME-GC/MS *Instrum Sci Technol, 33, #2, 175-186* Bartlett, M.; Brown, S.; Bruckner, J.; Dixon, A.; Muralidhara, S.	headspace 5 min	GC/MS
1874	Fatty acids in plasma	Rapid measurement of 13 C-enrichment of acetic, propionic, and butyric acids in plasma w/ SPME coupled to GC-MS *Analytica Chimica Acta, 512, #2, 305-310* Moreau, N. M.; Delepee, R.; Maume, D.; le Bizec, B.; Nguyen, P..; Champ, M..; Martin, L..;Dumon, H.	75µm Carboxen 5 min extract	GC-MS
1875	Animal testing	Toward more useful in vitro toxicity data with measured free concentrations *Environ. Sci. Technol., 38. #23, 6263-6270*	in-vitro sampling	GC

		Busser, F; Heringa, M.; Hermens, J.; Schreurs, R.; Van Der Burg, Bart; Van Der Saag, Paul T.		
2574	**Camphor and borneol in chinese medicines**	**Development of microwave-assisted extraction followed by headspace SPME-GC-MS for quantification of camphor and borneol in Flos Chrysanthemi Indici.** ***Anal. Chim. Acta: 575, #1, 120-125 (2006-08-04)*** **Deng, C. H.; Mao, Y.; Yao, N.; Zhang, X. M.**	65µm PDMS-DVB 20min @ 40°C headspace	GC-MS
1876	Volatiles in chinese medicines	SPME followed by GC-MS analysis of the volatile components of Flos Chrysanthemi indici in different growing areas. *Chromatographia, 59, #11-12, 763-767* Wu, Q.; Deng, C. H.; Shen, S.; Song, G. X.; Hu, Y. M.; Fu, D. X.; Chen, J. K.; Zhang, X. M.*	headspace	GC-MS
1877	Diethyl phthalate on skin	Application of SPME to in vitro skin permeation experiments example using diethyl phthalate *Toxicology In Vitro, 19, #2, 253-259* Frasch, H. Fred; Barbero, Ana M.		GC
1878	Volatiles from cell culture	Identification of biogenic organotellurides in Escherichia coli K 12 headspace gases using SPME-GC *Analytical Biochemistry, 331. #1, 106-114* Swearingen, J.; Araya, M.; Plishker, M.; Saavedra, C.; Vasquez, C.Chasteen, T.	75µm Carboxen headspace	GC-MS
1879	Faecal Odor from cats	The effect of oligofructose on urea metabolism and faecal odour components in cats *J Animal Physiology and Animal Nutr, 89, #3-6, 208-214* Hesta, M.; Hoornaert, E.; Verlinden, A.; Janssens, G. P. J.	headspace	GC
1880	Strychnine in blood	Application of SPME to determination of strychnine in blood *J Chromatogra B, 816, #1-2, 29-34* Barroso, M.; Gallardo, E.; Margalho, C; Avila, S; Marques, E; Vieira, D. N.; Lopez-Rivadulla, M.	65µm CW-DVB 20min extraction immersion sampling	GC/EI-MS
1881	Hexanal, heptanal in blood	Development of headspace SPME w/ on-fiber derivatization for determination of hexanal and heptanal in human blood *J Chromatogr, B: 813, #1-2, 47-52* Deng, C. H.; Li, N.; Zhang, X. M.*	65µm PDMS-DVB 8min @ 60°C PFBHA derivatives headspace	GC-MS
2585	**TAMEM, MTBE, ETBE and in urine**	**Determination of low level methyl tert-butyl ether, ethyl tert-butyl ether and methyl tert-amyl ether in human urine by HS-SPME GC-MS** ***ANAL. CHIM. ACTA: 581,#1, 53-62 (02 JAN 2007)*** **Scibetta, L.; Campo, L.; Mercadante, R.; Foa`, V.; Fustinoni, S.**	**headspace 65µm PDMS-DVB**	**GC-MS**
1882	Methyl tert-butyl ether in blood	Identification and elimination of polysiloxane curing agent interference encountered in the quantification of low-picogram per milliliter methyl tert-butyl ether in blood by SPME headspace analysis *Anal. Chem, 77,#9, 2912-29-19.* Blount, Benjamin C.; Chambers, David M.; Hughes, T.; Mauldin, J.; McElprang, David	headspace	GC-MS
1883	Ephedrine in urine	SPME coupled w/ ion mobility spectrometry for the analysis of ephedrine in urine *J. Sep. Sci.28. #7,612-618* Lokhnauth, John K.; Snow, Nicholas H.	immersion sampling	IMS
1884	Ehtanol in biological fluids	Determination of ethanol in human blood and urine by automated headspace SPME and capillary GC *Anal. Chim. Acta, 522, #2, 163-168* De Martinis, B.; Martins R., Maria A.; Santos M., Carmen C.	headspace	GC
1885	Aldehydes in blood	A simple, rapid and sensitive method for determination aldehydes in human blood by GC-MS and SPME with on-fibre derivatization. *Rapid Communications in Mass Spect, 18, #15, 1715-1720* Deng, C. H.; Zhang, X. M.*	PFBHA derivative headspace	GC-MS
2164	**Odorous compounds in**	**Identification of components responsible for the odor of cigar smoker's breath** ***J Ag Food Chem, 54, #2, 497-501 (2006)***	**headspace**	**GC-MS**
2218	**Hydrocarbons in breath**	**SPME for analysis of alkanes and aromatic hydrocarbons in human breath** ***J. Chromatogr. B, 826, #1-2,69-74 (2005)*** **Yu, Hao; Xu, Liang; Wang, Ping**		**GC**

1886	Acetone in human breath & plasms	Determination of acetone in human breath by GC-MS and SPME with on-fiber derivatization *J. Chromatogr. B , 810, #2, 269-275* Deng, Ci; Yu, X; Zhang, J; Zhang, W Zhang, X	65µm PDMS-DVB PFBHA derivative 4 min extract agitated	GC-MS
1887	Breath marker in blood & breath	Impact of inspired substance concentrations on the results of breath analysis in mechanically ventilated patients *Biomarkers, 10, #2-3, 138-152* Schubert, J.; Miekisch, W.; Birken, T.; Geiger, K.; Noelge-Schomburg, G	headspace	GC-MS
1888	Flavins	Capillary LC determination of cellular flavins J. Chromatogr. A, 1053, #1-2, 71-78 Jia, Li; Tanaka, Nobuo; Terabe, Shigeru	in-tube silica-ODS	LC-MS
1889	Protein binders	Study of ligand-receptor binding using SPME: Investigation of receptor, free, and total ligand concentrations *J of Proteome Res, 4, #3, 789-800* Musteata, Florin Marcel; Pawliszyn, Janusz	restricted access molecularly imprinted immobilized antibodies	LC-MS
1890	Sterols in serum samples	Determination of sterols in biological samples by SPME with on-fiber derivatization and GC/FID *Anal. Bioanal. Chem., 381, #8, 1576-1583* Domeno, Celia; Nerin, Cristina; Ruiz, Barbara	BSTFA derivative headspace	GC-FID
1891	Basic drugs in serum	Poly (methacrylic acid-ethylene glycol dimethacrylate) monlithic capillary for intube SPME coupled to HPLC and its application to determination of basic drugs in human serum *Anal. Chim. Acta, 523, #2. 251-258* Da, Shi-Lu; Fan, Yi; Feng, Yu-Qi; Shi, Zhi-Guo	polymethacrylate coated tube	HPLC-UV
1892	Volatiles from Chinese medicine	Analysis of Rhioxma Curcumae Aeruginosae volatiles by SPME w/GC-MS *Zeitschrift fuer Naturforschung Section C J of Biosciences 59, #7-8, 533-537* Sha, Yuri F.; Shen, Shun; Duan, Geng L.	headspace	GC-MS
2754	**BTEX in urine**	**Comparison between dynamic headspace and headspace SPME for gas chromatography of BTEX in urine** ***ARH. HIG. RADA TOKSIKOL. 58, #4, 421-427 (01 DEC 2007)*** **Karaconji, I. B.; Skender, L.**	**headspace**	**GC-PID**
1893	BTEX in blood	Analytical method for evaluation of exposure to benzene, toluene, xylene in blood by GC preceded by SPME *J Chromatogr B, 809, #1, 183-187* Alegretti, Ana Paula; Thiesen, Flavia V.; Maciel, Gisele	headspace	GC
1894	1,2,3,4-tetrachloro-bezene in body residue	Chronic toxicity and body residues of the nonpolar narcotic 1,2,3,4-tetrachlorobenzene in Chironomus riparius *Env Toxicology and Chem, 23, #8, 2022-2028* Leslie, Heather A.; Kraak, Michiel; Hermens, Joop L.	headspace	GC
2889	**Bisphenol A cyanobacteria culture media**	**Application of SPME to the determination of alkylphenols and bisphenol A in cyanobacteria culture media** ***Anal. Bioanal. Chem. 391, #1, 425-432 (May 2008)*** **Baptista, M.; Basto, M.; Carvalho, P.; Stoichev, T,; Vasconcelos, M.**	**65µm CW-DVB headspace** **sat. salt**	**GC-FID**
1895	Chlorobenzene in body residue	Baseline toxicity of a chlorobenzene mixture and total body residues measured and estimated with SPME *Env Toxicology and Chemistry, 23, #8, 2017-2021* Leslie, Heather A.; Hermens, Joop L. M.; Kraak, Michiel H. S.	headspace	GC
1896	Chlorinated bisphenol A in plasma	Use of SPME followed by on-column silylation for determining chlorinated bisphenol A in human plasma by GC-MS *J Chromatogra, B, 817, #2, 167-172* Del Olmo, M.; Gonzalez-Casado, A.; Suarez, B.; Taoufiki, J. Vilchez, J.L.; Zafra, A.	85µm polyacrylate BSTFA derivative	GC-MS-SIM

Toxicology

2633	**Review Trends**	**Application of solid-phase microextraction in analytical toxicology** ***Anal. Bioanal. Chem. 388, #7, 1393-1414 (August 2007)*** **Pragst, Fritz**		
		Microextraction of drugs		

639	Drugs	*J. Chromatogr.,A, 922(2000) 17-63* Lord, H., Pawliszyn, J.	review article	
912	Drugs	High-temperature SPME procedure for the detection of drugs by GC-MS *J. Chromatogr. B (2000) 745(2), 399-411* Staerk, U., Külpmann, W.	85µm polyacrylate 10min @200°C headspace acetic anhydride-pyridine	GC-MS
640	Drugs in body fluids	Solid phase microextraction in biomedical analysis *J. Chromatogr.,A, 902(2000) 167-194* S. Ulrich	review article	
641	Volatile, semivolatiles in biological fluids	Headspace SPME procedures for gas chromatographic analysis of biological fluids and materials. *J. Chromatogr.,A, 902(2000) 267-287* Mills, G., Walker, V.	review article	GC
847	Volatile, in urine	Headspace SPME profiles of volatile compounds in urine: Application to metabolic investigations *J. Chromatogr.,B 753(2001) 259-268* Mills, G., Walker, V.	75µm Carboxen/PDMS headspace pH <4 & >9	GC-MS
642	Hydrocarbon mixture in water	Accessing the aquatic toxicity of complex hydrocarbons mixtures using SPME *Toxicol. Lett. 2000, 112-1113, 273-282* Parkerton, T, Sone, M., Letiski, D.		
643	Methadone in saliva	SPME in the determination of methadone in human saliva by GC-MS *J. Anal Toxicol (2000), 24(2), 93-96* Dos Santos Lucas, A., Bermejo, A., Fernandez, P., Tabernero, M	100µm PDMS 30 min	
29	Methadone in urine	Gas Chromatographic Analysis of Methadone in Urine Samples after Solid Phase Microextraction J. Microcolumn Sep. 6: 577-581 (1994) Chiarotti, M., Marsili, R.	100µm PDMS 15 min immersion pH 7.7	GC-MS
644	Methadone, EDDP in human hair	Use of SPME for the determination of methadone and EDDP in human hair by GC-MS *Forensic Sci. Int (2000) 107(1-3), 225-232* Luca, A., Bermejo, A., Tabernero, M., Fernadez, P., Strano-Rossi, S.	100µm PDMS 30 min, immersed	GC-MS
563	Methadone, EDDP in plasma	Use of SPME for the determination of Methadone and its main metabolite, EDDP, in plasma by GC-MS J. Anal. Toxicol. 24, 66-69 (2000) Bermejo, A., Seara, R., dos Santos Lucas, A., Tabernero, M., Fernandez, P., Marsili, R.	100µm PDMS 30 min immersion 1:4 delution @ pH 9	GC-MS
474	Anorectics in urine	SPME and GC analysis of anorectic compounds in human urine J.Microcolumn Sep. 1997, ((4), 249-252 Chiarotti, M. Strano-Rossi, S., Marsili, R.		GC-MS
2891	**Tetramethylene disulfotetramine in foods**	**Analysis of tetramethylene disulfotetramine in foods using SPME gas chromatography-mass spectrometry** ***J. Chromatogr. A 1192, #1, 36-40 (May 23 2008)*** **De Jager, Lowri S.; Diachenko, Gregory W.; Perfetti, Gracia A.**	**70 µm CW/DVB headspace**	**GC/MS**
2715	**Tetramine in human urine**	**Determination of tetramethylenedisulfotetramine in human urine with GC-flame thermionic detection coupling with direct immersed SPME** ***Forensic Sci. Int. 159, #2-3, 168-174 (2006-06-02)*** **Zeng, D.; Chen, B. ; Yao, S. Z.; Ying, J. Y.**	**85µm polyacrylate immersed**	**GC-FPD**
645	Tetramine	Rapid detection of tetramethylenedisulfotertramine in human blood by SPME-GC	100µm PDMS	GC-FPD

	in blood	*Anal. Chim. Acta (2000), 404(2), 329-334* Luan, T., Li, G., Zhao, M., Zhang, Z. SPME-GC-MS method for the determination of		
930	Anesthetics in urine	inhalation anesthetics in urine *J. Chromatogr. B (1999), 732(1) 115-125* Poli, D., Bergamaschi, E., Maini, P., Andreoli, R., Mutti, A.	50:30µm DVB/Carboxen/ PDMS 20min headspace 10% NaCl	GC-MS
65	Anesthetics in human blood	Detection of Ten Local Anesthetics in Human Blood Using Solid Phase Microextraction and Gas Chromatography Jpn. J. Forensic Toxicol. 13 (2): 182-188 (1995) Kumazawa, T., Lee, X., Sato, K., Seno, H., Ishii, A., Suzuki, D.	100µm PDMS 100°C, 40 min headspace perchloric acid added	GC-FID
144	Anesthetics in blood	Extraction of Local Anesthetics from Human Blood by Direct Immersion-SPME Chromatographia 43: 59-62 (1996) Kumazawa, T., Sato, K., Seno, H., Ishii, A., Suzuki, O.	100µm PDMS 40 min immersion	GC-FID
342	Anesthetics in human blood	Simple Analysis of Local Anesthetics in Human Blood Using Headspace SPME and GC-MS-Electron Impact Ionization Selected Ion Monitoring J. Chromatog. B, 709 (1998), 225-232 Watanabe, T., Namera, A., Yaskiki, M., Iwasaki, Y., Kojima, T.	100µm PDMS 120°C, 45 min headspace NaOH added	GC-MS
475	Nereistoxin in human serum	Simple and Sensitive Analysis of Nereistoxin and its Metabolites in Human Serum using Headspace SPME-GC-MS J. Chromatographic Science 37(3):77-82(1999) Namera,A., Watabe,T., Yashiki,Y., Kojima,T., Urabe,T.	65µm DVB/PDMS 30 min @ 70°C NaCl added, headspace	GC-MS
419	Lidocaine in urine	Direct SPME Combined with Gas and Liquid Chromatography for the Determination of Lidocaine in Human Urine Chromatographia (1998), 47(11/12), 678-684 Koster, E., Hofman, N., DeJong, G .		GC, HPLC
646	Lidocaine in plasma	Determination of lidocaine in plasma by direct SPME combined with GC *J. Chromatogr., B. Biomed Sci. Appl (2000), 739(1), 175-182* Koster, E., Wemes, C., Morsink, J., deJong, G.	65µm PDMS/DVB 10 min immersed salt added	GC
647	Lidocaine in plasma	Evaluation of SPME in combination with GC as a tool for quantitative bioanalysis *J. Microcolumn Sep. 2000, 12(5), 308-315* Abdel-Rehim, M., Bielenstein, M, Arvidsson, T.	Carbowax-DVB pH 9	GC-NPD
420	Organochlorine compounds in blood	Determination of Persistent Organochlorine Compounds in Blood by SPME Extraction and GC-ECD Fresenius' J. Anal. Chem. (1998), 361(2), 192-196 Roehrig, L., Puettmann, M., Meisch, H.		GC-ECD
141	Chloroethers in biological samples	Determination of Chloroethenes in Environmental Biological Samples Using GC Coupled with SPME Chromatographia 42(5/6): 313-17 (1996) Xu, N., Vandegrift, S., Sewe, G.		
67	Solvent thinners in urine, blood	Simple Analysis of 5 Thinner Components in Human-Body Fluids by Headspace SPME J. Legal Medicine 107: 310-313 (1995) Lee, X., Kumazawa, T., Sato, K.	100µm PDMS 80°C, 5 min headspace	GC-FID
877	Solvent thinners in urine, blood	Improved extraction of thinner components from human body fluids by headspace SPME with a Carboxen/PDMS coated fiber *Leg. Med. 1(1999) 231-237* Lee, X., Kumazawa, T., Kondo, K., Furuta, S., Sato, K.	65µm Carboxen/PDMS	
648	Volatile organics in blood	Determination of volatile organic compounds in blood by headspace SPME-GC *Weosjemg Uamkoi 2000, 29(1), 37-39*	100µm PDMS 10 min	GC-FID

		Hao, S., Kang, J., Zhou, S, Cui, J., Qi, Q., Han, K.		
649	Volatile organics in blood	The use of SPME in conjunction with benchtop quadropole MS for the analysis of volatile organic compounds in human blood at low ppt. Levels *J. Chromatogr. Sci. (2000), 38(2), 49-54* Cardinali, F., Ashley, D., Wooten, J., McCraw, J., Lemire, S.	100µm PDMS 10 min, headspace	GC-MS
795	Benzene in urine	Urinary benzene as a biomarker of exposure among occupationally exposed and unexposed subjects. *Carcinogenesis (Oxford) (2001) 22(2), 279-286* Rappaport, S; Bechtold, W; Dosemeci, M; Fustinoni, S Guilan, Li; Hayes, R		GC-MS
2386	**Organochlorine pesticides, PCBs in human serum**	**Determination of organochlorine pesticides and PCBs in human serum using headspace SPME-GC-ECD** ***J. Chromatogr., B: 846, #1, 298-305 (2007-02-01)*** **Lopez, R.; Goni, F.; Etxandia, A.; Millan, E.**	**100µm PDMS 50min @ 85°C headspace**	**GC-ECD**
914	PAHs in blood serum	Determination of PAHs in human blood seum by proteolytic digestion-direct immersion SPME *Analytica Chimica Acta (1999) 396(2-3) 303-308* Poon, K., Lam, P., Lam, M.		
887	PAHs	Quantification of the PAH (Polycyclic Aromatic hydrocarbons) metabolites as a biomarker for PAH exposure. *Abstracts of Papers ACS (2001) 221(1-2) ANYL117* Walcott, C; Smith, C; Patterson, D; Maggio, V; Huang, W; Grainger, J		
		Analysis of Inflammable Substances in Blood Using		
146	HydrocarbonsC9-C20 blood in blood	Head Space-SPME and Chemical Ionization and Chemical Ionization Selected Ion Monitoring Jpn. J. Forensic Toxicol. 13 (2): 189-194 (1995) Iwasaki, Y., Yahiki, M., Nagsawa, N., Kojima, T., Miyazaki, T.	100µm PDMS 10min.@90C NaOH added headspace	GC-MS
476	Flammables blood, urine	Analysis Method of Flammables in Blood by using headspace- SPME and Chemical ionized MS Detection Jpn. J. Legal. Med (49 Append): 80(1995) Iwasaki,Y., Yashiki,M., Nagasawa,N., Miyazaki,T., Kojima,T	100µm PDMS 10 min @ 90°C headspace	GC-MS
195	Cresol, phenols in human blood	Detection of Cresol Isomers and Phenol in Human Whole Blood by Headspace SPME and Capillary GC Jpn. J. Forensic Toxicol. 15 (1): 21-28 (1996) Lee, X., Kumazawa, T., Furuta, S., Kurosawa, T., Akiya, K., Skiya, I., Sato, K.	85µm polyacrylate 30 min @ 100°C NaCl added headspace	GC-FID
420	Chlorophenols in urine	Application of SPME and GC-MS for the Determination of Chlorophenols in Urine J. Chromatogr. B: Biomed. Sci. Appl. (1998), 707(1+2), 91-97 Lee, M., Yeh, Y., Hsiang, W., Chen, C.	85um polyacrylate 50 min, immersed pH 1	GC-MS
583	4-Chlorophenol in urine	Total 4-chlorophenol determination in urine samples of subjects exposed to chlorobenzene, using SPME and GC-MS. J-High-Resolut-Chromatogr. Jul 1999; 22(7): 427-428 Guidotti,-M; Ravaioli,-G; Vitali,-M	85µm polyacrylate 30 min salt added	GC-MS
2530	**O-cresol, toluene in urine**	**Comparison between urinary o-cresol and toluene as biomarkers of toluene exposure** ***J. Occup. Environ. Hyg. (USA) 4, #1, 1-9 (Jan. 2007)*** **Fustinoni, S.; Mercadante, R.; Campo, L.; Scibetta, L.; Valla, C.; Consonni, D.; Foa, V.**	**headspace**	**GC-MS**
2788	**PCBs in biological tissue**	**Immersed SPME to measure chemical activity of lipophilic organic contaminants in fatty tissue samples** ***Chemosphere 71, #8, 1502-1510 (April 2008)***		

		Mayer, P.; McLachlan, M..; Ossiander, Lia; Reichenberg, F.		
		Sample pretreatment method for the determination of PCBs in bird livers		
2712	**PCBs in bird liver**	**using ultrasonic extraction followed by headspace SPME-GC-MS** ***J. Chromatogr. A 1124, #1-2, 97-105 (2006-08-18)*** **Lambropoulou, D. A.; Konstantinou, I. K.; Albanis, T. A.**	**headspace**	**GC-MS**
477	PCBs in human serum	Determination of PCBs in human blood serum by SPME Cheosphere, 1999, 39(6), 905-912 Poon, K., Lam, P., Lam, M.		GC-ECD
68	Valproic acid in human plasma	Solid Phase Microextraction for the Determination of the Free Concentration of Valproic Acid in Human Plasma by Capillary GC J. Chromatogr. B 673: 299-305 (1995) Krogh, M., Johansen, K., Gonnesen, F., Rasmussen, K.	100µm PDMS 3 min immersion pH 2	GC-FID
69	Nicotine, cotinine in urine	Rapid Analysis of Nicotine and Cotinine in Urine Using Head Space Solid Phase Microextraction and Selected Ion Monitoring Jpn. J. Forensic Toxicol. 13 (1): 17-24 (1995) Yashiki, N., Magasawa, T., Kojima, T., Miyazaki, T., Iwasaki, Y.	100µm PDMS 80°C, 5 min headspace	GC-MS
478	Cartap in human serum	Simple Analysis of Cartap and Its Metabolites Using Solid Phase Microextraction and GC/MS Jpn. J. Forensic Toxicol. 16(2):142-143(1998) Namera,A., Watanabe,T., Yashiki,M., Iwasaki,Y., Kojima,T.	65µm DVB/PDMS 30 min @ 70°C immersed, NaOH added	GC-MS
479	Nicotine, cotinine in urine	Analysis of Nicotine and Cotinine in biological fluid sample by SPME Jpn. J. Legal. Med (49 Append): 80(1995) Iwasaki,Y., Yashiki,M., Nagasawa,N., Miyazaki,T., Kojima,T.	100µm PDMS 80°C, 5 min headspace	GC-MS
480	Stimulants in blood & urine	Analysis of Stimulants and Narcotics Bunseki 10:816-822(1995) Yashiki,M., Kojima,T.	100µm PDMS 20 min @100°C 3pH, (NH4)2SO4,NaCl headspace	GC-NPD
918	Stimulants urine, hair samples	Determination of stimulants in human urine and hair samples by polypyrrole coated capillary in-tube SPME coupled w/ LC-MS *Talanta 2001, 54(4) 655-672* Wu, J., Lord, H., Pawliszyn, J.	polypyrrole capillary	LC-MS
650	Fenfluramine, amphetamine, methamphetamine in blood	Simple and simultaneous analysis of fenfluramine, amphetamine, and methamphetamine in whole blood by GC-MS after headspace SPME and derivatization *Forensic Sci. Int. 2000, 109(3), 215-223* Namera, A., Yahiki, M., Liu, M., Okajima, K., Hara, K., Imamura, T., Kojima, T.	15 min, headspace	GC-MS
808	Amphetamine, methamphetamine in blood	Highly sensitive analysis of methamphetamine and amphetamine in human whole blood using headspace GC-MS *Forensic Sci. Int. 2000, 116(1), 15-22* Namera, A., Kojima, T, Okajima, K., Tskue, I., Yashiki, M.	30 min @ 90°C headspace	GC-MS EI-SIM
842	4-(4-methoxybenzyl) pyrimidine in tablets	Synthesis of 4-methyl-5-arylpyrimidines and 4-arylpyrimidines: route specific markers for the Leuckardt preparation of amphetamine, 4-methoxyamphetamine and 4-methylthioamphetamine. *Forensic Sci Intl (2001) 115(1-2) 53-67* Kirkbride, K.; Ward, A; Jenkins, N..; Klass, G.; Coumbaros, J.	headspace	GC-MS
866	Impurities from drug	Application of solid-phase microextraction to the profiling of an illicit drug: Manufacturing impurities in illicit 4-methoxyamphetamine *J.Forensic Sciences (1999)44(6), 1237-1242* Kirkbride, K. Paul; Coumbaros, John C.; Klass, Gunter		

2900	**Volatiles from**	**Use of volatile organic components in scat to identify Canid species** ***Journal of Wildlife Management 72, #3, 792-797 (APR 2008)***	**headspace**	**GC-FID**
	Canid species	**Burnham, Eric; Bender, Louis C.; Eiceman, G.; Pierce, K.; Prasad, S.**		
481	Amphetamines, ecstasy in powder & tablets	SPME/Capillary GC for the profiling of confiscated ecstasy and amphetamine Chromatographia, (1999) 50 (3/4), 247-252 Kongshaug, K., Pedersen-Bjergard, S., Krogh,M., Rasmussen, K	65µm DVB/PDMS headspace/immersed 0.1M acetate buffer pH 5	GC-NPD
482	Ecstasy and amphetamines in urine	Automated determination of ecstasy and amphetamines in urine by SPME and capillary GC after polylchloroformate derivatization. J. Pharm. Bomed. Anal. (1999), 19(3+4), 463-475 Ugland, H., Kogh, M., Rasmussen, K.	100µm PDMS 16 min, immersed pH10	GC-NPD or MS
927	Amphetamine, methamphetamine dimethamphetamine in urine	Determination of amphetamine, methamphetamine and dimethamphetamine in human urine by SPME-GC-MS *J. chromatogr. B (1998), 716(1-2) 359-365* Myung, S., Min, H., Kim, S., Kim, M., Cho, J., Kim, T.	100µm PDMS 30 min, immersed pH 12.4 KOH, NaCl added stirred	GC-MS
562	Amphetamines in urine	Rapid analysis of amphetamine, methamphetamine, MDA, and MDMA in urine using SPME, direct On-Fiber derivatization, and analysis by GC-MS J. Anal. Toxicol. 24, 11-16 (2000) Jurado, C., Gimenez, M., Soriano, T., Menedez, M., Repetto, M.	100µm PDMS 10 min @ 100°C headspace, 2N NaOH 20 min @ 60°C on fiber trifluoroacetic anhydride	GC-MS
483	Amphetamines in urine & blood	Rapid Analysis Amphetamines in Blood Using SPME 20th Japan Biomedical Mass Spectrometry:127-130(1995) Yashiki,M., Kojima,T.	100µm PDMS 5 min @ 80°C immersed, NaOH added	GC-MS
484	Amphetamines in urine & blood	Detection of Amphetamines and Inflammable Compounds in Biological Materials Using GC/MS and SPME Jpn. J. Forensic Toxicol. 12(2):120-121(1994) Yashiki, M., Kojima,T., Miyazaki,T.	100µm PDMS 5 min @ 80°C immersed, NaOH added	GC-MS
188	Amphetamines in urine	Quantitative and Qualitative Analysis of MDMA, MDEA, MA, and Amphetamine in Urine by Headspace/SPME and GC/MS Forensic Sci. Intl. 83 (3): 161-166 (1996) Centini, F., Masti, A., Comparini, I.	100µm PDMS 5 min @ 90°C headspace	GC-MS
70	Amphetamines in urine	Detection of Amphetamines in Urine Using Head Space SPME and Chemical Ionization Selected Ion Monitoring Forensic Sci Intl., 76(2), 169-177 (1995) Yashiki, M., Kojima, T., Miyazaki, T., Nagasawa, N., Iwasaki, Y., Hara, K.	100µm PDMS 5 min 80°C stirring	GC-FID
173	Amphetamines in blood	Rapid Analysis of Amphetamines in Blood Using Headspace SPME and Selected-Ion Monitoring Forensic Sci. Intl. 78 (2): 95-102 (1996) Nagasawa, N., Yashiki, M., Iwasaki, Y., Hara, K., Kojima, T.	100µm PDMS 5 min @ 80°C heptafluorobutyr- amide derivative	GC-SIM-MS
327	Amphetamines in urine	Method Optimization for the Analysis of Amphetamines in Urine by SPME Anal. Chem. 69 (19): 3899-3906 (1997) Lord, H., Pawliszyn, J.	100µm PDMS 15-60 min headspace stirring	GC-FID
192	Amphetamines in urine	Simple Clean-up of Methamphetamine and Amphetamine in Human Urine by Direct-Immersion SPME Jpn. J. Forensic Toxicol. 14 (3): 228-232 (1996) Ishii, A., Seno, H., Kumazawa, T., Suzuki, O., Nishikawa, M., Watanabe, K., Hattori, H.	100µm PDMS 30 min @ 65°C Na2CO3 added immersed	GC-NPD

145	Amphetamines in urine	Application of SPME Technique for the Detection of Urinar Methamphetamine and Amphetamine by GC J. Can. Soc. Forensic Sci. 29(2): 43-48, (1996) Ameno, K., Fuke, C., Ameno, S., Kinoshita, H., Ijirei, I.		GC
2744	**Impurities in metamphetamine**	**Identification of impurities and the statistical classification of methamphetamine using headspace SPME-GC-MS** ***Forensic Sci. Int. 160, #1, 44-52 (2006-06-27)*** **Kuwayama, K.; Tsujikawa, K.; Miyaguchi, H.; Kanamori, T.; Iwata, Y.; Inoue, H.; Saitoh, S.; Kishi, T.**	**Car/DVB 30/50µm 30 min @ 85°C headspace**	**GC-MS**
421	Amphetamines, methamphetamine in hair	Determination of Amphetamine and Methamphetamine in Human Hair by Headspace SPME and GC-NPD J. Chromatogr. B: Biomed. Sci. Appl. (1998), 707(1+2) 99-104 Koide, I., Noguchi, O., Okada, K., Yokoyama, A., Oda, H., Yamamoto, S., Kataoka, H.	100µm PDMS 15 min @45°C immersed, NaOH added	GC-NPD
194	Methamphetamine, cocaine in urine	Rapid Analysis of Methamphetamine and Cocaine in the Urine of Drug Abusers with SPME Chromatography 18 (3): 185-188 (1996) Makino, Y., Takgi, T., Ohta, S., Hirobe, M.	100µm PDMS 15 min immersion pH 10.5	GC-FTD
198	Amphetamines in urine	Screening Procedure for 21 Amphetamine-Related Compounds in Urine Using SPME and Gas Chromatography-Mass Spectrometry J. Chromatogr. Sci. 36: 1-7 (1998) Battu, C., Marquet, P., Fauconnet, A., Lacassie, E., Lachatre, G.	100µm PDMS 80°C, 10 min headspace salt added	GC-MS
566	Amphetamines in urine	Automated drug analysis by in-tube SPME-LC-MS Chromatography. Jun 1999; 20(2): 142-145 Kataoka,-H; Lord,-HL; Pawliszyn,-J	60cm x 0.25mm ID tube Omegawax 250	LC-MS electrospray
651	Amphetamines in urine	Simple and rapid determination of amphetamine, methamphetamine and their methylenedioxyl derivatives in urine by automated in-tube SPME coupled with LC-electro- spray ionization mass spectrometry *J. Anal. Toxicol (2000), 24(4), 257-265* Kataoka,-H; Lord,-HL; Pawliszyn,-J	In-tube Omegawax 250 60cmx0.25mmi.d.x0.25µ m	LC-MS electrospray
652	Amphetamines methamphetamine in serum	Determination of amphetamine and methamphetamine in serum via headspace derivatization SPME-GC-MS *J. Chromatogr. A, 896, (2000) 265-273* Lee, M., Song, Y., Hwang, B., Chou, C.	PDMS 40 min, headspace pH 9.5 heptafluorobutyric anhydride ethyl acetate	GC-MS
831	Amphetamines	On-fiber derivatization for direct immersion SPME part I: acylation of amphetamine with pentafluorobenzoyl chloride *J. Sep. Sci. (2001) 24(2), 116-122* Koster, E; Bruins, C.; Wemes, C; De Jong, G.		
765	Beta blockers in urine, serum	Determination of automated In-tube SPME-LC-MS for drug analysis *J.MIcroSeparation,(2000-9), 12(9), 493-500* Kataoka,-H; Lord,-HL; Pawliszyn,-J	In-tube Omegawax 250	LC-MS electrospray
794	Beta blockers in urine, serum	Determination of beta-blockers by HPLC w/SPME from urine and plasma samples *Analytical Letters (2001) 34(1), 91-101* Tanabe, S; Shimokawa, K; Matsuda, Y.,Katayama, M; Daimon, H,Hara. I; Kaneko, S; Sato, T.	85µm polyacrylate	HPLC
71	Amphetamines, alcohols in urine, serum	Comparison of New Solid Phase Extraction Methods for Chromatographic Identification of Drugs in Clinical Toxicology Analysis	100µm PDMS, 85µm polyacrylate	GC-FID

		Degel, F., Weidemann, G.	60°C, 15 min headspace	
485	Amphetamines in biological fluids	Some Problems of Detecting Amphetamines in Biological Materials by using Triage Pract. Forens. Med. 40:99-102 (1997) Watanabe,T., Namera,A., Yashiki,M., Iwasaki,Y., Kojima,T.	100µm PDMS 5 min @ 80°C CaCO3 added headspace	GC-MS
234	Drug Summary	Analysis of Drugs and Poisons in Legal Medicine J. Mass Spectrom. Soc. Jpn. 44: 321-333 (1996) Suzuki, O., Seno, H., Ishii, A.	Various fibers & conditions	
79	Drugs of abuse in urine	Determination of Drugs of Abuse Using SPME (German) Labor-Med. 18 (2): 112-118 (1995) Singer, K., Wenz, B., Seefeld, V., Speer, U.	100µm PDMS, 85µm polyacrylate 40°C, 20 min immersion, stirring	GC-MS
2541	**Cocaine in plasma**	**Determination of cocaine and cocaethylene in plasma by SPME-GC-MS** ***J. Chromatogr., B: 845, #1, 90-94 (2007-01-01)*** **Alvarez, I.; Bermejo, A. M.; Tabernero, M. J.; Fernandez, P.; Lopez, P**	**headspace**	**GC-MS**
2534	**Cocaine in polymethyl methacrylate**	**Evidence on unusual way of cocaine smuggling: Cocaine-polymethyl methacrylate (PMMA) solid solution-study of clandestine laboratory samples** ***FORENSIC SCI. INT. 169, #2-3, 210-219 (04 JUL 2007)*** **Gostic, T.; Klemenc, S.**		**GC-MS**
81	Cocaine in urine	Detection of Cocaine in Human Urine by SPME and Capillary GC with Nitrogen-Phosphorus Detection Jpn. J. Forensic Toxicol. 13 (3): 207-210 (1995) Kumazawa, T., Watanabe, K., Sato, K., Seno, H., Ishii, A., Suzuki, O.	100µm PDMS 30 min immersion, stirring NaF added	GC-FPD
2210	**Cocaine from coca leaves**	**Focused microwave-assisted extraction combined with SPME-GC-MS for the selective analysis of cocaine from coca leaves** ***J. Chromatogr. A, 1112, #1-2,127-132 (2006)*** **Bicchi, C.; Bieri, Stefan; Christen, P.; Ilias, Yara; Veuthey, J.**	**100µm PDMS immersion**	**GC-MS**
653	Volatiles from cocaine, heroin	SPME/GC-MS characterization of volatiles associated with cocaine and heroin *Am. Lab, Sept. 2000, 32-34* Vu, D., Nicholas, P. Erikson, C.	30/50Carboxen/DVB/PDMS 85µm polyacrylate 90 min headspace	GC-MSD
486	Methyl Benzoate on currency	Field and Laboratory comparison of the sensitivity and reliability of cocaine detection on currency usinç chemical sensors, humans, K-Os and SPME/GC/MS Proceeding SPIE-Int. Soc. Opt. Eng, 3576:41-46 (1999) Furton, K., Hsu, Y., Luo, T., Norelus, A., Rose, S.		GC-MS-MS
907	Daidzein, isoflavon aglycones genistein in urine	Detection of the isoflavone aglycones genistein and daidzein in urine using SPME-HPLC-electrospray MS *J. Chromatogr. B (2001), 759(1) 33-41* Satterfield, M., Black, D., Brodbelt, J.		LC-MS
164	Barbiturates in water	Determination of Barbiturates by SPME and Ion Trap GC-MS J. Chromatogr. A 777: 275-282 (1997) Hall, B., Brodbelt, J.	65µm Carbowax/DVB 20 min immersion, stirring	GC-MS
572	Benzoylecgonine in urine	Aqueous phase hexyl chloroformate derivatization and SPME determination of benzoylecgonine in urine by GC-Quadrapole ion trap mass spectrometry J-Forensic-Sci. May 1999; 44(3): 527-534 Hall,-BJ; Parikh,-AR; Brodbelt,-JS	100µm PDMS 10 mi. @ 55°C hexyl chloroformate derivative	GC-EMIS
224	Barbiturates in urine and serum	Determination of Barbiturates by SPME and Capillary Electrophoresis Anal. Chem. 69: 1217-1222 (1997) Li, S., Weber, S.	polyvinyl coated metal rod 5, 10, 30 min	electrophoresis 230nm
		Detection of Meperidine (Pethidine) in Human Blood and Urine		

80 596	Meperidine Barbiturates in urine/serum	Artificial receptor-facilitated SPME of barbiturates. Anal-Chem. 1 Jun 1999; 71(11): 2146-2151 Li,-S; Sun,-LF; Chung,-Y; Weber,-SG	100µm PDMS PVC/steel rod 5 min immersed	GC-FID CE
654	Meperidine in urine and blood	Detection of Meperidine (Pheonthiazin) in human blood and urine by Headspace SPME and Gas Chromatography *Jpn. J. Forensic Toxicol. 13 (3): 211-215 (1995)* Seno, H., Kumazawa, T., Ishii, A., Nishikawa, M., Hattori, H., Suzuki, O.	100°C, 30 min headspace salt & NaOH added	GC
196	Phencyclidine in blood and urine	Simple Extraction of Phencyclidine from Human Body Fluids by Headspace SPME Chromatographia 43 (5-6): 331-333 (1996) Ishii, A., Kumazawa, T., Watanabe, K., Hattori, H., Suzuki, O.	100µm PDMS 90°C, 30 min headspace	GC-surface ionization detector
487	Diphenylmethane blood and urine	Simple Analysis of Diphenylmethane Antihistaminics and their Analogous in bodily Fluids by headspace SPME capillary gas chromatography J. Chromatogr. Sci. 35:275-279(1997) Nishikawa,M., Seno,H., Ishii,A. Suzuki,O., Kumazawa,T., Watanabe,K., Hattori,H.	100µm PDMS 10 min @ 98°C 10N NaOH	GC-FID
2260	**Antioxidant in martinis**	**Shaken not stirred: an analytical assay for antioxidant activity in martinis using quenched luminol chemiluminescence and SPME-GC-MS** ***Abstracts of Papers Am Chem Society 229, #1, U394 (2005)*** **McCrum, Erin C.; Shear, Ruth I.**		**GC/MS**
2261	**Organics in urine**	**Comparison of different SPME fibers for the GC-MS analysis of trace organics in a biological matrix (urine).** ***Abstracts of Papers Am Chem Society 229 #1, U353 (2005)*** **Eggert,M.; Brown,P.; Evola,M.; Goodwin,T.; Rasmussen,L.;Schulte, B.**		**GC/MS**
179	Ethanol in blood	Blood Alcohol Determination with Automated SPME: A Comparison with Static Headspace Sampling J. Can. Soc. Forens. Sci. 30(1): 7-12 (1997) Penton, Z.	65µm Carbowax/DVB 3 min headspace salt & NaF added	GC-FID
191	Ethanol in blood, urine	Detection of Ethanol in Human Body Fluids by Headspace SPME/Capillary GC Chromatographia 43 (7-8): 393-397 (1996) Kumazawa, T., Seno, H., Lee, X., Ishii, A., Suzuki, O., Sato, K.	65µm Carbowax/DVB 70°C, 10 min headspace, (NH4)2SO4	GC-MS
418	Ethanol in blood, urine	Improved Extraction of Ethanol from Human Body Fluids by Headspace SPME with a Carboxen/PDMS Fiber Chromatographia (1998), 47(9/10), 593-595 Lee, Z., Kumazawa, T., Sato, K., Seno, H., Ishii, A., Suzuki, O.	Carboxen/PDMS	
206	Antihistamine drugs in blood, urine	Simple Analysis of Diphenylmethane Antihistamines and Their Analogue in Bodily Fluids by Headspace SPME-Capillary Gas Chromatography J. Chromatogr. Sci. 35 (6): 275-279 Nishikawa, M., Seno, H., Ishii, A., Suzuki, O., Kumazawa, T., Watanabe, K., Hattori, H.	100µm PDMS 90°C, 10 min headspace	GC-FID
2719	**Sulfonamide antibiotics in wastewater**	**Determination of sulfonamide antibiotics in wastewater: A comparison of solid phase microextraction and solid phase extraction methods** ***J. Chromatogr., A 1131, #1-2, 1-10 (2006-10-27)*** **Balakrishnan, V. K.; Terry, K. A.; Toito, J.**	**65µm CW/DVB 20 MIN 4.5pH, sat. salt**	**GC**
2648	**Antibiotics in plasma**	**Determination of antibiotic drug concentrations in circulating human blood by means of solid phase micro-extraction** ***Clinica Chimica Acta 386, #1-2, 57-62 (NOV-DEC 2007)*** **Schubert, J.; Miekisch, W.; Fuchs, P.; Scherzer, N.; Lord, H.; Pawliszyn, J.; Mundkowski, R.**		**LC-MS**
		Simultaneous determination of nontricyclic antidepressants in human		

2734	**Nontricyclic antidepressants in plasma**	**plasma by (SPME-LC).** ***J. Anal. Toxicol. 31, #6, 313-320 (Jul-Aug 2007)*** **Silva, B. J. G.; Queiroz, R. H. C.; Queiroz, M. E. C.**		**LC-MS**
2507	**Tricyclic antidepressants in plasma**	**Analysis of tricyclic antidepressant drugs in plasma by means of SPME-liquid chromatography-mass spectrometry** ***J Mass Spectrometry 42, #10, 1342-1347 (OCT 2007)*** **Alves, C.; Santos-Neto, A.; Fernandes, C.; Rodrigues, J.; Lancas, F.**	**65µm PDMS/DVB** **30min @ 30°C** **direct extraction**	**LC-MS**
64	Tricyclic antidepressants in urine	Simple Extraction of Tricyclic Antidepressants in Human Urine by Headspace SPME Jpn. J. Forensic Toxicol. 13 (1): 25-30 (1995) Kumazawa, T., Lee, X., Tsai, M., Seno, H., Ishii, A., Sato, K.	100µm PDMS 100°C, 15 min headspace stirring	GC-FID
95	Tricyclic antidepressants in blood	Detection of Tricyclic Antidepressants in Whole Blood by Headspace SPME-Capillary GC J. Chrom. Sci. 35: 302-308 (1997) Lee, X., Kumazawa, T., Sato, K.	100µm PDMS 100°C, 60 min headspace NaOH added	GC-FID
488	Tricyclic antidepressants in urine, blood	Analysis of Tricyclic Antidepressant and that application for fatal intoxication by Headspace SPME Jpn. J. Legal. Med. 52:69(1998) Watanabe,T., Namera,A., Yashiki,M., Iwasaki,Y., Kojima,T.	100µm PDMS 45 min @ 120°C headspace, NaOH	GC-MS
352	Tetracyclic antidepressants in blood	Simple Analysis of Tetracyclic Antidepressants in Blood Using Headspace SPME and GC-MS J. Anal. Toxicology, Vol. 22 (5), 1998, 396-400 Namera, A., Watanabe, T., Yahiki, M., Iwasaki, Y., Kojima, T.	100µm PDMS 120°C, 45 min headspace NaOH added	GC-MS
655	Antidepressant in urine	Direct coupling of microcolumn liquid chromatography with in-tube SPME for the analysis of antidepressant drugs *Analyst (Cambridge UK) 2000, 125(5), 807-809* Saito, Y., Kawazoe, M, Jinno, K., Nayhashida, M.	In-tube	HPLC
227	Diazepam in serum	Solvent-Modified Solid-Phase Microextraction for the Determination of Diazepam in Human Plasma Samples by Capillary Gas Chromatography J. Chromatogr. B 689: 357-364 (1997) Krough, M., Grefslie, H., Rasmussen, K.	85µm polyacrylate 4 min immersion pH 5.5 1-octanol added	GC-FID or FPD
656	Amitriptyline in human urine	SPME coupled with microcolumn LC for the analysis of amitriptyline in human urine *Chromatographia, (2000 Sept.) 52(5-6) 309-313* Jinno, K., Kawazoe, M., Hayashida, M.		HPLC
371	Benzophenone-3 in water and urine	Determination Benzophenone-3 and Metabolites in Water and Human Urine by SPME and Quadrupole Ion Trap GC-MS Anal. Chimica Acta 371 (1998) 195-203 Felix, T., Hall, B., Brodbelt, J.	65µm Carbowax/DVB 45 min immersion	GC-MS
871	Benzoylecgonine in urine	Aqueous phase hexylchloroformate derivatization and SPME Determination of benzoylecgonine in urine by GC quadrupole ion trap mass spectrometry. *J Forensic Sci (1999) 44(3) 527-534* Brodbelt, Jennifer S.; Hall, Brad J.; Parikh, Aashish R.	100µm PDMS hexyl chloroformate derivative	GC-MS
168	Antidepressants in blood	Solid Phase Microextraction with Capillary GLC and NDPD for the Assay of Antidepressant Drugs in Human Plasma J. Chromatogr. B 696: 217-234 (1997) Ulrich, S., Martens, J.	100µm PDMS 60 min immersion	GC-NDPD
657	Phenothiazines urine, blood	Determination of Phenothiazines in human body fluids by SPME and LC-tandem mass spectrometry *J.Mass Spec. (2000-9) 35(9) 1091-1099* Seno, H., Kumazawa, T., Ishii, A., Hattori, H., Nishikawa, M., Watanabe, K., Suzuki, O.	85µm Polyacrylate 60 min @ 40°C pH 8 stirring	LC-MS

142	Phenothiazines urine, blood	Detection of Some Phenothiazines by Headspace SPME and GC *Jpn. J. Forensic Toxicol. 14: 30 (1996)* Kumazawa, T., Seno, H.,, Ishii, A., Hattori, H., Sato, K., Watanabe, K., Suzuki, O.	100µm PDMS 40 min @ 140°C headspace NaCl added	GC-FID
947	Propranolol	In-Tube Molecularly Imprinted Polymer SPME for the selective Determination of Propranolol *Anal. Chem (2001) 73(11) 2383-2389* Mullett, Wayne M.; Martin, Paul; Pawliszyn, Janusz		
2480	**Furan in plasma, urine**	**Quantification of plasma and urinary levels of furan in healthy individuals *FASEB Journal. 21, #6, A1066 (APR 2007)* Jun, Hee-Jin; Chung, Mi Ja; Park, Young-Sik; Lee, Kwang-Geun; Lee, S.**		**GC-MS**
946	Carbofuran in seum	Application of (SPME) technique for the detection of carbofuran in serum *J. Can. Soc. Forensic Sci(2001) 34(1), 23-26* Ameno, K.; Lee, S-K.; Ameno, S.; Kinoshita, H.; Kubota, T.; Zhang, X.; Ijiri,		
908	Dinitroaniline in blood, urine and water	Headspace SPME and GC determination of dinitroaniline herbiciede s in human blood, urine and environmental water *J. Chromatogr. B. (1998), 714(2), 205-213* Guan, F., Watanabe, K., Ishii, A., Seno, H., Kumazawa, T., Hattori, H., Suzuki, O.	100µm PDMS 30 min @ 70°C headspace NaSO4	GC-ECD
2809	**Pesticides**	**Reliable identification of pesticides using linear retention indices as an active tool in GC-MS analysis *J. Chromatogr. A.1186 (1-2), 430-433 (Apr 4 2008)* Casilli, A.; Dugo, G.; Dugo, Paola; Mondello, L.; Salvatore, Angelo; Tranchida, Peter Quinto**		**GC-MS**
2636	**Pesticides in ground water**	**Evaluation of the pesticide contamination of groundwater sampledl over two years from a vulnerable zone in Portuga *J Agri Food Chem 55, #15, 6227-6235 (2007)* Goncalves, C. M.; Silva, J. C. G. E. da; Alpendurada, M. F**		**GC-ECD GC-MS**
2412	**Phenylurea and propanil herbicides in ground water**	**Analysis of phenylurea and propanil herbicides by SPME-LC combined with post-column photochemically induced fluorimetry derivatization and fluorescence detection *Anal. Chim. Acta 593, #2, 157-163 (2007-06-19)* Mughari, A. R.; Parrilla Vazquez, P. ; Martinez Galera, M.**	**60µm PDMS/DVB fluorimetry derivatization**	**HPLC-PIF-FD**
183	Herbicides in water and biological fluids	SPME and GC-ECD Determination of Dinitroaniline Herbicides in Surface Water and Biological Fluids *Jpn. J. Forensic Toxicol. 15 (2): 151-153 (1997)* Prosen, F., Watanabe, K., Ishii, A., Seno, H., Suzuki, O.	100µm PDMS 30 min @ 70°C water @ 90°C blood Na2SO4, headspace	GC-ECD
860	Organochlorine & organophosphorus pesticides in biological fluids	Gas chromatographic determination of organochlorine and organophosphorus pesticides in human fluids using SPME *Analytica Chimica Acta (2001) 433(2) 217-226* Hernandez, F.; Beltran, J.; Egea, S.; Lopez, F. J.; Pitarch, E.		GC/ECD/FPD
66	Organophosphate pesticides in urine, blood	Detection of Organophosphate Pesticides in Human Body Fluids by Headspace SPME and Capillary GC with Nitrogen-Phosphorus Detection *Chromatogrphia 42(3/4): 135-140 (1996)* Lee, X., Kumazawa, T., Taguchi, T., Sato, K., Suzuki, O.	100µm PDMS 100°C, 20 min pH 3 with HCl	GC-NPD
875	Organophosphorus pesticides in whole blood	Optimisation of SPME conditions for headspace analysis of organophophorus pesticides in whole blood *Z Zagadnien Nauk Sadowych, 42(2000) 47-59* Asri, K., Anderson, R.		
2777	**Malathion bait**	**Malathion bait consumption and mortality of Anastrepha suspensa (Diptera : Tephritidae) *Annals of the Entomological Society of America 101, #2, 418-429***	**headspace**	**GC-MS**

		Nigg, H.; Schumann, R.; Rouseff, R.; Smoot, John M.; Fraser,		
103	Malathion in blood	Rapid Analysis of Malathion in Blood Using Head Space Solid Phase Microextraction and Selected Ion Monitoring *Forensic Sci. Int. 88: 125-131 (1997)* Namer, A., Yashiki, M., Nagasawa, N., Iwasaki, Y., Kojima, T.	100µm PDMS 90°C, 5 min headspace	GC-MS
489	Parathion in blood	Rapid analysis of parathion in biological samples using headspace SPME and GC-MS Clin. Chem. Lab. Med. 1999, 37(6), 639-642 Musshoff, F., Junker, H., Madea, B	 headspace	GC-MS
136	Carbamate in urine, serum	Determination of Some Carbamate Pesticides in Human Body Fluids by Headspace SPME/GC Jpn. J. Forensic Toxicol. 14 (3): 199-203 (1996) Seno, H., Kumazawa, T., Ishii, A., Nishif, M.	100µm PDMS 70°C, salt headspace	GC-NPD
797	Amino pesticides in biological samples	Separation methods for amino group-possessing pesticides in biological samples. *J Chromatogr B (2000) 747(1&2), 241-254* Kumazawa, T; Suzuki, O.	100µm PDMS 30min @ 95°C, salt headspace	GC-FID, NPD
490	Arylamide Herbicides in Serum	Simple Analysis of Arylamide Herbicides in Serum using Headspace SPME and GC-MS 6th Indo Pacific Congress on Legal Medicine and Forensic Science. 770-773(1998) Namera,A., Watanabe,T., Yashiki,M., Iwasaki,Y., Kojima,T.	100µm PDMS 45 min @ 90°C headspace, NaCl	GC-MS
107	Diazepams in biological fluids	Solid-Phase Microextraction/Liquid Chromatography (SPME/LC) for Drug Analysis in Biological Fluids Chromatography (1997), 18(4), 244-245, Jinno, K	85µm polyacrylate 30°C, 3 hr	HPLC-UV, 200nm
658	Drugs in biological fluids	SPME of drugs from biological matrices *J. Chromatogr. A 885(2000) 445-455* Snow, N.	review article	
234	Drugs in biological fluids	Analysis of Drugs and Poisons in Legal Medicine J. Mass Spectrom. Soc. Jpn. 44: 321-333 (1996) Suzuki, O., Seno, H., Ishii, A.	100µm PDMS & 85µm polyacrylate headspace NaCl, Na2SO4,	GC-MS
108	Volatiles in urine	Confirmation of Volatiles by SPME and GC-MS in the Investigation of Two Traffic Fatalities J. Anal. Toxicol. 1997, 21(4), 286-290 Brewer, W., Galipo, R., Morgan, S., Habben, K.	85µm polyacrylate 60°C, 10 min headspace	GC-MS
564	Tetarchoroethylene trichloroethylene in tissue, urine, serum	Tetrachloroethylene and trichloroethylene fatality: case report and simple headspace SPME-capillary GC determination in Tissues J. Anal.Toxicol, 24 (1), 22-26, (2000) Dehon, B., Humbert, L., Devisme, L., Stievenart, M., Mathieu, D. Houdret, N., Lhermitte, M.	100µm PDMS 1 min headspace 60°C	GC-ECD
2783	**steroidal glycoalkaloids**	**SPME followed by on-fiber derivatization of solasodine and solanidine aglycones of steroidal glycoalkaloids** ***J. Liq. Chromatogr.Relat. Technol. 31, #8, 1132-1146 (Jan 2008)*** **Eanes, Ritchie C.; Tek, Neslihan**	**60µm CW/DVB immersion TMSI derivative**	**GC/MS**
2239	**Steroid hormones in biological samples**	**SPME with on-fiber silylation for simultaneous determinations endocrine disrupting chemicals and steroid hormones by GC-MS** ***J. Chromatogr. A, 1104, #1-2, 23-32 (2006)*** **Lan, Chongyu; Luan, Tiangang; Yang, Lihua**	**85µm polyacrylate immersion derivatization**	**GC/MS**
113	Estrogen, steroids in water/biological fluids	Analysis of Steroids from Human Serum by SPME with Headspace Derivatization & GC J. High Res. Chromatogr. 20: 171-173 (1997)	85µm polyacrylate 30 min	GC-MS

		Okeyo, P., Rentz, S., Snow, N.	immersion, stirring BSTFA derivative	
373	Estrogen, steroids in water/biological fluids	Analysis of Estrogens and Anabolic Steroids by SPME with On-Fiber Derivatization and GC-MS J. Microcolumn Separations, 10(7) 551-556 (1998) Okeyo, P., Snow, N.	85µm polyacrylate 30 min immersion, stirring BSTFA derivative	GC-MS
404	Estrogen, steroids in water/biological fluids	On-Fiber Derivatization for Analysis of Steroids by SPME-GC-MS Book chapter Snow, N.	60µm Carbowax/DVB 60°C, 30 min immersion stirring BSTFA derivative	GC-MS
200	Ethanol, acetone, isoprene in human breath	Solid Phase Microextraction for the Analysis of Human Breath Anal. Chem. 69 (4): 587-596 (1997) Grote, C., Pawliszyn, J.	100µm PDMS 10-60 sec headspace	GC-MS
659	Isoprene in human breath	Determination of isoprene in human expired breath using SPME with GC-MS *J. Chromatogr, B. Biomed Appl. 739(1), 183-190* Hyspler, R, Crhova, S. Gasparic, J., Cizkova, M., Balasova, V., Zadak, Z.	Carboxen/PDMS 10 min @ 40°C from tedlar bag sample	GC-MS
322	Chloroethenes in biological fluids	Determination of Chloroethenes in Environmental Biological Samples Using GC Coupled with SPME Chromatographia 42 (5/6): 313-317 (1996) Xu, N., Vadegrifts, S., Sewell		
660	Halothane in biological samples	Rapid analysis of halothane in biological samples using headspace SPME and GC-MS - a case of double homicide *J. Anal. Toxicol. (2000), 24(5), 372-376* Musshoff, G., Junker, H., Madea, B.		GC-MS
867	4-Heptanone in urine	Urine 4-heptanone: A beta-oxidation product of 2-ethylhexanoic acid from plasticisers *Clinica Chimica Acta (2001) 306(1-2) 51-61* Walker, Valerie; Mills, Graham A		GC-MS
491	Clozapine in human plasma	SPME for the assay of clozapine in human plasma Fresenius' J. Anal. Chem, 1999, 364(7), 654-655 Kruggel, S., Ulrich, S.	100µm PDMS 30 min pH adj. NaOH	
843	Levomepromazine in human plasma	SPME for the assay of levomepromazine in human plasma *Therapeutic Drug Monitoring (2000) 22(6), 723-728* Kruggel, S., Ulrich, S.	100µm PDMS 30 min @30°c chloramitriptyline added 0. 1 M -NaOH	GC-NPD
575	Homocysteine in plasma/water	Determination of homocysteine and its related compounds by SPME-gas chromatography-mass spectrometry. J-Chromatogr,-B:-Biomed-Appl. 30 Apr 1999; 727(1-2): 1-8 Myung,-S-W; Kim,-M-S; Min,-H-K; Yoo,-E-A; Kim,-K-R	85µm polyacrylate 30 min immersed pH 3	GC-MS
906	Ranitidine	Automated in-tube SPME-LC-electrospray ionization mass spectrometry for the determination of ranitidine. J. Chromatogr.B (1999), 731(2), 353-359 Kataoka, H., Lord, H., Pawliszyn, J.		LC-MS
949	g-Hydroxybutyrate in human urine and water	Determination of gamma-hydroxybutyrate in water and human urine by SPME-GC/quadrupole iontrap MS *J. Forensic Sci (2001), 46(3), 688-693* Blair, S.; Song, M.; Hall, B.; Brodbelt, J.		GC-MS
869	g-Hydroxybutyrate in human whole blood	Simple extraction of gamma-hydroxybutyrate in human whole blood by headspace solid-phase microextraction *Jpn. J. Forensic Toxicol (2001) 19(1) 38-45* Kurihara, R; Ishii, A; Watanabe-Suzuki, K; Kumazawa, T; Seno, H; Suzuki, O; Katsumata, Y		

405	g-Hydroxybutyric acid in plasma, urine	Determination of gamma-Hydroxybutyric Acid (GHB) in Plasma and Urine by Headspace SPME and GC-Positive Ion Chemical Ionization MS Rapid Commun. Mass Spec(2000) 14(24), 2401-2407 Frison, G; Tedeschi, L; Maietti, S; Ferrara, Santo D	50µm Carbowax/TPR100 70°C, 15 min headspace pH 6-7	GC-PICI-MS
323	1-Phenylethylamine in urine	Simple Extraction of 1-Phenylethylamine in Human Urine by Headspace SPME Jpn. J. Forensic Toxicol. 15(3): 189-193 (1997) Ishii, A., Seno, H., Prosen, F., Watanabee, K., Kumanzawa, T., Hattori, H., Suzuki, O.	65µm PDMS/DVB 30 min @ 90°C 10M NaOH, K2CO3 headspace	GC-NPD
324	Benzodiazepines in urine	Detection of Benzodiazepines in Human Urine by Direct Immersion SPME-GC Jpn. J. Forensic Toxicol. 15 (1): 16-20 (1997) Seno, H., Kumazawa, T., Ishii, A., Watanbe, K., Hattori, H., Suzuki, O.	65µm PDMS/DVB 30 min immersion	GC-FID
325	Benzodiazepines in water & urine	Determination of Five Benzodiazepines in Aqueous Solution and Biological Fluids, Using SPME with Carbowax/DVB Fiber Coating J. Microcolumn Sep. 10 (2): 193-201 (1998) Luo, Y., Pan, L., Pawliszyn, J.	65µm Carbowax/DVB 45°C, 60 min stirring pH 7, salt added	GC-FID, GC-MS
351	Benzophenones in urine	SPME and GC-ECD of Benzophenones for Detection of Benzodiazepines in Urine J. Anal. Toxicology, Vol. 23, Jan/Feb 1999 , 54-61 Prosen, F., Seno, H., Ishii, A., Watanabe, K., Kumazawa, T., Hattori, H., Suzuki, O.	100µm PDMS 30 min immersion, stirring pH 9.4 KOH added	GC-ECD
357	Benzodiazepines in urine	SPME-Microcolumn LC for the Analysis of Benzodiazepines in Human Urine Analusis (1998), 26(5), M27-M30 Jinno, K., Taniguchi, M., Hayashida, M.	Carbowax/TPR100 60 min immersion	HPLC-UV 220nm
779	Benzodiazepines in urine & serum	Automated in-tube solid-phase microextraction coupled with LC-electrospray ionization MS for the determination of selected benzodiazepines *J. Anal. Toxicology, (2000) Vol. 24(8),718-725* Yuan, H. ; Mester, Z.; Lord, H.; Pawliszyn, J.	Supelco-Q capillary 60cmx0.25mm I.d.	LC-ESI-MS
326		SPME for Sample Preparation During Drug Metabolism Studies Pharmazie 53 (3): 172-177 (1998) Kroll, C., Borchert, H.		
2739	**Cyanide in blood**	**An improved method for cyanide determination in blood using SPMEand gas chromatography/mass spectrometry** ***Rapid Commun. Mass Spectrom. 20, #19, 2932-2938 (2006-09-12)*** **Frison, G.; Zancanaro, F.; Favretto, D.; Ferrara, S. D.**	**75µm Carboxen headspace**	**GC-MS-SIM**
328	Cyanide in blood	Analysis of Cyanide in Blood by Headspace SPME and Capillary GC Chromatographia 47 (3/4): 209-214 (1998) Takekawa, K., Oya, M., Kido, A., Suzuki, O.	Carbowax/DVB 50°C, 45 min headspace Na2SO4 added	GC-NPD
492	Lead in whole blood & Urine	Determination of Lead in Blood and Urine by SPME-GC Anal. Chem. 1999, 71(15), 2998-3002 Yu, X., Yuan, H., Gorecki, T., Pawliszyn, J.	headspace sodium tetraethyl borate derivative	
747	Lead in whole blood & Urine	Speciation of Alkyllead and Inorganic lead by derivatization with deuterium-labeled sodium tetraethylborate and SPME GC-MS *Anal. Chem. 2000, 72,1788-1792* Yu, X, Pawliszyn, J.	100µm PDMS 10 min, headspace sodium tetraethyl borate derivative	GC-MS
2519	**Methylmercury**	**Production of artifact methylmercury during the analysis of certified reference sediments: Use of ionic exchange in the**	**either ethylated**	**GC-MIP-AED**

	in sediment	**sample treatment step to minimise the problem** ***Anal. Chim. Acta 582, #1, 109-115 (Jan 16 2007)*** **de Diego, Alberto; Delgado, Alejandra; Madariaga, Juan Manuel; Prieto, Ailette; Zuloaga, Olatz**	**derivatives**	**GC-MS**
2914	**Methylmercury in sediment**	**Optimisation of the headspace-SPME for organomercury and organotin compound determination in sediment and biota** ***J Separation Science 31, #4, 768-774 (MAR 2008)*** **Delgado, A.; Usobiaga, A.; Prieto, A.; Zuloaga, O.; de Diego, A.; Madariaga, Juan**	**30µm PDMS headspace NaBEt4 derivative 3-24 min @ 20-90 °C**	**GC-MS**
416	Methylmercury in biological fluids or sediment	Determination of Methylmercury in Biological Samples and Sediments by Capillary GC Coupled with Atomic Adsorption after hydride derivatization and SPME J. Anal. At. Spectrom. (1998), 13(10), 1141-1144 He, B., Jiang, G., Ni, Z.	5cm fused silica fiber 90 min headspace KBH4 derivative	GC-AA
493	Alkalated Hg, Pb, Sn in urine	Simultaneous determination of Hg(III) and alkylated Hg, Pb, and Sn species in human body fluids using SPME-GC-MS-MS Fresenius' J.. Anal. Chem. (1999), 363(5-6), 466-468 Dunemann, L., Hajimiragha, H., Begerow, J.	100µm PDMS 10 min NaBEt4 derivatives pH 5.3	GC-MS-MS
661	Organometallic	Coupling of SPME and GC-AED for the determination of organometallic compounds *Mikrochim Acta, (2000) 135 (No.1&2) 91-95* Mothes, S, Wennrich, R.		GC-AED
329	Methanol in blood	Simple Extraction of Methanol in Human Whole Blood by Headspace SPME Jpn. J. Forensic Toxicol. 16 (1): 64-68 (1998) Lee, X., Kumazawa, T., Jurosawa, T., Akiya, K., Akiya, Y., Fruta, S., Sato, K.	Carboxen/PDMS 60°C, 10 min headspace stirring	GC-FID
330	Aromatic amines in urine, blood, milk	Solid Phase Microextraction of Monocyclic Aromatic Amines from Biological Fluid Anal. Chem. 70 (9): 1986-1992 (1998) DeBruin, L., Josephy, P., Pawliszyn, J.	65µm PDMS/DVB 45°C, 15 min headspace, salt added KOH added, pH >13	GC-FID
494	Trimethylamineuria in urine	Quantitative determination of trimethylamine in urine by SPME-GC-MS J. Chromatogr. B: Biomed Sci. Appl., 1999, 723(1+2), 281-285 Mills, G., Walke, V., Mughal, H.	65µm Carboxen/PDMS, 100µm PDMS 15 min @ 59°C headspace stirred	GC-MS
950	Acrolein in bioligical fluids	Determination of acrolein by headspace SPME-GC-MS *J. Chromatogr., B: Biomed (2001), 758(1), 123-128* Takamoto, S.; Sakura, N.; Yashiki, M.; Kojima, T.		
331	PAHs in urine	Fast Screening Method for the Profile Analysis of Polycyclic Aromatic Hydrocarbon Metabolites in Urine, Using Derivatization-SPME J. Chromatogr. G: Biomed. Sci. Appl. 705 (1): 132-138 (1998) Gmeiner, G., Krassnig, C., Schmid, E., Tausch, H.	85µm polyacrylate 35°C, 45 min stirring BSTFA derivative	GC-MS
495	BTEX in in urine & blood	SPME and GC-MS for determination of monoaromatic hydrocarbons in blood and urine. Application to people exposed to air pollutants Chromatographia, 1999, 50(3/4), 167-172 Andreoli, R., Manini, P. Bergamaschi, E., Brustolin, A., Mutti. A.	75µm Carboxen/PDMS headspace	GC-MS
591	BTEX in urine	Headspace solid-phase micro-extraction for the determination of BTEX in urine. J-Chromatogr,-B:-Biomed-Appl. 19 Feb 1999; 723(1-2): 105-115 Fustinoni,-S; Giampiccolo,-R; Pulvirenti,-S; Buratti,-M; Colombi,-A	100µm PDMS 15 min @ 30°C headspace	GC-EMIS
662	Toluene in blood	The comparison of toluene determination between headspace SPME and Headspace methods in glue sniffer's blood and urine samples *J. Forensic Sci. (2000), 45(3), 702-707* Kim, N., Park, S.	100µm PDMS	

496	Toluene, xylene in urine	Method for analyzing urinary toluene and xylene by SPME and its application to workers using organic solvents Bull. Environ, Contam. Toxicol. (1999), 62(2), 109-116 Asakawa, F., Jitsunari, F., Choi, J., Suna, S., Takeda, N., Kitamado, T.	100µm PDMS 5 min, NaCl, stirring	GC-FID
497	Toluene, benzene in human blood	Biomonitoring of benzene and toluene in human blood by headspace SPME Fresenius' J. Anal. Chem. (1999), 363(1)m 88-91 Schimmiing, E., Levsen, K., Koehme, C., Schuermann, W.	65µm Carboxen/PDMS 30 min @ 20°C headspace	GC-MS
332	Erythromycin in water	A Study of Erythromycin A Decomposition Products in Aqueous Solution by SPME-LC-MS Rapid Commun. Mass Spectrom. 10 (2): 225-234 (1998) Volmer, D., Hui, J.	65µm PDMS/DVB 15 min immersed 50% MeOH extr.	LC-MS
333	Corticosteroids in urine	Rapid Determination of Corticosteroids in Urine by Combined SPME-LC-MS Rapid Commun. Mass Spectrom. 11 (17): 1926-1934 (1997) Volmer, D., Hui, J.		LC-MS
663	Beta blockers in urine, serum	Polypyrrole coated capillary in-tube SPME coupled with HPLC electrospray ionization MS for the determination of beta blockers in urine and serum samples *J. Microcolumn Sep. (2000) 12(4), 255-266* Wu, J., Lord, H., Pawliszyn, J., Kataoka, H.	Polypyrrole capillary	LC-ESI-MS
334	Flavor compounds in staphylococci	Evaluation of SPME for Analysis of Volatile Metabolites Produced by Staphylococci J. Agric. Food Chem. 46 (1): 228-234 (1998) Vergnaise, L., Masson, F., Montel, M., Berdague, J., Talon, R.	100µm PDMS, 85µm polyacrylate headspace stirring, salt added pH 3 for esters	GC-FID
2576	**Volatiles from soil bacteria**	**Evaluation and identification of potential organic nematicidal volatiles from soil bacteria** ***Soil Biology & Biochem 39, #10, 2567-2575 (OCT 2007)*** **Gu, Ying-Qi; Mo, Ming-He; Zhou, Jun-Pei; Zou, Chang-Song; Zhang, K.**	**headspace**	**GC-MS**
498	Aldehydes, esters from bacteria	Application of SPME to measure volatile metabolites produced by Staphylococcus carnosus and Staphylococcus xylosus Book- Applied SPME, 1999, 364-371 Royal Society of Chemistry, Cambridge, UK Coden: 67TUA8 Talon, R, Montel, M.	100µm PDMS, 85µm polyacrylate 15 min, stirring esters @ 80°C, aldehydes @ 25°C headspace	GC-FID
392	Volatile metabolites in penicillium fungi	Application of Head-Space SPME for the Analysis of Volatile Metabolites Emitted by Penicillium Species J. Microbiological Methods, 25 (1996) 245-255 Nilsson, T., Larsen, T., Montanarrella, L., Madsen, J.	100µm PDMS, 85µm polyacrylate 25°C, 30 min (PDMS), 50 min (PA)	GC-MS
895	Volatile metabolites from limonen	Biotransformation of (R)-(+)- and (S)-(-)-limonene by fungi and the use of SPME for screening. *Phytochemistry (Oxford) (2001) 57(2) 199-208* Demyttenaere, J.; De Kimpe, N; Van Belleghem, K		
2730	**Volatile metabolites from monoterpenes**	**Fungal biotransformation of monoterpenes found in agro-industrial residues from orange and pulp industries into : aroma compounds screening using SPME** ***Food Sci Biotech 16, #1, 37-42 (2007)*** **Marostica, M. R., Jr.; Onoyama Mota, N.; Baudet, N.; Pastore, G. M.**	**headspace**	**GC**
802	Volatile metabolites in penicillium fungi	Biotransformation of geraniol, nerol and citral by sporulated surface cultures of Aspergillus niger and Penicillium sp. *Phytochemistry (2000) 55(4), 363-373* Demyttenaere, J.,del Carmen Herrera, M.; De Kimpe, N		
393	Volatiles in bacteria on poultry	Use of Digital Aroma Technology and SPME GC-MS to Compare Volatile Compounds produced by Bacteria Isolated from Processed Poultry	100µm PDMS 37°C, 30 min	GC-MS

		J. Sci Food Agric. 1998, 78, 343-348 Arnold, J., Senter, S.	headspace	
664	Volatiles in lactic acid bacteria	Evaluation of SPME for the Isotopic Analysis of volatile compounds produced during fermentation by lactic acid bacteria *J. Agric Food Chem. 2000, 48, 2222-2227* Goupry, S., Rochut, N., Robins, R., Gentil, E.	70µm Carboxen/PDMS 10 min headspace salt added	GC-C-IRMS
570	Fatty acid esters in faeses	Headspace SPME with l-pyrenyldiazomethane in-fiber derivatization for analysis of fecal short-chain fatty acids J-Chromatogr,-B:-Biomed-Appl. 25 Jun 1999; 730(1): 113-122 Mills,-GA; Walker,-V; Mughal,-H	85µm polyacrylate 15 min 1-pyrenyldiazomethane derivative	GC-EMIS
335	Cannabinoids in water/saliva	Determination of Cannabinoids in Water and Human Saliva by SPME and Quadrupole Ion Trap GC-MS Anal. Chem. 70 (9): 1788-1796 (1998) Hall, B., Satterfield-Doeerr, M., Parikh, A., Brodbelt, J.	30µm PDMS 10 min immersion	GC-MS
665	Dibenzylamine in saliva	Direct comparison of SPE and SPME for the GC determination of dibenzylamine in artificial saliva leachates from baby bottle teats *Anal Chim Acta 2000, 414(1-2), 133-140* Niessner, G., Klampfl, C.	85µm polyacrylate pH 10	GC-MS
2185	**Cannabinoids from Cannabis samples**	**Extraction and analysis of different Cannabis samples by headspace SPME combined with GC-MS** ***J SepSci. 28, #17, 2293-2300 (2005)*** **Ilias, Y.; Rudaz, S.; Mathieu, P.; Christen, P.; Veuthey, Jean**	**headspace**	**GC-MS**
340	Cannabinoids in hair	Solid-Phase Microextraction for Cannabinoids Analysis in Hair and Its Possible Application to Other Drugs J. Anal. Toxicology, Vol. 23, Jan./Feb. 1999 Strano-Rossi, S., Chiarotti, M.	30µm PDMS 15 min, immersion hair digested with 1N NaOH	GC-MS
666	Lipophilic drugs in hair	Use of headspace SPME in hair analysis for organic compounds *Forensic Sci. Int. (2000), 107(1-3), 129-148* Sporkiert, F., Pragst, F.	headspace hair digested with 4% NaOH	
941	Lipophilic drugs in hair	Analysis of hair by headspace SPME and GC-MS. *Chromatogr Separation Tech (2001), 17(2), 4-8* Pragst, F	headspace hair digested with 4% NaOH	
336	Review of use	SPME in Forensic Toxicology Jpn. J. Forensic Toxicol. 16 (1): 1-15 (1998) Namera, A., Yashiki, M., Kojima, T., Fukunaga, N.	various fibers and conditions	
337	Acylcarnitines in urine	Determination of Urinary Acylcarnitines by ESI-MS Coupled with SPME J. Mass Spectrom. 32 (11): 1195-1204 (1997) Mioder, M., Loster, H., Hraschuh, R., Popp, R.		ESI-MS
499	Methylxanthines in blood/urine	Extraction of methylxanthines from human body fluids by SPME Anal. Chim. Acta., 1999, 387(1), 53-60 Kumazawa, T., Seno, H., Lee, X., Ishii, A.	65µm Carbowax/DVB 1 hr @ 40°C 1ml of 1M HCl04	GC-NPD
414	Organic acid esters in urine	Urinary Organic Acid Screening by SPME of the Methyl Esters J. Chromatogr. B: Biomed Sci. Appl. (1998), 713(2), 427-432 Liebich, H., Gesele, E., Woll, J.	85µm polyacrylate 20 min immersion w/stirring trimethyloxonium tetrafluoroborate	GC-FID, -MS
667	Semivolatile in tissue/blood	Validation of negligible depletion SPME as a tool to determine tissue/blood partition coefficient for semivolatiles and nonvolatile organic chemicals *Toxicol. Appl. Pharmacol. (2000), 166(2), 138-144*		

		Garicano, E., Vaes, W., Hermens, J.		
415		New Mass Spectrometric Methods for the Fast Analysis of Biomedical-Relevant Substances CLB Chem. Labor Biotech. (1998), 49(11), 414-420 Volmer, D.		GC-MS
417	Verpamil & norverapamil in urine	SPME-HPLC Determination of Verpamil and Norverpamil Enantiomers in Urine J. Mass Spectrom. (1997), 32(11), 1195-1204 Asafu-Adjaye, E., Shiu, G.		HPLC
971	Pesticides in water	Pesticide toxicity assessment using an electrochemical biosensor. *Analytical and Bioananalytical Chemistry (2002) 373(8), 696-703* Farre, M.; Goncalves, C.; Lacorte, S.; Barcelo, D.; Alpendurada, M.F.		GC-MS
1034	Jet fuel in porcine skin.	Absorption through porcine skin exposed to various doses of jet fuel marker components determined with GC-FID using head space SPME fiber. *Toxicological Sciences (2003) 72 (S-1), 383.* Xia, X. R.; Riviere, J. E.; Muhammad, F.; Monteiro-Riviere, N. A.; Baynes, R. E.		
1050	PAH	Determination of selected monohydroxy metabolites of 2-, 3- and 4-ring polycyclic aromatic hydrocarbons in urine by solid-phase microextraction and isotope dilution gas chromatography-mass spectrometry. *Journal of Chromatography, B: Analytical Technologies in the Biomedical and Life Sciences (2002) 778 (1-2), 157-164.* Smith, C. J.; Walcott, C. J.; Huang, W. L.; Maggio, V.; Grainger, J.; Patterson, D. G., Jr.		GC-MS
1294		Biomimetic solid-phase microextraction to predict body residues and toxicity of chemicals that act by narcosis. *Environmental Toxicology and Chemistry (2002) 21(2), 229-234* Leslie, Heather A.; Busser, Frans J. M.; Hermens, Joop L. M.; Kraak, Michiel H. S.; Oosthoek, Annelies J. P.		GC-MS
1349	Fatty acid ethyl esters in hair	Fatty acid ethyl esters in hair as markers of alcohol consumption. Segmental hair analysis of alcoholics, social drinkers, and teetotalers. Clinical Chemistry (2001) 47(12), 2114-2123. Auwaerter, V.; Sporkert, F.; Hartwig, S.; Pragst, F. *; Vater, H.; Diefenbacher, A.		GC-MS
1381	Tricyclic antidepressants in urine.	Sample preparation with fibre-in-tube solid-phase microextraction for capillary electrophoretic separation of tricyclic antidepressant drugs in human urine. Electrophoresis (2001) 22(17), 3785-3790. Jinno, K.; Kawazoe, M.; Saito, Y.; Takeichi, T.; Hayashida, M.		
1391	Fatty acid ethyl esters in hair.	Analysis of fatty acid ethyl esters in hair as possible markers of chronically elevated alcohol consumption by headspace solid-phase microextraction (HS SPME) and gas chromatography-mass spectrometry (GC-MS). Forensic Science International (2001) 121(1-2), 76-88. Pragst, F.; Auwaerter, V.; Sporkert, F.; Spiegel, K.	65 um PDMS/DVB	GC-MS
1417		Pollution prevention screening of simulated Hanford waste for polychlorinated biphenyls by solid phase microextraction/GC-ECD. Abstracts of Papers American Chemical Society (2001) 222(1-2), ANYL118. Okemgbo, Asopuru A.; Metcalf, Steven G.		
1438	Methylene chloride in urine	Monitoring of occupational exposure to methylene chloride: Sampling protocol and stability of urine samples. *Journal of Toxicology Clinical Toxicology (2003) 41(5), 735-735* Tabak, A.; Scherb, I.; Hoffer, E.; Bentur, Y.; Weiner, A.		

2755	**Fentanyl in human plasma**	**Determination of fentanyl in human plasma by head-space SPME-GC-MS** ***J. PHARM. BIOMED. ANAL. 43, #5, 1763-1768 (11 APR 2007)*** **Bagheri, H.; Es-haghi, A.; Khalilian, F.; Rouini, M. -R.**	**headspace**	**GC-MS**
1489	Fentanyl and midazolam in plasma	Simultaneous determination of fentanyl and midazolam in plasma using direct solid-phase microextraction before gas chromatography-mass spectrometry analysis. *Analytical Letters (2002) 35(9), 1575-1590* Dufresne, C.; Bureau, J.; Favetta, P.; Gonin, R.; Guitton, J.	65um PDMS/DVB	
1501	Amphetamines and designer drugs in hair	Fully automated determination of amphetamines and synthetic designer drugs in hair samples using headspace solid-phase microextraction and gas chromatography-mass spectrometry. *Journal of Chromatographic Science (2002) 40(6), 359-364* Musshoff, Frank; Junker, Heike P.; Kroener, Lars; Lachenmeier, Dirk W.; Madea, Burkhard		GC-MS
2351	**GHV, MAMP, KET, MDMA in urine**	**A validated SPME-GC-MS method for simultaneous quantification of club drugs in human urine.** ***Forensic Sci Int 71, #2-3, 142-50 (2007 Sep 13)*** **Brown, Stacy D; Rhodes, Daniel J; Pritchard, Boyd J**	**100µm PDMS** **20 min @ 90°C** **hexylchloroformate/ pyridine derivative**	**GC-MS**
1511	Drugs of abuse	Detection and identification of illicit drugs including GHB, Rohypnol, Ketamine, and Psilocybin by refocused Solid Phase Microextraction High Performance Liquid Chromatography Mass Spectrometry, (SPME/HPLC/MS). *Abstracts of Papers American Chemical Society (2002) 223(1-2), ANYL 54* Sabucedo, Alberto; Furton, Kenneth G.; Benson, Andrew; Almirall, Jose		HPLC-MS
1021	allyl alcohol (2-propen-1-ol)	A fatal human intoxication with the herbicide allyl alcohol (2-propen-1-ol). *Journal of Analytical Toxicology (2002) 26(1), 55-57* Toennes, S. W.; Schmidt, K.; Fandino, A. S.; Kauert, G. F.		GC-MS
1530	Residual solvents in cocaine	Gas chromatographic-mass spectrometric analysis of residual solvent trapped into illicit cocaine exhibits using head-space solid-phase microextraction *Journal of Chromatography B (2002) 772(2), 249-256* Chiarotti, Marcello; Marsili, Remo; Moreda-Pineiro, Antonio	headspace	GC-MS

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748	Review	The use of SPME-GC in forensic analysis *J. Chromatogr. Sci. (2000), 38(7), 297-306* Furton, K., Wang, J., Hsu, Y. Walton, J, Almirall, J.		
500	Gasoline on skin	The detection and analysis of ignitable liquid residues extracted from human skin using SPME-GC Almirall, J., Wang, J., Lothridge, K, Furton, K.	100µm PDMS 15 min headspace	GC-FID
2733	**Gasoline volatiles in varied matries**	**Characterization of SPME-GC for the analysis of gasoline tracers in different microenvironments.** ***J Air Waste Manag Assoc 57, #3, 355-65 (2007 Mar)*** **Ceballos, Diana; Zielinska, Barbara; Fujita, Eric; Sagebiel, John**	**75µm Carboxen** **10min** **air samples**	**GC-FPD**
2385	**Fire debris from surrogate metals**	**SPME samping of fire debris resideus in the presence of radionuclide surrogate metals** ***Journal of Chromatography A 2007-03-23*** **Duff, M., Crump, S., Keisha M.**	**headspace** **22°C**	**GC-MS**
2630	**Ignitable liquids in fire debris**	**Forensic application of GC-differential mobility spectrometry with two-way classification of ignitable liquids from fire debris** ***Anal. Chem. 79, #17, 6752-6759 (Sep 1 2007)*** **Harrington, Peter B.; Lu, Yao**	**headspace**	**GC-MS**

85	Accelerants in fire debris	A Simple, Inexpensive, Rapid, Sensitive and Solventless Technique for the Analysis of Accelerants in Fire Debris Based on SPME *J. High Res. Chromatogr. 18: 625-629 (1995)* Furton, K., Bruna, J., Almirall, J.	100µm PDMS 40°C, 20 min headspace	GC-FID
105	Gasoline, kerosene in fire debris	Forensic Application of the SPME Method to the Analysis of Gasoline and Kerosene Kaneko, T., Nakada, M.	100µm PDMS 22°C for 1 hr, or 80°C for 5 min headspace	GC-NPD
2430	**Accelerants Identification**	**Multivariate pattern recognition of petroleum-based accelerants by SPME-GC with flame ionization detection.** ***Anal. Chim. Acta 589, #2, 247-254 (2007-04-25)*** **Bodle, E. S.; Hardy, J. K.**	**headspace**	**GC-FID**
114	Accelerants in fire debris	Novel Method for Analysis of Gasoline from Fire Debris Using Headspace Solid Phase Microextraction *J. Forensic Sci. 41: 12-22 (1996)* Furton, K., Almirall, J., Bruna, J.	100µm PDMS 40°C, 20 min	GC-FID
115	Accelerants in liquid residue	The Recovery of Accelerants in Aqueous Samples from Fire Debris Using SPME *Science & Justice 36 (4): 283-287 (1996)* Almirall, J., Furton, K., Bruna, J.	100µm PDMS 20 min @ 40°C	GC-FID
143	Accelerants in fire debris	Determination of Liquid Accelerants in Arson Suspected Fire Debris Using Headspace SPME *Anal. Commun. 33: 129 (1996)* Steffen, A., Pawliszyn, J.	100µm PDMS 15 min @ 70°C headspace	GC-FID
594	Accelerants in fire debris	A comprehensive sample preparation scheme for a accelerants in suspect arson cases. *J-Forensic-Sci. May 1999; 44(3): 504-515* Ren,-QL; Bertsch,-W		GC, GC-MS
2269	**TNT in sand**	**Immersion mode SPME ECD/GC and TEEM-GC/MS for analysis of explosives buried in sand** ***Proc SPIE Int Soc Opt Eng (2005) 5794 #II, 1272-1280*** **Baez, B.; Briano, J.; Castro, M..; Correa, S.; De Echevarria, M. Hernandez-Rivera, S.**	**Immersion**	**GC-ECD GC/MS**
2270	**TNT in sand**	**Transport of explosives II: Use of Headspace-SPME/GC-ECD and TEEM GC/MS for detection of TNT vapors from sand buried samples** ***Proc SPIE Int Soc Opt Eng (2005) 5794 #II, 1263-1271*** **Baez, B.; Briano, J.; Castro, M..; Correa, S.; De Echevarria, M. Hernandez-Rivera, S.**	**Headspace**	**GC-ECD GC/MS**
2383	**Explosive residue**	**SPME sampling of high explosive resideus in the presence of radionuclides and radioneclide surrogate metals** ***J Radioanalytical and Nuclear Chemistry -2007-04-13*** **Duff, M., Crump, S., Robert, R., Beals, D.**		
2675	**PAHs in aquatic worm**	**Bioconcentration factor hydrophobicity cutoff: An artificial phenomenon reconstructed** ***ENVIRON. SCI. TECHNOL. 41, #21, 7363-7369 (01 NOV 2007)*** **Jonker, M. T. O.; Van, Der Heijden S. A.**		
668	TNT, 2,4-DNT, RDX in soil	Development of field screening methods for TNT, 2,4-DNT, and RDX in soil. *Talanta, 39: 419-28 (1992)* T Jenkens, et al		
812	RDX, HMX in soil	Detection of the cyclic nitramine explosives hexahydro 1,3,5-trinitro-1,3,5-triazine (RDX) and octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazine (HMX) and their degradation products in soil environments *J Chromatog A (2001) 909(1), 53-60* Hawari, J; Beaudet, S; Groom, C.; Halasz, A; Paquet, L	65µm PDMS/DVB 20MIN @55°c PFBHA derivative	GC-MS LC-MS
		Trace Analysis of explosives in Seawater Using SPME and		

344	explosives in salt water	GC-Ion Trap Mass Spectrometry Anal. Chem., Vol. 70, No. 14, July 15, 1998, pg. 3015-3020 Barshick, S., Griest, W.	65µm Carbowax/DVB 60 min immersion stirring	GC-MS
2394	**2,3-dimethyl-2,3-dinitrobutane from ammonium nitrate**	**Solid-phase microextraction coupled to GCfor the determination of 2,3-dimethyl-2,3-dinitrobutane as a marking agent for explosives** ***Talanta 72, #4, 1581-1585 (2007-06-15)*** **Li, X. J.; Zeng, Z. R.; Zeng, Y.**	**headspace 30 sec @ 22°C**	**GC**
2284	**Explosives in open areas.**	**Application of a SPME-IMS detection system for explosives detection** ***Proc SPIE Int Soc Opt Eng Vol 5778 #2, 667-672 (2005)*** **Almirall, Jose R.; Furton, Kenneth G.; Perr, Jeannette M.**	**headspace**	**GC/IMS**
2285	**Odors from smokeless powders**	**Discrimination of smokeless powders by headspace SPME-GC-MS and SPME-GC-ECD, and the potential implications upon training canine detection of explosives** ***Proc SPIE Int Soc Opt Eng Vol 5778 #2, 638-643 (2005)*** **Almirall, Jose R.; Furton, Kenneth G.; Harper, Ross J.**	**headspace**	**GC-MS GC-ECD**
2370	**Explosives**	**SPME-HPLC: A new approach to the analysis of explosives** ***J. HAZARD. MATER. 14, # 3, 691-697 (2007)*** **Gaurav; Kaur, V.; Kumar, A.; Malik, A. K.; Rai, P. K.**	**65µm CW/DVB**	**HPLC**
669	Explosives from solids, water	Application of SPME to the recovery of explosives and ignitable liquid residues from forensic specimens *J. Chromatogr A, 885(2000) 419-432* Furton, K., Almirall, J., Bi, M., Wang, J., Wu, L.	65µm Carbowax/DVB 25 min, 25% NaCl immersion stirring	GC-ECD HPLC
592	explosives in water	An improved interface for coupling SPME to HPLC applied to the analysis of explosives J-High-Resolut-Chromatogr. May 1999; 22(5): 279-282 Wu,-L; Almirall,-JR; Furton,-KG	50µm Carbowax/TPR	HPLC-UV 254nm
886	Explosives from solids, water	Optimization of SPME for the recovery of explosives from aqueous and post-explosion debris followed by gas and liquid chromatographic analysis *J. Forensic Sci. 45: 845-852 (2000)* Furton, K., Wu, L., Almirall, J.	65µm Carbowax/DVB 50µm Carbowax/TPR 30 min, 25% NaCl immersion stirring	GC-ECD HPLC
2804	**Volatiles from explosives and drugs**	**Analysis of volatile components of drugs and explosives by SPME-ion mobility spectrometry** **Journal of Separation Science 31, #2, 402-412 (FEB 2008)** **Lai, Hanh; Guerra, Patricia; Joshi, Monica; Almirall, Jose R.**	**headspace**	**GC-IMS**
2766	**VOCs from wax objects**	**First results on headspace-SPME-GC-MS of volatile organic compounds emitted by wax objects in museums** ***J. Chromatogr A, 1187, 239-249 (Apr 11 2008)*** **Langlois, J.; Lattuati-Derieux, A.; Regert, M.; Thao, S.**	**headspace**	**GC-MS**
985	Acetic and formic acid in museum environment	Acetic acid and formic acid concentrations in the museum environment measured by SPME-GC/MS *Atmospheric Environment (2002) 36 (24), 3909-3916* Ryhl-Svendsen, M.; Glastrup, J.	Polyacrylate	GC-MS
986	Explosives in soil	Detection of explosives and their degradation products in soil environments. *J.Chromatogr. A (2002) 963(1-2), 411-418* Halasz, A.; Groom, C.; Zhou, E.; Paquet, L.; Beaulieu, C.; Deschamps, S.; Thiboutot, S.; Ampleman, G.; Dubois, C.; Hawari, J.		GC-MS
989	Methylmercury in human hair	Determination of methylmercury in human hair by ethylation followed by headspace SPME/GC *J.Chromatogr. A (2002) 963(1-2), 345-351* Diez, S.; Bayona, J.M.		GC-CVAFS

990	Methylmercury in biologicals	Methylmercury determination in biological samples by derivatization, SPME and GC. *J.Chromatogr. A (2002) 963(1-2), 313-323* Rodil, R.; Carro, A.M.; Lorenzo, R. A.; Abuin, M.; Cela, R.	PDMS	GC-MS
991	Ethanol in post-mortem samples.	Automated headspace SPME and capillary GC analysis of ethanol in post-mortem species. *Forensic Science International (2002) 128(3), 115-119.* de Martinis, B.S.; Santos Martin, C.C.	Polyacrylate	GC
1003	L-methadone	Fatal mixed intoxication caused by L-methadone and chloral hydrate. *Archiv fuer Kriminologie (2003) 211 (3-4), 90-97.* Weinmann, Wolfgang; Goerke, Rolf; Perdekamp, Markus Grosse; Thurau, Kirsten; Vogt, Susanne		GC-MS
2756	**Semivolatile pollutants in sediment**	**Determination of semi-volatile priority pollutants in landfill leachates and sediments using microwave-assisted headspace SPME** ***Analytical and Bioanalytical Chemistry 386, #2, 324-331 (2006-09-15)*** **Herbert, P.; Silva, A.; Joao, M.; Santos, L.; Alves, A.**	**headspace**	**GC-MS**
2624	**Hydrophobic compounds from sediment**	**Desorption of hydrophobic compounds from laboratory-spiked Sediments measured by tenax absorbent and matrix SPME** ***Env Sci & Tech 41, #16, 5672-5678 (AUG 15 2007)*** **You, Jing; Pehkonen, Sari; Landrum, Peter F.; Lydy, Michael J.**		**GC**
2595	**Alcohol ethoxylates in marine sediment**	**Nonlinear sorption of three alcohol ethoxylates to marine sediment: A combined Langmuir and linear sorption process?** ***ENVIRON. SCI. TECHNOL.41, #9, 3192-3198 (01 MAY 2007)*** **Droge, S. T. J.; Hermens, J. L. M.**	**85µm Polyacrylate**	**GC-MS**
1013	TNT in sediment	Nondestructive, minimal-disturbance, direct-burial solid-phase microextraction fiber technique for measuring TNT in sediment *Environmental Science and Technology (2003) 37 (8), 1625-1632.* Conder, Jason M.; La Point, Thomas W.; Lotufo, Guilherme R.; Steevens, Jeffery A.	Polyacrylate	
1025	Drugs of abuse in hair samples.	Aplication of tandem mass spectrometry combined with gas chromatography and headspace solid-phase dynamic extraction for the determination of drugs of abuse in hair samples. *Rapid Communications in Mass Spectrometry (2003) 17 (5), 472-478.* Lachenmeier, Dirk W.; Kroener, Lars; Madea, Burkhard; Musshoff, Frank	PDMS	GC-MS-MS
1031	Fatty acid esters in hair.	Fatty acid ethyl esters in scalp, pubic, axillary, beard and body hair as markers for alcohol misuse. *Alcohol and Alcoholism (2003) 38 (2), 163-168.* Pragst, Fritz; Auwaerter, Volker; Hartwig, Sven		
1033		Investigation by solid-phase microextraction and gas chromatography/mass spectrometry of secondary metabolites in lichens deposited on stone monuments. *Rapid Communications in Mass Spectrometry (2003) 17 (6), 526-531.* Di Tullio, Alessandra; De Angelis, Francesco; Ceci, Roberta; Quaresima, Raimondo; Reale, Samantha		GC-MS
1079	Review article	ASTM standards for fire debris analysis: A review. *Forensic Science International (2003) 132 (1), 63-67.* Stauffer, Eric; Lentini, John J.		
1135	Cannabinoids in hair.	Fully automated determination of cannabinoids in hair samples using headspace solid-phase microextraction and gas chromatography-mass spectrometry. *Journal of Analytical Toxicology (2002) 26 (8), 554-560.* Musshoff, F.; Junker, H. P.; Lachenmeier, D. W.; Kroener, L.; Madea, B.		GC-MS

		Application of tandem mass spectrometry combined with gas chromatography and headspace solid-phase dynamic extraction for the determination of drugs of abuse in hair samples.		
1242	Drugs of abuse in hair.	*Rapid Communications in Mass Spectrometry (2003) 17 (5), 472-478.* Lachenmeier, D. W.; Kroener, L.; Musshoff, F.; Madea, B.		GC-TMS
1273	Gamma-hydroxybutyric acid	Development of a GC/MS method for detection of gamma-hydroxybutyric acid (GHB) and its precursors. *Abstracts of Papers American Chem Society (2003) 225 (1-2), CHED 209.* Helwig, Katie; Dema, Anne C.; Wetmore, Lori A.		GC-MS
1286	Thiopental and pentobarbital in hair.	Detection of thiopental and pentobarbital in head and pubic hair in a case of drug-facilitated sexual assault. *Forensic Science International (2003) 133 (1-2), 171-174.* Ferrara, Santo Davide; Favretto, Donata; Frison, Giampietro; Tedeschi, Luciano		GC-MS-MS
2696	**Cannabinoids in hair.**	**Headspace SPME of cannabinoids in human head hair samples.** ***J. Sep. Sci. 30, #1, 128-134 (2007-01)*** **Rodrigues de Oliveira, C. D.; Yonamine, M.; de Moraes Moreau, R. L.**	**headspace**	**GC-MS**
1287	Cannabinoids in hair.	Automated headspace solid-phase dynamic extraction for the determination of cannabinoids in hair samples. *Forensic Science International (2003) 133 (1-2), 32-38.* Musshoff, Frank; Kroener, Lars; Lachenmeier, Dirk W.; Madea, Burkhard		GC-MS
1293	Drugs of abuse in saliva	Simultaneous detection of some drugs of abuse in saliva samples by SPME technique. *Forensic Science International (2003) 134 (1), 40-45.* Fucci, Nadia; Chiarotti, Marcello; De Giovanni, Nadia		GC/MS
1509	Gamma-hydroxybutyric acid (GHB)	SPME on-fiber derivatization of gamma-hydroxybutyric acid (GHB) in forensic analysis. *Abstracts of Papers American Chem Society (2002) 223(1-2), ANYL 134* Meyers, Jodi E.; Almirall, Jose R.; Galiana, Gigi		
1548	Methamphetamine	SPME/GC-MS characterization of volatiles associated with methamphetamine: Toward the development of a pseudomethamphetamine training material. *Journal of Forensic Sciences (2002) 46(5), 1014-1024* Vu, Doan-Trang T.		GC-MS
1550	Gamma-hydroxybutyrate (GHB) in human urine	Determination of gamma-hydroxybutyrate in water and human urine by solid phase microextraction-gas chromatography/quadrupole ion trap spectrometry. *Journal of Forensic Sciences (2002) 46(3), 688-693* Brodbelt, Jennifer; Blair, Sheryl; Hall, Brad; Song, Meansup	65 um PDMS/DVB	GC-MS
1235	Odor chemicals from explosives	Identification of canis familiaris active odor signature chemicals in controlled substances and high explosives. *Abstracts of Papers American Chemical Society (2003) 225 (1-2), PRES 25.* Lopez, Claudia; Furton, Kenneth G.; Harper, Ross; Hsu, Ya-Li; Walton, John		
1328	Odor chemicals from explosives	Laboratory and field experiments used to identify Canis lupus var. familiaris active odour signature chemicals from drugs, explosives, and humans. *Analytical and Bioanalytical Chemistry (2003) 376 (8), 1212-1224.* Lorenzo, N.; Wan, T. L.; Harper, R. J.; Hsu, Y. L.; Chow, M.; Rose, S.; Furton, K. G.*	CW/DVB and PDMS	GC-ECD & GC-MS
1556	TNT isomers from land mines	Chemical signatures of TNT-filled land mines. Talanta 54(3), 2001, 501-514.	Headspace	

		Jenkins, T; Leggett, D; Miyares, P.; Walsh, M.; Ranney, T.; Cragin, J.H.; George, V.		
1557	Odor chemicals from explosives.	The scientific foundation and efficacy of the use of canines as chemical detectors for explosives. Talanta 54(3), 2001, 487-500. Furton, K.G.; Myers, L.J.		
2683	**Leachable organics from hydrocarbon resins**	**Assessing the aquatic hazard of commercial hydrocarbon resins** ***ECOTOXICOL. ENVIRON. SAF. 66, #2, 159-168 (2007)*** **Woods, R. W.; Letinski, D. J.; Febbo, E. J.; Dzamba, C. L.; .** **Connelly, M. J.; Parkerton, T. F**		**GC**
1897	Terpenes in resins	Headspace SPME for screening for the presence of resins in Egyptian archaeological samples. *J Separation Sci, 27, #3, 235-243* Hamm, Sandrine; Bleton, Jean; Tchapla, Alain	headspace	GC
1898	Methyl mercury from human hair	Improvements in the methylmercury extraction from human hair by headspace SPME followed by GC-cold-vapour atomic flourescence spectrometry *J Chromatogr A, 1025, #1, 71-75* Montuori, P; Jover, E; Alzaga, R; Diez, S; Bayona, J.	headspace ethyl derivative	GC-cold vapour atomic spectrometry
1899	TNT in sand	Transport of explosives TNT in soil and its equilibrium vapor *Proc SPIE Int Soc Opt Eng, 5415, #2, 1389-1399* Baez, B; Briano, J; Castro, M.; Correa, S; De Jes, M.; Hernandez-Rivera, Samuel P.; Mina, Nairmen	Headspace for 20min immersion in water extract	TEEM-GC/MS GC/ECD
1900	Oxidation byproducts of TNT	Oxidation of TNT by photo-Fenton process *Chemosphere, 57, #9, 1107-1114* Chen, Jong-Nan; Liou, Ming-Jer; Lu, Ming-Chun		GC-MS
1901	Ammonium nitrate explosive	New developments in SPME. Part 2: analysis of ammonium nitrate-based explosives. *J Forensic Sci, 49, #2, 215-221* Brown, H.; Kirkbride, K.*; Pigou, P. .; Walker, G.	Alkylchloroformate derivative	GC-MS
1902	Signature odor explosives drugs, and humans	Laboratory and field experiments used to identify Canis lupus var. familiaris active odor signature chemicals from drugs, explosives, and humans *Anal. Bioanal. Chem., 376, #8, 1212-1224* Chow, M.; Furton, K.; Harper, R.; Hsu, Ya-Li.; Lorenzo, N.; Rose, S.; Wan,T.	50µm CW/DVB PDMS coatings	GC/MS GC/ECD
2884	**TATP degradation products**	**GC-MS analysis of triacetone triperoxide (TATP) degradation products** ***Rapid Commun, Mass Spectrom 22, #7 950-958 (2008)*** **Armitt, David; Zimmermann, Peter; Ellis-Steinborner, Simon**	**headspace**	**GC/MS**
1903	TATP in post explosives	Improved method for the detection of TATP after explosior *J Forensic Sci, 49, #5, 935-938* Muller, D.; Levy, A.; Shelef, R.; Abramovich-Bar, S.; Sonenfeld, D.; Tamiri, T.	65µm PDMS-DVB headspace	GC/MS
1904	GHB in water	Analysis of gamma-hydroxybutyric acid (GHB) in spiked water and beverage samples using SPME on fiber derivatization/gas chromatography-mass spectrometry *J Forensic Sci, 50, #1, 31-36* Meyers, Jodi E.; Almirall, Jose R.	derivative on-fiber	GC-MS
2767	**Organtin in landfill leachate**	**Evaluation of a combined fractionation and speciation approach for study of size-based distribution of organotin species on environmental colloids** ***Anal. Bioanal. Chem. 390, #7, 1805-1813 (April 2008)*** **Dubascoux, S.; Heroult, J.; Le Hecho, I.; Lespes, G.; Potin-Gautier, M.**	**headspace**	**GC-PFPD**
2749	**Organtin in soil**	**Influence of the soil matrices on the analytical performance of headspace SPME for organotin analysis by GC-pulsed FPD** ***J. Chromatogr. A 1132, #1-2, 234-240 (2006-11-03)*** **Zuliani, T.; Lespes, G.; Milacic, R.; Scancar, J.; Potin-Gautier, M.**	**100µm PDMS headspace**	**GC-PFPD**
1905	Explosives in soil, water,	Solid phase microextraction with GC/MS for the trace analysis of explosives *Proc. 50th ASMS Conf. Mass Spectrom. Allied Top.*		GC-MS GC-ECD

	and swab samples	2002, p669-670 Maslanka, D; McDonald, J.; Miller, M.		
1906	FAEE from skin samples	Wipe-test and patch-test for alcohol misuse based on the concentration ratio of fatty acid ethyl esters and squalene C FAEE / C SQ in skin surface lipids. *Forensic Sci Intl, 143, #2-3, 77-86* Pragst, F.; Auwaerter, V.; Kiessling, B.; Dyes, C.	headspace	GC-MS LC-PDA
1907	Methyl parathion in biological samples	Headspace SPME for the GC analysis of methyl-parathion in postmortem human samples: application in a suicide case by intravenous injection. *Forensic Sci Intl, 143, #2-3, 127-132* Tsoukali, H.; Raikos, N.; Theodoridis, G.; Psaroulis, D.	85µm polyacrylate headspace salt added	GC-NPD
1908	Cocaine in sweat	Detection of cocaine and cocaethylene in sweat by SPME-GC-MS *J. Chromatogr. B, 811, #1, 37-40* Follador, M; Moreau, R; Silva, O.; Yonamine, M.	immersed in 0.2M sodium acetate buffer pH 5	GC-MS
2750	**Hydroxy metabolites of PAHs**	**Determination of hydroxy metabolites of PAHs by fully automated SPME derivatization and gas chromatography-mass spectrometry** ***J. Chromatogr. A 1173, #1-2, 37-43 (30 Nov 2007)*** **Luan, T.; Fang, S.; Zhong, Y.; Lin, L.; Chan, S. M. N.; Lan, C.; Tam, N.**	**immersion BTSF derivative**	**GC-MS**
1909	PAHs in gasoline soot	identification of gasoline soot in suspect arson cases by using headspace SPME-GC-MS *Analytical Letters, 236, #7, 1373-1384* Wu, Chia-Hao; Chen, Chin-Lien; Huang, Ching-Te; Lee, Maw-Rong; Huang, Chih-Ming	100µm PDMS 75µm Carboxen heaspace	GC-MS
1910	Propane in biological materials	Quantification of propane in biological materials by headspace GC *Forensic Science International, 151, #2-3, 165-170* Park, J; Min, Ji-Sook; Heo, S.; Lim, Mi-Ae; Park, S	headspace	GC-MS
1911	Volatile organics from human skin	The study of fingerprint characteristics of the emanations from human arm skin using the original sampling system by SPME-GC-MS *J. Chromatogr. B, 822, #1-2, 244-252* Cai, Ji-Jin; Li, Gong-Ke; Ruan, Gui-Hua; Zhang, Zhuo-Min	headspace 30min sampling	GC-MS
1912	Capsaicin from fabrics	Extraction of capsaicin in aerosol defense sprays from fabrics *Talanta, 67, #2, 377-382* Almirall, Jose R.; Spicer Jr., Oliver	headspace	GC
1913	Odor chemicals in explosive	Identification of dominant odor chemicals emanating from explosives for use in developing optimal training aid combinations and mimics for canine detection *Talanta, 67, #2, 313-327* Almirall, Jose R.; Furton, Kenneth G.; Harper, Ross J.	headspace	GC-MS GC-ECD
2235	**Odorous gases from livestock operations**	**Evaluation of sample recovery of malodorous gases from air sampling bags, SPME, and sampling canisters** ***Annu. Int. Meet., (2004) p5547-5562*** **Koziel, J.; Kuhrt, F.; Lloyd, J.; Parker, D.; Spinhirne,J.; Wright,D.**	**75µmCarboxen headspace**	**GC/MS**
2265	**Malodorous gases from livestock**	**Evaluation of sample recovery of malodorous livestock gases from air sampling bags, SPME fibers, Tenax TA sorbent tubes, and sampling canisters** ***J. Air Waste Manage. Assoc. 55, #8, 1147-1157 (2005)*** **Koziel, J.; Kuhrt, F.; Lloyd, J.; Parker, D.;Spinhirne, J.; Wright, D.**	**75µm Carboxen headspace**	**GC/MS**
2657	**Volatiles found in cow slurry**	**Headspace-SPME preconcentration of phenols, indoles and on-fibre derivatised volatile fatty acids in liquid and gas samples from cow slurries** ***J. Sep. Sci. 30, #14, 2293-2304 (September 2007)*** **Arana, G,; Larreta, J.; Vallejo, A.; Bilbao, U.; Alonso, A.; Zuloaga, O.**	**DVB/Car 50/30µm headspace MTBSTFA derivative**	**GC/MS**
2588	**Volatiles found in cow slurry**	**Optimisation of the on-fibre derivatisation of volatile fatty acids in the simultaneous determination together with phenols and indoles in cow slurries** ***Anal Bioanal Chem 389, #5, 1603-1609 (NOV 2007)*** **Larreta, J.; Usobiaga, A.; Etxebarria, N.; Arana, G.; Zuloaga, O.**	**DVB/Car 50/30µm headspace MTBSTFA derivative**	**GC**
2459	**Volatiles found in cow slurry**	**Experimental design to optimise the analysis of organic volatile compounds in cow slurry by headspace SPME-GC-MS** ***J. Chromatogr., A 1136, #1, 1-9 (2006-12-08)***	**100µm PDMS 75µm Carboxen**	**GC/MS**

		Larreta, J.; Vallejo, A.; Bilbao, U.; Alonso, A.; Arana, G.; Zuloaga, O.	**headspace**	
			Methylation	
2477	**Odor from manures**	**Identification of volatile organic compounds in the manures of cow, hog and chicken by SPME-GC-MS** ***Se Pu 25, #3, 425-9 (2007 May)*** **Huang, Jun; He, Jin; Zhang, Jibin; Yu, Ziniu**	**65µm PDMS-DVB** **30 min at 60°C** **sat.NaCl** **headspace**	**GC-MS** **In chinese**
2221	**Malodors of livestock operations**	**Multidimensional GC-olfactometry for the identification and prioritization of malodors from confined animal feeding operations** ***J Ag Food Chem, 53, #22, 8663-8672 (2005)*** **Wright, D.; Eaton, D..; Nielsen, L.; Kuhrt, F.; Koziel, J.,. Spinhirne, J.; Parker, D**		**GC-MS**
2316	**Odor from swine facilities**	**Effect of ozonation on odor and the concentration of odorous organic compounds in air in a swine housing facility** ***Trans. Am. Soc. Agric. Eng. 48 #6, 2297-2302 (2005)*** **Davies, S.H.; Hill, J.D.; Kim-Yang, H.; Von Bernuth, R.D.**	**air sampling**	**GC**
2144	**Odor from swine facilities**	**Analysis of odorous compounds in swine buildings and their relationship to thermal environment, management and categories of pigs** ***Livestock Environ. Proc. Seventh Int. Symp 334-340 (2005)*** **Dahl, P.; Johnsen, J.; Maahn, M.; Segaard, H.;Takai, H.; Tegersen, F.**	**Air sample**	**GC/MS**
2759	**Odor from swine manure**	**Simultaneous chemical and sensory characterization of volatile organic compounds and semi-volatile organic compounds emitted from swine manure using SPME and multidimensional GC-MS-olfactometry** ***J. Environ. Qual. 37, #2, 521-534 (2008)*** **Cai, L.; Hoff, Steven J.; Jenks, W.; Koziel, Jacek A.; Lo, Yin-Cheung M.; Xin, Hongwei**	**85µm Carboxen headspace**	**GC/MS**
2161	**Volatiles in swine particulate matter**	**Characterization of volatile organic compounds and odorants associated with swine barn particulate matter using SPME-MS-olfactometry** ***J. Chromatogr. A, 1102, #1-2, 60-72 (2006)*** **Cai, Lingshuang; Koziel, Jacek A.; Lo, Yin-Cheung; Hoff, Steven J.**	**75µm Carboxen headspace**	**GC-MS**

Environmental

1914	Auto exhaust	Formation and reaction of hydroxycarbonyls from the reaction of OH radicals with 1,3-butadiene and isoprene *Environ. Sci. Technol., 39. #11, 4091-4099* Arey, Janet; Atkinson, Roger; Baker, Jillian	pentafluorobenzyl hydroxyl amine derivatives	API-MS GC/FID
1915	Carboxylic acids in air	Photochemical sources of organic acids. 1. Reaction of ozone with isoprene, propene, and 2-butenes under dry and humid conditions using SPME *J Phys Chem A, 109, #24, 5358-5365* Orzechowska, Grazyna; Paulson, Suzanne	headspace	GC-MS
1916	Byproducts of reactions	Rate coefficients for the gas-phase reaction of isoprene with $N0_3$ and NO_2 *Int J Chem Kinet, 37, #2, 57-65* Johnson, M.; Langer, S.; Stabel, J.	headspace	GC/FID
1917	Hydroxyl-carbonyls in Air	1,4-Hydroxycarbonyl products of the OH radical initiated reactions of C5-C8 n-alkanes in the prescence of NO *Environ. Sci. Technol., 39. #12, 4447-4453* Arey, Janet; Aschmann, Sara M.; Atkinson, Roger; Reisen, F	on-fiber hydroxylamine derivatives	GC-MS GC/FID
1918	Volatile sulfur from biogas production	Occurrence and abatement of volatile sulfur compounds during biogas production *J. Air Waste Manage. Assoc, 54, #7, 855-861.* Andersson, F.; Ejlertsson, J.; Karlsson, A.; Svensson, B.	headspace	GC-MS
1920	Sulfur compd industrial effluents	Headspace SPME followed by GC/PFPD for the analysis of malodorous sulfur compounds liquid industrial effluents *Anal and Bioanal Chemistry, 378, #1, 190-196* Desauziers, V.; Fanlo, Jean-Louis; Lestremau, F.	65µm PDMS-DVB 75µm Carboxen 5 or 60 min headspace	GC/PFPD
1921	PAHs in air	Air/polymer distribution coefficients for PAHs by SPME sampling. *J Chromatography, A, 1029, #1-2, 263-266* Kolar, K.; Ciganek, M.; Malecha, J.	PDMS coated fibers	GC-MS

1922	Organo-halogenated in fish feed	Selective extraction of trace levels of polychlorinated and polybrominated contaminants by supercritical fluid-SPME and determination by GC-MS. Application to aquaculture fish feed and cultured marine species *Anal. Chem., 77, #7, 2259-2265* Carro, A.M.; Lorenzo, R.A.; Rodil, R.; Torrijos, R. Cela		GC/MS/MS
2389	**Ethylene oxide in air**	**Round-robin evaluation of a SPME-GC for reliable determination of trace level ethylene oxide in sterilized medical devices** ***Biomed Chromatogr: 22, #2, 136-48 (-2008 Feb)*** **Harper, T.; Cushinotto, L.; Blaszko, N.; Arinaga, J.; Davis, F.; Cummins, C.; Dicicco, M.**		GC
1923	Ethylene oxide in air	Laboratory and field validations of a SPME device for the determination of ethylene oxide. *J Chromatogr A, 1026, #1-2, 25-30* Tsai, S; Tsai, S; Wang, V; Lai, J	75µm Carboxen HBr on-fiber derivative 25°C	GC
2187	**Methylmercury in tuna fish**	**Isotope dilution SPME GC/MS for the determination of methylmercury in tuna fish samples** ***J. Mass Spectrom. 41, #1, 77-83 (2006)*** **Centineo, G.; Garcia A., J.; Gonzalez, E. Sanz-Medel, A.**	**headspace 15 min NaEt4B derivatives**	**GC-MS**
1924	Methyl mercury from fish tissue	Blank correction considerations for isotope dilution and reverse isotope dilution calibration: Determination of methylmercury in fish tissue *J of Anall Atomic Spectrometry, 20, #8, 724-729* Yang, Lu; Sturgeon, Ralph E.		GC-ICP-MS
1925	PCBs in waste oil	Selective determination of PCBs in waste oils using liquid-liquid partition followed by headspace SPME and GC with atomic emission detection *J. Chromatogr. A,1056, #1-2, 263-266* Cela Torrijos, R.; Ramil Criado, M.; Rodriguez Pereiro, I.	65µm PDMS-DVB headspace	GC-AED
1926	Degradation byproducts of triclosan	Confirmation of the formation of dichlorodibenzo-p·dioxin in the photodegradation of triclosan by photo-SPME *Anal. Bioanal. Chem., 381,#6, 1294-1298* Cela, R.; GarciaJares, C.; Llompart, M.; Lores, M.; SanchezPrado, L.	100µm PDMS headspace	GC-EI/MS
1927	Acids from diesel fuel	Degradation and corrosive activities of fungi in a diesel-mild steel-aqueous system *World J Microbiology & Biotechnology, 21, #2, 135-142* Bento, F.; Beech, I.; Gaylarde, C.; Englert, G.; Muller,I.	headspace @ 30°C	GC
1928	PCBs in ash	Determination of PCBs in ash using dimethylsulfoxide microwave assisted extraction followed by SPME *Talanta, 63, #3, 533-540* Criado, M.; Pereiro, I. ; Torrijos, R.	65µm PDMS-DVB headspace stirring	GC-ECD and GC-MS
2508	**Chemical warfare agents**	**Solid phase microextraction combined with gas chromatography - A powerful tool for the determination of chemical warfare agents and related review article** ***CURR. ORG. CHEM. 11, #3, 241-253 (2007)*** **Zygmunt, B.; Zaborowska, A.; Swiatłowska, J.; Namiesnik, J.**		
2196	**Chemical warfare agents (TEP, GB and GD) on office media**	**LC electrospray tandem MS and desorption electrospray ionization tandem MS analysis of chemical warfare agents in office media typically collected during a forensic investigation** ***J. Chromatogr. A, 1110, #1-2,86-94 (2006)*** **Chenier, C.L.; D'Agostino, P.A.; Hancock, J.R.; Lepage, C.R. Jackson**		**LC-MS**
2165	**Chemical warfare agent surrogate from water**	**Closed tube sample introduction for gas chromatography-ion mobility spectrometry analysis of water contaminated with a chemical warfare agent surrogate compound** ***Anal. Chim. Acta, 556, #2, 455-461 (2006)*** **Erickson, R.; Tripathi, A; Maswadeh, W.; Snyder, A.; Smith, P.**	**headspace**	**IMS**
1929	Chemical warfare agemt in air	Detection of gas-phase chemical warfare agents using field-portable GC-MS systems: instrument and sampling strategy considerations. *Trends in Anal Chem, 23, #4, 296-306* Smith, P.; Lepage, C.; Koch, D.; Wyatt, H., Hook, G.; Betsinger, G.; Erickson, R., Eckenrode, B.	direct air sampling	GC-MS
		Towards smaller and faster GC-MS systems		

1930	Chemical in air and water	for field chemical detection *J. Chromatogr. A, 1067, #1-2,285-294* Eckenrode, B.; Erickson, R..; Hook, G.; Koch, D.; Leow, S.; Lepage, C. Jackson; Smith, P..; Sng, M.	<10 min sampling	GC-MS
1931	Chemical warfare agemt in soil	Rapid screening of precursor and degradation products of chemical warfare agents in soil by SPME ion mobility spectrometry (SPME-IMS) *Anal. Chim. Acta, 545, #1, 13-20* Harrington, Peter B.; Rearden, Preshious	100µm PDMS 65µm PDMS-DVB <30 min sampling headspace	GC-MS
2680	**Phenols in water**	**Development, validation and application of a method to analyze phenols in water samples by SPME-GC-FID** ***J Env Sci and Health 42, #5, 491-498 (2007)*** **Lancas, Fernando M.; Olivares, Igor R. B.; Alves, Priscila M.**	**50µm PA 40 min @ 70°C sat salt**	**GC-FID**
2381	**Phenol and nitrophenol in rainwater**	**SPME-GC-MS for analysis of phenols and nitrophenols in rainwater, as their t-butyldimethylsilyl derivatives** ***Analytical and Bioanalytical Chemistry 38, # 7; Conference 10. 2527-2535 (2007-04-15)*** **Jaber, F., Schummer, C., Mirabel, P., Millet, M., Chami, J.**	**50µm PA 40 min @ 22°C t-butyldimethylsilyl derivatives 75 g NaCl, ph 3**	**GC-MS**
2745	**Chlorophenol in wine**	**Assessment of the matrix effect on the headspace (HS-SPME) analysis of chlorophenols in wines.** ***J. Sep. Sci. 30, #5, 722-730 (2007-03)*** **Insa, S.; Besalu, E.; Salvado, V.; Antico, E.**	**headspace**	**GC-ECD GC-MS**
2858	**Organics from environmental samples**	**Recent trends in the use of organized molecular systems combined with chromatographic techniques in environmental analysis** ***Anal. Bioanal. Chem. 391, #3, 725-733 (June 2008)*** **Ferrera, Zoraida Sosa; Moreno, Daura Vega; Padron, M. Esther Torres; Rodriguez, Jose Juan; Santana; Santana, Cristina Mahugo**	**Review article**	
2799	**Phenols in natural water**	**Implementation of SPME with micellar desorption method for priority phenolic compound determination in natural waters** ***J. Chrom Sci., 46, #4, 325-331 (APR 2008)*** **Padron, M. ; Santana, C.; Ferrera, Z. Sosa; Rodriguez, J.**		
2438	**Chlorophenol in water**	**Development of a SPME method with micellar desorption for the determination of chlorophenols in water samples: Comparison with conventional SPME method** ***J. Chromatogr., A 1140, #1-2, 13-20 (2007-01-26)*** **Mahugo Santana, C.; Torres Padron, M.; Sosa Ferrera, Z.; Santana Rodriguez, J.**		**HPLC-DAD.**
2396	**Chlorophenol in water**	**Monitoring chlorophenols in industrial effluents by SPME-GC-MS** ***Int. J. Environ. Anal. Chem. 87, #3, 159-175 (2007-03-15)*** **Pino, V.; Ayala, J. H.; Gonzalez, V.; Afonso, A. M.**	**85µm PA 50µm CW**	**GC-MS**
2374	**Phenol and chlorophenol in water**	**Experimental and statistical validation of SPME-GC-MS analysis of r phenol and chlorophenols in raw and treated wate** ***Chemosphere 68, #3, 501-510 (JUN 2007)*** **Simoes, N.; Cardoso, V.; Ferreira, E.; Benoliel, M.**	**85µm PA 40 min @ 35°C 10% NaCl, pH 4.0**	**GC-MS**
1932	Phenols from water	Enhanced extraction capacity and chemical noise reduction in SPME *J Separation Science, 27, #17-18, 1517-1523* Moeder, Monika; Schrader, Steffi	review of fibers	GC/MS
2560	**Nitrous oxide in sediment**	**SPME-GC-MS determination of nitrous oxide evolution to measure denitrification in estuarine soils and sediments** ***J. Chromatogr. A, 1133, #1-2, 300-304 (2006-11-10)*** **Drescher, S. R.; Brown, S. D.**		**GC-MS**
1933	Sulfur compounds in sediment	Identification of sulfur interferences during organotin determination in harbour sediment samples by NaEt4B ethylation and GC-pulsed FPD flame photometric detection *J. Chromatogr. A, 1046, #1-2, 217-224* Bravo, M; Gregori, I Lespes, G; Pinochet, H; Potin-Gautier, M	$NaEt_4B$ derivatives	GC-FPD
2581	**Flavor volatiles from capers**	**Flavour profile of capers (Capparis spinosa L.) from the Eolian Archipelago by HS-SPME/GC-MS** ***Food Chemistry 101, 1272-1278 #3, (2007)*** **Romeo, V; Ziino, M.; Giuffrida, D.; Condurso, C.; Verzera, A.**	**headspace**	**GC-MS**
2893	**Volatiles in fish muscle**	**SPME method for the determination of volatile compounds associated to oxidation of fish muscle** ***J. Chromatogr. A, 1192, #1, 9-16 (May 23 2008)***	**75µm Carboxen headspace**	**GC-MS**

		Iglesias, Jacobo; Medina, Isabel	**30 min at 60 °C saline extraction**	
2552	**Volatiles in tuna fish**	**Characterisation of the volatiles of yellowfin tuna (Thunnus albacares) during storage by SPME- GC-MS and their relationship to fish quality parameters** ***Intl J Food Sci Tech 42, #10, 1139-1147 (2007)*** **Edirisinghe, R. K. B.; Graham, A. J.; Taylor, S. J.**	**headspace**	**GC-MS**
2278	**Volatiles in fish oil**	**Oxidatively derived volatile compounds in microencapsulated fish oil monitored by SPME** ***J Food Science 70 #7, C433-C440 (2005)*** **Jonsdottir, Rosa; Bragadottir, Margaret; Arnarson, Gudmundur Orn**	**PDMS/DVB headspace**	**GC-FID**
1934	Biphenyls in fish oil	Determination of mono- to octachlorobiphenyls in fish oil using Florisil adsorption followed by headspace SPME-GC with TOF-MS *J. Chromatogr. Am 1085, #2, 278-284* Agustin, M.; Hong, S; Lee, K.; Park, H.; Ryu, Jae-Ch	65µm PDMS-DVB headspace	GC-TOF-MS
2805	**Solvent residue in vegetable oil**	**The comparison of SPME-GC and static headspace-GC for determination of solvent residues in vegetable oils** ***Journal of Separation Science 31,#2, 364-371 (Feb 2008)*** **Ligor, Magdalena; Buszewski, Boguslaw**	**85µm CAR/PDMS headspace**	**GC-FID**
2700	**Benzo-a-pyrene in vegetable oil**	**Rapid validated method for the analysis of benzo a pyrene in vegetable oils by using SPME-gas chromatography-mass spectrometry.** ***J. Chromatogr., A 1176, #1-2, 231-235 (2007)*** **Purcaro, G.; Moret, S.; Conte, L. S.**	**headspace**	**GC-MS**
2453	**PAHs in vegetable oil**	**Determination of PAHs in vegetable oils using SPME-comprehensive two-dimensional GC coupled with time-of-flight MS** ***J. Chromatogr., A 1150, #1-2, 173-177 (2007-05-25)*** **Wejnerowska, G.; Karczmarek, A.; Gaca, J**	**immersed**	**GC-TOF-MS**
2868	**PAHs in aquatic species**	**Evaluation of spme conditions for the determination of PAHs in aquatic species using gas chromatography** ***Anal. Bioanal. Chem. 391, #4, 1419-1424 (June 2008)*** **Aguinaga, N.; Campillo, N.; Hernandez-Cordoba, M.; Vinas, P.**	**65µm PDMS-DVB 75°C for 60 min headspace**	**GC-MS**
2866	**PAHs in milk**	**A headspace SPME procedure coupled with for the analysis of volatile polycyclic aromatic hydrocarbons in milk samples** ***Anal. Bioanal. Chem. 391, #3, 753-758 (June 2008)*** **Aguinaga, N.; Campillo, N.; Hernandez-Cordoba, M.; Vinas, P.**	**65µm PDMS-DVB 75°C for 60 min headspace**	**GC-MS**
2448	**PAHs in milk**	**Determination of 16 polycyclic aromatic hydrocarbons in milk and related products using SPME-GC-MS** ***Anal. Chim. Acta 596, #2, 285-290 (2007-07-23)*** **Aguinaga, N.; Campillo, N.; Hernandez-Cordoba, M. ; Vinas, P.**	**65µm PDMS-DVB immersed 60 min at 55°C**	**GC-MS**
2423	**PAHs in smoked meat**	**Analysis of polycyclic aromatic hydrocarbons in solid matrixes by solid-phase microextraction coupled to a direct extraction device** ***Talanta 71, #2, 751-757 (2007-02-15)*** **Martin, D.; Ruiz, J.**	**100µm PDMS 65µm PDMS-DVB 25°C for 60 min headspace**	**GC-MS**
2720	**PAHs in sediment**	**Behaviour of polycyclic aromatic hydrocarbons in dissolved, colloidal, and particulate phases in sedimentary cores** ***Intl J Env Analyt Chem 87, #3, 211-225 (2007)*** **King, A. J.; Readman, J. W.; Zhou, J. L.**		**GC-MS**
2782	**Phenanthrene in soil**	**Electronic nose and SPME techniques to monitor phenanthrene biodegradation in soil** ***Sens Actuators, B Chem 131, #1, 63-70 (Apr 14 2008)*** **De Cesare, F.; Macagnano, A.; Pantalei, S.; Zampetti, E.**	**headspace**	
2650	**PAHs in soil**	**Comparison of techniques for estimating PAH bioavailability: uptake in Eisenia fetida, passive samplers and leaching using various s olvents and additives.** ***Environ Pollut 145, #1, 154-60 (2007 Jan)*** **Bergknut, M.; Sehlin, E.; Lundstedt, S.; Andersson, P.; Haglund, P.; Tysklind, M.**		**GC**
1935	PAHs in soil/seaweed	SPME and GC-MS for the determination of PAHs in environmental solid matrices. *Jl of Chromatographic Sci, 42, #6, 329-335* Cam, D.; Gagni, S.; Lombardi, N.; Punin, M.	100µm PDMS immersed liquid carrier	GC-MS
		SPME coupled with HPLC using on-line diode-array and		

2266	**Fenitrothion in water**	**electrochemical detection for the determination of fenitrothion and its main metabolites in environmental water samples** ***J. Chromatogr. A, 1094 #1-2, 70-76 (2005)*** **Barrio,R.; Goicolea, M.; Sampedro, M.; Sanchez-Ortega, A.; Unceta,N.**		**HPLC**
1936	Roxarsone in water	Sensitive method for the determination of roxarsone using w/ SPME multi-detector gas chromatography *J Chromatogr A, 1057, #1-2, 177-183* Aldstadt III, Joseph H.; Roerdink, Aaron R.	65µm PDMS-DVB 15min @ 70°C 1,3-propanedithiol derivatives	GC-MS GC-PFPD
1937	Selenium from plants	Speciation of volatile selenium species in plants using GC-ICP-MS *Sepu, 22, #1, 16-19* Meija, J.; Montes-Bayon, M.; Caruso, J.; Leduc, D.; Terry, N.	headspace	GC-ICP-MS
1938	Sulfur & N2 odorants in biomass	Analysis of sulfur & nitrogen odorants using SPME and GC-MS *Water Sci. Technol., 50, #4, 115-120* Chiu, P.C.; Dentel, S.K.; Hepner, S.; Turkmen, M.	headspace	GC-MS
2303	**Odorants from FeSO4 solutions.**	**Identification of metallic-smelling 1-octen-3-one and 1-nonen-3-one from solutions of ferrous sulfate** ***J Ag Food Chem, 53, #21, 8325-8327 (2005)*** **Lubran, Meryl B.; Lawless, Harry T.; Lavin, Edward; Acree, Terry E.**	**headspace (1, 5, and 16 h) 22° and 37°C**	**GC**
1939	Odors from biosolids	Characterization of odors from limed biosolids treated with nitrate and anthraquinone *J. Environ. Sci. Health, 40, #1, 139-149* Abu-Orf, M; Choi, H.; Kim, H.; McConnell, L.; Peot, C.; Ramirez, M.	headspace	GC-MS
2214	**Organics from automobile materials**	**Contamination of toxic volatile and semi-volatile compounds from automobile materials** ***Bul Envn Contamination and Toxicology 76, #2, 301-305 (2006)*** **Zhou, S.; Huang, J. X.; Kinkel, J.; Stark, W.**		
1940	Organics in stack emmisions	Sampling and analysis of volatile organic pollutants emitted by an industrial stack *Anal. Chim. Acta, 524, #1-2, 51-62* Campo, L.; Domeno, C.; Martinez-Garcia, Fca.; Nerin, C.	85µm polyacrylate headspace	GC-MS
1941	Volatile organics in dust	Quantitative determination of volatile organic compounds in indoor dust using gas chromatography-UV spectrometry *Environ. Int., 31, #8, 1141-1148* Bornehag, C; Lagesson, V; Nilsson, A; Sundell, J; Tagesson, C	headspace	GC-UV
1942	Volatiles in concrete	Analysis of volatile components in concrete by SPME-GC-Mass Spetrometry *Zhipu Xuebao, 25, #4, 225-228* Liao, K.	50/30µm DVB/CAR 65°C, headspace	GC-MS
1943	Volatiles in concrete	Identification of volatile components in yunyan and yanmo concrete by SPME -GC-MS *Zhipu Xuebao, 25, #1, 32-37* Zhu, S. M.; Li, J.; Lin, P.	headspace	GC-MS
1944	Chlorophenols from landfills	Chlorophenols in leachates originating from different landfills and aerobic composting plants *J. Hazard. Mater., 124. #1-3, 107-112* Ozkaya, Bestamin	headspace	GC-FID
2694	**Organics from particulate**	**GC analysis of organic marker compounds in fine particulate matter using solid-phase microextraction** ***J Air Waste Manag Assoc. 57, #1, 53-58 (2007 Jan,)*** **Lin, Lin; Lee, Milton L; Eatough, Delbert J**	**75µm Carboxen 30min headspace**	**GC-MS**
1945	Organics from particulate	Qualitative analysis of organics in atmospheric particulates by headspace SPME-GC/MS *Atmos. Environ., 38, #40, 6917-6925* Khanal, O.; Shooter, D.	100µm PDMS 10min headspace	GC-MS
2653	**Pesticides from soil**	**Current trends in SPME techniques for the determination of pesticides in food and environment** ***J Biochem Biophysical Methods 70, #2, 117-131 (MAR 10 2007)*** **Pico, Yolanda; Fernandez, Monica; Ruiz, Maria Jose; Font, Guillermina**	Review	
1946	Pesticides from soil	Determination of pesticides and their degradation products IN soil: Critical review and comparison of methods *TrAC Trends Anal. Chem., 23, #10-11, 772-789* Andreu, Vicente; Pico, Yolanda	Review headspace SPME	GC-MS LC-MS

2844	**Organics in water**	**Coupled in-tube and on-fibre SPME for cleanup and preconcentration of organic micropollutants from aqueous samples and analysis by GC-MS** ***Anal. Chim. Acta 618, #1, 61-69 (Jun 16 2008)*** **Gupta, Manju; Jain, Archana; Pillai, Aradhana K.K.V.; Verma, K.**	**DVB/Cab (30/50 µm)**	**GC-MS**
2339	**Organics in water**	**Target and nontarget screening of organic micropollutants in water by SPMEs combined with GC-TOF-MS** ***Anal Chem Vol. 79, # 24 9494-504 (2007 Dec 15)*** **Hernandez, F.; Portoloes, Tania; Pitarch, Elena; Loopez, F.**		**GC-TOF-MS**
2846	**PAHs in water**	**SPME followed by HPLC with fluorimetric and UV detection for the determination of polycyclic aromatic hydrocarbons in water** ***Analytical Letters 41, #1, 119-136 (2008)*** **Ricardo Lucio-Gutierrez, J.; de la Luz Salazar-Cavazos, Maria; Waksman de Torres,Noemi H.; Castro-Rios, Rocio**	**65µm PDMS/DVB** **60 min @ 70°C** **immersion**	**LC-UV**
2397	**PAHs in water**	**Determination of PAHs in aqueous samples by microwave assisted headspace SPME-GC-FID** ***Talanta 72, #4, 1269-1274 (2007-06-15)*** **Wei, M. -C.; Jen, J. -F.**	**65µm PDMS/DVB** **30 min @ 20°C**	**GC-FID**
2345	**PAHs in water**	**SPME-GC-MS analysis of PAHs Towards the European Union water directive 2006/0129 EC** ***J Chromatogr A 1176, #1-2 , 48-56 (2007 Dec 28)*** **Fernoandez-Gonzoalez, V; Concha-Graona, E; Muniategui-Lorenzo, S; Loopez-Mahoa, P; Prada-Rodroguez, D**	**65µm PDMS/DVB immersion**	**GC-MS GC-MS-MS**
2543	**PAHs in earthworms**	**Predicting PAH bioaccumulation and toxicity in earthworms exposed to manufactured gas plant soils with solid-phase microextraction** ***Env Science & Tech 41, #21, 7472-7478 (NOV 1 2007)*** **Jonker, T. O.; van der Heijden, S.; Kreitinger, J.; Hawthorne,S.**		
2596	**Organics from soil**	**Characterization of an urban landfill soil by using physicochemical . analysis and solid phase microextraction (SPME)-GC/MS** ***Env. Monitoring Assessment 127, #1-3, 337-351 (APR 2007)*** **Banar, Mufide; Ozkan, Aysun; Vardar, Cigdem**	**65µm PDMS/DVB headspace** **15 min @ 50°C**	**GC-MS**
1947	Organics from soil	SPME to predict bioavailability and accumulation of organic micropollutants in terrestrial organisms after exposure to a field-contaminated soil *Environ. Sci. Technol., 38, #18, 4842-4848* Barendregt, A; Fleuren, R; Hermens, J.; Jager, T; Sinnige, T.; Van Der Wal, Leon; Van Gestel, Cornelis A. M.	30µm PDMS headspace 10 days exposure	GC-MS
1948	PAHs in micelles	SPME coupled to GC-MS for determining PAH-micelle micelle partition coefficients *Anal. Chem., 76, #15, 4572-4578* Alfonso, Ana M.; Ayala, Juan H.; Gonzalez, V; Pino, V.	85µm polyacrylate 100µm PDMS	GC-MS
1949	Odors from pig sheds	Implementation of new methods to characterise atmospheres in piggeries *Int. J. Environ. Anal. Chem., 84, #9, 647-659* Begnaud, F.; Berdague, Jean-Louis; Lebost, J.; Murat, C.; Peres, C.	headspace	GC-MS
1950	Organics in water	In-tube solid-phase microextraction and online coupling with high-resolution GC. *LC-GC Europe, 17, #3, 144-151* Wang, H. W.; Liu, W. M.; Guan, Y. F.	5 M X 0.53mm ID 1.2µm PDMS	GC
1951	Odor from swine facilities	Characterization of volatile organic compounds on airborne dust in a swine finishing barn *Trans. Am. Soc. Agric. Eng., 47, #4, 1231-1238* Jeon, I.J.; Maghirang, R.G.; Razote, E.B.; Seitz, L.M	75µm Carboxen 100µm PDMS headspace	GC

Water

778	Volatile organics in environmental samples	Solid Phase Microextraction of volatile organic compounds in environmental applications *Am Laboratory (2001)33(4), 18-20* Van Longenhove, H; Dewulf, J.	100µm PDMS 85µm Polyacrylate 15 min.	GC
858	Organic pollutants in environment	SPME - a convenient tool for the determination of organic pollutants in environmental matrices *Crit. Rev. Anal. Chem (2001) 31(1) 1-18*		

		Zygmunt, Bogdan; Jastrzebska, Anna; Namiesnik, Jacek		
2670	**Toluene from air**	**Characterisation of absorptive sampling with SPME fibres in the EUPHORE photoreactor** ***Talanta 72, #5, 1757-1766 (JUL 31 2007)*** **Alvarez E., Gomez**		**GC**
2601	**Carbonyl product photo-oxidation BTEX**	**Experimental confirmation of the dicarbonyl route in the photo-oxidation of benzen and toluene** ***Env Sci Tech 41, #24, 8362-8369 (DEC 15 2007)*** **Alvarez, E. Gomez; Viidanoja, J.; Munoz, A.; Wirtz, K.; Hjorth, J.**	**PFBHA derivatives**	
2717	**Volatile emissions industrial gaseous**	**Rapid analysis of tile industry gaseous emissions by ion mobility spectrometry and comparison with SPME-GC-MS** ***J. Environ. Monit. 8, #12, 1219-1226 (2006-11-28)*** **Pozzi, R.; Bocchini, P.; Pinelli, F.; Galletti, G. C.**		**GC-MS**
2710	**Semivolatile chlorinated organics in air**	**Comparative application of SPME fibre assemblies and semi-permeable membrane devices as passive air samplers for semi-volatile chlorinated organic compounds. A case study on the landfill "Grube Antonie" in Bitterfeld, Germany** ***Environmental Pollution 144; # 2; 414-422 (2006-11-15)*** **Paschke, A.; Vrana, B.; Popp, P.; Schueuermann, G.**	**65µM CW/DVB** **passive air sample**	**GC**
2602	**Toluene from air samples**	**Modelling of toluene SPME for indoor air sampling.** ***Anal Bioanal Chem 388, #1, 147-56 (2007 May)*** **Mocho, Pierre; Larroque, Virginie; Desauziers, Valoerie**	**75µm Carboxen**	**GC**
1	BTEX compounds, PCBs, solvents in water	The Application of Chemically Modified Fused Silica Fibers in the Extraction of Organics from Water Matrix Samples and Their Rapid Transfer to Capillary Columns Water Pollution Research J. Canada 24: 179 (1989) Belardi, R., Pawliszyn, J.	uncoated fiber 1 min	GC-FID
2678	**VOCs in water**	**Development of a simple, accurate SPME-based method for assay of VOCs in column breakthrough experiments** ***CHEMOSPHERE 66, #1, 18-29 (2006)*** **Salaices, Avila M. A.; Breiter, R.; Mott, H.**	**headspace** **5 min**	**GC**
2682	**Review article**	**Multiple solid-phase microextraction: Theory and applications.** ***Trends Anal. Chem 26, #3, 206-214 (2007-03)*** **Tena, M. T.; Carillo, J. D.**		
2685	**Review article**	**Developments in multiple headspace extraction** ***J. Biochem. Biophys. Mehods 70, #2, 229-233 (10 MAR 2007)*** **Hakkarainen, M.**		
2789	**Review article**	**Sorbent- and liquid-phase microextraction techniques and membrane-assisted extraction in combination with GC analysis: A review** ***Anal. Chim. Acta 614, #1, 27-37 (Apr 28 2008)*** **Hyotylainen, Tuulia; Riekkola, Marja-Liisa**		
3	VOCs in water	Solid Phase Microextraction for the Direct Analysis of Water: Theory and Practice LC-GC 10: 656-661 (1992) Arthur, C., Potter, D., Buchholz., K, Motlagh, S., Pawliszyn, J.	100µm PDMS 2-5 min salt added	GC-FID
4	VOCs, PCBs, solvents in water	Practical and Theoretical Aspects of Solid Phase Microextraction for the Direct Analysis of Groundwater Proceedings 15th Annual EPA Conference-Analysis of Pollutants in Environment, Norfolk, VA, May 1992 Arthur, C., Buchholtz, K., Motlagh, S., Killam, L., Pawliszyn, J.	100µm PDMS 5-14 min salt added	GC-FID
6	BTEX, gasoline in water	Analysis of Substituted Benzene Compounds in Groundwater Using SPME J. Env. Sci. Technol. 26: 979-983 (1992) Arthur, C., Potter, D., Lim, M., Motlagh, S.,	56µm PDMS 2-6 min stirring	GC-FID

		Killam, L., Pawliszyn, J.		
2616	**BTEX compounds in water**	**Determination of benzene, toluene, ethylbenzene, xylenes in water at sub-ng l(-1) levels by SPME coupled to cryo-trap GC-MS** ***Chemosphere 69, #9, 1381-1387 (NOV 2007)*** **Lee, Maw-Rong; Chang, Chia-Min; Dou, Jianpeng**	**75µm Carboxen 15 min @ 25°C sat. salt**	**GC-MS**
7	BTEX compounds in water	Dynamics of Organic Compounds Extraction from Water Using Liquid-Coated Fused Silica Fibers Anal. Chem. 64: 1187-1199 (1992) Louch, D., Motlagh, S., Pawliszyn, J.	56µm PDMS 2-6 min stirring	GC-FID
10	BTEX compounds in water	Detection of Substituted Benzenes in Water at the pg/mL Level Using Solid Phase Microextraction and GC-Ion Trap Mass Spectrometer J. Chromatogr. 625: 247-255 (1992) Potter, D., Pawliszyn, J.	100µm PDMS 30 min stirring	GC-FID
11	Organics in water	Environmental Analysis of Organic Compounds in Water Using Solid Phase Microextraction J. High Res. Chromatogr. 15: 741-744 (1992) Arthur, C., Pratt, K., Belardi, R., Motlagh, S., Pawliszyn, J.	100µm PDMS 14 min stirring	GC-MS
14	Phenols in water	Determination of Phenols by SPME and GC Analysis J. Environ. Sci. Technol. 27 (13): 2844-2848 (1993) Buchholz, K., Pawliszyn, J.	85µm polyacrylate 60 min stirring salt added, pH 2	GC-FID, -MS
230	Phenols in water	Determination of Phenolic Compounds in Waste Water by Solid-Phase Microextraction Fresenius' J. Anal. Chem. 357: 326-332 (1997) Moeder, M., Schrader, S., Franck, U., Popp, P.		GC-MS
670	Phenols in water	Sorption of phenols to dissolved organic matter investigated by SPME *Sci. Total Environ. (2000), 253(1-3), 63-74* Ohlenbusch, G., Kumke, M., Frimmel, F.		
922	Phenolic compounds in water	SPME coupled to liquid chromatography for the analysis of phenolic compounds in water J. Chromatogr. A (2001) 923(1-2), p45-52 Toledo, E., Prat, M., Alpendurada, M.	50µm CW/TPR 65µm DVB/PDMS 30min immersed salt added, pH 2	HPLC
951	Chlorinated phenolics in water	Application of SPME in pre-concentration of chlorinated phenolic compounds from cellulose bleaching effluents *J. Sep. Sci (2001), 24(4), 309-312* Dos Santos, L.; Vale, M.; De Araujo, M. Bertrand C.; Caramao, E.; Oliveira, E.		
15	VOCs, phenols, semivolatiles in water	Recent Advances in Solid-Phase Microextraction (SPME) of Environmental Samples Proceedings Water Quality Technology Conference Miami, FL, Nov. 1993 Arthur, C., Pratt, K., Belardi, R., Motlagh, S., Pawliszyn, J.	100µm PDMS 5 min (volatiles) 10 min (semivolatiles) headspace stirring, salt added	GC-MS
671	4-Quinolones in water	Influence of pH and other modifying factors on the distribution behaviors of 4-Quinolones to Solid phase and humic acids studied by "negligible-depletion" SPME-HPLC *Environ Sci Technol. 2000, 34, 4989-4994* Lutzhoft, H. Vaes, W., Freidig, A., Halling-Sorrensen, B. Hermens, J.	CW/TPR 10min. pH 3-5.5 stirred	HPLC 260NM
2644	**Semivolatiles varied matrices**	**Determining chemical activity of (semi)volatile compounds by headspace solid-phase microextraction** ***Anal. Chem. 79, #7, 2869-2876 (Apr 1 2007)*** **Burken, J.; Karlson, U.; Legind, C.; Mayer, P.; Reichenberg, F**	**headspace 30 min**	**GC**
		Analysis of semi-volatile organic compounds in aqueous samples by		

2454	**Semivolatiles in waste water**	**microwave-assisted headspace SPME Coupled with GC-ECD** ***J. Chromatogr., A 1140, #1-2, 35-43 (2007-01-26)*** **Huang, Y. P.; Yang, Y. C.; Shu, Y. Y.**	**headspace** **30 min @ 70°C**	**GC-ECD**
501	24 Semivolatiles in waste water	Development of SPME-GC method for the determination of organic compounds in waste water Acta Hydrochim. Hydrobiol. 1999, 27(4), 1913-199 Grote, C., Belau, E., Levsen, K., Wunsch, G.		GC
938	Organics in water	An improved automatic analyzer for organic compounds in water based on headspace (SPME) coupled to GC *Field Anal. Chem. Technol (2001) 5(1-2), 37-49* Belau, E.; Grote, C.; Spiekermann, M.; Levsen, K.		GC
565	Semivolatiles in fish, water	Polyacrylate-Coated SPME fibers as a tool to simulate body residues and target concentrations of complex organic mixtures for estimation of baseline toxicity Environ. Sci. Technol. 2000, 34, 324-331 Verbruggen, E., Vaes, W., Parkerton, T., Hermens, J.	85µm polyacrylate 5-150 min	GC-MS
785	Halogenated hydrocarbons in water	Impact of a lignite seam on contaminated groundwater in the aquifer system of the Bitterfeld region *Water Air Soil Pollut (2000) 125(1-4), 157-170* Christoph, G; Dermietzel, J.		
19	Chlorohydrocarbons in water	Determination of Volatile Chlorinated Hydrocarbons in Air and Water with Solid-Phase Microextraction Analyst(Cambridge,UK) 118: 1501-5, Dec. 1993 Chai, M., Arthur, C., Pratt, K., Pawliszyn, J., Belardi, R.	100µm PDMS 20 min (immersion) 10 min (headspace)	GC-ECD
436	Chlorohydrocarbons in water	Analysis of Volatile Halogenated Hydrocarbons in Water by SPME and GC-MS Chem. Listy (1998), 92(9), 633-642 Janda, V., Viden, I.	100µm PDMS 20 min stirred	GC-MS
2645	**Aromatic hydrocarbons in ice crystals**	**Laboratory studies on the uptake of aromatic hydrocarbons by ice crystals during vapor depositional crystal growth** ***Atmos. Environ. 41, #29, 6156-6166 (Sept 2007)*** **Borrmann, S.; Fries, E.; Haunold, W.; Jaeschke, W.; Mitra, S.; Schmidt, M.; Starokozhev, E.**	**headspace**	**GC**
20	PAHs, PCBs in water	Rapid Determination of Polyaromatic Hydrocarbons and Polychlorinated Biphenyls in Water Using Solid-Phase Microextraction and GC/MS J. Environ. Sci. Technol. 28(2): 298-305 (1994) Potter, D., Pawliszyn, J.	15µm PDMS 10 min stirring	GC-MS
900	Aromatic compounds in water	SPME of aromatic hydrocarbons from water samples Chemija (2000) 11(4) 206-210 Seduikiene, I.; Vickackaite, V.; Kazlauskas, R		
672	PAHs in water	Quantitative analysis of PAHs in water by SPME-HPLC *Huanjing Huaxue (2000) 19(4), 382-384* Li, Y., Zhang, X., Xu, R., Cai, W., Wang, G., Song, Y.		HPLC
2831	**Dissolved organic carbon in rivers**	**Allochthonous DOC in floodplain rivers: Identifying sources using using SPME with GC.** ***Aquatic Sciences 69m #4, 472-483 (2007)*** **Zander, Alek; Bishop, Andrea G.; Prenzler, Paul D.; Ryder, Darren S.**		
2740	**Chlorinated volatils in water and wastewater**	**Determination of chlorinated volatile organic compounds in water and municipal wastewater using headspace-SPME-GC** ***J. Chromatogr. A, 1132, #(1-2), 310-314 (2006-11-03)*** **Antoniou, V.; Koukouraki, E. E.; Diamadopoulos, E.**	**headspace**	**GC-MS**
2482	**Volatiles and**	**Analysis of volatile and semivolatile organic compounds in municipal wastewater using headspace SPME-GC**	**headspace**	**GC-MS**

	semivolatiles from wastewater	***Water Environment Research 79, #8, 921-930 (AUG 2007)*** **Antoniou, Chrysoula V.; Koukouraki, Elisavet E.; Diamadopoulos, Evan**		
2540	**VOCs in oil sludge**	**Leaching of vocs from cement-based stabilized/solidified refinery oily sludge using solid phase microextraction** ***Env Tech 28, #10, 1173-1185 (OCT 2007)*** **Karamalidis, A. K.; Voudrias, E. A.**	**headspace**	**GC-FID**
22	VOCs, BTEX, PAHs in wastewater, sludge	Analysis of Organic Compounds in Environmental Samples Using Headspace Solid Phase Microextraction J. High Res. Chromatogr. 16(12): 689-692 (1993) Zhang, A., Pawliszyn, J.	100µm PDMS stirring, varied time saturated salt	GC-MS
673	Jet fuels in ground water	Source identification of underground fuel spills by SPME/High Resolution GC/genetic algorithms *Anal. Chem. (2000), 72(2), 423-433* Lavine, B., Ritter, J., Moores, A., Wilson, M., Faruque, A., Mayfield, H.		GC
2824	**Organic chemicals in sludge**	**Relative efficacy of intrinsic and extant parameters for modeling biodegradation of synthetic organic compounds in activated sludge: Steady-state systems** ***Water Environ. Res. 75(2), 98-104 (2000)*** **Bowyer, R.; Grady Jr., C.; Magbanua Jr., B.; Rodieck, Allison G.; Sanders II, R.; Smets, B.; Sowers, W.; Stolze, S.**	**headspace**	**GC-FID**
674	Organic chemicals in waste water	Quantification of synthetic organic chemicals in biological treatment process effluent using SPME-GC *Water Environ. Res, (2000), 72(1), 98-104* Magbanua, B., Mitchell, D., Gehniger, S., Bowyer, R., Grady, C., Leslie, J.	85µm polyacrylate	GC-FID
675	Musk fragrances in water	Optimization of SPME for the GC-MS determination of synthetic musk fragrances in water samples *J. Chromatogr. A, (2000) 903(1-2), 203-210* Winkler, M., Headley, J., Peru, K.	65µm PDMS/DVB 45 min @ 30°C headspace agitation	GC-MS
502	Polycyclic musk in surface water	Occurrence and distribution of organic compounds in the aquatic system in Berlin, Germany. Part 3, Determination of synthetic musks in Berlin surface water applying SPME and GC-MS Acta Hydrochim Hydrobiol (1999), 27(3), 150-156 Heberer, T., Gramer, S., Stan, H.		GC-MS
787	Polyolefins in soil	Ultrasonication and microwave assisted extraction of degradation products from degradable polyolefin blends aged in soil *J. Appl. Polym. Sci (2001) 79(6), 1101-1112* Contat-Rodrigo, L; Haider, N; Karlsson, S; Ribes-Greus, A		GC-MS
2854	**Fluorene from water samples**	**Kinetics of fluorene biodegradation by a mixed culture** **Proc. Second IASTED Int. Conf. Advanced Technol. Environ. Field pp84-87 (2007)** **Brito, A.G.; Gomes, R.C.B.; Nogueira, R.; Oliveira, J.M.; Peixoto, J.**		**GC-FID**
2775	**Pyrene in soil**	**SPME as a tool to predict the bioavailahility and toxicity of pyrene to the springtail, Folsomia candida, under various soil conditions** ***Environl Scie & Tech, 42(4), 1332-1336 (2008)*** **Styrishave, B.; Mortensen, M.; Krogh, P.; Andersen, Ole; Jensen, J.**		
940	Pyrene on humic material	Sorption of pyrene to dissolved humic substances and related model polymers. 1. Structure-property correlation *Environl Scie & Tech (2001), 35(12), 2536-2542* Kopinke, F.; Georgi, A.; Mackenzie, K.		
2586	**PAHs in water**	**Influence of sorption to dissolved humic substances on transformation reactions of hydrophobic organic compounds in water. I. Chlorination of PAHs**		

676	PAHs in water/soil	SPME and headspace SPME for the determination of high molecular-weight PAHs in water and soil samples *J. Chromatogr. Sci., (2000) 38(12) 528-534* Doong, R., Chang, S., Yuh-Chang	100µm PDMS 85µm polyacrylate 20-60 min @60°C	GC-FID
677	PAHs in water/soil	Determination of Distribution Coefficients of priority PAHs using SPME *Anal. Chem. 2000, 72(15), 3647-3652* Doong, R., Chang, S.,	100µm PDMS 85µm polyacrylate 20-60min.	
678	PAHs in water/soil	SPME FOR determining the Distribution of 16 USEPA PAHs in water *J.. Chromatogr.. A 2000, 879(2), 177-188* Doong, R., Chang, S., Sun,, Y.	100µm PDMS 85µm polyacrylate 20-60 min	GC-MS
585	PAHs in water/humic material	Interaction between natural organic matter (NOM) and (PAH) comparison of fluorescence quenching and SPME. Fresenius'-J-Anal-Chem. Jun 1999; 364(4): 313-319 Doll,-TE; Frimmel,-FH; Kumke,-MU; Ohlenbusch,-G	7µm PDMS 20 min	GC-MS
25	PAHs, semivolatiles in water	Solid Phase Microextraction -- A Solventless Sample Preparation Method for Organic Compounds in Water American Environmental Lab April 1994, p 43-45 Shirey, R., Mani, V., Savrock, J.	7µm PDMS (PAHs) polyacrylate (semivol) 15 min, stirring saturated salt	GC-FID, -ECD
679	Volatiles in water	Optimization of Extraction Conditions for Low-Molecular-Weight analytes using SPME *J. Chrom. Sci., Vol. 38, March 2000, 109-116* Shirey, R.	six different fibers 15 min headspace sat. salt, pH2,7,11	GC-MS
680	Semivolatiles in water	Optimization of Extraction Conditions and Fiber Selection for Semivolatile Analytes using SPME *J. Chrom. Sci., Vol. 38, July 2000, 279-288* Shirey, R.	seven different fibers 30 min, immersed sat. salt, pH2,7,11	GC-MS
440	PAHs in water	Solvent-Free Method for the Determination of PAHs in Wastewater by SPME-HPLC with Photodiode-Array Detector J. Chromatogr. A (1998), 823(1+2), 211-218 Negrao, M., Alpenduradu, M.	100µm PDMS 45°C, 30 min stirring	HPLC-PAD
26	BTEX compounds in water	Analysis of BTEX in Water by Commercially Available SPME and CLOT Column Gas Chromatography J. Chromatogr. 677: 201-205 (1994) Sama, L., Webster, G., Friesen-Fisher, M., Ranjai, R.	100µm PDMS 35 min stirring	GC-FID
30	Nitrobenzenes in water	Determination of the Semi-Volatile Compounds Nitrobenzene, Isophorone, 2,4-Dinitrotoluene and 2,6-Dinitrotoluene in Water Using SPME with Polydimethylsiloxane-Coated Fibe J. Chromatogr. A Vol 678(2): 313 (1994) Horng, J., Huang, S.	100µm PDMS 15 min stirring saturated salt	GC-FID
31	VOCs, chloropesticides in water	Rapid Analysis of Environmental Samples Using SPME and Narrow Bore Capillary Columns J High Res. Chromatogr. 18(8): 495-499 (1995) Shirey, R.	100µm PDMS 15 min stirring saturated salt	GC-MS
47	BTEX compounds in water	Determination of BTEX Compounds in Water by Solid-Phase Microextraction and Raman Spectroscopy Anal. Chem. 67(3): 600-605 (1995) Wittkamp, B., Tilotta, D.	100µm PDMS	GC-FID
681	Volatiles	A new method for the rapid determination of volatile substances: the SPME-direct method Part 1: Apparatus and working conditions *Sens, Acatuators, B. (2001) B72 (2) 184-187* Bene, A., Fornage, A., Luisier, J., Pichler, P., Villettaz, J.		

830	Methyl, ethylmercury chlorides in water	Direct hydride derivatization of methyl- and ethylmercury chlorides in acqueous solution with KBH4 *J Environ Sci (China) (2000) 12(3) 275-278* Jiang Gui-bin; He Bin		GC-MS
2582	**Methylmercury derivatives in biological matrix**	**Methylmercury determination in biota by SPME matrix effect evaluation** ***J Chromatogr A 1174, #1-2, 2-6 (2007 Dec 7)*** **Carrasco, Luis; Doez, Sergi; Bayona, Josep M**	**headspace** **NaBEtr derivative**	**GC-Py-AFS**
48	Methylmercury derivatives in water and fish	Determination of Methymercury in Fish and River Water Samples Using in situ Sodium Tetraethylborate Derivatization Followed by SPME and GC-MS J. Chromatogr. 696: 113-122 (1995) Cai, Y., Bayona, J.	100µm PDMS 10 min stirring headspace	GC-MS
407	Organomercury in water and soil	SPME and GC-MIP-AED for the Speciation Analysis of Organomercury Compounds J. High Resol. Chromatogr. 1999, 22 (3) 181-182 Mothes, S., Wennrich, R.	100µm PDMS 25°C 50 min (immersion) 20 min (headspace)	GC-MIP-AED
18	Bismuth III in water	Solid Phase Microextraction of Metal Ions Microchim. Acta 112: 41-6 (1993) Otu, E., Pawliszyn, J.	bare, or 100µm PDMS 60 min immersion	UV / VIS 460nm
682	Dimethylarsinic acid arsonic acid	Speciation of dimethylarsinic acid and monomethyl-arsonic acid by SPME-GC-ion trap MS *J. Chromatogr.A 2000, 873(1), 129-135* Mester, Z., Pawliszyn, J.	100µm PDMS 40min @ 20°C thioglycol methylate derv.	GC-MS
96	Organo Hg, Sn, Pb in water	Sensitive, Simultaneous Determination of Organomercury Lead, and Tin Compounds with Headspace SPME Capillary GC Combined with Inductively Coupled Plasma MS Anal. Chem. 69: 1604-1611 (1997) Moens, L., DeSmaele, T., Dams, R., VanDen Broeck, P., Sandra, P.	100µm PDMS 10 min headspace stirring pH 5.3 NaBEtr derivative	ICP-MS
873	Tin & lead in water	SPME-GC-glow discharge-optical emission detection for tin and lead speciation *J Anal At Spectrom (2001) 16(4), 376-381* Orellana-Velado, N.G.; Pereiro, R.; Sanz-Medel, A	 NaBEtr derivative	GC-OES
796	Organo Sn in water	Speciation of organotins in environmental samples by SPME-GC: comparison of four specific detectors: *J. Anal. At. Spectrom (2001) 16(3), 263-269* Aguerre, S; Lespes, G; Desauziers, V; Potin-Gautier, M		FPD, PFPD MIP-AES ICP-MS
2764	**Organotin and organomercury in sediments**	**Optimisation of the headspace-SPME for organomercury and organotin compound determination in sediment and biota** ***J. Sep. Sci. 31, #4, 768-774 (March 2008)*** **de Diego, A.; Delgado, A.; Madariaga, Juan M.; Prieto, Ailette; Usobiaga, Aresatz; Zuloaga, Olatz**	**30 µm PDMS** **Headspace** **3-24 min@ 20-90°C** **NaBEtr derivative**	**MIP-AES**
2244	**Organotin in marine sediments**	**Organotin speciation in Bizerte lagoon (Tunisia)** ***Science of the Total Environment 349, #1-3, 211-222 (2005)*** **Mzoughi, N.; Lespes, G.; Bravo, M.; Dachraoui, M.; Potin-Gautier, M.**	**headspace** **NaEt4B derivatives**	**GC-PFPD**
153	Organo Sn, Pb in water	Preconcentration and Determination of Sn- and Pb-Organic Species in Environmental Samples by SPME and GC-AED Fresenius' J. Anal. Chem. 354: 587-91 (1996) Tutschiku, S., Mothes, S., Wennrich, R.		GC-AED
215	**Organotin** in water	Determination of Organotin Compounds in Water Samples by Solid-Phase Microextraction (SPME) and GC-MS Ann. Chim. (Rome) 87: 497-504 (1997) Guidotti, M., Vitali, M.		GC-MS
152	Methyltin in water	Rapid Determination of Methyltin Compounds in Aqueous Samples Using SPME and Capillary GC Followed by in situ Derivatization with Sodium Tetraethylborate J. High Res. Chromatogr. 18: 767 (1995) Morcillo, Y., Cai, Y., Bayona, J.	100µm PDMS 29°C, 2-35 min headspace stirring	GC-FPD

			NaBEtr derivative	
161	Lead derivatives in water	Determination of Tetraethyllead and Inorganic Lead in Water by SPME-GC Anal. Chem. 68: 3008 (1996) Gorecki, T., Pawliszyn, J.	100µm PDMS 10 min headspace	GC-MS
683	Lead derivatives in water	Determination of Tetraethyllead by SPME-thermal desorption quartz furnace atomic absorption spectrometry *J. Anal. At. Spectrom. 2000, 15(16), 705-709* Sandra Fraguairo, M, AlavapMoreno, F., Isela, B.	10 min, headspace	AA
23	Organotin compounds in water	Rapid Determination of Butyl, Phenyl and Cyclohexyl Tin Compounds in Aqueous Samples Using SPME and Capillary Gas Chromatography Following in situ Derivatization with Sodium Tetraethylborate CID-CSIC Jordi Girona, 18-26, E-8034, Barcelona, Spain Morcillo, Y., Cai, Y., Porte, C., Bayona, J.	100µm PDMS 30 min immersion stirring NaBEt4 derivative	GC-FPD
503	Organo-tin, -lead, -mercury in water	Determination of organometallic compounds in surface water and sediment samples with SPME-CGC-ICPMS Mikrochim. Acta (1999), 130(4), 241-251 De Smaele, T., Moens, L., Sandra, P., Dams, R.	100µm PDMS 10 min headspace	GC-ICPMS
235	Rare earth elements	Separation of Cerium from Other Rare-Earth Elements with Application to Samarium-Neodymium and Lanthanum-Cerium Chronometry Nucl. Instrum. Methods Phys.Res.Sect.B 117: 201-208 (1996) Rehkaemper, M., Gaertner, M., Galer, S., Goldstein, S.		
2742	**Selenite and organoselenium**	**Comparison of two derivatizing agents for the simultaneous. determination of selenite and organoselenium species by GC and atomic emission .** ***J. Chromatogr. A 1165, #1-2, 191-199 (Sep 21 2007)*** **Campillo, N.; Penalver, R.; Hernandez-Cordoba, M.; Perez-Sirvent, C.; Martinez-Sanchez, M. -J.**	**immersed vs headspace (20min) piazselenol derivative**	**GC-MS**
580	Selenite, selenate in water	Selective determination of selenite and selenate using SPME and GC-MS J-High-Resolut-Chromatogr. Jul 1999; 22(7): 414-416 Guidotti,-M; Ravaioli,-G; Vitali,-M	35 min, agitation piazselenol derivative immersed	GC-MS
2752	**Nitroaromatics in water**	**Compound-specific nitrogen and carbon isotope analysis of nitroaromatic compounds in aqueous samples using SPME-GC/IRMS** ***ANAL. CHEM. 79, #6, 2386-2393 (15 MAR 2007)*** **Berg, M.; Bolotin, J.; Hofstetter, T. B.**		**GC/IRMS**
2640	**Nitroaromatics in water**	**Analysis of nitroaromatic compounds in complex samples using SPME and isotope dilution quantification GC-electron negative ionisation MS** ***J. Chromatogr. A 1164, #1-2, 65-73 (Sep 14 2007)*** **van Bavel, B.; Gustavsson, L.; Jonsson, S**		**GC-MS**
49	Nitroaromatics in water	Enrichment of Nitroaromatic Compounds from Water Samples by SPME GIT Spex Chromatogr. 14: 85-87 (1995) Schaefer, B., Engewald, W.		
809	Nitroarenes	Analysis of nitroarenes by SPME/GC-Ion trap MS *Chromatography (2000) 21(2),123-124* Kataoka, Hiroyuki; Lord, Heather L.; Pawliszyn, Janusz		GC-MS
160	Hetero aromatics in water	Trace Analysis of Hetero Aromatic Compounds in Water by SPME J. High Res. Chromatogr. 19(11): 627-632 (1996) Johansen, S., Pawliszyn, J.	85µm polyacrylate 60-200 min stirring pH 8, salt added	GC-MS
		Determination of Benzene Derivatives in Water by SPME		

218	BTEX in water	Anal. Chim. Acta 343: 101-108 (1997) Huang, S., Cheng, C., Sung, Y.		
50	Nitrophenols in water	Enrichment of Nitrophenols from Water by Means of SPME Fresenius' J. Anal. Chem. 352(5): 535-6 (1995) Schafer, B., Engewald, W.	100µm PDMS 5 min stirring pH <2, saturated salt	GC-NPD
504	2,4-dinitrophenol in water	Determination of 2,4-dinitrophenol by SPME couple GC-MS Sepu (1999), 17(2), 131-133 Lu, X., Zhao, X., Ye, F., Xu, G.	85µm polyacrylate 30 min, immersed pH2, satr. salt Chinese	GC-MS
51	Fuel hydrocarbons in water	Quantitative Analysis of Fuel-Related Hydrocarbons in Surface Water and Wastewater Samples by SPME Anal. Chem. 68(1): 144-155 (1996) Langenfeld, J., Hawthorne, S., Miller, D.	100µm PDMS 45 min stirring	GC-FID
2887	**phenols, . phosphates, phthalates, PAHs in surface water**	**Measurement of drinking water contaminants by SPME initially quantified in source water samples by the USGS** ***Environ. Sci. Technol. 42, #8, 2976-2981 (Apr 15 2008)*** **Buckley, Brian; Lippincott, R.; Murphy, E.; Stiles, R.; Yang, lll**	**70 µm CW/DVB 65 µmPDMS/DVB**	**GC-MS**
2435	**VOCs in water**	**Critical comparison of automated purge and trap and SPME for routine determination of volatile organic compounds in drinking waters by GC-MS** ***Talanta 74, #5, 1455-1462 (Feb 15 2008)*** **Lara-Gonzalo, A..; Sanchez-Uria, J.; Sanz-Medel, A.; Segovia-Garcia, E.**		**GC-MS**
684	VOCs in water	Determination of volatile organic compounds (VOCs) in drinking water using SPME *Anal. Sci. Technol. (2000) 13(3), 277-281* Park, G., Lee, S.	100µm PDMS	GC-MS
832	VOCs in water	Chemical and microbiological characterization of drinking water after filtration with a domestic-size charcoal column and ultraviolet sterilization *Urban Water (2000) 2(1), 13-20* Serpieri, N.; Moneti, G.; Pieraccini, G.; Donati, R.; Mariottini, E.; Dolara, P	100µm PDMS 10min. headspace NaCl added	GC-MS
82	VOCs in water	An Evaluation of Solid Phase Microextraction for Analysis of Volatile Organic Compounds in Drinking Water J. High Res. Chromatogr. 18: 617-624 (1995) Nilsson, T., Ogaard-Madison, J., Montanrilla, L., Larsen, B., Facchetti, S., Pelusioj, F.	100µm PDMS 20-80°C, 60 min headspace stirring	GC-MS
685	MTBE in surface water	Determination of MTBE in surface water by use of SPME *Environ, Sci.Technol. (2000), 34(7), 1359-1364* Achten, C., Puettmann, W.	Carboxen/DVB/PDMS 69 min 25% NaCl, stirred	GC-MS
935	MTBE in surface water	Sensitive methods for measuring methyl tert-butyl-ether in water *Umwelt-Technol. Aktuell (2000) 12(1), 22-25* Achten, C., Puettmann, W.	Carboxen/DVB/PDMS 69 min 25% NaCl, stirred	GC-MS
686	MTBE, Ethanol, other oxygenates in water	Trace Analysis of Ethanol, MTBE, and related Oxygenate Compounds in Water using SPME and GC-MS *Anal. Chem. 2000, 72, 4654-4658* Cassada, D., Zhang, Y., Snow, D., Spalding, R.	Carboxen/DVB/PDMS 25 min immersed stirred Sat. salt,	GC-MS
910	MTBE, TBE, BTEX in water	High levels of monoaromatic compounds limit the use of SPME of MTBE and Tert butyl alcohol *Environ Sci Technol, 2001, 35 (15) 3190-3192* Black, L., Fine, D.	75µm Carboxen/PDMS 65µm DVB/PDMS 1-25min. saturated salt	Ion trap GC-MS
		Analysis of Water Samples for Trace Levels of Oxygenated		

354	MTBE, EBE, BTEX in water	and Aromatic Compounds Using Headspace SPME and Comprehensive Two-Dimensional Gas Chromatography J. Microcolumn Separations, 10 (7), 597-604 (1998) Gaines, R., Ledford, E., Stuart, J.	75µm Carboxen/PDMS 40°C, 10 min headspace saturated salt	GC-FID
952	MTBE in water	Measurement of Henry's law constant for MTBE using SPME *Environ. Toxicol. Chem (2001), 20(8), 1625-1629* Bierwagen, B.G.; Keller, A.A.	15°-40°C headspace	
581	Tetrachloroethene in water	Role of humic acids in the titanium oxide-photocatalysed degradation of tetrachloroethene in water. Water-Res. Jun 1999; 33(8): 1827-1836 Selli,-E; Baglio,-D; Montanarella,-L; Bidoglio,-G	100µm PDMS	GC-MS
2331	**Trihalomethanes in water**	**Using SPME with GC to assess trihalomethane content in water *Abstracts of Papers Am Chem Society (2004) 227 Part1, U456*** **Rizzuti, Anthony M.; Rogers, Lisa N.**		**GC**
2829	**Volatiles in in drinking water**	**Simultaneous analysis of 23 priority volatile compounds in water by SPME-GC-MS and estimation of the method's uncertainty Int. J. Environ. Anal. Chem. 88, #3, 151-164 (March 2008) Alpendurada, M.; Carvalho, J.; Goncalves, C.; Guimaraes, A.**	**75µm Carboxen headspace 15min @ 20°C**	**GC-MS**
2215	**Trihalomethane in drinking water**	**Determination of trihalomethanes in drinking water of towns in the State of Minas Gerais, Brazil using headspace (HS)/SPME high resolution GC-ECD *Ciencia Eng.) 11 #2, 57-62 (2002)* Duarte, M.; Parreira, F; Rabelo De Carvalho, C.**	**headspace**	**GC-ECD**
175	Trihalomethanes in water	Detection and Quantification of Trihalomethanes in Drinking Water from Alexandria, Egypt Contam. Toxicol. 56: 397-404 (1996) Hassan, A., Benfenati, E., Fanelli, R.		
687	Dichlorobenzene in water	Analysis of dichlorobenzene in water by SPME *J. Chin. Chem. Soc (2000) 47(2) 415-420* Liu, Y., Ho, W.	100um PDMS 30 min	GC-ECD
813	Chloroform in water	Analysis of chloroform in drinking water by headspace solid-phase microextraction and GC *Fenxi Shiyanshi (2000), 19(5), 65-67* Liu, Z. L.; Wang, C. H.; Wang, X	85µm Polyacrylate 45°C headspace	GC-FID
858	Chloroform from Kraft pulp bleach	Chloroform formation during kraft pulp bleaching with chlorine and chlorinated compounds -determination of chloroform amounts by solid phase microextraction *Kami Pa Gikyoshi (2000) 54(11) 1555-1563* Oi, Hiroshi; Masuzawa, Kiyoshi	 (Japanese)	
83	Benzene, halobenzene in water	Application of Solid Phase Microextraction (SPME) in Combination with GC/FID: The Determination of Benzene and Halogenated Benzenes in Pure and Octanol-Saturated Water Chem-Anal (Warsaw) 40: 897-904 (1995) Popp, P., Paschke, A., Schroeter, U., Oppermann, G.		GC-FID
688	Benzene derivatives in surface water	Matrix effect for several derivatives of benzene in water by SPME *Chromatographia 2000, 51(suppl.) S328-S330* Javorszky, E., Molnar, E., Torkos, K. Borossay, J		
86	Organics in water	Comparison of On-line SPE-HPLC and SPME-GC for the Analysis of Microcontaminants in Water Chromatographia 41: 462-470 (1995) Rivasseau, C., Caude, M.		HPLC
217	Haloethers in water	Determination of Haloethers in Water by SPME J. Chromatogr. A 769: 239-246 (1997) Huang, S., Ting, C., Lin, C.	100µm PDMS 40 min, immersion saturated salt	GC-FID
		Anaerobic biotransformation of trichlorofluoroethene in		

586	Trichlorofluoroether in water	groundwater microcosms. Environ-Sci-Technol. 15 Jun 1999; 33(12): 2040-2045 Vancheeswaran,-S; Hyman,-MR; Semprini,-L	100µm PDMS headspace salt, agitation	GC-MS
90	Aromatics in water	Determination of Volatile Organic Compounds in Water by Solid Phase Micro-Extraction and Infrared Spectroscopy Environ. Sci. Technol. 30: 1212-1219 (1996) Heglund, D., Tilotta, D.	parafilm, 30 min	GC-FID
926		Poly(dimethylsiloxane) films as sorbent for SPME couple infrared spectroscopy *J. Chromatogr. A (1998), 829(1-2) 377-384* Merschman, S., Lubbad, S., Tilotta, D.	PDMS	IR
942	Volatile organics in water	Development of headspace SPME/attenuated total reflectior infrared chemical sensing method for the determination o of volatile organic compounds in aqueous solutions *Analytica Chimica Acta (2001), 436(1), 31-40* Yang, Jyisy; Tsai, Shu-Sha	 headspace	IR
505	Hydroxyaromatics in water	Determination of hydroxyaromatic compounds in water by SPME coupled to HPLC J. Chromatogr. A. (1999), 835(1+2), 127-135 Wu, Y., Huang, S.	PDMS/DVB or CW-TPR	HPLC 280nm
229	71 organics in gaseous mixture	Calibration of a Commercial Solid-Phase Microextraction Device for Measuring Headspace Concentrations of Organic Volatiles Anal. Chem. 69: 364-372 (1997) Bartlet, R.	100µm PDMS 25°C, 30 min headspace	GC-FID
155	VOCs in water	Sampling Volatile Organic Compounds Using a Modified Solid Phase Microextraction Device J High Res. Chromatogr. 19(3): 155-60 (1996) Zhang, Z., Pawliszyn, J.	100µm PDMS 10 min headspace stirring, saturated salt	GC-MS
205	Volatiles in water	Solid Phase Microextraction of Volatile Compounds Using Carboxen-Polydimethylsiloxane Fibers Chromatographia 46: 419-424 (1997) Popp, P., Paschke, A.	75µm Carboxen/PDMS 30 min headspace stirring	GC-FID, ECD
240	Volatiles in water	Application of Solid-Phase Microextraction to the Analysis of Volatile Organic Compounds in Water J. Chromatogr. A 742: 181-189 (1996) Santos, F., Galceran, M., Fraisse, D.	100µm PDMS, 85µm polyacrylate 12 min stirring	GC-FID
689	BTEX in water	Static headspace, SOME and headspace SPME for BTEX determination in aqueous samples by GC *Anal. Chim. Acta. 2000, 415(1-2), 9-20* Menendex, J., Sanchez, M., Uria, J., Martinez, E., Medel, A.	100µm PDMS	GC-FID
506	BTEX in water	In-tube SPME-GC of volatile compounds in aqueous solution Analyst (Cambridge, UK), 1999, 124(5), 651-655 Tan, B, Marriott, P., Morrison, P., Lee, H.	1 meter capillary	GC-FID
117	Solvents, C2-C4 acids in water	Carbon Isotope Analysis of Semivolatile Organic Compounds in Aqueous Media Using SPME and Isotope Ratio Monitoring GC/MS Anal. Chem. 69: 944-950 (1997) Dias, R., Freeman, K.	polyacrylate, Carbowax, cyclodextrin 10-30 min stirring	GC-MS
225	Organochlorine semivolatiles in water	Application of Solid-Phase Microextraction to the Headspace GC Analysis of Semivolatile Organochlorine Contaminants in Aqueous Matrices J. Chromatogr. A 757: 173-182 (1997) Page, B., Lacroix, G.	100µm PDMS 87°C, 45 min headspace & immersion salt added	GC-ELCD
507	Polar organics in water	Analysis of organochlorine compounds in water by SPME/GC Fenxi Huaxue, 1999, 27(7), 768-772 Zhang, D, Zhou, Z., Tang, Y., Wu, C., Zhen, W. Xu, Y.	100µm PDMS 70°C, headspace	GC-ECD

			Chinese	
151	BTEX in water	Protocol for the Analysis of High Concentrations of Benzene, Toluene, Ethylbenzene, and Xylene Isomers in Water Using Automated SPME-GC-FID Environ. Sci. Technol. 30: 1521 (1996) Thomas, S., Ranjan, S., Webster, G., Sarna, L.	100µm PDMS 5 min immersion	GC-FID
154	Organics in water	Solid Phase Microextraction Coupled to GC: A New Method for the Analysis of Organics in Water J. Chromatogr. A 733: 143 (1996) Eisert, R., Levson, K.	various fibers and conditions	GC-MS, AED
909	Endocrine disruptors in water	Column siylation method for determining endocrine disruptors from environmental water samples by SPME *Talanta 2001, 54(6) 1039-1047* Helaleh, M., Fujii, S., Korenaga, T.		
767	Ibuprofen, NBBS in water	Elimination of Ibuprofen and NBBS in municipal purification plant analyzed by SPME *Schiftenr (1999), 95, 1-148* Huppert, N.		
			(in german)	
162	Surfactants in water	SPME Coupled with HPLC for Determination of Alkylphenol Ethoxylate Surfactants in Water Anal. Chem. 68: 1521-9 (1996) Boyd-Boland, A., Pawliszyn, J.	Carbowax/TPR 100 50 min immersion stirring	HPLC UV, 220nm
897	Surfactant in water	Identification of alkyl dimethylbenzylammonium surfactants in water samples by SPME followed by ion trap LC/MS and LC/MS/MS *Environ. Sci. Technol 92001) 35(12) 2583-2588* Ferrer, Imma; Furlong, Edward		LC/MS
690	Surfactant in water	Identification and characterization of Fenton oxidation products of surfactants by EMS and SPME-GC-MS Fatty alcohol polyethoxy sulfates. *Rapid Commun, Mass Spectrom 2000, 14(10), 834-839* Cuzzola, A., Raffaelli, A., Saba, A., Salvadori, P.		
928	Surfactant in water	Assessment of polycystalline graphites as sorbents for SPME of nonionic surfactants J. Chromatogr. A (2000) 888(1-2) 35-41 Aranda, R., Kruus, P., Burk, R.		
508	Diethylphthalate in water	Trace determination of diethylphthalate in aqueous media by SPME-HPLC J. Chromatogr. A 841(1999) 177-185 Kelly, M., Larroque, M.	60µm DVB/PDMS 15 min immersed NaCl	HPLC UV, 226nm
804	Phthalic diesters in water	Determination of phthalic diesters in water by solid-phase microextraction-capillary gas chromatography *Sepu (2000) 18(6), 568-570* Liu, Z. L.; Xiao, C. H.; Wu, C. Y.; Han, H. M.	100µm PDMS headspace (in Chinese)	
2721	**Diethylhexyl phthalate in water**	**Determination of diethylhexyl phthalate in water by SPME-HPLC** ***Talanta 69, #5, 1095-1099 (2006-07-15)*** **Kayali, N.; Tamayo, F. G.; Polo-Diez, L. M.**		**HPLC**
2449	**Phthalates esters in bottled water**	**Determination of phthalates and adipate in bottled water by headspace SPME and gas chromatography/mass spectrometry** ***Journal of Chromatography A 1178, #1-2, 231-238 (2008)*** **Xu-Liang Cao**	**65µm DVB/PDMS headspace 10 and 30% NaCl**	**GC-MS**
588	Phthalates esters in water	In-tube SPME-LC analysis of phthalate esters in water samples Chromatography. Jun 1999; 20(2): 124-125 Saito,-Y; Nakao,-Y; Jinno,-K	40m x 0.25mm capillary	HPLC

782	Butylphthalates in water	Fiber-in-tube solid-phase microextraction: a fibrous rigid-rod heterocyclic polymer as the extraction medium *Fresenius' J AnalChem (2000) 368(7), 641-643* Saito, Y.; Nakao, Y.; Imaizumi, M.; Takeichi, T.; Kiso, Y.; Jinno, K	20min.	HPLC
2335	**Phthalates esters in wastewater**	**Distribution coefficients of phthalates between absorption fiber and water and its using in quantitative analysis** ***Anal. Chim. Acta 560 #1-2, 110-117 (2006)*** **Garbowska, Katarzyna; Isidorov, Valery A.; Kotowska, Urszula**	**85µm polyacrylate 100µm PDMS immersed**	**GC-FID**
691	Phthalates esters in water	Determination of phthalate esters in water samples by SPME and GC with mass spectrometric detection *J. Chromatogr. A (2000), 872 (1&2), 191-201* Penalver, A., Pocurull, E, Borrull, F., Marce, R.	85µm polyacrylate 90min @ 45°C NaCl added	GC-MS
801	Phthalates esters in water	Methods for routine analysis of phthalates in food and the environment *Deutsche Lebensmittel-Rundschau (2000) 96(11), 411-417* Baerwinkel, D.; Haufe, J.; Kroh, L. W		GC-FID/MS
178	4-Nonylphenol in sea water	Determination of 4-Nonylphenol. Part 2: Orthogonal Array Design as a Chemometric Method for the SPME of 4-Nonylphenol in Water J. Microcolumn Sep. 8 (2): 131-136 (1996) Chee, K., Wong, M., Lee, H.	100µm PDMS 30 min immersion stirring	GC-FID
219	BTEX in water	Direct Solid Phase Microextraction for the Determination of BTEX in Water and Waste Water J. High Res. Chromatogr. 19: 472-474 (1996) Valor, I., Cortada, C., Molto, J.	100µm PDMS 10 min stirring	GC-FID
208	BTEX compounds in water	A New Porous-Layer Activated-Charcoal-Coated Fused Silica Fibre: Application for Determination of BTEX Compounds in Water Samples Using Headspace SPME and Capillary Gas Chromatography Chromatographia 45: 183-189 (1997) Djozan, D., Assadi, Y.	100µm charcoal coated fiber / PDMS 25°C, 15 min stirring salt added	GC-FID
169	Chlorinated 1,3-butadienes in water	Analysis of Chlorinated 1,3-Butadienes by SPME and GC-MS J. Chromatogr. A 737: 85-91 (1996) Fattore, E., Benfenati, E., Fanelli, R.	100µm PDMS 30 min immersion	GC-MS
692	Styrene in water	SPME method for the quantitative analysis of styrene in water *J. Chromatogr.Sci. (2000), 38(7), 315-318* Silva, F., DeCarvalho, C., Cardeal, Z.	85µm polyacrylate 10mn @ 55°C headspace	GC-FID
2837	**Furan in the atmospher**	**Primary product distribution from the Cl-atom initiated atmospheric degradation of furan: Environmental implications** ***Atmospheric Environment 41, #31, 8796-8810 (DEC 2007)*** **Villanueva, F; Barnes, I.; Monedero, E.; Salgado, S;Gomez, M; Martin, P.**	**air sample**	**GC-MS**
776	Dioxin, Furans in water	Determination of dioxins and furans in water sample by HRGC/HRMS and pretreatment using SPME *Organohalogen Compd (2000) 45, 68-71* Eom, S; Ahn, So; Kim, M; Shin, J		GC-MS
2367	**Review**	**Trends in solventless sample preparation techniques for environmental analysis** ***J. BIOCHEM. BIOPHYS. METHODS 70,# 2, 275-288 (10 MAR 2007)*** **Wardencki, W.; Cury&Istrok;o, J.; Namiesnik, J.**	Review article	
170	Semivolatiles in water	Trends in Extraction of Semivolatile Compounds from Water for Environmental Analysis Anal. Commun. 33 (9): 15H-17H Poole, S., Poole, C.		

509	Semivolatiles in water	Studies of the composition of distillates from leachate by GC-MS coupled to SPME Rapid Commun. Mass Spectrom (1999), 13(10), 966-970 Saba, A., Pucci, S., Raffaekki, A., Salvadori, P.	pH 4 or 10 headspace/immersed	GC-ms
2607	**Monocarboxylic acids from carbonaceous chondrite**	**Structure and isotopic ratios of aliphatic side chains in the insoluble organic matter of the Murchison carbonaceous chondrite** ***Earth Planet. Sci. Lett. (Netherlands) 259, #3-4, 517-25 (2007)*** **Yongsong Huang; Alexandre, M.R.; Yi Wang**		**GC**
807	Petroleum hydrocarbons in water	Application of SPME chromatography with mass spectrometry to the analysis of gasoline content in water *Huaxue Fence (2000) 36(10) 465-466* Chen, X. D.; Zhou, H		
216	Petroleum hydrocarbons in water	Water Analysis by Solid-Phase Microextraction Based on Physical Chemical Properties of the Coating Anal. Chem. 69(11): 1992-1998 (1997) Saraullo, A., Martos, P., Pawliszyn, J.	100µm PDMS 30 min headspace stirring	GC-FID
272	BTEX	Application Methods of SPME for the Classification of BTEX GIT Labor-Fachz. 41 (12): 1191-1195 (1997) Van der Heide, M., Petry, P.		
273		SPME as a Method for Preparing Environmental Samples Pol. J. Environ. Stud. 6 (5): 5-12 (1997) Ligor, M., Buszewski, B.		
274		SPME in Pretreatment of Environmental Samples Huaxue Jinzhan 10 (1): 74-84(1998) Jia, J., He, Y., Huang, J.		
275	Aqueous samples	Direct SPME of Complex Aqueous Samples with Hollow Fiber Membrane Protection Anal. Commun. 33 (7): 219-221(1996) Zhang, Z., Poerschmann, J., Pawliszyn, J.		
2838	**Organics from humic material**	**The degradtion of humic substance using continuous photocatalysis systems** ***Sep. Sci. Technol. 43, #1, 93-112 (January 2008)*** **Areerachakul, N.; Duangduen, C.; Kandasamy, J.; Vigneswaran, S.**		**GC**
2618	**Organics from humic material**	**Partitioning of selected environmental pollutants into organic matter as determined by solid-phase microextraction** ***Chemosphere 66, #8, 1580-1589 (2007-01)*** **Prosen, H.; Fingler, S.; Zupancic-Kralj, L.; Drevenkar, V.**		**GC**
2801	**PCBs in sediment**	**Bioavailability of PCBs from field-collected sediments: Application of Tenax extraction and matrix-SPME techniques** ***Chemosphere 71, #2, 337-344 (MAR 2008)*** **Trimble, Tricia A.; You, Jing; Lydy, Michael J.**		**GC**
2631	**PCBs in sediment**	**Availability of polychlorinated biphenyls in field-contaminated sediment** ***Env Tox Chem 26, #9, 1940-1948 (SEP 2007)*** **You, Jing; Landrum, Peter E.; Trimble, Tricia A.; Lydy, Michael J.**		**GC**
693	Alkanes, PCBs,PAHs in humic material	Sorption of very hydrophobic organic compounds onto PDMS and dissolve humic organic matter. 1. Adsorption or partitioning of VHOC on PDMS coated SPME fibers-never-ending story *Environ Sci Technol 2000, 34, 3824-3830* Poerschmann, J., Gorecki, T., Kopinke, G.	7um, 30um PDMS 20 min stirring	GC-MS SIMS
844	Hydrophobic organics in humic material	Sorption of hydrophobic organic compounds on nonpolar SPME fibres and dissolved humic organic matter long dash Part III: Application of the solubility parameter concept to interpret sorption on SPME fibre coatings *J Microcolumn Separations (2000) 12(12), 603-612* Poerschmann, J.	PDMS, polyacrylate	GC-MS

923		Use of SPME for measuring oil-water partition coefficients and correlation with HPLC methods for lipophilicity J. Chromatogr A (1999) 864(2) 183-189 Pollein, P., Roberts, D.		HPLC
276	Phenols, PAHs in wastewater	SPME for Determining Distribution of Chemicals in Aqueous Matrixes Anal. Chem. 69 (4): 597-600 (1997) Zhang, A., Kopinke, G., Pawliszyn, J.	100µm PDMS 10 sec stirring	GC-MS
277	Chlorinated organics in water	Water Solubility and Octanol/Water-Partitioning of Hydrophobic Chlorinate Organic Substances Determined by Using SPME/GC Fresenius' J. Anal. Chem. 360 (1): 52-57 (1998) Paschke, A., Popp, P.		
278	Phenols in water	Determination of Phenols by Solid-Phase Microextraction J. Chromatogr. A 767 (1+2): 171-175 (1997) Bartak, P., Cap, L.	85µm polyacrylate 25°C, 60 min headspace pH 1, salt added	GC-FID
439	Chlorophenols in water	Determination of Chlorophenols Using SPME and GC/MS Ann. Chim. (Rome) (1998), 88(9-10), 629-635 Guidotti, M., Ravaioli, G.		GC-MS
2617	**Organics in drinking water**	**Determination of volatile organic compounds pollution sources in Malaysian drinking water using multivariate analysis** ***Environ. Monit. Assess. 124, #1-3, 39-50 (January 2007)*** **Abdullah, Pauzi; Soh, Shiau-Chian**	**100µm PDMS**	**GC-MS**
2152	**Organics in drinking water**	**Evaluation of SPME as an alternative to the official method for the analysis of organic micro-pollutants in drinking water** ***J. Chromatogr. A, 1101, #1-2, 46-52 (2006)*** **Guillot, Sophie; Kelly, Mary T.; Fenet, Helene; Larroque, Michel**	**65µm PDMS/DVB** **30 min @ 60°C**	**GC-MS**
777	Organics in drinking water	Solid phase extraction techniques for drinking water abstraction monitoring and investigation of pollution incidents *J Water Supply Res and Tech (2000) 49(2), 103-109* Gardner, M.; Comber, S. ; Rogers, H.		GC-MS
944	Organics in water	Determination of water contaminants at trace levels using large volume sampling techniques: Comparison of LVPTVI, LVOCI, and SPME. *American Laboratory (2001) 33(11), 45-47* Trisciani, A.; Munari, F.; Anelli, L.; Castanho, J.		
279	VOCs in water	Pollution of Ground and Drinking Water with Volatile Organic Compounds, SPME and GC/MS Analysis Toxicol. Environ. Chem. 55 (1-4): 73-81 (1996) Hassan, A., Benfenati, E., Facchini, G., Fanelli, R.		GC-MS
280	Trihalomethanes in water	Determination of Trihalomethanes in Drinking Water by SPME-GC with Electron-Capture Detection Toxicol. Environ. Chem. 60(1-14): 39-45 (1997) Chen, M., Mao, I., Hsu, C.		GC-ECD
281	Chloroacetic acid esters in water	Determination of Chlorinated Acetic Acids in Drinking Water by in situ Derivatization and Solid Phase Microextraction Int. J. Environ. Anal. Chem. 66 (3): 215-224(1997) Aikawa, B., Burk, R.	30µm PDMS 1 min headspace stirring methanolic HCl added	GC-ECD
510	Sulfur compounds in water, N2 & propane	Studies on the application of SPME for analysis of volatile organic sulfur compounds in gaseous and liquid samples Chem. Anal. (Warsaw), 1999, 44(3A), 485-493 Wardencki, W., Namiesnik, J.		FPD-GC

339	Geosmin, 2-MIB in water	Rapid Analysis of Geosmin and 2-Methylisoborneol in Water Using SPME Procedures Water Research Vol. 32, No. 7, 2140-2146 (1998 Lloyd, S., Lea, J., Zimba, P., Grimm, C.	100µm PDMS 40°C, 30 min headspace, stirring salt added	GC-MS
362	2-MIB, geosmin in catfish	Analysis of 2-Methylisoboreneol and Geosmin in Catfish by Microwave Distillation-SPME J. Agri. Food Chem., 47, No. 1, pg. 164-169, 1999 Lloyd, S., Grimm, C.	100µm PDMS 40°C, 30 min headspace, stirring salt added	GC-MS
446	MIB & geosmin in water	Determination of Geosmin and 2-Methylisoboreneol in Water Using SPME and GC-Chemical Ionization/Electron Impact Ionization Ion Trap MS Analyst (Cambridge, U.K.) (1998), 123 (10), 2155-2160 McCallum, R., Pendleton, P., Scumann, R., Trinh, M.	80µm Carboxen/DVB/PDMS 60°C, 30 min headspace stirring salt added	GC-MS
2778	**Ozone in air**	**Passive sampling of ambient ozone by SPME with on-fiber derivatization** ***Analytica Chimica Acta: 610, #2, 149-155 (MAR 10 2008)*** **Lee, I-Su; Tsai, Shih-Wei**	**65µm DVB/PDMS PFBHA & DPE derivatives @ 25°C**	**GC-ECD**
2375	**Odor compounds in water**	**Tacoma controls tastes and odours with ozone** ***Water Science and Technology 55, # 5, 137-144 (2007)*** **Carlson, M.; Chen, T.; McMeen, C.; Suffet, I. H.; Zhang, M**		
511	34 Odor compounds in water	Headspace SPME for the determination of trace levels of taste and odor compounds in water samples Analyst (Cambridge, UK) 1999, 123(4), 459-466 Bao, M., Mascini, M., Griffini, O., Burrini, D., Santianni, D., Barbieri, K.	65µm DVB/PDMS 40 min @ 20°C NaCl, stirring immersion/headspace	GC-Ion trap MS
282	Chemical warfare compounds	On-Site Sample Work-Up Procedures to Isolate Chemical Warfare-Related Compounds, Using SPE & SPME Technology Analytical Chemistry Associated with the Destruction of Chemical Weapons NATO ASI Ser., Ser. 1 13: 65-76 (1997) Alcaraz, A., Hulsey, S., Whipple, R., Andresen, B.		
2349	**Nerve agents**	**Synthetic methods applied to the detection of chemical *warfare nerve agents*** ***CURR. ORG. CHEM. 11, #3, 255-265*** **Giordano, B. C.; Collins, G. E**	**Review article**	
116	Nerve agents in water	Determination of Chemical Warfare Agents in Natural Water Samples by SPME Anal. Chem. 69: 1866-1872 (1997) Lakso, H., Ng, W.	65µm PDMS/DVB 30 min headspace saturated salt	GC-FID GC-MS
762	Lewisite oxide in soil	Determination of Lewisite oxide in soil using SPME followed by GC w/FPD or Mass spectormetric detection *J. Chromatogr-A, 909 (2001) 13-28* Tomkin, B., Sega, G., Ho, C.	100µm PDMS 20min. agitated	GC-FPD/or GC-MS
560	Chemical warfare agents in water	In-situ derivatisation of degradation products of chemical warfare agents in water by SPME and GC-MS analysis J. Chromatogr-A, Feb 1999, 832(1+2), 173-182 Sng, M., Ng., W.	1,3-propanedithiol derv. 65µm Carboxen/PDMS 20°C, N-methyl-N-(tert-butyl dimethylsilyl) trifluoro-acetamide derivative	GC-MS
283	Volatiles in wastewater	Rapid Determination of Volatile Organic Compounds in Environmentally Hazardous Wastewaters, Using SPME Anal. Chem. 358 (7-8): 833-837 (1997) James, K., Stack, M.		
		Trace salt Signatures from World War II		

284	TNT, DNT salt in seawater/ sediment	Unexploded Undersea Ordinance Environ. Sci. Technol. 32 (9): 1354-1358 (1998) Darrach, M., Chutjian, A., Plett, G.	65µm PDMS/DVB 15 min pH 8 agitation	directly into MS
285	Aromatic amines in water	Determination of Aromatic Amines by SPME-GC-MS in Water Samples J. Chromatogr. A 791(1+2): 221-230 (1997) Muller, L., Fattore, E., Benfenati, E.	65µm Carbowax/DVB 30 min stirring pH 7.6, salt added	GC-MS
578	Aromatic amines in water	SPME coupled with HPLC for the determination of aromatic amines. Anal-Chem. 15 Jan 1999; 71(2): 310-318 Wu,-Y-C; Huang,-S-D	65µm PDMS/DVB, CW-TPR	HPLC-UV 280nm
286	Volatiles in water	Inter-Laboratory Studies for the Validation of SPME for the Quantitative Analysis of Volatile Organic Compounds Compounds in Aqueous Samples Anal. Chim. Acta 356 (2-3): 113-123 (1997) Nilsson, T., Ferrari, R., Facchetti, S.	100µm PDMS 30 min headspace & immersion stirring	GC-ECD
597	Volatiles (BTEX) in water	Solid-phase micro-extraction of volatiles from water using open cap vials Chromatographia. May 1999; 49(9-10): 513-519 Matisova,-E; Sedlakova,-J; Simon,-P; Welsch,-T	100µm PDMS 5 min. @ 25C stirred	GC-FID
287	VOCs, pesticides in water and air	Capabilities for the Direct Determination of Triphenyl- and Triethylarsine in Water by SPME Followed by GC-A Amer. Environ. Lab, 9 (10): cover, 5-6 (1997) Mothes, S., Wennrich. R.	Carboxen/PDMS, 100µm PDMS various conditions	GC-MS
374	Organoarsenicals in water and soil	Determination of Organoarsenicals in the Environment by SPME-GC-MS J. Chromatogr. A 807 (1998) 253-263 Szostek, B., Aldstadt, J.	100µm PDMS 10 min immersion methyl thioglycolate (derivative)	GC-MS
879	Organoarsenicals in water	SPME method for GC w/MS and pulsed Flame photometric detection: studies of organoarsenical speciation *J. Chromatogr. A 918(2001) 169-175* Killelea, D., Aldstadt, J.	100µm PDMS 10 min immersion methyl thioglycolate (derivative)	GC-MS GC- PFPD
790	Organoarsenicals in water	Speciation of organoarsenic compounds by poly(pyrrole)-coated capillary in-tube SPME coupled with HPLC-EI-MS *Analytica Chimica Acta (2000) 424(2), 211-222* Wu, J. C.; Mester, Z.; Pawliszyn, J.	Polypyrrol capillary	LC-EI-MS
815	Metal hydrides in water	Sampling and determination of metal hydrides by SPME thermal desorption inductively coupled plasma MS *J. Analytical Atomic Spectrometry (2000) 15(11) 1461-1465* Mester, Z.; Sturgeon, R. E.; Lam, J. W	Carboxen/PDMS, Sodium Borohydride/HCl	ICP-MS
2894	**Disinfection byproducts in water**	**Emerging technologies for identification of disinfection byproducts: GC/FT-ICR MS characterization of solvent artifacts** ***Environ Sci& Tech 41, #15, 5419-5425 (AUG 1 2007)*** **Heffner, C.; Silwal, I.; Peckenham, J..; Solouki, T.**		**GC/FT-ICR MS**
288	Iodinated volatiles in water	SPME with Temperature-Programmed Desorption for the Analysis of Iodinated Disinfection Byproducts Anal. Chem. 70 (3): 638-644 (1998) Frazey, P., Barkley, R., Siever, R.	85µm polyacrylate 15 min immersion stirring	GC-ECD
		Determination of Chloroethers in Aqueous Samples,		

289	Chloroethers in water	Using SPME Acta Hydrochim. Hydrobio. 25 (6): 329-334 (1997) Wennrich, L., Engewald, W., Popp, P.		GC-FID or MS
513	Chloroethers in water	GC trace analysis of haloethers in water: Comparison of different extraction techniques Int. J. Environ.Anal. Chem (1999), 73(1), 31-41 Wennrich, L., Engewald, W., Popp, P.		GC-FID or MS
514	Aliphatic aldehydes in water/oil	Influence of extraction parameters and medium on efficiency of SPME sampling in analysis of aliphatic aldehydes J. Chromatogr., A 1999, 845(1+2), 337-347 Keszler, A., heberger, K.	100µm PDMS 30 min @ 40°C immersed/headspace	GC-MSD
515	Glycerol ethers in water	Improved extraction of glycerol ethers from water by SPME by Carboxen-PDMS coated fiber Chromatogrophia, 1999, 50 (3/4), 155-159 Bensoam, J., Cicolella, A., Durjardin, R.	75µm Carboxen/PDMS 25°C, sat. NaCl immersed	GC-FID
516	Amines/alcohols in water	Evaluation of SPME for the anlaysis of hydophilic compounds J. Exposure Anal.Environ. Epidemiol. 1999, 9(3) 181-191 Shoemaker, J. Munch, J., Behmer, T.	75µm Carboxen/PDMS	
517	Polar volatiles in water	SPME of volatile polar compounds in water J. High Resolut. Chromatogr. (1999), 22(2), 109-115 Matisova, E, Sedlakova, J., Slezackova, M., Welsch, T.	85µm polyacrylate 50°C headspace	GC-MS
290	VOCs, pesticides in water and air	On-Site Sampling for Volatiles and Pesticides, Using SPME Amer. Environ. Lab. 10 (2): 21-22 (1998) Shirey, R., Mani, V, Mindrup, R.	100µm PDMS, 75µm Carboxen/PDMS 2-3 min, headspace stirring, salt added	GC-MS
291	Petroleum hydrocarbons in water	Solvent-Free and Rapid Determination of Petroleum Hydrocarbons in Water by SPME UFZ-Ber. Optimierung Umweltvertiraeglicher Analysenverfahren fuer Mineraloelkohlenwasserstoff IM Boden 12: 14-17 (1997) Christall, B.		
367	C3-C16 hydrocarbons in water	Partition Infrared Method for Total Gasoline Range Organics in Water Based on SPME Environ. Sci. Technol, 1999, 33, 814-819 Stahl, D., Tilotta, D.	130µm Teflon film 30 min immersion	IR 4000-2690 cm-1
518	MMT in water	Determination of methylcyclopentadienylmanganese tricarbonyl (MMT) in aqueous samples by SPME-GC-AED Analyst (Cambridge, UK), (1999), 124(1), 71-73 Yang, F., Chau, Y.	100µm PDMS 15 min @ 20°C headspace	GC-AED
2665	**MMT in water**	**SPME combined with GC-AED for the determination of cyclopentadienyl-manganese tricarbonyl and (methylcyclopentadienyl)manganese tricarbonyl in soils and seawaters** ***J. Chromatogr. A 1173, #1-2, 139-145 (Nov 30 2007)*** **Campillo, N.; Hernandez-Cordoba, Manuel; Penalver, Rosa**	**headspace**	**GC-AED**
849	MMT in water	Determination of methylcyclopentadienylmanganesel tricarbonyl by SPME-direct thermal desorption-quartz furnace atomic absorption spectrometry *Spectrochim. Acta, Part B (2001) 56B(2) 215-222* Fragueiro, M. S.; Alava-Moreno, F.; Lavilla, I.; Bendicho, C		GC-AED
2706	**Organochlorine pesticides in**	**Uncertainty associated to the analysis of organochlorine pesticides in water by SPME-GC-ECD-Evaluation using two different approaches** ***Analytica Chimica Acta; Vol. 573-574, 202-208 (2006-07-28)***	**headspace**	**GC-ECD**

	water	**Ratola, Nuno**		
2852	**Review article**	**Analytical methods for PCBs and organochlorine pesticides in environmental monitoring and surveillance: A critical appraisal** ***Anal. Bioanal. Chem. 386, #4, 769-789 (October 2006)*** **Muir, Derek; Sverko, Ed**		
2409	**Pesticides, PCBs from water**	**Simultaneous analysis of PCBs and organochlorine pesticides in water by headspace SPME with GC-MS** ***J. Chromatogr., A 1138, #1-2, 231-243 (2007-01-05)*** **Derouiche, A.; Driss, M. R.; Morizur, J. -P.; Taphanel, M. -H.**	**100µm PDMS headspace**	**GC-ECD**
519	VOCs, BTEX, pesticides, PCBs from water	Efficiency of direct SPME from water: Comparison of different fiber types including a new C8-coating Chromatographia, 1999, 49(11/12), 686-690 Popp, P., Paschke, A.	variety of fibers	
904	pesticides in water	Analysis of fire ant pesticides in water by SPME and GC-MS and LC-MS Analytica Chimica Acta 2001, 436(1) 11-20 Reyzer, M., Brodbelt, J.		GC-MS & LC-MS
2413	**Pesticides in water**	**Optimisation and validation of a SPME method for simultaneous determination of different types of pesticides in water by GC-MS** ***J. Chromatogr., A 1141, #2, 165-173 (2007-02-09)*** **Beceiro-Gonzalez, E. ; Concha-Grana, E.; Guimares, A.; Goncalves, C.; Muniategui-Lorenzo, S.; Alpendurada, M.**	**60µm PDMS/DVB 45 min @ 60°C**	**GC-MS**
770	Chlorine, nitrogen phosphorus pesticides in water	Multiresidual method for determination of chlorine, nitrogen, and phosphorus containing pesticides in surface and drinking water by SPME and GC/ECD/NPD *Boll. Chim. Ig., Parte Sci. (2000) 51(S3), 99-103* de Luca, Giuseppe; Mura, Michele	(in Italian)	GC/ECD/NPD
512	Iodinated THMs in drinking water	SPME for the determination of iodinated trihalomethanes in drinking water J. Chromatogr., A (1999), 841(2), 197-206 Cancho, B., Ventura, G., Galceran, M.	65µm CW/DVB/PDMS 10 min @ 20°C NaCl used	GC-ECD
292	Iodinated organics in water	Solid Phase Microextraction and Analysis of Iodinated Organic Compounds Avail. UMI, Order No. DA9812871 from: Diss. Abstr. Int., B 58 (10): 5364 (1998) Frazey, P.	85µm polyacrylate	GC-ECD
288	Iodinated volatiles in water	SPME with Temperature-Programmed Desorption for the Analysis of Iodinated Disinfection Byproducts Anal. Chem. 70 (3): 638-644 (1998) Frazey, P., Barkley, R., Siever, R.	85µm polyacrylate 15 min immersion stirring	GC-ECD
694	Cyanogen chloride in water	Simultaneous determination of cyanogen chloride and cyanogen bromide in treated water at sub-ug/L levels by a new SPME-GC-ECD method *J. Chromatogr. A 897(2000) 307-315* Cancho, B., Ventura, F., Galceran, M.	Carboxen/DVB/PDMS 15 min, headspace 2-3pH, 25% salt added	GC-ECD
695	Acetic acid in water	Determination of acetic acid in aqueous samples, by water-phase derivatization, SPME, and GC *J. Chromatogr. A., (2000), 874(2), 225-234* Wittmann, G., Van Langenhove, H., Dewulf, J.	85µm Polyacrylate headspace benzenal bromide derv.	GC-FID
411	Chloroacetic acids in water	Determinationof Chlorinated Acetic Acids in Drinking Water by in-situ Derivatization-SPME Interri J. Environ. Anal. Chem. 66: 215-224 (1997) Aikawa, B., Burk, R.		
520	Haloacetic acids in water	SPME coupled with GC-ion trap mass spectrometry for the analysis of haloacetic acids in wate J. Chromatogr., A 1999, 859(2), 159-172 Sarridon, M., Santos, F., Galceran, M.		GC-Iontrap MS

696	Haloacetic acids in water	In situ derivatization/SPME for the determination of haloacetic acids in water *Anal. Chem. 2000 Oct. 15, 72(20), 4865-4873* Sarrion, M. Santos, F., Galceran, M.	Carboxen/PDMS headspace dimethyl sulfate derv.	GC-ITMS
353	Chlorobenzenes in water	Using SPME to Determine Partition Coefficients to Humic Acids and Bioavailable Concentrations of Hydrophobic Chemicals Environ.Sci Technol, 1998, 32, 3430-3435 Ramos, E., Meijer, S., Vaes, W., Verhaar, H., Hermens, J.	7µm PDMS 20 min immersion pH 7	GC-FID
576	Chlorobenzenes in water	SPME-capillary GC determination of chlorobenzene compounds in water Lihua-Jianyan,-Huaxue-Fence. Mar 1999; 35(3): 103-105 Yang,-HB	100µm PDMS 5 min, agitated 0.5gm NaOH immersed	GC-ECD
697	Chlorinated benzenes in water	Trace analysis of ten chlorinated benzenes in water by headspace SPME *J. Chromatogr. A (2000) 874(1), 149-154* He, Y., Wang, Y., Lee, H.	100µm PDMS headspace salt, agitated	GC-MS
698	Fungicides in water	Determination of fungicides in natural waters using SPME and GC coupled with ECD and MS detection *J. Chromatorgr A., 893 (2000), 143-156* Lambropoulou, D., Konstantinou, I., Albanis, T.	100µm PDMS 30 min, agitated 20% NaCl, pH 4 immersed	GC-MS
2527	**Chlorothalonil in water**	**New cloud vapor zone (CVZ) coupled headspace SPME technique** ***Anal Bioanal Chem 388, #2, 377-83 (2007 May)*** **Huang, Yi-Ching; Su, Yi-Song; Muniraj, Sarangapani; Zhang, W.; Jen, J.**	**100µm PDMS** **5°C** **headspace**	
699	Chlorothalonil in water	Determination of aqueous chlorothalonil with SPME-GC *J. Chromatogr. A, 896 (2000) 105-110* Chen, S., Su, Y., Jen, J.	100µm PDMS 40 min,	GC-ECD
800	Alachlor in water	Optimization of alachlor solid-phase micro-extraction from water samples using experimental design. *J. Chromatogr. A (2000) 896(1-2), 373-379* Gonzalez-Barreiro, C.; Lores, M.; Casais, M. C.; Cela, R.	60µm PDMS/DVB 120min @ 25°C stirred	HPLC
2786	**Pyrethroids in soil**	**Simultaneous determination of traces of pyrethroids, organochlorines and other main plant protection agents in agricultural soils by headspace SPME-GC-MS** ***J. Chromatogr. A, 1188, #2, 154-163 (Apr 25 2008)*** **Cela, R.; Dagnac, Thierry; Fernandez-Alvarez, M.; Garcia-Jares, C.; Lamas, J.; Llompart, Maria; Lores, Marta**	**85µm polyacrylate** **headspace** **100 °C**	**GC-µECD**
2787	**Pyrethroids in groundwater**	**Application of SPME for determination of pyrethroids in groundwater using LC with post-column photochemically induced fluorimetry derivatization and fluorescence detection** ***J. Chromatogr. A, 1188, #2, 61-68 (Apr 25 2008)*** **Galera, M. Martinez; Mughari, Ahmed R.; Vazquez, P. Parrilla**	**60µm PDMS/DVB** **fluorimetry derivatization**	**LC fluorescencene**
2403	**Chloroacetanilide herbicides in water**	**Analysis of chloroacetanilide herbicides in water samples by SPME-GC-MS** ***Anal. Chim. Acta 591, #1, 87-96 (2007-05-15)*** **Xu, X. Q.; Yang, H. H.; Wang, L.; Han, B.; Wang, X. R.; Lee, F. S.-C**		**GC-MS**
293	Acidic herbicides in water	Gas-Phase Post-Derivatization Following SPME for Determining Acidic Herbicides in Water Anal. Chem. 70 (9): 1963-1968 (1998) Lee, M., Lee, R., Lin, Y., Chen, C., Hwang, B.	85µm polyacrylate 50 min immersion, stirring pH 1, salt added diazomethane (deriv.)	GC-MS
905	Acidic herbicides in water	Derivatisation/SPME followed by GC-MS for the analysis of phenoxy acid herbicieds in aqueous samples *J. Chromatogr. A (1998),826(2), 211-216*		GC-MS

		Nilsson, T., Baglio, D., Miguez, I., Madsen, J., Facchetti, S.		
898	Acidic herbicides in water	Automated on-line in-tube SPME followed by LC/electrospray ionization mass spectrometry for the determination of chlorinated phenoxy acid herbicides in environmental waters *Analyst (Cambridge, U. K.) 2001 , 126(5) 602-608* Takino, Masahiko; Daishima, Shigeki; Nakahara, Taketoshi		LC-MS
763	Profoxydim in water	Application of on-site SPME in aquatic dissipation studies of profoxydim in rice *J. Chromatogr A, 909 (2001) 29-36* Eisert, R, Jackson, S., Krotzky, A.	50µm Carbowax-TPR 30min. salt added immersed	HPLC-UV
521	Fungicides in water	SPME of the antifouling Irgarol 1051 and fungicides dichlofluanid and 4-chloro-3-methylphenol in water samples J. Chromatogr. A, (1999), 839(1+2), 253-260 Penalver, A., Pocurull, E., Borrull, F., Marce, R.	85µm polyacrylate 1 hr. @ 60°C immersion, salt added	GC-MS
568	T2 mycotoxin in water	Determination of trichothecene (T2 mycotoxin) in aqueous sample with solid-phase microextraction technique followed by GC-FID J-High-Resolut-Chromatogr. Jul 1999; 22(7): 424-426 Lee,-PK; Kee,-SYK; Ng,-W; Gopalakrishnakone,-P	85µm polyacrylate 75 min, immersed satr. salt stirred	GC-FID
294	PAHs in water	SPME of PAHs from Aqueous Samples, Using Fibers Coated with HPLC Chemically Bonded Silica Stationary Phases Anal. Chem. 69 (24): 5001-5005 (1997) Liu, Y., Lee, M., Hageman, K., Yang, Y, Hawthorne, S.	100µm silica/epoxy 60°C, 30 min headspace	GC-FID, -MS
295	PAHs	Separation and Determination of Polycyclic Aromatic Hydrocarbons by SPME/Cyclodextrin-Modified Capillary Electrophoresis Anal. Chem. 69 (9): 1726-1731 (1997) Nguye, A., Luong, J.		
700	PAHs in water	Monitoring of PAH in water using headspace SPME and capillary GC *Microchem J. (1999), 63(2), 276-284* Djozan, D., Assadi, Y.		
701	PAHs in water	SPME for determining the distribution of sixteen USEPA polycyclic aromatic hydrocarbons in water samples *J. Chromatogr. A. (2000) 879, 177* Doong, R., Chang, S., Sun, Y.		
296	Aromatics in water	Determination of Aromatic Compounds in Water by SPME and Ultraviolet Absorption Spectroscopy Anal. Chem. 69 (1): 1197-1203 (1997) Wittkamp, B., Hawthorne, S., Tilotta, D.	PDMS chip 30-50 min immersion	UV spectroscopy 220-300nm
344	RDX, TNT metabolites in salt water	Trace Analysis of salt in Seawater Using SPME and GC-Ion Trap Mass Spectrometry Anal. Chem., Vol. 70, No. 14, July 15, 1998, pg. 3015-3020 Barshick, S., Griest, W.	Carbowax/DVB 10 min immersion stirring	GC-MS
297	Phthalates, surfactants in water	Characterization of Water-Soluble Components of Slurries Using SPME Coupled to LC-MS J. Microcolumn Sep. 10 (2): 225-234 (1998) Moder, M., Popp, P., Pawliszyn, J.	65µm Carbowax/TPR 1-15 hr. pH 2, satr. salt	LC-MS
598	Organophosphorus compounds in leachate	Comparative studies of the leachate of an industrial landfill by GC-MS,LC-nuclear magnetic resonance and LC-MS J-Chromatogr,-A. 29 Jan 1999; 831(2): 243-256 Benfenati,-E; Pierucci,-P; Fanelli,-R; Preiss,-A Godejohann,-M; Astratov,-M; Levsen,-K; Barcelo,-D		GC-MS
702	Fatty acids in waste water	Development of a headspace SPME procedure for the determination of free volatile fatty acids in waste wate *J Chromatogr. A,(2000) 873(1), 107-115* Abalos, M., Bayona, J., Pawliszyn, J.	85µm Carboxen/PDMS headspace stirring	GC-FID, MS

703	Fatty acids in water	Application of GC coupled to chemical ionisation MS following headspace SPME for the determination of free volatile fatty acids in aqueous samples. *J. Chromatogr. A 891 (2000) 387-294* Abalos, M., Bayona, J.	85µm Carboxen/PDMS 20 min headspace 3.75 g NaCl, pH 1.5	GC-CI-MS
593	Fatty acids in waste water	Analysis of volatile fatty acids in waste water collected from a pig farm by a SPME method. Chemosphere. Feb 1999; 38(4): 823-834 Yo,-S-P	65µm Carbowax/DVB 20 min immersion stirred	GC-MS
913	Aromatic acids/bases in water	SPME with pH adjustment for the determination of aromatic acids and bases in water *J. Chromatogr. A (1998) 829(1-2) 223-233* van Doorn, H., Grabanski, C., Miller, D., Hawthorne, S.		
704	Volatile, semivolatiles in water & soil	Solid Phase microextraction: a promising technique for sample preparation in environmental analysis *J. Chromatogr. A 889 (2000) 3-14* Alpendurada, M.	review article	
2529	**Antibiotics in wastewater**	**SPME of macrolide, trimethoprim, and sulfonamide antibiotics in wastewaters** ***J Chromatogr. A 1169, #1-2, 53-62 (OCT 26 2007)*** **McClure, Evelyn L.; Wong, Charles S.**		**HPLC-MS-MS**
2296	**Antibiotics in wastewater**	**Simultaneous extraction and analysis of 11 tetracycline and sulfonamide antibiotics in influent and effluent domestic wastewater by SPME and LC electrospray ionization tandem mass spectrometry** ***J. Chromatogr. A, (2006) 1097, #1-2, 40-53*** **Carlson, Kenneth; Cha, Jongmun; Yang, Shinwoo**		**LC-MS**
972	Alkyl sulfides in water	Determination of volatile alkyl sulfides in wastewater. *J.Chromatogr. A (2002) 963(1-2), 249-257* Abalos, M.; Prieto, X.; Bayona, J.M.	PDMS/carboxen	GC-MS
975	MTBE in water	Determination of MTBE in water by GC-FID *J.Chromatogr. A (2002) 963(1-2), 259-264* Dron, J.; Garcia, R.; Millan, E.	65 um PDMS/DVB	GC-FID
2238	**review of trends**	**Current perspectives in analyte extraction strategies for tin and arsenic speciation** ***J Chromatogr. A 1153, #1-2, 114-29 (2007 Jun 15)*** **Dietz, C.; Sanz, Jon; Sanz, Estrella; Muonoz-Olivas, Rian; Coamara, C.**		
976	Butyltin in water	Rapid determination of butyltin species in water samples by multicapillary GC *J.Chromatogr. A (2002) 963(1-2), 195-203.* Carpinterio Botana, J.; Rodriguez Pereiro, I.; Cela Torrijos, R.		GC-AED
978	BHT in bottled water	Determination of butylated hydroxytoluene in bottled drinking water. *J.Chromatogr. A (2002) 963(1-2), 179-183* Tombesi, N.B.; Freije, H.		GC-MS
2641	**Nonylphenols in water**	**Analysis or nonylphenol in water samples by automatic SPME-GC** ***Zhongshan Daxue Xuebao 46, #5, 45-48 (Sept 2007)*** **Chen, Ling; Deng, Qin-Ying; Liu, Lan; Zhou, Hai-Yun**	**65µm DVB/PDMS** **20 min.**	**GC**
979	Nonylphenols in water	Determination of short ethoxy chain nonylphenols and their brominated analogs in raw and treated water. *J.Chromatogr. A (2002) 963(1-2), 159-167* Diaz, A.; Ventura, F.; Galceran, M.T.	DVB/carboxen/PDMS	GC-MS
980	Phenolic pollutants in water	Method for the analysis of thirty phenolic pollutants in water samples. *J.Chromatogr. A (2002) 963(1-2), 137-148* Llompart, M.; Lourido, M; Landin, P.; Garcia-Jares, C.; Cela, R.	75 um carboxen/PDMS	GC-MS

981	Carbofuran in water	Comparison of SPE and SPME for carbofuran in water. *J.Chromatogr. A (2002) 963(1-2), 117-123* Lopez-Blanco, M.C.; Cancho-Grande, B.; Simal-Gandara, J.		HPLC
983	Sulfur in gaseous matrices	Quantification of volatile sulfur compounds in complex gaseous matrices by SPME *J.Chromatogr. A (2002) 963(1-2), 57-64* Nielsen, S.T.; Jonnson, S.	75 um carboxen/PDMS	GC-MS
993	Musk compounds in water.	Optimization of SPME method for synthetic musk compounds in water. *J.Chromatogr. A (2002) 963(1-2), 277-285* Garcia-Jares, C.; Llompart, M.; Polo, M.; Salgado, C.; Macias, S.; Cela, R.	Various	GC
1001	VOC's in water/soil	Determination of volatile organic compounds (VOC) in water and soil using solid phase microextraction. *Chemia Analityczna (2002) 47 (4), 507-530.* Wypych, J.; Manko, T	PDMS	GC-MS
1005	Nonylphenols in water	Determination of estrogenic short ethoxy chain nonylphenols and metabolites in river and treated water by SPE (solid phase extraction) and SPME (solid phase microextraction) *Water Sc. Technol. Water Supply (2003) 3 (1-2), 329-334.* Diaz, A.; Galceran, M.T.; Ventura, F.		
1015	MTBE in water	Determination of MTBE in a recreational harbor using solid-phase microextraction *Chemosphere (2003) 51 (8), 805-810.* Ganske, Jane A.; Green, David B.; Zuccarello, Joseph L.		GC-MS
1023	Nonylphenol in water	ethinylestradiol in wastewater using solid-phase microextraction and gas *J.Chromatogr. A (2003) 988(1), 41-51.* Braun, P.; Engewald, W.; Kuschk, P.; Moeder, M.; Popp, P.; St. Schrader	Various	GC-MS
1026	MTBE, TAME and TBA in water.	Improved analysis of MTBE, TAME, and TBA in petroleum fuel-contaminated groundwater by SPME using deuterated internal standards with GC-MS *Environmental Science & Technology (2003) 37 (7), 1392-1397.* Dewsbury, Paul; Lerner, David N.; Thornton, Steven F.	PDMS-carboxen	GC-MS
1029	Antifouling agents in water	Headspace solid phase microextraction for the analysis of the new antifouling agents Irgarol 1051 and Sea Nine 211 in natural waters. *Analytica Chimica Acta (2002) 468 (1), 171-180.* Lambropoulou, D. A.; Sakkas, V. A.; Albanis, T. A.*	65 um PDMS-DVB	GC-MS
1041	Hydrocarbons in water	Characterization and source identification of hydrocarbons in water samples using multiple analytical techniques. *Journal of Chromatography, A (2002) 971 (1-2), 173-184.* Wang, Z. D.; Li, K.; Fingas, M.; Sigouin, L.; Menard, L.		GC-MS
1042	Aromatic amines and PAH in water.	Characteristics of poly(methylphenylvinylsiloxane) fibre probe for solid-phase microextraction *Fenxi Shiyanshi (2002) 21 (5), 75-78.* Zeng, Z. R.; Wang, Y. L.; Yang, M.; Tian, S. Z.	poly(methylphenylvinylsilo	GC
1043	Methamidophos in water.	Determination of methamidophos residues in water by SPME-CGC-MS. *Fenxi Shiyanshi (2002) 21 (5), 28-30* Li, Q.; Liu, H. L.; Wang, J. L.; Chen, H.	100 µm PDMS	GC-MS
1049	MTBE in water	Identification of MTBE in water by SPME and GC-MS. *American Laboratory (2002) 34 (21), 34.* Guidotti, M.; Blasi, G.; Lucarelli, E.; Onorati, B.; Ravaioli, G.; Stella, D.	75 µm Carboxen/PDMS	GC-MS
1058	Chlorophenols in water.	Determination of chlorophenols in waste water using direct solid-phase microextraction-GC *Fenxi Kexue Xuebao (2002) 18 (5), 421-423.*	85 µm polyacrylate	GC-ECD

		Zhang, H. Y.; Zhang, J.; Huang, X. H.	260°C, 5 minutes	
1059	Phenols in water	Determination of phenols in water by solid-phase microextraction-gas chromatography-mass spectrometry. *Fenxi Huaxue (2002) 30 (10), 1240-1242.* Zhao, R. S.; Liu, R. M.*; Cui, Q. X		GC-MS
1069	PAHs from drinking water.	Coating of solid-phase microextraction fibers with chemically bonded silica particles: selective extraction of polycyclic aromatic hydrocarbons from drinking water samples. *Journal of Chromatographic Science (2002) 40 (9), 489-494.* Rodrigues, R.; Lacerda, C. A.; Lancas, F. M.*	Various	
1093	Cedrol in sea water	Determination of cedrol in sea water by SPME-GC-MS and its content variations in redtide sea water. *Fenxi Ceshi Xuebao (2002) 21 (6), 5-8.* Zhao, M. Q.; Li, G. K.; Chen, H.; Zhang, Z. X.	Various	GC-MS
1095	Aromatic compounds in aqueous solutions.	Infra-red reflection-absorption method for the detection of aromatic compounds in aqueous solutions with limited sample volumes. *Analytical Sciences (2002) 18 (11), 1247-1252.* Yang, J.; Chen, P. Y.*		
1100	n-alkanes from aqueous samples	Analysis of n-alkanes at sub microgram per liter level after direct solid phase microextraction from aqueous samples. *Analytical Sciences (2002) 18 (11), 1221-1226.* Farajzadeh, M.; Hatami, M.		GC-FID
1103	Organic acids in water	Gas-phase analysis of trimethylamine, propionic and butyric acid, and sulfur compounds using solid-phase microextraction *Analytical Chemistry (2002) 74(5), 1054-1060* Kim, H.; Nochetto, C.; McConnell, L. L.		
1110	Phthalate esters from water.	Hollow-fibre liquid-phase microextraction of phthalate esters from water *Journal of Chromatography A (2003) 999 (1-2), 145-153.* Kalogerakis, Nicolas; Psillakis, Elefteria		
1111	Haloanisoles in water.	Simultaneous determination of "earthy-musty" odorous haloanisoles and their corresponding halophenols in water samples using solid-phase microextraction coupled to gas chromatography with electron-capture detection *Journal of Chromatography A (2003) 999 (1-2), 135-144.* Bruchet, Auguste; Dugay, Jose; Hennion, Marie-Claire; Malleret, Laure		GC-ECD
2194	**Alkylbenzenes in detergents**	**Factorial design optimization of SPME conditons for (GC-MS) analysis of linear alkylbenzenes (LABs) in detergents** ***Anal. Chim. Acta 562. #2, 152-157 (2006)*** **Bruns, Roy E.; De Carvalho, Lilian R. Franco; Penteado, Jose C.**	**headspace**	**GC-MS**
1116	Alkylbenzenesulfonates	Determination of linear alkylbenzensulfonates in aqueous matrices by ion-pair solid-phase microextraction-in-port derivatization-gas chromatography-mass spectrometry *Journal of Chromatography A (2003) 999 (1-2), 51-60.* Alzaga, Roberto; Bayona, Josep Maria; Ortiz, Laura; Pena, Araceli		GC
1122	Chlorophenols in water	Improved determination of chlorophenols in water by solid-phase microextraction followed by benzoylation and gas chromatography with electron capture detection. *Chromatographia (2002) 55(9-10), 595-600* Bianchi, F.; Careri, M.; Mucchino, C.; Musci, M.	65um DVB/PDMS, pentafluorobenzoyl chloride derivatization	GC-ECD

1151	PAH, PCB and phthalates in water.	MultiSimplex optimization of the solid-phase microextraction-gas chromatography-mass spectrometric determination of polycyclic aromatic hydrocarbons, polychlorinated biphenyls and phthalates from water samples. *Journal of Chromatography, A (2002) 978 (1-2), 165-175.* Cortazar, E.; Zuloaga, O. *; Sanz, J.; Raposo, J. C.; Etxebarria, N.; Fernandez, L. A.	PDMS	GC-MS
1153	Endosulfan in water.	Optimization of solid-phase extraction and solid-phase microextraction for the determination of small alpha - and small beta -endosulfan in water by gas chromatography-electron-capture detection. *Journal of Chromatography, A (2002) 976 (1-2), 293-299.* Lopez-Blanco, M. C.; Reboreda-Rodriguez, B.; Cancho-Grande, B.; Simal-Gandara, J. *		GC-ECD
1154	PAH's in water	Application of the novel benzo-15-crown-5 sol-gel coating for solid-phase microextraction in rapid determination of trace PAHs in water at non-equilibrium situations. *Fenxi Kexue Xuebao (2003) 19 (2), 109-112.* Wang, D. H.; Xing, J.; Wu, C. Y.*		GC
1155	Phthalate esters	Application of time-resolved luminescence methodology to the determination of phthalate esters. *Analytical Letters (2003) 36 (5), 1017-1027.* Casas-Hernandez, A. M.; Aguilar-Caballos, M. P.; Gomez-Hens, A. *		
2549	**Butyltin in sediments**	**Headspace SPME-GC-ion trap tandem mass spectrometry method for butyltin analysis in sediments: Optimization and validation** ***Microchemical Journal 87, #2, 147-153 (DEC 2007)*** **Carvalho, P.; Pinto, L.; Basto, A..; Vasconcelos, A..**	**headspace**	**GC-MS**
1164	Butyltin	SPME-GCMS for speciation of butyltin compounds in marine environment *Journal De Physique. IV : JP (2003) 107 (II), 1313-1316.* Mahapatra, S.; Puranik, V.D.; Sadasivan, S.; Tripathi, R.M.	PDMS	GC-MS
1071	VOC, SVOC in aqueous solutions.	Fibre introduction mass spectrometry: fully direct coupling of solid-phase microextraction with mass spectrometry. *Analytical Chemistry (2002) 74 (21), 5688-5692.* Meurer, E. C.; Tomazela, D. M.; Silva, R. C.; Augusto, F.; Eberlin, M. N.*	PDMS	FIMS
1072		Extractions with superheated water. *Journal of Chromatography, A (2002) 975 (1), 31-46.* Smith, R. M.		
1112	Organotin	Rapid determination of organotin compounds by headspace solid-phase microextraction *Journal of Chromatography A (2003) 999 (1-2), 123-134.* Le Gac, Marjorie; Lespes, Gaetane; Potin-Gautier, Martine		GC
1228	BTEX	Determination of siloxane-water partition coefficients by capillary extraction-high-resolution gas chromatography. Study of aromatic solvents. *Journal of Chromatography, A (2003) 985 (1-2), 39-45.* Nardi, L.		
1167	Glycol ethers	Optimization of the headspace solid-phase microextraction for determination of glycol ethers by orthogonal array designs. *Journal of Chromatography, A (2002) 977(1), 11-15* Huang, C. T.; Su, Y. Y.; Hsieh, Y. Z.	75µm Carboxen PDMS	GC-FID
1168	Oestrogenic short ethoxy chain nonylphenols in water	Simultaneous determination of oestrogenic short ethoxy chain nonylphenols and their acidic metabolites in water by an in-sample derivatization/solid-phase microextraction method. *Analytical Chemistry (2002) 75(15), 3869-3876* Diaz, A.; Ventura, F.; Galceran, M. T.		

1182	Biocides in water	Comparison of the performance of analytical methods based on solid-phase extraction and on solid-phase microextraction for the determination of antifouling booster biocides in natural waters. *Chromatographia (2002) 56 (11-12), 745-751.* Konstantinou, I. K.; Hela, D. G.; Lambropoulou, D. A.; Sakkas, V. A.; Albanis, T. A.*		GC-MS
1184	Phthalates in water	Solid-phase microextraction of phthalates from water. *Journal of Chromatography A (2001) 938(1-2), 93-101* Luks-Betlej, K.; Janoszka, B.; Paschke, H.; Popp, P.	70µm Carbowax/DVB	
1188	Mercury in sea water.	Speciation of mercury compounds by gas chromatography with atomic emission detection. Simultaneous optimization of a headspace solid-phase microextraction and derivatization procedure by use of chemometric techniques. *Chromatographia (2002) 56 (11-12), 733-738.* Carro, A. M.; Neira, I.; Rodil, R.; Lorenzo, R. A.	PDMS	GC-MIP AES
1189	Endosulfan in aqueous samples.	Optimization and application of SPME for the gas chromatographic determination of endosulfan and its major metabolites in the ng L-1 range in aqueous solutions. *Analytical and Bioanalytical Chemistry (2003) 376 (1), 61-68.* Frimmel, F. H.; Deger, A. B.; Gremm, T. J.; Mendez, L.	PDMS	GC-ECD
1206	MTBE in water	Methyl tert-butyl ether (MTBE) in urban and rural precipitation in Germany. *Atmospheric Environment (2001) 35(36), 6337-6345* Achten, Christine; Kolb, Axel; Puettmann, Wilhelm	75um Carboxen PDMS	GC-MS
1213	VOC's in groundwater.	Monitoring and evolution of the pollution by volatile organic compounds (VOCs) in the groundwaters of the Najerilla River Basin (Spain) *International Journal of Environmental Analytical Chemistry (2003) 83 (6), 495-506.* Fernandez-Torroba, Miguel A.; Ortiz, Gustavo; Pons, Begona; Tena, Maria Teresa	75 um Carboxen/PDMS	GC-FID
1221	BTEX	In-tube solid-phase microextraction sampler for long-term storage. *Journal of Chromatography, A (2003) 985 (1-2), 93-98.* Nardi, L.		
1222	PAHs	Determination of polycyclic aromatic hydrocarbons in water by capillary solid-phase microextraction coupled with high-performance liquid-chromatography. *Fenxi Huaxue (2003) 31 (2), 171-174.* Chen, S.; Hahn, J. H.; Quan, X.; Lim, K. S.; Yang, F. L.		HPLC
1223	Phthalates in water	Solid-phase microextraction coupled with high performance liquid chromatography-UV detection for the determination of di- n -propyl-phthalate, di-iso -butyl-phthalate, and di-cyclohexyl-phthalate in environmental water samples. *Analytical Letters (2003) 36 (2), 389-404.* Cai, Y. Q.; Jiang, G. B.*; Liu, J. F.		HPLC
1234	Organotin	Validation, using a chemometric approach, of gas chromatography-inductively coupled plasma-atomic emission spectrometry (GC-ICP-AES) for organotin determination. *Analytical and Bioanalytical Chemistry (2003) 376 (1-2), 226-235.* Lespes, Gaetane; Aguerre, Sandrine; Pecheyran, Christophe		GC-ICP-AES
1241	Chlorinated paraffins in water.	Solid-phase microextraction for the analysis of short-chain chlorinated paraffins in water samples. *Journal of Chromatography, A (2003) 984 (1), 1-8.* Castells, P.; Santos, F. J.; Galceran, M. T.*	Various.	GC-ECD
1256	Dioxin in water	Rapid determination of 2,3,7,8-tetrachlorodibenzo- p -dioxin in water samples by using solid-phase microextraction followed by gas chromatography with tandem mass spectrometry. *Journal of AOAC International (2003) 86 (1), 44-49.* Landin, P.; Llompart, M.; Lourido, M.; Garcia-Jares, C.; Carro, N.; Cela, R.	Various	GC-TMS

		Application of single-drop microextraction and comparison with solid-phase microextraction and solid-phase extraction for the determination of small alpha - and small beta -endosulfan in water samples by gas chromatography-electron-capture detection.		
1258	Beta-endosulfan	*Journal of Chromatography, A (2003) 984 (2), 245-252.*		GC-ECD
		Lopez-Blanco, M. C.; Blanco-Cid, S.; Cancho-Grande, B.; Simal-Gandara, J. *		
		Analysis of polychlorinated biphenyls in aqueous samples by microwave-assisted headspace solid-phase microextraction		
1260	PCBs in water.	*Journal of Chromatography, A (2003) 1008 (1), 1-12.*	Headspace	GC-FID
		Huang, Yaping; Shu, Youn Yuen; Tardif, Mylaine; Wang, Shu Shing		
		Determination of PCBs in the Housatonic River, MA by SPME and GC-ECD.		
1263	PCBs in water	*Abstracts of Papers American Chemical Society (2003) 225 (1-2), CHED 317.*		
		Wells, James; Schaumloffel, John C.		
		A new selective SPME fiber for some n-alkanes and its use for headspace sampling of aqueous samples		
1264	n-alkanes in water	*Journal of Separation Science (2002) 26 (9-10), 802-808.*	Cellulose acetate, PVC	
		Farajzadeh, Mir Ali; Hatami, Mehdi		
		Extraction of polycyclic aromatic hydrocarbons and organochloride compounds from water: A comparison between solid-phase microextraction and stir bar sorptive extraction		
1265	PAHs from water	*Journal of Separation Science (2002) 26 (9-10), 961-967.*		GC-MS
		Bauer, Coretta; Hauser, Barbara; Keil, Petra; Popp, Peter; Wennrich, Luise		
		Experimental design applied to the determination of several contaminants in Duero River by solid-phase microextraction.		
	Solvents from			
1267	varnishes.	*Analytica Chimica Acta (2003) 477 (2), 257-267.*	Various	GC-MS
		Salafranca, J.; Domeno, C.; Fernandez, C.; Nerin, C. *		
		Development and validation of a solid-phase microextraction method for the analysis of volatile organic compounds in groundwater samples.		
1278	VOCs in groundwater.	*Chromatographia (2003) 41 (6), 301-304.*	Various	GC
		Alonso, A.; Fernandez-Torroba, M. A.; Tena, M. T.; Pons, B. *		
		Development of an SPME-GC-MS method for trace organic compounds in waste water from a petrochemical refinery.		
	Trace organic compounds in waste			
1298	water.	*Sepu (2003) 21 (1), 76-80.*		GC-MS
		Xiao, K.; Wang, Y.; Lu, X.; Kong, H. W.; Yao, Q. H.; Xu, G. W.*		
		Optimization of a solid-phase microextraction procedure for the determination of triazines in water with gas chromatography-mass spectrometry detection.		
1300	Triazines in water.	*Journal of Chromatography, A (2003) 1007 (1-2), 127-135.*	Various	GC-MS
		Frias, S.; Rodriguez, M. A.*; Conde, J. E.; Perez-Trujillo, J. P.		
		Analysis of aldehydes in water by solid-phase microextraction with on-fiber derivatization		
1322	Aldehydes in water	*Journal of Chromatography, A (2003) 1015 (1-2), 143-150.*	PDMS/DVB	GC-MS
		Chang, Chun-Ming; Tsai, Shih-Wei		
		Determination of iodinated phenol species at parts-per-trillion concentration levels in different water samples by solid-phase microextraction/offline GC-ICP-MS		
	Phenol species in			
1335	water.	*Journal of Analytical Atomic Spectrometry (2003) 18 (9), 1119-1124.*	Various	GC-ICP-MS
		Caruso, Joseph A.; De Wuilloud, Jorgelina C.A.; Vonderheide, Anne P.; Wuilloud, Rodolfo G.		
		Solid-phase microextraction to monitor the sonochemical degradation of polycyclic aromatic hydrocarbons in water.		
1340	PAH's in water.	*Journal of Environmental Monitoring (2003) 5 (1), 135-140.*		GC-MS

		Psillakis, E.; Ntelekos, A.; Mantzavinos, D.; Nikolopoulos, E.; Kalogerakis, N.		
		Investigations on the sorption of phenols to dissolved organic matter by a QSAR study.		
1351	Phenols from water.	Chemosphere (2001) 45(3), 323-327.	85 um polyacrylate	GC-MS
		Ohlenbusch, G.; Frimmel, F. H.		
		Miniaturized solid-phase extraction as a sample preparation technique for the determination of phthalates in water.		
1357	Phthalates in water.	Analytical and Bioanalytical Chemistry (2002) 373(1-2), 81-86.		HPLC
		Saito, Y.; Nakao, Y.; Imaizumi, M.; Morishima, Y.; Kiso, Y.; Jinno, K. *		
		Sorptive sample preparation long dash a review.		
1358	PAH, PCB, pesticides and VOC	Analytical and Bioanalytical Chemistry (2002) 373(1-2), 3-22.	PDMS	
		Baltussen, E.; Cramers, C. A.; Sandra, P. J. F.		
		Determination of tin- and lead-organic compounds by SPME-GC-atomic-emission detection (SPME-GC-AED) after in situ propylation with sodium tetrapropylborate.		
1374	Tin and lead.	Journal of Analytical Atomic Spectrometry (2001) 16(10), 1160-1166.		GC-AED
		Crnoja, M.; Haberhauer-Troyer, C.; Rosenberg, E. *; Grasserbauer, M.		
		Simultaneous determination of traces of hydrophilic and volatile compounds in water by solid-phase microextraction and GC/MS.		
1376	Volatile compounds in water.	Bunseki Kagaku (2001) 50(10), 685-693.		GC-MS
		Miyazaki, T.; Kadokami, K.; Tukamoto, H.		
		Determination of phenylurea herbicides in natural waters at concentrations below one nanogram-per-litre using solid-phase extraction, derivatization, and solid-phase microextraction-gas chromatography-mass spectrometry.		
1383	Phenylurea herbicides in water.	Journal of Chromatography, A (2001) 930(1-2), 9-19.	85µm Polyacrylate	GC-MS
		Gerecke, A. C.; Tixier, C.; Bartels, T.; Schwarzenbach, R. P.; Mueller, S. R.*		
		Comparison between solid-phase extraction methods for the chromatographic determination of organophosphorus pesticides in water.		
1405	Organophosphorous pesticides in water.	Journal of Environmental Science and Health Part B Pesticides Food Contaminants and Agricultural Wastes (2001) B36(5), 517-527.		
		Lancas, Fernado M.; Carvalho, Dermeval; Queiroz, Maria E. C.; Silva, Silvana M		
		Occurrence of butyltin compounds in the waters of selected lakes, rivers and coastal environments from China.		
1407	Butyltin in water	Environmental Pollution (2001) 115(1), 81-87.		GC-FID
		Jiang Gui-bin; Liu Ji-yan; Wu Di-jing; Zhou Qun-fang		
		Alkylphenols and bisphenol-A in the coastal environment of Singapore and their rapid extraction from seawater and biological materials.		
1408	Alkylphenols and bisphenol-A	Abstracts of Papers American Chemical Society (2001) 222(1-2), ENVR155.		
		Lee, Hian Kee; Chanbasha, Basheer		
		Screening method for nitroaromatic compounds in water based on solid-phase microextraction and infrared spectroscopy.		
1416	Nitroaromatic compounds in water.	Environmental Science & Technology (2001) 35(17), 3507-3512.		IR
		Tilotta, David C.; Stahl, Danese C.		
		Comparison of different fibers for the solid-phase microextraction of phthalate esters from water.		
1419	Phthalate esters from water.	Journal of Chromatography A (2001) 922(1-2), 377-384.	65µm PDMS/DVB	GC-MS
		Pocurull, E.; Borrull, F.; Marce, R. M.; Penalver, A.		
		A rapid and sensitive method for methyl tert-butyl ether analysis in water samples by use of solid phase microextraction and gas chromatography-mass spectrometry.		

1425	MTBE in water	Chemosphere (2001) 44(4), 539-544. Roda, Aldo; Barbieri, Anna; Piazza, Francesco; Violante, Francesco Saverio Optimisation of the hyphenation between solid-phase microextraction , capillary gas chromatography and inductively coupled plasma atomic emission spectrometry for the routine speciation of organotin compounds in the environment	DVB/carboxen/PDMS	GC-MS
1431	Organotin compounds	J Anal At Spectrom (2001) 16(12), 1429-1433. Aguerre, S.; Donard, O.F.X.; Krupp, E.; Lespes, G.; Pecheyran, C.; Potin-Gautier, M. Speciation without chromatography: Part I. Determination of tributyltin in aqueous samples by chloride generation, headspace solid-phase microextraction and inductively coupled plasma time of flight mass spectrometry		GC-ICP-AES
1432	Tributyltin	J Anal At Spectrom (2001) 16(11), 1313-1316. Lam, J.W.; Maxwell, P.S.; Mester, Z.; Peter, L.; Sturgeon, R.E. Comparison of SPME/Transmission IR and SPME/ATR-IR spectroscopic methods in detection of chloroanilines in aqueous solutions	PDMS/DVB	ICP-TOFMS
1436	Chloroanilines in water	Applied Spectroscopy (2001) 55(7), 919-926. Tsai, F.-P.; Yang, J. Analysis of carcinogenic aromatic amines in water samples by solid-phase microextraction coupled with high-performance liquid chromatography		
1444	Amines in water	*Anal. Chim. Acta (2003) 495(1-2) 109-122* Chang, Wei-Yan; Huang, Shang-Da; Sung, Yu-Hsiang Determination of aliphatic amines using N-succinimidyl benzoate as a new derivatization reagent in gas chromatography combined with solid-phase microextraction	Various fibers compared	HPLC
1449	Amines in water	*Journal of Chromatography A (2003) 1021 (1), 175-181* Cai, Ling-Shuang; Jing, Zhi-Zhong; Wang, Hong; Yu, Jian-Xin; Zhang, Hua-Shan; Zhao, Yuan-Yuan Reevaluation of headspace solid-phase microextraction and gas chromatography-mass spectrometry for the determination of methyl tert-butyl ether in water samples	Headspace after derivatization with N-succinimidyl benzoate	GC-FID, GC-MS
1450	MTBE in water	*Journal of Chromatography A (2003) 1021(1), 157-164* Bucciferro, Anthony; Chu, Shaogang; Fang, Fu; Hong, Chia-Swee; Kou, Wenpeng Strategically designed sample composition for fastest screening of polychlorinated biphenyl congeners in water samples.		GC-MS
1460	PCBs in water	*Journal of Environmental Monitoring (2002) 4(4), 490-497* Martinez, E.; Llompart, M. P.; Landin, P.; Cela, R.; Carro, A. M.		
2232	**MTBE in water and soil**	**State of the art in the determination of MTBE in natural waters & soils** ***Crit. Rev. Anal. Chem.35 #4, 317-337 (2005)*** **Aragon, P.; Atienza, J.; Herrero, M; M., Angel; Aragon, P.; Atienza, J.; Herrero, Ma. Asuncion; Maquieira, A.; Puchades, R.**	**headspace**	**FID**
1475	MTBE in water	Sensitive method for determination of methyl tert-butyl ether (MTBE) in water by use of headspace-SPME/GC-MS. *Fresenius' Journal of Analytical Chemistry (2001) 371(4), 519-525* Achten, Christine; Kolb, Axel; Puettmann, Wilhelm	75um Carboxen/PDMS, headspace	GC-MS
2230	**MTBE in drinking water**	**Methyl tert-butyl ether (MTBE) in finished drinking water in Germany** ***Environ. Pollut 140 #2, 294-303 (2006)*** **Kolb, Axel; Puttmann, Wilhelm**		
1480	MIB in drinking water	Correlation of musty odor and 2-MIB in two drinking water treatment plants in South Taiwan. *Science of the Total Environment (2002) 289(1-3), 225-235*		GC-MS

		Lin, Tsair-Fuh; Kao, Hsiao-Pin; Wong, Jiun-Yue		
1484	2-hydroxy-4-methoxybenzophenone and octyldimethyl-p-aminobenzoic acid sunscreen agents in water	Gas chromatographic determination of 2-hydroxy-4-methoxybenzophenone and octyldimethyl-p-aminobenzoic acid sunscreen agents in swimming pool and bathing waters by solid-phase microextraction *Journal of Chromatography A (2002) 967(2), 243-253* Albanis, T. A.; Giokas, D. L.; Karayannis, M. I.; Lambropoulou, D. A.; Sakkas, V. A.	100µm PDMS, 85µm Polyacrylate	
1488	Organochlorines in water	Determination of organochlorides in water using solid-phase microextraction coupled to gas chromatography. *American Laboratory (2002) 34(17), 12-14* Ou Qing-Yu; Liang Bing; Li Ju-bai; Huang Min-jia		GC
1493	Estrogenic compounds in water	Method based on solid-phase microextraction-high-performance liquid chromatography with UV and electrochemical detection to determine estrogenic compounds in water samples. *Journal of Chromatography A (2002) 964(1-2), 153-160* Pocurull, E.; Borrull, F.; Marce, R. M.; Penalver, A.	85um Polyacrylate	HPLC-UV, HPLC-ED
1504	Mehylmercury in water	Application of SPME for the quantitative determination of methylmercury in aqueous solutions. *Abstracts of Papers American Chemical Society (2002) 223(1-2) CHED 125* Moore, J. Taylor; McDowell, Derek R.; Ambler, Rich B.		
1536	Phthalic acid esters in water	Development of a solid-phase microextraction method for the determination of phthalic acid esters in water. *Analytica Chimica Acta (2002) 457(2), 211-223* Holadova, Katerina; Hajslova, Jana; Poustka, Jan; Prokupkova, Gabriela	Various fibers compared	GC-ECD
1538	Phenolic compounds in water	Solid-phase microextraction coupled to high-performance liquid chromatography to determine phenolic compounds in water samples. *Journal of Chromatography A (2002) 953(1-2), 79-87* Marce, R. M.; Borrull, F.; Penalver, A.; Pocurull, E.	85um Polyacrylate	HPLC-UV
2154	**Chlorophenols in water**	**Vial position in the determination of chlorophenols in water by SPME** ***J. Chromatogr. A, 1103, #1, 29-34 (2006)*** **Portillo, A; Prohibas, N.; Salvado, V.; Simonet, B. M.**	**headspace**	**GC-MS**
1552	Chlorophenols in water	Determination of chlorophenols by solid-phase microextraction and liquid chromatography with electrochemical detection. *Journal of Chromatography A (2002) 947(2), 155-165* Galceran, M. T.; Santos, F. J.; Sarrion, M. N.	Various fibers compared	HPLC-ELCD
1354	Aldehydes in drinking water	Determination of aldehydes in drinking water using pentafluorobenzylhydroxylamine derivatization and solid-phase microextraction *Journal of Chromatography A (2002) 943(1), 1-13* Ventura, Francesc; Cancho, Beatriz; Galceran, Ma. Teresa	65um DVB PDMS, on-fiber derivatization with PFBHA	GC-ECD
1156	Chlorophenols	Solid-phase microextraction liquid chromatography/tandem mass spectrometry for the analysis of chlorophenols in environmental samples. *Rapid Communications in Mass Spectrometry (2002) 17 (1), 39-48.* Sarrion, M. N.; Santos, F. J.; Moyano, E.; Galceran, M. T.*	Carbowax/TPR	LC-TMS
		Simultaneous mercury and tin speciation in environmental samples by GC-MIP/AES after preconcentration by solid phase microextraction		

1166	Mercury and tin in environmental samples.	*Journal De Physique. IV : JP (2003) 107 (II), 1423.* Carrera, R.; De Diego, A.; Delgado, A.; Madariaga, J.; Sanz, J.; Zuloaga, O.	PDMS	GC-MIP/AES
1074	Tributyltin	Improvement of measurement precision of SPME-GC/MS determination of tributyltin using isotope dilution calibration. *Analytical Chemistry (2002) 74 (21), 5606-5613.* Bancon-Montigny, C.; Maxwell, P.; Yang, L.; Mester, Z.; Sturgeon, R. E.		GC-MS
1952	Methyl phosphoric acid in wate	Determination of methylphosphonic acid in water by SPME-GC *Fenxi Ceshi Xuebao, 23, #1, 106-108* Yuan, L.; Xu, D. N.		GC
1953	Nickle-cadmium from water	Electrochemically controlled (EC) SPME based on over oxidized sulfonate polypyrrole *Talanta, 67, #1,, 245-251* Ertas, N; Pekmez, K; Sahin, Y; Tamer, U Udum, Y.; Yildiz, A.	sulfortated polypyrrole coated fiber immersed	ETAAS
1954	Industrial effluent in freshwater	Risk assessment of domestic and industrial effluents unloaded into a freshwater environment *Ecotoxicology & Environmental Safety, 61, #3, 380-391* Di Marzio, W.; Saenz, M.; Alberdi, J.; Tortorelli, M.; Silvana, G.		GC-MS
1955	Alkanethiols in wastewater	Low part per trillion determination of reactive alkanethiols in wastewater by in situ derivatization-SPME followed by GC/MS *Anal. Chem., 77, #18, 6012-6018* Alzaga, R.; Bayona, J.M.; Garcia-Jares, C.; Llompart, M.; Salgado-Petinal, C.	N-ethylmaleimide derivatives immersion sampling	GC-MS
2876	**Alcohol ethoxylates in marine sediment**	**Sediment toxicity of a rapidly biodegrading nonionic surfactant: Comparing the equilibrium partitioning approach with measurements in pore water** ***Env Sci & Tech. 42, #11, 4215-4221 (Jun 1 2008)*** **Droge, Steven T. J.; Hermens, Joop L. M.; Postma, Jaap F.**		**GC-MS**
2443	**Ethoxylates in seawater**	**Analysis of freely dissolved alcohol ethoxylate homologues in various seawater matrixes using solid-phase microextraction** ***Anal. Chem. 79, #7, 2885-2891 (2007-04-01)*** **Droge, S. T.; Sinnige, T. L.; Hermens, J. L. M.**	**headspace**	**GC**
1956	Chromium in seawater	Determination of total chromium in seawater by isotope dilution sector field ICPMS using GC s sample introduction *Anal. Chem., 76, #13, 3510-3516* Abranko, L; Mester, ; Sturgeon, .; Yang, L	PDMS fiber TFA derivatives headspace	ICPMS
1957	Chromium in Water	Determination of chromium(III) in water by SPME w/ polyimide-coated fiber and GC-FPD *J. Chromatogr. A, 1062, #1, 49-55* Ding, Tzuoo-Huei; Lin, Huang-Huei; Whang, Chen-Wen	polyimide fiber TFA derivatives	GC-FPD
1958	Organics in water	SPME: A powerful sample preparation tool prior to mass spectrometric analysis *J. Mass Spectrom.(2004) 39(3), 233-254* Vas, Gyorgy; Vekey, Karoly	review article	GC-MS, LC-MS
1959	Butyltin in sea water	Comparison between headspace and aqueous phase SPME method for speciation analysis of butyltin compounds in sea water *J Food and Drug Analysis, 12, #3, 205-211* Hsia, Meng-Pei; Hsu, Tau-Being; Liu, Shiu-Mei	headspace & immersion sampling	GC
1960	Hg,Pb,Tn in water & seawater	Multielemental speciation analysis of organometallic compounds of mercury, lead, and tin in natural water samples by headspace-SPME followed by GC-MS *J. Chromatogr. A, 1034,#1-2, 191-197* Centineo, G; Gonzalez, E; Sanz-Medel, A	Various fibers $NaEt_4B$ derivatives headspace	GC-MS
1961	MTBE in water	Reevaluation of headspace SPME-GC-MS for the determination of methyl tert-butyl either in water samples *J. Chromatogr. A, 1021, #1-2, 157-164*	headspace	GC-MS

		Fang, Fu; Hong, Chia-Swee; Chu, S; Kou, W; Bucciferro, A		
1962	Diacetyl Odor in water	Identification of 2,3-butanedione (diacetyl) as the compound causing odor events at trace levels in the Llobregat River and Barcelona's treated water (Spain *J. Chromatogr. A, 1034, #1-2, 175-182* Diaz, A.; Galceran, Ma. Teresa; Ventura, F.	75µm Carboxen 30min @ 60°C $NaEt_4B$ derivative Headspace	GC-MS
1963	Odors/volatiles in water	Simultaneous determination of 22 volatile organic compounds, methyl-tert-butyl ether,1,4-dioxane, 2-methylisoborneol and geosmgeosmin in water by headspace SPME-GC-MS *Anal. Chim. Acta, 548, #1-2, 79-85* Daishima, Shigeki; Nakamura, Sadao	100µm PDMS headspace	GC-MS
2807	**Geosmin and 2-methyisoborneol in water**	**Determination of musty odorants, 2-methylisoborneol and geosmin, in environmental water by headspace GC-MS** ***J. Chromatogr. A, 1186, #1-2, 434-437 (Apr 4 2008)*** **Kataoka, Hiroyuki; Okamura, Kota; Saito, Keita**	**65µm PDMS-DVB Headspace 70 °C for 30 min.**	**GC-MS**
1964	Alkyl lead in water	Study of alkyl lead speciation by Head Space (HS)· SPME coupled with GC-MS *Fenxi Shiyansh, 23, #2, 14-17* Shuai, Q.; Zheng, C; Shuai, Q.; Yang, W.; Zheng, Y.	Headspace	GC-MS
2666	**Volatiles from linoleic acid**	**Effects of riboflavin-photo sensitization on the formation of volatiles in linoleic acid model systems with sodium azide or D2O** ***Food Chemistry 105, #4, 1375-1381 (2007)*** **Yang, Seungk; Lee, JaeMin; Lee, JaeChul; Lee, JaeHwan**	**Headspace**	**GC-MS**
1965	C2-C7 Fatty acids in water/lanolin	Volatile fatty acids as malodorous compounds in wool scouring water and lanolin. Origin and characterization. *Env Technology, 24, #12, 1465-1470* Jover, E.; Abalos, M.; Ortiz, L.; Bayona, J.	headspace	GC-CI-MS
1966	Volatile oxidative products in oil-water	SPME of volatile oxidation compounds in oil-in-water emulsions *Food Chemistry, 92, #3, 401-406* Beltran, G; Aguilera, M; Gordon, Michael H.	headspace 50°C for 20 min.	GC-FID.
1967	Organometallic derivatives in water	Full automation of derivatization:SPME-GC-MS with dual-arm system for the determination of organometallic compounds in aqueous samples. *J Chromatogr A, 1025, #1, 77-84* Parkinson, D; Bruheim, I; Christ, I; Pawliszyn, J	phenyl derivative headspace	GC-MS
1968	Methyl mercury from seawater	Determination of methylmercury and mercury(II) in a marine ecosystem using SPME--GC-MS *Anal. Chim. Acta, 551, #1-2, 192-198* Bhalke, S.; Mishra, S.; Puranik, V.D.; Shukla, V.K.; Tripathi, R.M.	headspace $Na(C_6H_5)_4B$ derivative	GC-MS
1969	Mercury from wate/ sediment	Speciation analysis of mercury by SPME and multicapillary GC hyphenated to ICP-TOF spectrometry. *J Chromatogr A, 1055, #1-2, 197-207* Jitaru, P.; Adams, F. C.*	75µm Carboxen $NaEt_4B$ derivatives headspace	ICP-TOF-MS
1970	BTEX in water	Diffusion-based calibration for SPMEof benzene, toluene, ethylbenzene, p-xylene and chlorobenzenes from aqueous samples *J Chromatogr A, 1025, #1, 11-16* Paschke, A.; Popp, P.	headspace	GC
1971	Chlorinated benzenes	Indirect determination of low vapour pressures using SPME - Application to tetrachlorobenzenes & trachlorbenyltoluenes *J Chromatogr A, 1072, #1, 93-97* Paschke, Albrecht; Schroter, Uwe; Schuurmann, Gerrit	minutes to hour headspace	GC
2890	**Organo-phosphorus compounds**	**LC-MS-based procedures for monitoring of toxic organophosphorus compounds and verification of pesticide and nerve agent poisoning** ***Anal. Bioanal. Chem. 391, #1, 97-116 (May 2008)*** **John, Harald; Thiermann, Horst; Worek, Franz**	**review article**	**LC-MS**
1972	Organo-phosphorus pesticides in water	Determination of organophosphorus pesticides in spiked river water samples using SPME-GC With EI-MS and ICP-MS detection *J Anal At Spectrom, 20, #9, 876-882* Blanco-Gonzalez, E; Fidalgo-Used, N; Montes-Bayon, M; Sanz-Medel, A	immersed sampling	GC-MS GC-ICP-MS

		SPME for the determination of pyrethroids in cucumber and watermelon		
2404	**Pyrethroids in cucumber and watermelon**	**using HPLC combined with post-column photochemically induced fluorimetryderivatization and fluorescence detection** ***Anal. Chim. Acta 607, #1, 74-82 (21 JAN 2008)*** **Vazquez, P. P.; Mughari, A. R.; Galera, M. M.**	**30 min @ 65°C** **fluorimetry** **derivatization**	**HPLC-PIF-FD**
2609	**Pyrethroids photodegradation**	**Alternative sample preparation method for photochemical studies based on SPME: Synthetic pyrethroid photochemistry** ***J. Chromatogr. A 1152, #1-2, 156-167 (Jun 8 2007)*** **Cela, R.; Fernandez-Alvarez, M.; Garcia-Jares, C.; Llompart, M.; Lores, M.; Sanchez-Prado, L.**	**headspace**	**GC-MS**
2591	**Pyrethroids photodegradation**	**The photochemical behaviour of five household pyrethroid insecticides and a synergist as studied by photo-solid-phase microextraction** ***Anal. Bioanal. Chem. 388, #5-6, 1235-1247 (2007-07)*** **Fernandez-Alvarez, M.; Lores, M. ; Llompart, M.; Garcia-Jares, C.; Cela, R**	**headspace** **100µm PDMS**	**GC-MS**
2625	**Pyrethroids in sediment**	**Occurrence and bioavailability of pyrethroids in a mixed land use watershed** ***J. Environ. Qual. 36, #4, 1006-1012 (July/August 2007)*** **Bondarenko, S.; Budd, R.; Gan, J.; Haver, D.; Kabashima, J.**		
2594	**Pyrethroids in sediment**	**Analysis of pyrethroids in sediment pore water by SPME** ***Environ Toxicol Chem 26, #12, 2587-93 (2007 Dec)*** **Bondarenko, Svetlana; Spurlock, Frank; Gan, Jianying**		
2865	**Pyrethroids and organochlorinated pesticides in bovine milk**	**Development of a SPME-GC with micro ECD detection method for a multiresidue analysis of pesticides in bovine milk** ***Anal. Chim. Acta 617, #1-2, 37-50 (Jun 9 2008)*** **Cela, Rafael; Dagnac, Thierry; Fernandez-Alvarez, Maria; Garcia-Jares, Carmen; Lamas, J.: Pablo; Llompart, Maria; Lores, M.**	**65µm PDMS-DVB** **30min @ 100°C** **stirred**	**GC-ECD**
2537	**Pyrethroids in water**	**Effects of sample pretreatment and storage conditions in the etermination of pyrethroids in water samples by SPME-GC-MS** ***Anal Bioanal Chem 387, #5, 1841-1849 (2007)*** **Casas, V.; Llompart, M.; Garcia-Jares, C.; Cela, R.; Dagnac, T**	**headspace** **40°C**	**GC-MS**
1973	Pyrethroids in water	Determination of enantiomers of synthetic pyrethroids in water by SPME enantioselective gas chromatography. *J Agrl Food Chem, 52, #4, 736-741* Liu, W. P.; Gan, J. J.*		GC
2908	**Pesticides in water**	**Ultrasound-assisted emulsification-microextraction of emergent contaminants and pesticides in environmental waters** ***J. Chromatogr. A 1190, #1-2, 27-38 (May 9 2008)*** **Cela, R.; Garcia-Jares, C.; Garcia-Monteagudo, J.; Llompart, M.; Regueiro, J.**	**10min immersion**	**GC-MS**
2172	**Polar organics in water**	**Strategies for the microextraction of polar organic contaminants in water samples** ***Anal. Bioanal. Chem. 384, #7-8, 1447-1461 (2006)*** **Quintana, Jose Benito; Rodriguez, Isaac**		**GC-MS**
2268	**Polybrominated diphenyl ethers from water**	**Photochemical studies of a polybrominated diphenyl ethers (PBDES) technical mixture by SPME** ***Chemosphere 60 #7, 922-928 (2005)*** **Sanchez-Prado, L.; Gonzalez-Barreiro, C.; Lores, M.; Llompart, M.; Garcia-Jares, C.; Cela, R.**		
1974	Polybrominate diphenyls/ biphenyls in water	Development of a SPME-GC-MS method for poly-brominated diphenyl ethers and polybrominated biphenyls in water sample *Analytical Chemistry, 76, #4, 1054-1062* Polo, M.; Gomez-Noya, G.; Quintana, J. B.; Llompart, M.; Garcia-Jares, C.; Cela, R.	headspace	GC-MS
1975	Polybrominate diphenyl ether from water	Photochemical studies of a polybrominated diphenyl ethers (PBDES) technical mixture by SPME *Chemosphere, 60, #7, 922-928* Cela, R.; Garcia-Jares, C.; Gonzalez-Barreiro, C.; Llompart, M.; Lores, M.; Sanchez-Prado, L.		GC
1976	PCBs in water	Determination of PDMS-seawater distribution coefficients for PCBs and chlorinated biphenyls and chlorinated pesticides by SPME-GC-MS	100µm PDMS 12 day extraction	GC-MS

		J. Chromatogr. A,1066, #1-2, 165-175 Zeng, E; Tsukada, D; Noblet, J.; Peng, J	immersion	
1977	Phthalate esters in water	Multivariate optimization of a SPME method for the analysis of phthalate esters in environmental waters *J. Chromatogr. A,1072, #1, 63-72* Cela, R; Garcia-Jares, C; Llompart, M Polo, M	Various fibers direct immersion & headspace	GC-MS
1978	Tin compounds in water	New approach of SPME improving the extraction yield of butyl and phenyltin compounds by combining the effects of pressure and type of agitatior *J. Chromatogr. A,1072, #1, 19-27* Bueno, M; Darrouzes, J; Holeman, M; Pecheyran, C; Potin-Gautier, M	Ethylate derivatives headspace agitated	GC
1979	Aliphatic amines in water	Determination of aliphatic amines using N-succinimidyl benzoate as a new derivatization reagent in *GC combined with SPME* *J. Chromatogr. A,1021, #1-2, 175-181* Zhao, Y.; Cai, L.; Jing, Z.; Wang, H.; Yu, J.; Zhang, H.	60min @ 80°C headspace succinimidyl benzoate derivatives	GC-MS GC-FID
2834	**Aromatic amines in food**	**Analytical methods applied to the determination of heterocyclic aromatic amines in foods** ***J. Chromatogr. B,862, #1-2, 15-42 (Feb 1 2008)*** ***Afonso, A.M.; Ayala, J.H.; Gonzalez, V.; Sanz Alaejos, M.***	Review article	
1980	Aromatic amines in water	In situ derivatization/SPME determination of polar aromatic amines. *Analytical Chemistry, 76, #4, 1028-1038* Zimmermann, T.; Ensinger, W. J.; Schmidt, T. C.*	65µm PDMS-DVB diazotation/ iodination	GC-MS
1981	Aromatic amines in water	Determination of aromatic amines in waste water by SPME-GC *Fenxi Ceshi Xuebao, 23, #3, 18-21* Peng, J. G.; Wang, D. H.; Wu, C. Y.		GC
1982	Phenols in water	Comparative study of the use of flow-through systems with and without air segmentatio determination of phenols by SPME-GC *Chromatographia, 59, #5-6, 387-391* Nome, R. C.; Carasek, E. *	80µm polyacrylate 100µm PDMS immersed	GC
1983	Aldehydes in water	Determination of low-molecular mass aldehydes by automated headspace spme with in-fibre derivatisation J. Chromatogr. A, 1071, #1-2, 147-154 O'Reilly, John; Pawliszyn, Janusz; Wang, Qing	headspace PFBHA derivatives	GC-FID
1984	Aldehydes in water	Determination of low-molecular mass aldehydes by automated headspace SPME with in-fibre derivatization *J. Chromatogr. A, 1071, #1-2,147-154* Wang, Qing; O'Reilly, John; Pawliszyn, Janusz	PFBHA derivatives headspace	GC-FID
2197	**Organochlorine pesticides in sediments**	**Concentration and fate of persistent organochlorine pesticides in estuarine sediments using headspace SPME** ***Chemosphere 62, #11,1869-1878 (2006)*** **Chang, Sue-Min; Doong, Ruey-An**	**headspace**	
2388	**Organochlorine pesticides in water**	**Determination of organochlorine pesticides in ground water samples using SPME by GC-ECD** ***Talanta 72, #5, 1833-1841 (2007-07-31)*** **Raposo, J. L., Jr.; Re-Poppi, N.**	**50/30µm DVB/CAR immersion**	**GC-ECD**
1985	Organochlorine pesticides in water	Analysis of organochlorine pesticides in water by novel activated carbon fiber SPME coupled w/GC-MS *J. Environ. Sci. Health Part B, 39, #2, 235-248* Fang, N; Jia, J; Sun, T; Wang, Y; Yu, J		GC-MS
2240	**Tebuthiuron and diuron in water**	**Development and validation of a methodology for the determination of pesticides in water by SPME-LC/DAD** ***J. Liq. Chromatogr. 28 #18, 2909-2919 (2005)*** **Brondi, Silvia H. G.; Lancas, Fernando M.; Rodrigues Da Silva, Jose C.**	**85µm polyacrylate 50 minutes,**	**LC/DAD**
1986	Organochlorine pesticides in water	Optimization of a methodology for the determination of organochlorine pesticides in surface water by SPME-GC-MS *J. Environ. Sci. Health Part B, 40, #4, 513-523* Brondi, Silvia Helena G.; Lancas, Fernando M.	85µm polyacrylate 40min @ >20°C agitation immersed sampling	GC-MS
		GC-MS methodology using SPME for the multiresideu		

1987	Pesticides in surface water	determination of pesticides in surface waters. *Intl J Env Analytical Chem, 84, #14-15, 1079-1092* Albanis, T; Hela, D.; Lambropoulou, D.; Sakkas, V.	65µm PDMS-DVB	GC-SIM-MS
1988	Endosulfan, carbofuran in water	Pesticides in Esteros del Ibera (AR): Evaluation of impacts and proposal of guidelines for water quality protection *Ecol. Model., 86, #1, 85-97* Boia, C; Borrego, C; Silva, C; Valente, J	immersed sampling	GC-MS
1989	Endosulfan, in water	Optimization and application of SPME for the GC determination of endosulfan and its major metabolites in the ng L/sup-1 / range in aqueous solutions *Anal. Bioanal. Chem., 376, #1, 61-68* Deger, A.B.; Frimmel, F.H.; Gremm, T.J.; Mendez, L.	100µm PDMS 30% NaCl	GC-ECD GC-MS
2306	**PAHs in water**	**Determination of membrane permeability without calibration using (SPME)** **J. Membr. Sci. 68 #1, 65-73 (2005)** **Liu, Xinyu; Pawliszyn, Janusz**	**PDMS**	**GC**
1990	Phthalates in water	Application of membrane techniques to water purification. Removal of phthalates *Desalination, 162, #1-3, 121-128* Bodzek, M; Dudziak, M; Luks-Betlej, K	65µm CW/DVB	GC-FID
1991	PAHs in water	Degradation of PAHs in aqueous solutions by ultrasonic irradiation *J. Hazard. Mater., 108, #1-2, 95-102* Goula,G; Kalogerakis,N; Mantzavinos,D; Psillakis, E	20°C & 40°C immersed sampling sonicated	GC-MS
1992	Vinyl chloride in water	Oxidative microbial transformation of vinyl chloride under anaerobic conditions in ground water *Proc. of the Third Int. Conf. on Rem. of Chlorinated and Recalcitrant 2002, pp1571-1578* Banwart, S; Holliger, C; Morgan, Pl; Shah, N.; Szynalski, K.	headspace	GC-MS
1993	Adipate in water	Determination of adipate in water with headspace SPME and single ion monitoring GC-MS *Fenxi Shiyanshi, 23, #4, 77-80* Zhang, W. Y.; Wang, C. Y.; Yang, Z. J.	Headspace	GC-MS
1994	Bisphenol in water	SPME coupled with HPLC w/ fluorimetric detection for the determination of bisphenol A, 4-n-nonylphenol and 4-t-octylphenol in environmental water samples. *Analytical Letters, 37, #4, 739-753* Cai, Y. Q.; Jiang, G. B.*; Liu, J. F.; Liang, X.; Yao, Z. W.; Liu, J. M.; Liu, J. Y.; Zhou, Q. X.	50µm CW-TPR	HPLC-Fluorimetric
1995	Volatiles from Bacteria in water	Electronic nose technology for the detection of microbial and chemical contamination of potable water *Sens Actuators, B Chem, 106, #1, 3-6* Canhoto, O.; Magan, N.	headspace @ 25°C	GC
1996	Herbicides in water	On-fibre silylation following SPME for the determination of acidic herbicides in water samples by GC *Anal. Chim. Acta, 537, #1-2, 259-266* Cela, R.; Gonzalez, R.; Quintana, J.; Rodriguez, I.; Rubi, E.	85µm polyacrylate MTBSTFA derivative stirred	GC-MS
1997	Herbicides in water	Analysis of the chloroacetanilide herbicides in water using SPME with CAR/PDMS and GC/ECD *J of AOAC Intl, 88, #4, 1236-1241* Hwanc, Ying-Ming; Wong, Yih-Gang; Ho, Wu-Hsiung	75µm Carboxen immersed sampling	GC-ECD
2790	**Triclosan in water**	**Sonochemical degradation of triclosan in water and wastewater** ***Ultrason. Sonochem.15, #5, 689-694 (July 2008)*** **Barro, R.; Garcia-Jares, C.; Kalogerakis, N.; Llompart, M.; Lores, M.; Mantzavinos, D.; Petrakis, C.; Psillakis, E.; Sanchez-Prado, L.**		**GC-ECD** **GC-MS**
2171	**Triclosan in water**	**Further research on the photo-SPME of triclosan** ***Anal. Bioanal. Chem.384, #7-8, 1548-1557 (2006)*** **Cela, R.; Fernandez-Alvarez, M.; Garcia-Jares, C.; Llompart, M.; Lores,Marta; Sanchez-Prado, L.**	**PDMS fiber**	**GC-MS**
1998	Triclosan in water	Optimization of SPMEconditions for the determination of triclosan and possible related compounds in water samples *J Chromatogr A, 1072, #1, 107-115* Canosa, P.; Rodriguez, I.; Rubi, E.; Cela, R.	85µm polyacrylate MTBSTFA derivative 30min extraction immersed sampling	GC-MS

1999	Anti-inflamatory drugs in water	Application of strategic sample composition to the screening of anti-inflammatory drugs in water samples using SPME *Anal. Chim. Acta, 524, #1-2, 63-71* Carpinteiro, J.; Carro, A.; Cela, R.; Lorenzo, R.; Martinez, E.; Quintana, J.; Rodriguez, I.	85µm polyacrylate silylated esterfication headspace	GC-MS
2793	**Anti-inflamatory drugs in water**	**Determination of anti-inflammatory drugs in water samples, by in situ derivatization, SPME-GC-MS** ***Talanta 75, #1, 111-115 (MAR 15 2008)*** **Araujo, L.; Wild, J.; Villa, N.; Camargo, N.; Cubillan, D.; Prieto, A.**	**100µm PDMS headspace dimethyl sulphate, derivatives**	**GC-MS**
2499	**Anti-inflamatory drugs in water**	**Recently developed GC/MS and LC/MS methods for determining NSAIDs in water samples** ***Anal Bioanal Chemistry 387, #4, 1203-1214 (FEB 2007)*** **Farre, M.; Petrovic, M.; Barcelo, D.**	derivatives	**LC-MS** **GC-MS**
2784	**Phamaceutical resideu in sewage effluent**	**A combination of statistical and analytical evaluation methods as a new optimization strategy for the quantification of pharmaceutical residues in sewage effluent** ***Anal. Chim. Acta, 613, #2, 169-176 (Apr 21 2008)*** **Budziak, D.; Carasek, E.; Costa, L..; Martendal, E.; Suchara, E.**	**2.5-7 pH**	GC-MS-MS
2000	Estrogens in sewage water	Applicability of SPME followed by on-fiber silylation for the determination of estrogens in water samples by GC-MS-MS *J Chromatogr A, 1056, #1-2, 179-185* Carpinteiro, J.; Carro, A.; Cela, R.; Lorenzo, R.A.; Quintana, J.; Rodriguez, I.	85µm polyacrylate MSTFA derivatives immersed sampling	GC-MS-MS
2001	Chloro-brom-anisole in water	Determination of odorous mixed chloro-bromoanisoles in water by SPME-GC-MS *J Chromatogr A, 1064, #1-2, 97-106* Diaz, A.; Ventura, F.; Galceran, M.	headspace 100µm PDMS	GC-MS
2002	Nonylphenol in water	Estimation of measurement uncertainty for the determination of nonylphenol in water using SPME and SPME procedures. *Analytica Chimica Acta, 506, #1, 71-80* Diaz, A.; Vazquez, L.; Ventura, F.; Galceran, M.		GC-MS
2523	**Organics in sediment**	**Predicting organic contaminant concentrations in sediment porewater using solid-phase microextraction** ***Chemosphere 66, #8, 1408-1414 (JAN 2007)*** **Yang, Ze-Yu; Zeng, Eddy Y.; Maruya, Keith A.; Mai, Bi-Xian; Ran, Yong**		
2003	Organotin in water and sediment	Validation, using a chemometric approach, of GC-inductively coupled plasma-atomic emission spectrometry (GC-ICP-AES) for organotin determination *Anal. Bioanal. Chem., 376, #2, 226-235* Aguerre, S.; Lespes, G.; Pecheyran, C.		GC-ICP-AES
2004	Bethrodine herbicide in water	Development of a novel SPME element for thermal desorption GC analysis *J. Chromatogr. A, 1035, #2, 277-279* Hosaka, A.; Ohtani, H.; Tsuge, S.; Wang, L.; Watanabe, C.	30µm PDMS	GC-MS
2005	Fumigants in soil/water	Application of SPME for the determination of soil fumigants in water and soil samples *Journal of Separation Science, 28, #1, 98-103* Fuster, S.; Beltran, J.; Lopez, F. J.; Hernandez, F.	soil headspace or immersed in water	GC/ECD/NPD
2006	Surfactants in water	Impurity analysis of 1,4-dioxane in nonionic surfactants and cosmetics using headspace SPME coupled w/GC & GC-MS *J. Chromatogr. A, 1071, #1-2, 141-145* Fuh, C. Bor; Lai, M.; Tsai, H. Y.; Chang, C. M.	headspace	GC, GC-MS
2007	Surfactants in water	Rapid screening for trace nonyl-phenyl polyethylene glycol ether in water by SPME combining with laser desorption ionization MS *Proc. 50th ASMS Conf. Mass Spectrom. Allied Top.* 2002, p597-599 Chen, Yu-Chie; Sun, Mei-Chuan	14 hour polycrystaline graphite coated fiber	SALDI-MS
2008	Methylamine in water	Analysis of methylamine by SPME and HPLC after on-fiber derivatization with 9-fluorenylmethyl chloroformate *Anal. Chim. Acta, 513, #2, 425-433* Campins-Falco, P.; Chafer-Pericas, C.; Herraez-Hernandez, R	9-fluorenylmethyl chloroformate derivative immersion sampling	HPLC

2009	Methylamine in water	A new selective method for dimethylamine in water analysis by LC using SPME and two-stage derivatization with o-phthalaldialdehyde and 9-fluorenylmethyl chloroformate *Talanta, 66, #5, 1139-1145* Chafer-Pericas, C; Herraez-Hernandez, R.; Campins-Falco, P	50µm CW-TPR 9-fluorenylmethyl chloroformate derivative immersion sampling	HPLC
2010	Bisphenol A from water	Determining leaching of bisphenol A from plastic containers by SPME-GC-MS *Anal. Chim. Acta, 539, #1-2, 41-47* Chang, Chia-Min; Chou, Chi-Chi; Lee, Maw-Rong	85µm polyacrylate 50min @ 65°C BSTFA derivative headspace	GC-MS
2011	Bisphenol A from water	Determination of trace bisphenol-A in leachate by SPME coupled with HPLC *Fenxi Kexue Xuebao, 20, #5, 461-464* Deng, L.; Zhang, W. H.; Feng, X. H.; Deng, N. S.*		HPLC-UV
2426	**Trihalomethanes in drinking water**	**Fibre selection based on an overall analytical feature comparison for the solid-phase microextraction of trihalomethanes from drinking water** ***J. Chromatogr., A 1139, #1, 27-35 (2007-01-12)*** **San Juan, P. M.; Carrillo, J. D.; Tena, M. T.**	**65µm PDMS-DVB** **headspace** **40°C, 0.36 g mL salt**	**GC-MS**
2857	**Fuel oxygenates in water**	**Novel analytical methods for the determination of fuel oxygenates in water** **HANDBOOK OF ENVIRONMENTAL CHEMISTRY pp1-30 (2007)** **Jochmann, Maik A.; Schmidt, Torsten C.**	**review article**	
2758	**Fuel oxygenates in tap water**	**Measurement of fuel oxygenates in tap water using SPME-GC-MS** ***J Chrom Sci, 46, #5, 381-387 (MAY-JUN 2008)*** **Cardinali, Frederick L.; Blount, Benjamin C.; Schmidt, Rachael; Morrow, J.**	**headspace**	**GC-MS**
2012	THM & TBE in tap water	Measurement of trihalomethanes and methyl tertiary-butyl ether in tap water using SPME-GC-MS. *J Chrom Sci, 42, #4, 200-206* Cardinali, F.; Ashley, D.; Morrow, J.; Moll, D.; Blount, B.	headspace	GC-MS
2013	Ethanol in air & water	Methods for sampling and analysis of tropospheric ethanol in gaseous and aqueous phases. *Chemosphere, 52, #8, 1307-1319* Monod, A.; Bonnefoy, N.; Kaluzny, P.; Denis, I.; Foster, P.; Carlier, P.	headspace from cryocooled sample	GC-FID
2014	Aniline in water	Determination of aniline in water by microwave-assisted headspace SPME-gas chromatography. *Chromatographia, 59, #7-8, 517-520* Yan, C. T.; Jen, J. F.*	65µm PDMS-DVB headspace pH12, salt added	GC-FID
2015	PAHs in water	Coupling of a modified in-tube spme technique w/ HPLC-fluorescence detection for the ultra-trace determination of PAHs in water samples. Chromatographia, 59, #7-8, 501-505 Bagheri, H.; Salemi, A.	PDMS capillary tube	HPLC
2773	**Formate in plants**	**Quantitation of formate in plants and its enhancement in response to environmental stresses** ***J Applied Biological Chem 50, #4, 211-214 (DEC 2007)*** **Kim, Jae-Kwang; Cho, Myoung-Rae; Baek, Hyung-Jin; Ryu, Tae-Hun; Kim, Jung-Bong; Kim, Jun-Heong; Kim, Myong-Jo; Yu, Chang-Yeon; Fukusaki, Ei-Ichiro; Kobayashi, Akio**		**GC/MS**
2458	**Antioxidants in plants**	**Improved method for the in vitro assessment of antioxidant activity of plant extracts by headspace SPME-GC-ECD** ***J. Chromatogr., A 1152, #1-2, 150-155 (2007-06-08)*** **Gioti, E. M.; Fiamegos, Y. C.; Skalkos, D. C.; Stalikas, C. D.**	**headspace** **hydrazone derivative**	**GC-ECD**
2263	**Malonaldehyde**	**Development of malonaldehyde assay using headspace -SPME) and its application for antioxidants** ***Abstracts of Papers Am Chem Society (2005) 229 #1, U57*** **Fujioka, Kazutoshi; Shibamoto, Takayuki**	**headspace**	**GC/MS**
2016	Aromatic compounds in 10% alcohol water mixture	SPME for qualitative and quantitative determination of migrated degradation products of antioxidants in an organic aqueous solution *J. Chromatogr. A, 1080, #-2, 107-116* Albertsson, Ann-Christine; Burman, L.; Hoglund, A.	headspace	GC
2017	Anatoxin in water	Analysis of anatoxin-a using polyaniline as a sorbent in SPME coupled to GC-MS *J. Chromatogr. A, 1078, #1--2, 120-127*	32µm polypyrrole film 10% salt	GC-MS

		Davarani, H.; Fallahi, M.; Ghassempour, A.; Mehdinia, A.; Najafi, N.; Nakhshab, M.	30min w/agitation	
2018	agrochemicals in water	SPME-HPLCdetermination of Nabam, Thiram, and Azamethiphos in water samples with UV detection: preliminary data *Talanta, 66, #1, 266-270* Aulakh, Jatinder Singh; Malik, A. K.; Mahajan, R. K.	PDMS fiber headspace	HPLC-UV
2019	Orgaonotin in water	Headspace single-drop microextration for the detection of organotin compounds *Talanta, 63, #3, 555-560* Bancon-Montigny, C; Colombini, V; Maxwell, P; Mester, Z; Sturgeon, R: Yang, Lu	headspace	GC
2020	Orgaonotin in water	Determination of organotin compounds in water by headspace SPMEwith GC-MS *J. Chromatogr. A, 1064 #1, 1-8* Chou, Chi-Chi; Lee, Maw-Rong	$NaEt_4B$ derivatives 30min @ 45°C, pH 5 headspace	GC-MS
2021	Organotin in water/ sediment	Automated headspace-SPME-retention time locked-isotope dilution GC-MS for the analysis of organotin compounds in water and sediment samples *J. Chromatogr. A, 1079, #1-2, 408-414* David, F; Devos, C; Moens, L; Sandra, P.; Vliegen, M; Willaert, B	$NaEt_4B$ derivatives headspace	GC-MS
2022	Phthalate esters in water	Monitoring the sonochemical degradation of phthalate esters in water using SPME *Chemosphere, 54, #7, 849-857* Psillakis, E.; Mantzavinos, D.; Kalogerakis, N.	immersion sampling 21°C & 50°C NaCl addition	GC
2023	Drugs from water	SPME-GC-MS for the analysis of selective serotonin reuptake inhibitors in environmental water *J. Chromatogr. A, 1045, #1-2, 241-247* Cela, R; Garcia-Jares, C; Gomez, Mo; Llompart, M; Pablo Lamas, J.;Salgado-Petinal, Carmen	65µm PDMS-DVB 100°C, direct extract in situ acetylation	GC-MS
2024	Musty odors in water	Analysis of earthy and musty odors in water samples bySPME coupled with GC-ion trap MS *Talanta, 65, #2, 518-524* Huang, Shang-Da; Li, Tzu-Ying; Sung, Yu-Hsiang	headspace	GC-ITMS
2913	**Triazine herbicides in ground water**	**Determination of trace triazine and chloroacetamide herbicides in tile-fed drainage ditch water using SPME coupled with GC-MS** ***Environ. Pollut.152, #1, 239-244 (March 2008)*** **Huang, Chi-hua; Pappas, Elizabeth A.; Rocha, Cleonice**	**100 µm PDMS headspace 40 min, 83% NaCl,**	**GC-MS**
2025	Triazine herbicides in ground water	Optimization of a SPME procedure for the detemination of herbicides by micellar electrokinetic chromatography. *J Separation Sci, 27, #9, 660-666* Frias-Garcia, S.; Sanchez, M..; Rodriguez-Delgado, M	65µm PDMS-DVB 120 min 10% NaCl, stirring	SPME-MEKC
2026	Triazine herbicides in water	Analysis of triazine in water samples by SPME-HPLC *Talanta, 64, #4, 887-893* Huang, Hsin-I; Huang, Shang-Da; Sung, Yu-Hsiang	50µm CW-TPR 100µm PDMS	HPLC
2823	**Organics in wastewater**	**Applications of chitosan beads and porous crab shell powder combined with for detection and the removal of colour from textile wastewater** ***Carbohydr Polym 72, #3, 550-556 (May 16 2008)*** **Lu, Li C.; Sye, Wen F.; Tai, Jia W.; Wang, Cheng I.**	**PDMS fiber headspace**	**GC-MS**
2027	Volatiles in wastewater	A laboratory batch reactor test for assessing nonspeciated volatile organic compound biodegradation in activated sludge *Water Environ. Res., 75, #4, 342-354* Allen, C.; Cano, M.; Huot, M.; Rhodes, I.; Saterbak, A; Van Compernolle,Remi; Williams, M.	headspace	GC
2028	Organics in seawater	Determination of organic contaminants in coastal water *Trends in Anal Chemistry, 23, #4, 341-350* Gimeno, R. A.; Marce, R. M.*; Borrull, F.		LC-MS
2029	Musk compounds in water	Study of the photoinduced degradation of polycyclic musk compounds by SPME and GC-MS *Rapid Comm in Mass Spec, 18, #111, 1186-1192* Sanchez-Prado, L; Llompart,M; Lores,M;	PDMS fiber headspace	GC-MS

		Garcia-Jares,C; Cela, R		
2569	**Phenolic fire retardants in water**	**Development of a SPME method for the analysis of phenolic flame retardants in water samples.** ***J. Chromatogr., A 1124, #1-2, 11-21 (2006-08-18)*** **Polo, M.; Llompart, M. ; Garcia, C.; Gomez-Noya, G.; Bollain, M.; Cela, R.**	**75µm Carboxen headspace 100°C**	**GC-MS**
2509	**Organophosphorus fire retardants in wastewater**	**Determination of organophosphorus fire retardants and plasticizers in wastewater samples using MAE-SPME with GC-ICPMS and GC-TOFMS detection** ***JEM 9, #12, 1329-1336 (2007)*** **Ellis, Jenny; Shah, Monika; Kubachka, Kevin M.; Caruso, Joseph A.**	**30min @ 65°C 10% NaCl**	GC-TOFMS GC-ICPMS
2483	**Brominated compounds Review article**	**Recent developments in the analysis of brominated flame retardants and brominated natural compounds** ***J. Chromatogr. A 1153, #1-2, 145-171 (15 JUN 2007)*** **Covaci, A.; Voorspoels, S.; Ramos, L.; Neels, H.; Blust, R**		
2464	**Polybrominated compounds in water**	**Microwave-assisted extraction followed by headspace SPME-GC-MS detection for determination of polybrominated compounds in aquaculture samples** ***Anal. Bioanal. Chem. 388, #5-6, 1021-1029 (2007-07)*** **Carro, A. M.; Lorenzo, R. A.; Phan-Tan-Luu, R.; Cela, R.**	**headspace**	**GC-MS/MS**
2571	**Polybrominated compounds in sewage sludge**	**Simple approach for the determination of brominated flame retardants in environmental solid samples based on solvent extraction and SPME followed by gas chromatography-tandem mass spectrometry** ***J. Chromatogr., A 1124, #1-2, 139-147 (2006-08-18)*** **Salgado, C.; Llompart, M. ; Garcia-Jares, C.; Gares-Chao, M.; Cela, R**	**headspace**	**GC-MS/MS**
2030	PBDEs in water	Investigation of photodegradation products generated after UV-irradiation of five polybrominated diphenyl ethers using photo SPME *Journal of Chromatography A, 1071, #1-2, 85-92* Sanchez-Prado, L.; Llompart,M.; Lores,M.; Garcia-Jares,C.; Cela, R.	PDMS fiber	GC-MS
2031	Organics in water	Determination of organic contaminants in coastal water *TrAC Trends Anal. Chem., 23, #4, 341-350* Borrull, F.; Gimeno, R.A.; Marce, R.M.		GC
2032	Acaricide fenbutatin oxide in water	Determination of the acaricide fenbutatin oxide in water samples by automated headspace-SPME-GC/MS *J. Sep. Sci., 26, #7, 665-668* Devos, Christophe; Moens, Luc; Sandra, Pat	headspace $NaEt_4B$ derivatives 30min @ 80°C	GC-MS
2033	Alkylbezene-sulphonic acid in water	Linear alkylbenzensulphonic acids (LAS) oxidation by H2O2 and O2: An investigation by GC & LC coupled w/MS *Appl. Catal. B Environ.59, #1-2, 113-120* Cuzzola, Angela; Raffaelli, Andrea; Salvadori, Piero	headspace	GC-MS
2034	Dioxin, hexa-chlorobenzene in water	SPME for the evaluation of partition coefficients of a chlorinated dioxin and hexachlorobenzene into humic substances *Analytical Sciences, 20, #5, 787-791* Yabuta, H.; Fukushima, M. *; Tanaka, F.; Ichikawa, H.; Tatsumi, K.	immersed	GC-ECD
2035	Dioxin, hexa-chlorobenzene in water	Influence of chemical characteristics of humic substances on the partition coefficient of a chlorinated dioxin *Chemosphere, 58,#10, 1319-1326* Fukushima, Masami; Ichikawa, Hiroyasu; Kikuchi, Atsunori Tanaka, Fumiko; Tatsumi, Kenji; Yabuta, Hikaru	headspace	GC-ECD
2036	Molinate herbicides in water	A case study of molinate application in a Portuguese rice field: Herbicide dissipation and proposal of a clean-up methodology *Chemosphere, 59, #7, 1059-1065* Castro, M; Manaia, C.; Nunes, O.; Silva-Ferreira, A.	immersed sampling	GC-FPD
2037	Organics in seawater	Determination of organic contaminants in coastal water *Trends in Analytical Chemistry, 23, #4, 341-350* Gimeno, R. A.; Marce, R. M.; Borrull, F.		LC-MS
2816	**Copper II from environmental samples**	**Development of SPME-HPLC method for the determination of copper(h) in environmental samples using morpholine-4-carbodithioate** ***Annali di Chimica 97, #11-12, 1279-1290 (NOV-DEC 2007)*** **Kaur, Varinder; Malik, Ashok Kumar**	**100µm PDMS derivatives**	**LC-MS**

2038	Organometals in water	Simultaneous multi-elemental speciation analysis of organometallic compounds by SPME and multi-capillary GC hyphenated to ICP-time-of-flight-MS *J Anal At Spectrom, 19, #7, 867-875* Adams, Freddy C.; Infante, Heidi G; Jitaru, Petru	65µm PDMS-DVB 75µm Carboxen headspace $NaEt_4B$ derivatives	ICP-TOF-MS
2039	Mercury in water	Speciation analysis of mercury by SPME and multi-capillary GC- inductively coupled plasma-TOF-MS *J. Chromatogr. A,1055, #1-2, 197-207* Adams, Freddy C.; Jitaru, Petru	75µm Carboxen headspace $NaEt_4B$ derivatives	GC-ICP-MS
2040	Iodophenols in river water	Fast speciation analysis of iodophenol compounds in river waters by capillary electrophoresis-ICP-MS with off-line SPME *Electrophoresis, 25, #12, 1843-1851* Kannamikumarath, Sasi S.; Wuilloud, Rodolfo G.; Jayasinghe, Sarath; Caruso, Joseph A.	immersion sampling	ICP-MS
2195	**Oil pollutants in water**	**Determination of oil pollutants in aqueous samples with the use of steam carrier gas chromatography** ***Pet. Chem.46, #1, 60-64 (2006)*** **Chuikin, A.V.; Grigor'ev, S.V.; Velikov, A.A.**		
2041	Organic pollutants from water	Optimization of SPME for the GC-MS analysis of persistent organic pollutants *J AOAC Int, 87, #4, 1021-1027* Alpendurada, M.; Gago-MARTINEZ, A; Nogueiras, M, Prado, Juan; Rellan, Satvdra;Vetter, Walter	varios fibers	GC/MS
2042	Amines, fatty acids, alky-sulfides in wastewater	Use of headspace SPME to characterize odour compounds in subsurface flow constructed wetland for wastewater treatment *Water Sci. Technol., 49, #9, 89-98* Aguirre, P.; Bayona, J.M.; Garcia, J.; Huang, Y.; Mujeriego, R.; Ortiz, L.	headspace	GC/MS or GC/NPD
2043	Odourous compounds from waste gas	Development of a simple and sensitive method for the characterization of odorous waste gasemissions by means of SPME-GC-MS/olfactometry *Waste Manage., 25, #9, 872-879* Jans, M.; Kleeberg, K.K.; Liu, Y.; Schlegelmilch, M.; Stegmann, R.; Streese, J.	75µm Carboxen headspace	GC/MS or GC/FID/O
2044	PAHs in drinking water	Comparison of strategies for extraction of high molecular weight PAHs from drinking waters *J Agr Food Chem, 52, #23, 6897-6903* Garcia-Falcon, M. S.; Perez-Lamela, M.; Simal-Gandara, J.	immersion sampling	HPLC-FLD
2045	PAHs in water	Determination of PAHs in water by SPME-HPLC *Analytical Sciences, 20, #10, 1383-1388* Chen, H. W.	35min immersed extract added 1.5M sodium monochloroacetate	HPLC-FLD
2046	organochlorides in water	Determination of organochlorides in water using solid-phase microextraction coupled to GC *Am Lab, 34. #17, 12-14* Huang, Min-Jia; Li, Ju-Bai; Liang, Bing; Ou, Qing-Yu	65µm PDMS-DVB 45sec @ 50°C	GC
2047	PAHs in water	SPME measurement of parent and alkyl PAHs in milliliter sediment pore water samples and determination of K' values *Environ. Sci. Technol,.39, #8,2795-2803* Grabanski, C.; Hawthorne, S.; Kreitinger, J..; Miller, D.	immersion sampling	GC/ MS
2048	Organics in groundwater	Coupling of SPME with MCC/UV-IMS as a tool for rapid on-site detection of groundwater and surface water contamination *Anal. Bioanal. Chem., 382, #8, 1842-1847* Baumbach, J.I.; Klockow, D.; Walendzik, G.	headspace	UV-IMS
2292	**Trichloroanisoles and gesomin in water**	**Simultaneous picogram determination of "earthy-musty" odorous compounds in water using SPME-GC-MS coupled with initial cool programmable temperature vaporizer inlet** ***J. Chromatogr. A 1098, #1-2, 7-13 (2005)*** **Hu, Ruikang; Yang, Zhaoguang; Zhang, Lifeng**	**DVB/CAR 50/30µm headspace**	**GC/MS**
2049	2,4,6-Trichloro-anisole in chlorinated	Detection of 2,4,6-trichloroanisole in chlorinated water at nanogram per litre levels by SPME-GC-ECD *Anal. Bioanal. Chem., 382, #2, 341-346* Da Silva, Joaquim C. G. Esteves; Pinheiro, Paula B. M.	100µm PDMS headspace	GC-ECD

	water			
2050	Clenbuterol in water	SPME and headspace derivatization of clenbuterol followed by GC-FID and GC-SIMMS quantification *Anal. Bioanal. Chem., 375, #3, 460-464* *Engelmann, M.D.; Hinz, D.; Wenclawiak, B.W.*	85µm polyacrylate HMDS derivative headspace	GC-FID, GC-MS
2051	Explosives in water	Use of SPME-GC-ECD for the determination of energetic chemicals, in marine samples *J Chromatogr A, 1066, #1-2, 177-187* Monteil-Rivera, Fanny; Beaulieu, Chantale; Hawari, J.	65µm CW/DVB 30% salt added	GC-ECD
2051	Explosives in water	SPME ion mobility spectrometer interface for explosive and taggant detection *J Sep Science, 28, #2, 177-183* Perr, Jeannette M.; Furton, Kenneth G.; Almirall, J.	headspace	Ion mobility spectrometry
2052	Explosives in water	Determination of explosives in environmental water samples by SPME-liquid chromatography *J. Chromatogr. A, 1048, #2, 213-221* Beaulieu,C.; Deschamps,S.; Hawari,J.; Monteil-Rivera,F.; Paquet,L.	50µm CW-TPR immersed	HPLC-UV
2053	Anthracen in water	In-tube capillary solid-phase microextraction coupled on-line to micro-HPL *Fenxi Shiyanshi, 24, #2, 41-43* Shu, X.; Yang, B. C.; Tan, F.; Guan, Y. F.	In-tube capillary	HPLC
2521	**Nitro musk fragrance in water**	**Optimization of a sensitive method for the determination of nitro musk fragrances in waters by SPME-GC with micro ECD using factorial experimental design** ***Anal Bioanal Chem 388, #8, 1789-1798 (AUG 2007)*** **Polo, Maria; Garcia-Jares, Carmen; Llompart, Maria; Cela, Rafael**	**75µm Carboxen 65µm PDMS/DVB headspace @ 100°C**	**GC-ECD**
2054	Volatiles from musks	Further SPME-GC-MS applications: "On-fibre" and and aqueous photodegradation of nitro musks *J. Chromatogr. A, 1048. #1, 73-80* Cela, R.; Garcia-Jares, C.; Llompart, M.; Lores, M.; Lourido, M.; Sanchez-Prado, L.	immersion sampling	GC-MS
2341	**Volatiles from sediment**	**Analysis of volatile organic compounds (VOCs) in sediments using in . situ SPME sampling** ***J Environ Monit 9 # 5, 411-418 (2007 May)*** **Bravo-Linares, Claudio M; Mudge, Stephen M**	**headspace**	**GC**
2055	2,4,6-trinitro-toluene in water & sediment	SPME for predicting the bioavailability of 2,4,6-trinitrotoluene and its primary transformation products in sediment and water *Environ. Toxicol. Chem., 24, #5, 1059-1066* Conder, Jason M.; La Point, Thomas W.	85µm polyacrylate	GC-MS
2056	Aromatics in water	Rapid analysis of aromatic contaminants in water samples by means of laser ionization mass spectrometry *Anal. Bioanal. Chem, 377, #7-8, 1124-1132* Globig, Daniel; Weickhardt, Christian		GC-MS
2057	phycoerythrin in water	Coupling of SPME and capillary isoelectric focusing w/ laser-induced fluorescence whole column imaging detection for protein analysis. *Analytical Chemistry, 77, #1, 165-171* Liu, Z.; Pawliszyn, J. *	10 min sampling	CIEF-WCID
2058	Nitroaromatics in sediment, water	Spme fibers for estimating the toxicity of nitroaromatic compounds *Aquatic Ecosystem Health & Mgmt, 7, #3, 387-397* Conder, J. M.; Lotufo, G. R.; Bowen, A. T.; Turner, P. K.; La Point, T. W.; Steevens, J. A.	85µm polyacrylate immersion sampling	GC
2059	Perfluoro-carboxylic acod in water	Determination of perfluorocarboxylic acids in aqueous matrices by ion-pair SPME in-port derivatization GC negative ion chemical ionization mass spectrometry *J Chromatogr, A, 1042, #1-2, 155-162* Alzaga, R.; Bayona, J. M.*	headspace butyl ester derivative	CI-MS
2060	perfluoro-carboxylic acod in water	Development of a procedure for the determination of perfluorocarboxylic acids in sediments by pressurised fluid extraction, headspace SPME followed by GCMS *Journal of Chromatography, A, 1083, #1-2, 1-6* Alzaga, R.; Bayona, J.M.; Jover, E.; Salgado-Petinal, C.	headspace	CI-MS

2061	Dialkyl ethers in water	Determination of fuel dialkyl ethers and BTEX in water using headspace SPME and GC-FID *J Chromatogra A, 1033, #2, 193-203* Arambarri, I.; Lasa, M.; Garcia, Rosa; Millan, E.	65µm PDMS-DVB headspace 10min @ 10°C	GC-FID
2062	MTBE in water	Identification of MTBE in water by SPME and GC-MS *Am Lab, 34, #21, 34* Blasi, G.; Guidotti, M.; Lucarelli, E.; Onorati, B.; Ravaioli, G.; Stella, D.	headspace	GC/MS
2063	Taste/odor in water	Analysis of taste- and odor-causing compounds in drinking water using solid-phase microextraction *Am Lab, 35, #17, 42-46* Voit, Jim	review technique	GC
2064	MTBE in water	Interlaboratory comparison study for the determination of methyl tert-butyl ether in water *Anal. Bioanal. Chem., 377, #7-8, 1140-1147* Fuhrer, M.; Kandler, W.; Krska, R.; Schuhmacher, R.; Stadlmann, C.	various fibers	GC/MS GC-FID
2065	MTBE, TBA in water	Comparison of SPME headspace analysis to U.S. EPA Method 5030/8260B for MTBE monitoring *Ground Water Monit. Rem., 25, #2, 52-58* Oh, Keun-Chan; Stringfellow, William T.	75µm Carboxen headspace	GC-MS
2066	MTBE in water	Observations on SPME for MTBE analysis *Chemosphere, 57, #6, 523-527* Bergendahl, J.; Erdem-Senatalar, Ayse; Thompson, Robert W.	headspace	GC-MS
2067	MTBE in water	Sources, distribution and behaviour of methyl tert-butyl ether (MTBE) in the Tamar Estuary, UK *Chemosphere, 57, #6, 429-437* Bayona, Josep M.; Guitart, Carlos; Readman, James W.	75µm Carboxen 75% salt added headspace	GC-MS
2068	Chromium in sea water	Spme for the determination of chromium in sea-water. *J of Anal Atomic Spectrometry, 19, #9, 1098-1103* Abranko, L.; Yang, L.; Sturgeon, R. L.; Fodor, P.; Mester, Z.	100µm PDMS headspace derivatives (trifluoroacetylacetone)	GC-ECD ICP-MS, EI-MS
2069	Saccharides from water & juices	Micro-solid-phase extraction with helical-solid-sorbent in the presence of organic solvent for GC-MS analysis of -per-O-methylated mono and disaccharides. *Analytica Chimica Acta, 519, #1, 93-101* Ciucanu, I.; Swallow, K. C.; Caprita, R.	headspace per- O -methylation	GC-MS
2070	Volatiles in water	Analysis of compound-specific carbon isotopic compositions of trace-level volatile organic compounds in aqueous phases. *Sepu, 22, #4, 439-441* Liu, G. Q.; Zhang, G.; Huang, S. Q.; Peng, X. Z.; Chen, H. H.	cryofocused injection headspace sampling	GC
2071	Volatiles in water	On-line coupling of in-tube SPME to capillary GC for trace analysis of aqueous samples. *Sepu, 22, #4, 354-357* Guan, Y. F.; Wang, H. W.; Liu, W. M.		GC
2071	Chlorinated parafins in water	SPE versus SPME for the determination of chlorinated paraffins in water using GC-negative chemical ion MS *J Chromatography, A, 1025, #2, 157-162* Castells, P.; Santos, F. J.; Galceran, M. T.*	immersed fiber	GC-NCI-MS
2175	**Chlorinated hydrocarbons in soils**	**Headspace SPME GC-ECD determination of organic chlorinated hydrocarbons in soils** ***Annali di Chimica 95, #11-12, 741-756 (2005)*** **Pastore, Paolo; Favaro, Gabriella; Badocco, Denis; Lavagnini, Irma**	**headspace water solution**	**GC-ECD**
2073	Chlorinated hydrocarbons in water	Development of a SPME-based method for sampling of persistent chlorinated hydrocarbons in an urbanized coastal environment *Environ. Sci. Technol., 38, #21, 5737-5743* Diehl, Dario W.; Tsukada, David; Zeng, Eddy Y.	100µm PDMS in situ sampling 18 to 43 days	GC
2074	Odors from water	An automated headspace SPME-GC-ITMS technique for taste and odor compound identification *Water Qual. Res. J. Can., 39, #3, 213-222* Davies, John-Mark; Furtula, Vesna; Mazumder, Asit	65µm PDMS-DVB headspace	GC-ITMS
2075	PAHs in water	Determination of PAHs in water by SPME-GC-MS *Anal. Chim. Acta, 523, #2, 259-267* King, A.J.; Readman, J.W.; Zhou, J.L.	agitation applied immersed	GC-MS

2076	Phenols in waste water	Determination of phenolic compounds in wastewater samples using a novel fiber by SPME coupled to GC *Analytica Chimica Acta, 538, #1-2, 63-70* Zhou, Furong; Li, Xiujuan; Zeng, Zhaorui	85µm polyacrylate	GC-FID
2077	Selenite in water	SPME - capillary GC combined w/ microwave-Inducted plasma atomic-emission spectrometry for selenite determination *Anal& Bioanalytical Chem, 379, #5, 842-848* Dimitrakakis, E.; Haberhauer-Troyer, C. *; Abe, Y.; Ochsenkuhn-Petropoulou, M. T.; Rosenberg, E.	$NaEt_4B$ derivatives headspace	GC-MIP-AED

Pesticides

441	Pesticides in water	Determination of Pesticides in Aqueous Environmental Samples via SPME (Solid-Phase Microextraction) GIT Frachz. Lab. 39: 25-26 (1995) Eisert, R., Levsen, K.		
522	Pesticides in water	Quantitative analysis of pesticides in water by SPME coupled with Mass Spectrometry Spectra. Anal. 1999, 28(208), 23-29 Massat, F. Laurent, A.	100µm PDMS, 65µm DVB/PDMS 30 min agitated	GC-MS
523	Organochlorine & organophosphorus in water/ethanol	A Systematic Approach to Optimize SPME determination of Pesticides in Ethanol/Water mixtures used as Food Simulates Anal. Chem. (1999), 71(13), 2417-2422 Batlle, R, Sanchez, C., Nerin, C.		
442		Solid-Phase Microextraction (SPME) GIT Frachz. Lab. 39: 325-331 (1995) Popp, P., Kauert, A., Kalbitz, K.		
781	Organophosphorus pesticides in water	Determination of organophosphorus insecticides in natural waters using SPE-disks and SPME followed by GC-FTD and GC-MS *Fresenius' J Anal Chem (2000) 368(6) 616-623* Lambropoulou, D.; Sakellarides, T.; Albanis, T.	85µm polyacrylate	GC-FTD and GC-MS
915	Organophosphorus pesticides in water	Optimization of headspace SPME conditions for the determination of organophorus insecticides in natural water *J. Chromatogr. A (2001) 922(1-2) 243-255* Lambropoulou, D.; Albanis, T.		
123	Organophosphorus pesticides in water	Pesticide Analysis by SPME Am. Env. Lab. April 1997, pp 20-22 Eisert, R., Gorecki, T., Pawliszyn, J.	100µm PDMS 60 min immersion	GC-FID
2487	**Benzimidazole Fungicides in water**	**SPME of benzimidazole fungicides in environmental liquid samples and HPLC-fluorescence determination** ***Anal Bioanal Chemistry 387, #6, 1957-1963 (2007)*** **Lopez-Monzon, A.; Vega-Moreno, D.; Torres-Padron, M. E.; Sosa-Ferrera, Z.; Santana-Rodriguez, J. J.**	**75µm Carboxen**	**HPLC fluorescence**
104	Insecticides, fungicides in water	Influence of Ethanol on Pesticide Extraction in Aqueous Solutions by SPME J. Agric. Food Chem. 44: 3871-3877 (1996) Urruty, L., Montury, M.	100µm PDMS 30 min headspace	GC-MS
122	Pesticides in water	Simultaneous Determination of 60 Pesticides in Water Using SPME and GC/MS Analyst 121: 929-938, July 1996 Boyd-Boland, A., Magdic, S., Pawliszyn, J.	100µm PDMS 50 min immersion stirring, salt added	GC-MS
241	Nitrogen- & phosphate-	Solid-Phase Microextraction of Nitrogen- and Phosphorus-Containing Pesticides from Water and GC Analysis	100µm PDMS	GC-NPD

	pesticides in water	Environ. Sci. Technol. 30: 3259-3265 (1996) Choudhury, T., Gerhardt, K., Mawhinney, T.	60 min immersion	
52	Pesticides in water	Determination of Organophosphorus, Triazine, and 2,6-Dinitroanailine Pesticides in Aqueous Samples via SPME and GC with NPD Detection Fresenius J. Anal. Chem. 351: 555-562 (1995) Eisert, R., Levsen, K.	100µm PDMS, 85µm polyacrylate 25 min immersion stirring, salt added	GC-NPD
443	Organophosphate pesticides in water	Simple Extraction of Organophosphate Pesticides Using (SPME) Before Capillary Gas Chromatography Hochudoku 13 (2): 122-123 (1995) Lee, X., Kumazawa, T., Taguchi, T., Sato, K., Suzuki, O.		GC-NPD, -MS
167	Organophosphorus insecticides in water	Analysis of Organophosphorus Insecticides from Environmental Samples Using SPME J. Chromatogr. A 736: 219-228 (1996) Magdic, S., Boyd-Boland, A., Jinno, K., Pawliszyn, J.	85µm polyacrylate 60°C, 60 min immersion salt added	GC-NPD
861	Organophosphorus pesticides in water	Solventless sample preparation procedure for organophosphorus pesticides analysis using SPME and on-line supercritical fluid extraction/HPLC technique. *Analytica Chimica Acta (2001) 433(2) 207-215* Jinno, K; Kiso, Yoshiaki; S, Yoshihiro; S, Shamsul H		HPLC
93	Organophosphorus pesticides in water	Matrix Effects on SPME of Organophosphorus Pesticides from Water J. Chromatogr. A 767: 195-203 (1997) Valor, I., Molto, J., Apraiz, D., Font, G.	85µm polyacrylate 60°C, 45 min immersion stirring	GC-NPD
839	52 Pesticides, PCBs	SPME of 52 pesticides and polychlorinated biphenyls: efficiencies of the SPME coatings PDMS, polyacrylate, PDMS/DVB, Carboxen/PDMS, and Carbowax/DVB *J. Sep. Sci. 2001) 24(1), 39-48* Valor, I; Perez, M; Cortada, C; Apraiz, D; Molto, J; Font, G	65µm PDMS/DVB	
118	Organophosphorus pesticides in water	Solid Phase Microextraction of Organophosphorus Pesticides from Water J. Chromatogr. A 759: 225-230 (1997) Sng, M., Lee, F., Lakso, H.	65µm PDMS/DVB 30 min immersion	
524	Organophosphorus pesticides in water	Determination of organophosphorus pesticides in water using GC-MS Qim. Nova (1999), 22(2), 197-200 Silva, F., Cardeal, Z., De Carvalho, C.	100µm PDMS Portuguese	GC-MS
2579	**Organophosphorus pesticides in vegetables**	**Headspace solid-phase microextraction for the gas chromatographic analysis of organophosphorus insecticides in vegetables** ***J AOAC Int 90, #6, 1677-81 (2007 Nov-Dec)*** **Fytianos, K.; Drimaropoulou, G.; Raikos, N.; Theodoridis, G.; Tsoukali, H.**	**100µm PDMS headspace**	**GC-FPD**
350	Organophosphorus pesticides in food plant	The Application of SPME in the Analysis of Organophosphorus Pesticides in a Food Plant Environ Sci. Technol. 1998, 32, 3816-820 Chen, W., Poon, K., Lam, M.	100µm PDMS 90 min immersion (water)	GC-FPD
525	Pyrethrins in insect spray, shampoo, flowers	Heterogenic catalytic hydrolysis and analysis of natural pyrethrins in subcritcal water coupled w/SPME-GC-MS Fresenius'J. Anal. Chem. 1999, 364(7), 625-630 Krappe, M, Hawthorne, S., Weclawiak, B.	100µm PDMS 20 min @ pH 2 immersed	GC-FID or MSD
705	Pyrethroids in water	SPME of pyrethroid pesticides from water at low and sub-ppt levels at different temperature *J.High Resolut.Chromatogr. (2000), 23(7/8), 485-488* Barrionuevo, W., Lancas, F.	100µm PDMS 5 min 40-90°C	GC-ECD
837	Pyrethroids	Solid-phase extraction (SPE) and solid-phase microextraction (SPME) of pyrethroids in water		

	in water	*Quim. Nova (2001), 24(2), 172-175* Barrionuevo, W., Lancas, F.		
299	Organophosphorus pesticides in water	Online Determination of Organophosphorus Pesticides in Water by SPME and GC with Thermionic-Selective Detection J. High Resolut. Chromatogr. 20 (9): 487-492(1997 Lopez-Avial, V., Young, R., Becker, W.	30µm PDMS 30 min immersion stirring	GC-TCD
390	Organophosphorus pesticides in water	SPME for quantitative analysis of organophosphorus Pesticides in Environmental Water Samples J. Chromatogr. A 808 (1998) 257-263 Beltran, J., Lopez, F., Hernandez, F.	100µm PDMS, 85µm polyacrylate 30 min stirring, salt added	GC-NPD
706	Pesticides in water	SPME for the determination of systemic and non-volatile pesticides in river water using GC with NPC and ECD *J. Chromatogr. A 893(2000) 347-358* Sampedro, M.; et al	100µm PDMS 15min immersed	GC-NPD ECD
868	Herbicides in water	Determination of herbicides in natural waters using (SPME) and GC coupled with flame thermionic and MS detection *Int. J. Environ. Anal. Chem (2000) 78(3-4), 223-240* Lambropoulou, D.; Konstantinou, I; Albanis, T.		GC-MS
707	Nitrogen herbicides in water	Use of SPME for the Quantitative determination of Herbicides in soil and water samples *Anal. Chem. 2000, 72, 2313-2322* Hernandez, F., Beltran, J., Lopez, F, Gaspar, J.	Carbowax DVB 30 min salt added, stirred	GC-MS SIM mode
28	Nitrogen herbicides in water	Solid Phase Microextraction of Nitrogen-Containing Herbicides J Chromatogr. 704: 163-172 (1995) Boyd-Boland, A., Pawliszyn, J.	85µm polyacrylate 50 min immersion pH 2, salt added	GC-NPD
53	Triazine herbicides in water	Automated Determination of S-Triazine Herbicides Using Solid-Phase Microextraction J. Chromatogr. 705: 305-312 (1995) Barnabas, I., Dean, J., Fowlis, I., Owen, S.	100µm PDMS 15 min (manual) 3 min (automated) immersion	GC-NPD
177	Triazine herbicides	Determination of Triazine Herbicides in Environmental Samples J. Chromatogr. 733: 295-335 (1996) (review) Dean, J., Wade, G., Barnabas, I.	100µm PDMS 10 min immersion (water)	GC-NPD
111	Triazine herbicides in water	Validation of SPME for the Analysis of Triazine Herbicides at ppt Level in Aqueous Samples J. Chromatogr. A. 795 (1998) 371-376 Nilsson, T., Ferrari, R., Basta, R., Dellavedova, P.	Carbowax/DVB 30 min immersion, stirring salt added	GC-NPD, GC-MS
708	Urea herbicides in water	Indirect analysis of urea herbicides from environmental water using solid phase microextraction *J. Chromatogr. A. 890 (2000) 303-312* Berrada, H., Font,G., Molto, J.	85µm polyacrylate immersed sat. salt, pH 4	GC-NPD
2162	**Pesticides**	**Depletion SPME for the evaluation of fiber-sample partition coefficients of pesticides** ***J. Chromatogr. A, 1102, #1-2, 51-59 (2006)*** **Zimmermann, Thomas; Ensinger, Wolfgang J.; Schmidt, Torsten C.**	**headspace**	**GC-MS**
231	Pesticides	Minimization of Solvent Consumption in Pesticide Residue Analysis J. Chromatogr. A 754: 43-47 (1996) Wan, H., Wong, M.	overview article	
838	Chlorinated pesticides in water	Determination of chlorine-containing pesticides in aqueous media by solid-phase microextraction method *Zh. Prikl. Khim (2000) 73(11), 1877-1882* Stolyarov, B. V.; Boiko, V. V		

156	Organochlorine pesticides in water	Online Determination of Organochlorine Pesticides in Water by SPME and GC-ECD J. High Res. Chromatogr. 19(5): 24756 (1996) Young, R., Lopez-Avila, V., Beckert, W.	100µm PDMS 20 min immersion stirring	GC-ECD
2307	**Chlorinated pesticides in soils**	**Development and validation of a novel method for the analysis of chlorinated pesticides in soils using microwave-assisted extraction- headspace SPME-GC-MS** ***Anal. Bioanal. Chem. 384 #3, 810-816 (2006)*** **Alves, A.; Herbert, P.; Morais, S.; Paiga, P.; Santos, L.**	**headspace**	**GC/MS**
180	Chlorinated pesticides in water	Optimization of a Technique of SPME and Capillary GC with ECD for the Determination of Nine Organochlorine Pesticides in Drinking Water Analusis 25 (3): 51-54 (1997) Almeida, M., Conceicao, P., Alpendurada, M.		GC-ECD
709	Chlorinated pesticides in water	Application of SPME and GC with ECD for the analysis of chlorinated pesticides in water *Spectra Anal (2000) 29(213)* Boussahel, R., Bouland, S., Montiel, A., Moussaoui, K	100µm PDMS 20min.	GC-ECD
864	Organochlorine pesticides in water	Comparison of three analytical procedures for determination of organochlorine pesticides and their by-products in water suspension during photocatalytic oxidation *Chemia Analityczna (Warsaw) (2000) 45(6) 901-910* Wiergowski, M.; Zaleska, A.; Biziuk, M.; Hupka, J.		GC-ECD GC-MS
710	Organochlorine pesticides in water	Monitoring organochlorine pesticides from landfill leachates by GC-ECD detection after solid phase microextraction *J. Chromatogr. A 891 (2000) 305-311* Bras, I., Santos, L., Alves, A.	100µm PDMS 30 min @ 55°C immersion stirring	GC-ECD
2506	**Pesticides in herbal teas**	**Pesticide analysis in herbal infusions by SPME-GC-AED.** ***Talanta 71, #3, 1417-1423 (2007-02-28)*** **Campillo, N.; Penalver, R.; Hernandez-Cordoba, M.**	**100µm PDMS immersion**	**GC-AED**
711	Organochlorine pesticides in herbs	SPME for organochlorine pesticides residues analysis in Chinese herbal formulations *J. Chromatogr. A 898 (2000) 245-256* Hwang, B. H.; Lee, M. R	100µm PDMS	GC-MS
43	Organophosphorus pesticides in water	Element-Selective Detection of Pesticides by Gas Chromatography-Atomic Emission Detection and SPME J. Chromatogr. A 683: 175-183 (1994) Eisert, R., Levsen, K., Wunsch, G.	100µm PDMS 20 min immersion	GC-AED
526	Organophosphorus in water	Determination of organophosphorus pesticides in water by SPME Talanta (1999), 49(2), 393-402 Su, P., Huang, S.	85µm polyacrylate	GC-FPD
712	Pesticide residue various matrices	Solid Phase microextraction in pesticides residue analysis *J. Chromatogr. A 885 (2000) 389-404* Beltran, J., Lopez, F., Hernandez, F.	review article	
713	Pesticides in water	An approach to solventless sample preparation procedure for pesticide analysis using SPME/supercritical fluid extraction technique *Analytica Chimical Acta 2000, 418(1), 69-77* Salleh, S., Saito, Y., Jinno, K.		HPLC
917	Organophosphorus pesticides	Solventless sample preparation procedure for organo-phosphorus pesticides analysis using SPME and on-line supercritical fluid extraction/HPLC technique		HPLC

	in water	*Analytica Cheimica Acta 2001, 433(2), 207-215* Salleh, S., Saito, Y., Kiso, Y., Jinno, K.		
87	Pesticides in water	Determination of Pesticides in Aqueous Samples by SPME In-Line Coupled to Gas Chromatography-Mass Spectrometry Am. Soc. Mass Spectrom. 6: 1119-1130 (1995) Eisert, R., Levsen, K.		GC-MS
157	Contaminants in water	Development of a Prototype System for Quasi-Continuous Analysis of Organic Contaminants in Surface or Sewage Water Based on In-Line Coupling of SPME to GC J. Chromatogr. A 737: 59 (1996) Eisert, R., Levsen, K., Wuensch, G.	85µm polyacrylate 10 min immersion	GC-FID
77	Metolachlor in water	Solid Phase Microextraction of the Herbicide Metolachlor in Runoff and Tile Drainage Water Samples J. Chromatogr. A 725: 129 (1996) Webster, G., Gaynor, J., Ng, H., Graham, J., Sama, L.	100µm PDMS 15 min immersion stirring	GC-ECD
193	Metolachlor in water	Comparative SPE, SPME, and Immunoassay Analysis of Metolachlor in Surface Runoff and Tile Drainage J. Agric. Food Chem. 44: 2736-2741 (1996) Graham, K., Ng, H., Tan, C., Gaynor, J., Cancilla, D., Webster, G., Drury, C., Welacky, T., Sarna, L.	100µm PDMS 15 min immersion stirring	GC-ECD
112	Polar herbicides	Application of SPME Coupled with HPLC for Analysis of Polar Herbicides Request from Environmental Institute, European Commission Joint Research Centre, 21020 Ispra (Va) Italy Nilsson, T.		HPLC
190	Pesticides in water	Analysis of Pesticides in Environmental Water Sample by SPME-HPLC J. Chromatogr. A754: 137-144 (1996) Jinno, K., Muramats, T., Saito, Y., Kiso, Y., Magdic, S., Pawliszyn, J.	85µm polyacrylate 60°C, 60 min immersion salt added	HPLC-UV 220nm
242	Pesticides in water	Pesticides by Solid-Phase Microextraction: Results of Round Robin Test Analyst (Cambridge) 121: 1381-1386 (1996) Gorecki, T., Mindrup, R., Pawliszyn, J.	100µm PDMS 45 min immersion stirring	GC-MS
438	Pesticides in water	SPME and GC for Rapid Analysis of Pesticides Aanalusis (1998), 26(6), M137-M143 Miege, C., Dugay, J.	Review	GC-MS
298	Chlorinated pesticides	Analysis of Organochlorine Pesticides by SPME J. Chromatogr. A 723(1): 111-112 (1996) Magdic, S., Pawliszyn, J.	100µm PDMS 90 min immersion salt added	GC-MS, -NPD
527	Organochlorine pesticides in water	Optimization of SPME conditions using a response surface methodology to determine organochlorine pesticides in water by GC-ECS J. Chromatogr. A (1999), 844(1+2), 425-432 Aguilar, C., Penalver, A, Pocurull, E., Ferre, J., Borrull, F., Marce, R.	85µm polyacrylate 45 min @ 60°C immersed agitated	GC-ECD
300	Pesticides in water	Effect of Various Parameters Governing SPME for the Trace Determination of Pesticides in Water J. Chromatogr., A 795 (1): 27-42 (1998) Dugay, J., Miege, C., Hennion, M.	65µm PDMS/DVB 25°C, 30 min immersion pH 7, salt added	GC-NPD
301	Pesticides in water	SPME and GC-MS Detection for the Determination of Pesticides in Aqueous Samples J. Chromatogr. A. 795 (1): 105-115 (1998) Aguilar, C., Penalver, S., Pocurull, E., Borrull, F., Marce, R.	85µm polyacrylate 55°C, 45 min immersion	GC-MS

			stirring, salt added	
528	Pesticides in water	Analysis of some pesticides in water samples using SPME-GC with different Mass Spectrometric techniques J. Chromatogr, A, 859(2): 193-202 (1999) Natangelo, M., Tavazzi, S., Fanelli, R., Befenatti, E.		GC-MS
714	Fentin in environmental samples	Headspace SPME capillary GC-ICP-MS for the determination of the organotin pesticide fentin in environmental samples *J.Anal. At. Spectrom. (2000), 15(6), 651-656* Vercauteren, J., DeMeester, A, DeSmaele, T. Vanhaecka, F., Moens, L., Dams, R., Sandra, P.	100µm PDMS 10-20 min 75-85°C NaBEt4 pH 8	GC-ICP-MS
445	Pesticides in water	Analysis of Pesticides in Environmental Water Samples by SPME-HPLC J. Chromatogr. A 754 (1+2): 137-144 (1996) Jinno, L., Muramatsu, T., Saito, Y., Kiso, Y., Magdic, S., Pawliszyn, J.	85µm polyacrylate 60°C, 60 min immersion stirring, salt added	HPLC-UV 220nm
587	Pesticides	Study on solventless sample preparation of pesticides with SPME-SFE technique. Chromatography. Jun 1999; 20(2): 126-127 Selleh,-SH; Saito,-Y; Jinno,-K	85µm polyacrylate 3 hr @ 60°C	HPLC-UV
2329	**Biologically active substance in water**	**Bioanalytical applications of solid-phase microextraction** ***Trends Anal. Chem. 26, #1, 36-45 (2007-01)*** **Musteata, F. M.; Pawliszyn, J.**	**Review article**	
715	Biologically active substance in water	SPME-GC-MS of biologically active substance in water samples *J. Chromatogr. A., (2000) 873(1), 95-106* Moeder, M., Schrader, S., Winkler, M., Popp, P.	85µm polyacrylate 65µm Carbowax/DVB 30 min	GC-MS
223	PCBs in water	SPME and Headspace SPME for the Determination of PCBs in Water Samples Anal. Chem. 1998, 70, 2510-2515 Llompart, M., Fingas, M., Li, K.	100µm PDMS 100°C, 30 min headspace/immersion stirring	GC-MSD
973	Organochlorine pesticides in water	Determination of organochlorine pesticides in ground water. *J.Chromatogr. A (2002) 963(1-2), 95-105* Perez-Trujillo, J.P.; Frias, S.; Conde, J.E.; Rodriguez-Delgado, M.A.	Various	
977	Pesticides in water	Comparison of different fibers for the analysis of pesticides in water. *J.Chromatogr. A (2002) 963(1-2), 19-26* Goncalves, C.; Alpendurada, M.F.	Various	
982	Pesticides in water	Monitoring of pesticides in the Kalamas River (Greece) *J.Chromatogr. A (2002) 963(1-2), 107-116* Lambropoulou, D. A.; Sakkas, V.A.; Hela, D.G.; Albanis, T.A.	100 um PDMS	GC-MS
998	Pesticides in oranges	Comparison of microextraction procedures to determine pesticides in oranges by liquid chromatography-mass spectrometry. *J.Chromatogr. A (2002) 970(1-2), 201-212* Blasco, C.; Font, G.; Pico, Y.		LC-MS
1000	Pesticides in drinking water	Multiresidue method for the simultaneous determination of four groups of pesticides in ground and drinking waters, using solid-phase microextraction-gas chromatography with electron-capture and thermionic specific detection. *J.Chromatogr. A (2002) 968(1-2), 177-190.* Goncalves, C.; Alpendurada, M. F.*	PDMS/DVB	GC
1004	Pesticides in water	Monitoring of priority pesticides using SPME (solid phase microextraction) in river water from Greece *Water Sc. Technol. Water Supply (2003) 3 (1-2), 335-342.*	PDMS	GC-MS

		Albanis, T.A.; Hela, D.; Lambropoulou, D.A.; Sakkas, V.A.		
1009	Pesticides in groundwater	Determination of atrazine and four organophosphorus pesticides in ground water using solid phase microextraction (SPME) followed by gas chromatography with selected-ion monitoring. *J.Chromatogr. A (2002) 972(2), 183-194.* Tomkins, B. A.; Ilgner, R. H.	65 um PDMS/DVB	GC-SIM
1011	Acetochlor in water	An enzyme-linked immunosorbent assay (ELISA) for the detection of acetochlor *International Journal of Environ. Anal. Chem. (2002) 82 (11-12), 879-891.* Belai, Ivan; Eremin, Sergei; Hegedus, Gyongyver; Krikunova, Vitalia; Szekacs, Andras		GC-MS
1019	Fenoxycarb in environmental samples	Evaluation of an enzyme immunoassay for the detection of the insect growth regulator fenoxycarb in environmental and biological samples. *Pest Management Science (2003) 59 (4), 410-416.* Szekacs, Andras; Le, Hong T. M.; Szurdoki, Ferenc		GC-MS
1046	Organonitrogen pesticides in water.	Application of solid-phase microextraction for the determination of organonitrogen pesticides in aqueous samples by gas chromatography with nitrogen-phosphorus detector. *International Journal of Environmental Analytical Chemistry (2002) 82 (10), 691-703.* Le Calvez, N.; Bodineau, L.; Fischer, J. C.	Various	GC
1047	Organochlorine pesticides.	Analysis of organochlorine pesticides by solid-phase microextraction followed by gas chromatography-mass spectrometry. *International Journal of Environmental Analytical Chemistry (2002) 82 (10), 651-657.* Zambonin, C. G.; Aresta, A.; Nilsson, T.	Various	GC-MS
1048	Fenthion and parathion	Application of solid-phase microextraction for monitoring the photocatalytic decomposition of fenthion and parathion in aqueous TiO 2 suspensions. *Analytica Chimica Acta (2002) 467 (1-2), 233-243.* Sakkas, V. A.; Lambropoulou, D. A.; Sakellarides, T. M.; Albanis, T. A.*		GC-MS
1096	Organophosphorous insecticides in water.	Validation of an SPME method, using PDMS, PA, PDMS-DVB, and CW-DVB SPME fiber coatings, for analysis of organophosphorus insecticides in natural waters. *Analytical and Bioanalytical Chemistry (2002) 374 (5), 932-941.* Lambropoulou, D. A.; Sakkas, V. A.; Albanis, T. A.*	Various	
1113	Herbicides in environmental samples.	Solid-phase microextraction for herbicide determination in environmental samples *Journal of Chromatography A (2003) 999 (1-2), 103-121.* Krutz, L.J.; Sciumbato, A.S.; Senseman, S.A.		GC
1123	Herbicides	Determination of herbicides, including thermally labile phenylureas, by solid-phase microextraction and gas chromatography-mass spectrometry *Journal of Chromatography A (2003) 1002 (1-2), 1-12.* Carabias-Martinez, R.; Garcia-Hermida, C.; Hernandez-Mendez, J.; Rodriguez-Gonzalo, E.; Soriano-Bravo, F.E.	Polyacrylate	GC-MS
1148	Dichlorvos	Determination of dichlorvos by online microwave-assisted extraction coupled to headspace solid-phase microextraction and gas chromatography-electron-capture detection. *Journal of Chromatography, A (2002) 976 (1-2), 349-355.* Chen, Y. I.; Su, Y. S.; Jen, J. F.*		GC-ECD
		Analysis of polar pesticides in water and wine samples by automated in-tube solid-phase microextraction coupled with high-performance liquid chromatography-mass spectrometry.		

1152	Polar pesticides in water and wine.	*Journal of Chromatography, A (2002) 976 (1-2), 357-367.* Wu, J. C.; Tragas, C.; Lord, H.; Pawliszyn, J. *		ESI-MS
1172	Oxidation residues of herbicides	Determination of oxadiazon residues by headspace solid-phase microextraction and gas chromatography-mass spectrometry Journal of Chromatography A (2002) 946(1-2), 239-245 Araujo, Lilia; Navalon, Alberto; Prieto, Avismelsi; Vilchez, Jose Luis		
1177	Pesticides in water samples.	Solventless sample preparation for pesticides analysis in environmental water samples using solid-phase microextraction-high resolution gas chromatography/mass spectrometry (SPME-HRGC/MS) *Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes (2003) 48 (4), 417-428.* Lancas, Fernando M.; Souza, Dalva A.	Various	
1192	Atrazine and organophosphorus pesticides in soil	Solid-phase microextraction method for the determination of atrazine and four organophosphorus pesticides in soil samples by gas chromatography. *Journal of Chromatography A (2001) 939(1-2), 13-21* Camara, C.; Bouaid, A.; Fernandez, P.; Gonzalez, M. J.; Ramos, L.		GC-MS
1219	DDT	On-fiber photodegradation after solid-phase microextraction of p,p '-DDT and two of its major photoproducts, p,p '-DDE and p,p '-DDD. *Journal of Chromatography, A (2003) 985 (1-2), 175-183.* Llompart, M.; Lores, M.; Lourido, M.; Sanchez-Prado, L.; Cela, R.		GC-MS
1299	Organophosphorous insecticide residues.	Determination of organophosphorus insecticide residues by solid-phase microextraction coupled with gas chromatography-mass spectrometry. *Sepu (2003), 21 (3), 273-276.* Shuai, Q.; Yang, W.; Zheng, Y. J.; Zheng, C. G.	PDMS or polyacrylate.	GC-MS
1309	Phenylureas herbicides in aqueous samples.	Solid-phase microextraction coupled with high-performance liquid chromatography for the determination of phenylurea herbicides in aqueous samples *Journal of Chromatography, A (2003) 1012 (1), 57-66.* Huang, Shang-Da; Lin, Hsin-Hang; Sung, Yu-Hsiang	PDMS-DVB, CW-TPR	HPLC
1316	Dichlorvos in pesticides.	Pesticide vapours in confined atmospheres. Determination of dichlorvos by SPME-GC-MS at the mg m-3 level. *Journal of Environmental Monitoring (2003) 5 (4), 574-577.* Sanusi, Astrid; Montury, Michel; Ferrari, Federico; Millet, Maurice	PDMS	GC-MS
2440	**Acaricides from honey**	**GC-MS determination of acaricides from honey after a new fast ultrasonic-based SPME sample treatment** ***Talanta 71, #5, 1906-1914 (2007-03-30)*** **Rial-Otero, R. ; Gaspar, E. M.; Moura, I.; Capelo, J. L.**	**85µm polyacrylate** **30 min**	GC-MS
1355	Pesticides in honey.	A solid-phase microextraction-gas chromatography-mass spectrometry approach for antivarroa acaricides and pesticide residues in honey. Chromatographia (2001) 54 (3-4), 241-246. Volante, M.; Galarini, R.; Miano, V.; Cattaneo, M.; Pecorelli, I.; Bianchi, M.; Marinoni, M. T.; Cossignani, L.; Damiani, P	100 um PDMS	GC-MS
1364	Organophosphorous pesticides	Application of solid-phase microextraction for the determination of organophosphorus pesticides in aqueous samples by gas chromatography with flame photometric detector. Talanta (2001) 55(4), 807-814. Yao, Z. W.; Jiang, G. B.*; Liu, J. M.; Cheng, W.	Various	GC-FID
1369	Pesticides in strawberries.	Focused microwave assistance for extracting some pesticide residues from strawberries into water before their determination by SPME/HPLC/DAD. Journal of Agricultural and Food Chemistry (2001) 49(11).	60µm PDMS/DVB	HPLC

		Falqui-Cao, C.; Wang, Z.; Urruty, L.; Pommier, J. -J.; Montury, M. *		
1395	Pesticides	Analysis of acidic pesticides using in situ derivatization with alkylchloroformate and solid-phase microextraction (SPME) for GC-MS. Chemosphere (2001) 44(7), 1531-1539. Henriksen, T.; Svensmark, B.; Lindhardt, B.; Juhler, R. K.	PDMS	GC-MS
1406	Pesticides	Formation of volatile halogenated by-products during chlorination of isoproturon aqueous solutions. Chemosphere (2001) 45(3), 269-274. Lopez, A.; Ciannarella, R.; Mascolo, G.; Tiravanti, G.	85 µm polyacrylate	GC-MS
1439	Herbicides in water	Factors affecting multiresidue determination of priority herbicides when using solid-phase microextraction. *Journal of AOAC International (2002) 85(2), 486-493* Albanis, Triantafyllos A.; Konstantinou, Ioannis K.; Lambropoulou, Dimitra A.	100µm PDMS and 85µm Polyacrylate	GC-FID, GC-MS
1445	Organochlorine pest. In water	Determination of organochlorine pesticides in water using microwave assisted headspace solid-phase microextraction and gas chromatography *Journal of Chromatography A (2003) 1012(2), 129-137* Jen, Jen-Fon; Li, Gwo-Chen; Li, Hong-Ping	Various fibers compared	GC-ECD
1459	Methyl parathion in apples	Field study for degradation of methyl parathion in apples cultivated with integrated crop management system. *Bulletin of Environmental Contamination and Toxicology (2002) 69(6), 771-778* Tsatsakis, A. M.; Danis, T. G.; Nikitovic, D. P.; Stratis, I. A.; Toutoudaki, M.; Tsakiris, I. N.		
1483	triazole in wine and strawberries	Solid-phase microextraction and gas chromatography-mass spectrometry for the rapid screening of triazole residues in wine and strawberries. *Journal of Chromatography A (2002) 967(2), 255-260* Zambonin, C. G.; Cilenti, A.; Palmisano, F.		
1494	Organochlorine pesticides in water	Determination of organochlorine pesticides in ground water using solid-phase microextraction followed by dual-column gas chromatography with electron-capture detection. *Journal of Chromatography A (2002) 964(1-2), 21-33* Tomkins, Bruce A.; Barnard, Angela R.	30µm PDMS	GC-ECD
1495	Pesticides in bee products	Analytical methods for pesticide residue determination in bee products. *Journal of Food Protection (2002) 65(9), 1502-1511* Fernandez, M.; Manes, J.; Pico, Y.		
1505	Dimethylchloroarsine	Identification of dimethylchloroarsine near a former herbicide factory by headspace solid-phase microextraction gas chromatography-mass spectrometry. *Chemosphere (2002) 48(9), 1003-1008* Aldstadt, Joseph H., III; Killelea, Daniel R.	85µm Carboxen PDMS Stableflex	GC-MS
1522	Chlorinated pesticides in water	Determination of chlorinated pesticides in water by SPME/GC. *Water Research (2002) 36(7), 1909-1911* Boussahel, R.; Baudu, M.; Bouland, S.; Montiel, A.; Moussaoui, K. M.	100µm PDMS	GC-ECD
1531	Organophosphorus pesticides in cherry and strawberry juice	Headspace solid phase microextraction applied to the analysis of organophosphorus insecticides in strawberry and cherry juices. *Journal of Agricultural and Food Chemistry (2002) 50(12), 3359-3365* Albanis, Triantafyllos A.; Lambropoulou, Dimitra A.	Various fibers compared	GC-MS

1554	Pesticides in water and food	Evaluation of Solid Phase Microextraction-gas chromatography in the analysis o some pesticides with different mass spectrometric techniques: Application to environmental waters and food samples. *Analytical Letters (2002) 35(2), 327-338* Benfenati, E.; Natangelo, M.; Tavazzi, S.		GC-ITMS
1551	Pesticides in human blood	Headspace solid-phase microextraction in combination with gas chromatography and tandem mass spectrometry for the determination of organochlorine and organophosphorus pesticides in whole human blood. *Journal of Chromatography B (2002) 769(1), 65-77* Hernandez, F.; Beltran, J.; Lopez, F. J.; Pitarch, E.		GC-MS
1386	Herbicides	Applications of solid-phase microextraction (SPME) in the determination of residues of certain herbicides at trace levels in environmental samples. Journal of Environmental Monitoring (2001) 49(9), 505-508. Ramesh, A.; Ravi, P. E.	65µm Carobwax/DVB	GC-ECD
1384	Tebufenpyrad and oxadiazon.	Determination of tebufenpyrad and oxadiazon by solid-phase microextraction and gas chromatography-mass spectrometry. Chromatographia (2001) 54(5-6), 377-382. Navalon, A.; Prieto, A.; Araujo, L.; Vilchez, J. L.*	100µm PDMS	GC-MS
2550	**2-aminoaceto-phenone in wine**	**Analysis of 2-aminoacetophenone by direct-immersion SPME-GC-MS and its sensory impact in Chardonnay and Pinot gris wines.** ***Food Chemistry 105, #3, 1144-1150 (2007)*** **Wenlai Fan; I-Min Tsai; Qian, M. C.**	**immersion**	**GC-MS**
2815	**Phthalates in wine**	**Determination of phthalates in wine by headspace SPME followed by GC-MS use of deuterated phthalates as internal standards** ***J Chromatography A 1181, #1-2, 125-130 (FEB 15 2008)*** **Carrillo, J. D.; Martinez, M. P.; Tena, M. T.**	**headspace**	**GC-MS**
2535	**Phthalates in wine**	**Determination of phthalates in wine by headspace SPME followed by . GC-MS. Fibre comparison and selection** ***J Chromatography A 1164, #1-2, 248-261 (2007)*** **Carrillo, J. D.; Salazar, C.; Moreta, C.; Tena, M. T.**	**65µm PDMS-DVB** **headspace**	**GC-MS**
2746	**guaiacols, phenols in wine**	**Determination of Brett character responsible compounds in wines by using multiple headspace solid-phase microextraction** ***J Chromatography A 1143, #1-2, 176-181 (2007)*** **Pizarro, C.; Perez-del-Notario, N.; Gonzalez-Saiz, J. M.**	**65µm CW-DVB** **headspace**	**GC-MS**
2526	**Ethylphenols in wine**	**Determination of ethylphenols in wine by in situ derivatisation and headspace solid-phase microextraction-GC-MS** ***Anal Bioanal Chem 387, #7, 2547-2558 (2007)*** **Carrillo, J. D.; Tena, M. T.**	**50/30 DVB/CAR** **headspace** **70C for 70 min** **acetic anhydride**	**GC-MS**
2573	**Polyfunctional thiols in wine**	**Automated analysis of 2-methyl-3-furanthiol and 3-mercaptohexyl . acetate at ng L minus 1 level by headspace SPME with on-fibre . derivatisation.and GC-negative chemical ionization MS determination** ***J. Chromatogr., A 1121, #1, 1-9 (2006-07-14)*** **Mateo-Vivaracho, L.; Ferreira, V. ; Cacho, J.**	**65µm PDMS-DVB** **headspace** **5 min** **pentafluorobenzyl bromide**	**GC-MS**
1558	Polyphenols in wine.	Gas phase post derivitization following SPME for rapid analysis of polyphenols in wine by GC-MS. Zhongshan Daxue Xuebao, Ziran Kexueban 40(1) 54-57. Luan, Tian-gang; Li, Gong-ke; Zhang, Zhan-xia.	Chinese	
2078	Pesticides in water	Fast screening determination of some ubiquitous pesticides with SPME in water samples *Analytical Letters, 37, #7, 1427-1436* Moreira Vaz, J.; Komatsu, E.	85µm polyacrylate immersion sampling	GC-MS
2079	Pesticides in air	Multiresidue method using SPME for the determination of various pesticides with different volatility in confined atmospheres *Anal and Bioanal Chemistry, 379, #3, 476-483* Ferrari, F; Sanusi, Ad; Millet, M; Montury, M	100µm PDMS 40min dynamic air sampling	GC-MS

2855	**Pesticides in rainwater**	**Pesticides analysed in rainwater in Alsace region (Eastern France): Comparison between urban and rural sites** ***Atmospheric Environment 41, #34, 7241-7252 (NOV 2007)*** **Scheyer, Anne; Morville, Stephane; Mirabel, Philippe; Millet, Maurice**	**100µm PDMS 65µm PDMS-DVB PFBBr derivatives**	**GC-MS/MS**
2241	**Pesticides in rainwater**	**Development of an SPME-GC-MS/MS method for the determination of pesticides in rainwater: Laboratory and field experiments** ***Environ. Pollut. 139 #1, 133-142 (2006)*** **Mirabel, Philippe; Sauret-Szczepanski, Nathalie; Wortham, Henri**		**GC-MS/MS**
2223	**Pesticides in rainwater**	**Analysis of trace levels of pesticides in rainwater using SPME and GC tandem mass spectrometry** ***Anal. Bioanal. Chem. 384, #2, 475-487 (2006)*** **Millet, Maurice; Mirabel, Philippe; Morville, Stephane; Scheyer, Anne**	**PDMS**	**GC-MS-MS**
2467	**Pesticides in rainwater**	**Analysis of trace levels of pesticides in rainwater by SPME and GC-tandem mass spectrometry after derivatisation with PFBBr.** ***Anal Bioanal Chem 387, #1, 359-68 (2007 Jan)*** **Scheyer, A.; Briand, O.; Morville, S.; Mirabel, P.; Millet, M.**	**65µm PDMS-DVB headspace PFBBr derivative 60 min at 68°C**	GC-MS
2080	Chlorpyrifos from water	Interactions of chlorpyrifos with colloidal materials in aqueous systems *J of Environmental Quality, 33., #5, 1765-1770* Wu, Jigang; Laird, David A.		GC
2081	Pesticides in water	SPME-GC-(tandem) MS as a tool for pesticide residue analysis in water samples at high sensitivity and selectivity w/ confirmation capabilities *J Chromatogr A, 1026, #1-2, 239-250* Goncalves, C.; Alpendurada, M. F.	65µm PDMS-DVB immersed fiber	GC-MS-MS
2082	Dieldrin in trees	Transport and fate of dieldrin in poplar and willow trees analyzed by SPME *Chemosphere, 61, #1,, 85-91* Anderson, Larry G.; Ramaswami, Anu; Skaates, S.	headspace	GC
2083	Pesticides in water	Pesticide residue analysis in waters by SPME coupled to GC-tandem mass spectrometry. *Analytical Letters, 37, 1, 99-117* Arrebola, F. ; Cortes Aguado, S.; Sanchez-Morito, N.; Garrido Frenich, A.; Martinez Vidal, J.	100µm PDMS 65µm PDMS-DVB	GC-MS-MS
2084	Pesticides in milk	Determination of pesticides and some metabolites in different kinds of milk by SPME and low-pressure GC-MS-MS *Anal. Bioanal. Chem., 381, #1, 164-172* Frenich, A. Garrido; Gonzalez-Rodriguez, M.J.; Liebanas, F. J. Arrebola; Lopez, F. J. Sanchez; Vidal, J. L. Martinez	headspace/ immersed acidified sample	GC-MS-MS
2741	**Chlorophenol in honey**	**Evaluation of SPME conditions for the determination of chlorophenols in honey samples using gas chromatography** ***J Chromatogr A, 1125, #1, 31-37 (2006-08-25)*** **Campillo, N.; Penalver, R.; Hernandez-Cordoba, M.**	**100µm PDMS headspace 15 min @ 75°C acetylation**	**GC-AED**
2085	Organo-phosphorus insecticides in honey	Comparison of SPME and stir bar sorptive extraction for determining six organophosphorus insecticides in honey by LC-MS *J Chromatogr A, 1030, #1-2, 77-85* Blasco, C.; Fernandez, M.; Pico, Y.; Font, G.	100µm PDMS	LC-MS
2086	Pyrethroid In vegetables	Application of SPME for the determination of pyrethroid residues in vegetable samples by GC-MS *Anal. Bioanal. Chem., 376, #4, 502-511* Beltran, J.; Hernandez, F.; Lopez, F.J.; Peruga, A.; Pitarch, E.	immersion sampling	GC/MS
2087	Pesticides in water	Water quality and presence of pesticides in a tropical coastal wetland in southern Mexico *Mar. Pollut. Bull., 48, #11-12, 1130-1141* Bello-Mendoza, R; Hernandez-Romero, A.; Malo, E.; Tovilla-Hernandez, C	immersion sampling	GC
2348	**p,p'-DDT in water**	**Spatial and temporal variations and possible sources of (DDT) and a its metabolites in rivers in Tianjin, Chin** ***Chemosphere 68, #1,10-6 (May-2007)*** **Tao, S; Li, B G; He, X C; Liu, W X; Shi, Z**		**GC**
2088	p,p'-DDT in water	Determination of dichlorodiphenyltrichloroethane in water using automated SPME-GC-ECD *Fenxi Huaxue, 32, #4, 500-502* Luan, T. G.; Lan, C. Y.; Zhou, H. L.; Wong, M. H.	100µm PDMS immersion sampling	GC-ECD

2089	Fluazifop in water	Evaluation of an SPME and GC-MS method for analysis of fluazifop in water. *Acta Chromatographica, 14, #1, 231-236* Olszewska, E.	100µm PDMS stirring	GC-MS
2090	Pesticides in water	Cost analysis of ELISA, solid-phase extraction, and SPME for the monitoring of pesticides in water *Environmental Research, 98, #1, 143-150* Dalvie, M.; Sinanovic, E.; London, L; Cairncross, E; Solomon, A.; Adam, H.	comparison of cost	GC
2091	Prethroid residue on strawberries	Advanced method using microwaves and SPME coupled w/GC-MS for the determination of pyrethroid residues in strawberries *J. Chromatogr. A, 1046, #1-2, 35-40* Guillet, Valerie; Montury, Michel; Sanusi, Astrid	100µm PDMS 30min immersed water/acetornitrile preextraction	GC-MS
2092	Pesticides in beverages	Analysis of pesticide residues in juice and beverages "review" *Crit. Rev. Anal. Chem., 34, #2, 121-131* Albero, B; Gonzalez, L; Sanchez-Brunete, C; Tadeo, J.	Review article	GC-MS
2093	Pesticides in water	Combining SPME and on-line preconcentration-capillary electrophoresis sensitive analysis of pesticides in foods *Electrophoresis, 26, #4-5, 980-989* Hernandez-Borges, J.; Cifuentes, A.; Garcia-Montelongo, F.; Rodriguez-Delgado, M.		CE-UV
2094	Pesticides in food	Highly sensitive analysis of multiple pesticides in foods combining SPME, capillary electrophoresis-MS & chemometrics *Electrophoresis, 25, #13, 2065-2076* Hernandez-Borges, Javier; Rodriguez-Delgado, M.; Garcia-Montelongo, Francisco J.; Cifuentes,A.	NH_2HCO_3 buffer pH 4	CE-MS CE-UV
2095	Pesticides in water	Application of SPME to the study of the photochemical behaviour of five priority pesticides: "On-fiber" and aqueous photodegradation *J. Chromatogr. A, 1047, #2, 271-279* Sanchez-Prado, Lucia; Llompart, Maria; Lores, Marta; Garcia-Jares, Carmen; Cela, Rafael	100µm PDMS 30min extract immersion sampling	GC-MS
2096	Pesticides in water	Applicability of headspaceSPME to the determination of multi-class pesticides in waters. *J Chromatogr A, 1028, #1, 63-74* Sakamoto, Mitsushi; Tsutsumi, Taizou	30µm polyacrylate 30° to 100°C headspace	GC-MS

Soil

36	Hexachlorocyclohexane in soil	Application of SPME and GC with Electron-Capture and Mass Spectrometric Detection for the Determination of Hexachlorocyclohexanes in Soil Solutions J. Chromatogr. 687: 133-140 (1994) Popp, P., Kalbitz, K., Opperman, G.	100µm PDMS 20-30 min immersion stirring	GC-ECD, GC-MS
74	Diesel fuel in soil	Solid Phase Microextraction-GC for Analysis of Diesel Fuel Residues in Soil Request from Dept. Soil Science, University of Manitoba Winnipeg, MB, Canada R3T 2N2. Graham, K., Webster, B., Sarna, L.	100µm PDMS 55°C, 30 min headspace	GC-FID
716	THF, methanol in distillate	Analysis of THF and methanol in distillation residue samples by automated headspace SPME-GC with FID *J Chromatogr. Sci. (2000), 38(3), 117-121* Gavlick, W.	65µm PDMS/DVB 9min. headspace	GC-FID
870	PAHs in environmental samples	The use of SPME and GC-MS for the chemical characterization and assessment of PAH pollution in aqueous environmental samples *Int. J. Environ. Anal. Chem (2000) 78(3-4) 205-221* Havenga, Willem J.; Rohwer, Egmont R		
717	PAHs in soil	Solid Phase Microextraction of PAHs from soil *Chem. Ana., 2000 (45 No.6) 835-842* Sedukiene, I., Vickackaite, V., Kazlauskas, R.		

567	PAHs in soil	Chemical characterization and screening of hydrocarbon pollution in industrial soils by headspace SPME J-Chromatogr,-A. 2 Jul 1999; 848(1-2): 279-295 Havenga,-WJ; Rohwer,-ER	100µm PDMS 40 min headspace	GC-MS
865	PAHs in soil	Solid phase microextraction of PAHs from soil *Chemia Analityczna (Warsaw) (2000) 45(6) 835-842* Seduikiene, I.; Vickackaite, V.; Kazlauskas, R.	30min @ 60°C heaspace	
75	Pesticides in soil	Extraction of Pesticides by Solid Phase Microextraction (from Soil) Request from: Dept. Environmental Assessment, Swedish University of Agricultural Sciences, PO Box 7050, Uppsala, Sweden Bengsson, S., Berglof, T.	100µm PDMS immersed, water solution	GC-ECD, -NPD
2336	**Alcohols, esters, carbonyls in air**	**Distribution coefficients of aliphatic alcohols, carbonyl compounds and esters between air and Carboxen/PDMS fiber coating** ***Anal. Chim. Acta. 560 #1-2, 103-109 (2006)*** **Isidorov, V.; Modzelewska, A.; Purzynska, A.; Serowiecka, M.**	**Carboxen/PDMS air sample 15-30°C**	**GC/MS**
2149	**Amides in Air**	**Analysis of amides in the air by sampling with SPME and detection by GC-FID** ***J. Sep. Sci., 29, #3, 346-350 (2006)*** **de Lourdes Cardeal, Z.; de Souza Bergo, P.; Parreira, F.; Rabelo de Carvalho, C.**	**passive air sampling 65µm PDMS-DVB 90min @25°C**	**GC-FID**
2718	**Triazine in water**	**On-fibre SPME coupled to conventional HPKC versus in-tube SPME coupled to capillary LC screening analysis of triazines in water samples.** ***J. Chromatogr., A 1125, #2, 159-171 (2006-09-01)*** **Chafer-Pericas, C.; Herraez-Hernandez, R.; Campins-Falco, P.**	**65µm PDMS-DVB**	**LC**
855	Triazine, amides in water	Determination of triazines and amides in water using solid-phase microextraction coupled with GC-MS. *Chromatographia (2001) 53(5-6), 306-310* Hu, R.; Elia, D.; Berthion, J. -M.; Poliak, S.		GC-MS
529	Triazines, carbamates in soil leachates	Determination of polar pesticides in soil by SPME couple to HPLC-MS Fresenius'J. Anal. Chem. (1999), 363(7), 680-685 Moder, M., Popp, P., Eisert, R., Pawliszyn, J.	85µm polyacrylate salt added	HPLC-MS
718	Triazines, in soil leachates	Determination of triazines in soil leachates by SPME coupled to GC-MS *J. Chromatogr. A 2000, 874(2), 247-255* Zambonin, C.., Palmisano, F.	85µm polyacrylate 30min @ 20°C aggitation	GC-MS
530	Organophosphorus pesticides in soil	Determination of organophosphorus pesticides in soil by headspace SPME Fresenius'J. Anal. Chem (1999), 363(7), 673-679 Ng, W., Teo, M., Lakso, H.	85µm polyacrylate 1 hr @ 80°C headspace over soil	GC-FID
76	Lindane in water and soil	Analysis of Lindane in Water and Soil by Solid Phase Microextraction Request from: Dept. Soil Science, University of Manitoba, Winnipeg MB, Canada R3T 2N2. Anderson, K., Sarna, L., Webster, B.	30µm & 100µm PDMS 58°C 40 min (headspace) 15-20 min (immersion)	GC-ECD
2170	**Organochlorine pesticides in soil**	**A novel headspace SPME method for the exact determination of organochlorine pesticides in environmental soil samples** ***Anal. Bioanal. Chem. 384, #7-8, 1584-1589 (2006)*** **Fu, Shan; Jiang, Ting; Wang, Xia; Xu, Xiaobai; Yuan, Jinpeng; Zhao, R.**		**GC-ECD**
880	Organochlorine pesticides in soil	Determination of organochlorine pesticides and their metabolities in soil samples using headspace SPME *J.Chromatogr. A (2001) 918(1), 177-188* Doong, R., Liao, P.	100µm PDMS, 65µm DVB/PDMS 60min@70°C heahspace	GC-ECD

			stirred	
881	Fipronil in water, soil, urine	Determination of fipronil by SPME and GC-MS *J chromatogr. A 919(2001) 215-221* Vilchez, J., Prieto, A., Araujo, L., Navalon, A.	85µm polyacrylate 30min. @ 60°C stirred 9.5 pH	GC-MS
857	Metochlor from soil	Determination of metolachlor volatile flux from soil using SPME *Prepr. Ext. Abstr. ACS (2001) 41(1) 307-311* McConnell, L.; Kim, H; Nochetto, C; Gish, T; Prueger, J		
833	Halobenzenes in soil and water	Gas chromatography/ion-trap tandem mass spectrometry for the analysis of halobenzenes in soils by SPME *Rapid Commun Mass Spectrometry (2000) 14(23) 2271-2281* Sarrion, M. N.; Santos, F. J.; Galceran, M. T.	100µm PDMS 45min	GC-MS
92	Chlorobenzenes in soil and water	Analysis of Chlorobenzenes in Soils by Headspace SPME and GC-Ion Trap MS J. Chromatogr. A 771: 181-189 (1997) Santos, F., Sarrion, M., Galceran, M.	100µm PDMS headspace	GC-Ion Trap MS
921	Chlorobenzenes in soil	Strategies for the analysis of chlorobenzenes in soils using SPME coupled with GC-ion trap mass spectrometry J. Chromatogr. A (1998), 819(1-2), 197-209 Sarrión, M., Santos, F., Galceran, M.		GC-Ion Trap MS
238	Chlorobenzenes, nitrobenzenes, anilines in soil, water	Analysis of Chloro- and Nitroanilines and Benzenes in Soil by Headspace Solid-Phase Microextraction J. Chromatogr. A 746: 71-81 (1996) Fromberg, A., Nilsson, T., Larsen, R., Montanarella, L., Facchetti, S., Madsen, J.	85µm polyacrylate headspace 50°C, 30 min	GC-ECD
97	Semivolatiles in solids	Coupled Subcritical Water Extraction with SPME for Determining Semivolatile Organics in Environmental Solids Anal. Chem. 68: 3892-3898 (1996) Hageman, K., Mazeas, L., Grabanski, C., Miller, D., Hawthorne, S.	100µm PDMS 15 min immersion	GC-MS
793	Phenols in soil	Fast determination of phenols in contaminated soils *J. Chromatogr., A (2001) 911(1), 135-141* Baciocchi, R.; Attina, M.; Lombardi, G.; Boni, M. R	85µm polyacrylate 60min. @ 20°C immersion, pH 1	GC-FID
719	Chlorophenols in soil	Determination of chlorophenols in soil using accelerated solvent extraction combined with SPME *Anal. Chem. (2000), 72(3), 46-551* Wennrich, L, Popp, P., Moeder, M.	85µm polyacrylate 20min. @ 20°C immersion, pH 2 satr NaCl	GC-MS
531	Volatiles and semivolatiles in soils/water	Headspace SPME for the determination of volatile and semivolatile pollutants in soils Talanta (1999), 48(2), 451-459 Llompart, M., Li, K., Fingas, M.	100µm PDMS 30 min @ 20°C headspace	GC-MSD
532	PAHs, hydrocarbons in pollutant crust	Investigation by SPME and GC-MS of organic films on stone monuments Rapid. Commun. Mass Spectrom. (1999), 13(10), 895-900 Angelis, F., Di Tullio, A., Mellerio, G., Quaresima, R, Volpe, R		GC-MS
533	Aldehydes, acids from palmitic acid	Degradation of palmitic (Hexadecanoic) acid deposited on TiO2 coated self cleaning glass: kinetics of disappearance, intermediate products and degradation pathways New J. Chem (1999), 23(4), 365-374 Romeas, V., Pichat, P., Guillard, C., Chopin, T., Lehaut, C.		
534	PAHs in organic matter	Interaction between natural organic matter (NOM) and polycyclic aromatic compounds, Comparison of fluorescence quenching and SPME Fresenius'J. Anal. Chem. (1999), 364(4), 313-319 Myung, S., Kim, M., Min, H., Yoo, E. Kim, K.	85µm polyacrylate 30 min pH3, immersed alkyl formate derivative	GC-MS

172	Elemental analysis of soil	Elemental and Organometallic Analysis of Soil Using Glow-Discharge MS and GC-MS Rapid Commun. Mass Spectrom. 10: 341-346 (1996) Barshick, C., Barshick, S., Mohill, M., Britt, P., Smith, D.	100µm PDMS 50°C, 10 min salt added	GC-MS
174	Mercury species in natural gas condensate	Performance Improvements in the Determination of Mercury Species in Natural Gas Condensate Using Online Amalgamation Trap or SPME with Capillary GC-Microwave-Induced Plasma Atomic Emission Spectrometry Analyst 121: 1055-1060 (1996) Snell, J., Frech, W., Thomassen, Y.		GC-ICP
535	Organomercury in soil and water	SPME and GC-MIP-AED for the speciation analysis of organomercury compounds J. High Resolut. Chromatogr. (1999), 22(3), 181-182 Mothes, S., Wennrich, R.		GC-MIP-AED
2314	**BTEX in sand**	**Headspace solid-phase microextraction (HS-SPME) for the determination of BTEX in foundry molding sand** ***Analytical Letters 38 #14, 2393-2405 (2005)*** **Dungan, Robert S.**	**75µm Carboxen headspace**	**GC/MS**
239	BTEX, chlorinated hydrocarbons in soil	The Determination of Volatile Organic Compounds in Soils Using SPME with Gas Chromatography-Mass Spectrometry J. High Res. Chromatogr. 19: 515-519 (1996) James, K., Stack, M.	100µm PDMS 5 min headspace	GC-MS
197	VOCs in water and sediment	Environmental Analysis of Volatile Organic Compounds in Water and Sediment by GC J.Chromatogr. A 733A 733: 119-141 (1996) (review) Kuran, P., Sojak, L.	overview article	
536	VOCs in sediment	Determination of VOC contamination in borehole sediments by headspace SPME-GC analysis Fresenius' J. Anal. Chem 1999, 364(7), 645-647 Dermietzel, Jurgen, Strenge, G.	water solution headspace	
768	Tributyltin in water	Determination of tributyltin by automated in-tube SPME with HPLC-ES-MS *J Anal At Spectrom (2001) 16(2), 159-165* Wu, J; Mester, Z; Pawliszyn, J.	In-tube SPME Supel-Q PLOT	LC-ES-MS
720	Butyltin in water	Determination of butyltin compounds in aqueous samples by GC w/FPD and headspace SPME after in-situ hydride derivatization *Aanl. Sci. 2000, 16(6), 585-588* Jiang, G, Liu, J.	NaBEt4 Japanese	GC-FID
771	Butyltin in sediment	Determination of butyltin compounds in sediments by headspace SPME and capillary GC w/FPD using quartz surface induced luninescence *Fenxi Huaxue (20001) 29(2), 158-160* Liu, J; Jiang, G.	KBH-4 in Chinese	GC-FPD
721	Butyltin in water	Determination of butyltin species in water and sediment by SPME-GC-FID *J.Chromatogr. A (2000), 873(1), 61-71* Millan, E., Pawliszyn, J.	NaBEt4	GC-FID
888		Solid phase microextraction as a tool for trace element speciation *Spectrochim. Acta, Part B (2001) 56B(3), 233-260* Mester, Z.; Sturgeon, R.; Pawliszyn, J.		
852	Butyltin	Speciation of butyltin compounds in marine sediments with headspace SPME and gas chromatography: MS	100µm PDMS	GC-MS

	in marine sediment	*Fresenius' J. Anal. Chem 2001, 369(6), 510-515* Cardellicchio, N.; Decataldo, A.; Di Leo, A.; Giandomenico, S.	headspace NaBEt4 derivative	
722	Butyl-, phenyltin in water	SPME: a new procedure for the control of butyl- and phenyltin pollution in the environment by GC-FID *Analyst (Cambridge, UK) 2000, 125(2), 263-268* Aguerre, S., Montigny, C, Lespes, G., Gaultier, M.	100µm PDMS 60 min, immersed NaBEt4	GC-FID
199	Organotin in humic organic matter	Solid Phase Microextraction to Study the Sorption of Organotin Compounds onto Particulate and Dissolved Humic Organic Matter *Environ. Sci. Technol. 31: 3629-3636 (1997)* Poerschmann, J., Kopinke, F., Pawliszyn, J.	100µm PDMS 30 min immersion	GC-MS
343	Methylmercury derivative in soil	Development of a Technique for the Analysis of Inorganic Mercury salts in Soils by GC-MS Intl. J. Mass Spectrometry 178 (1998) 31-41 Barshick, C., Barshick, S., Britt, P., Lake, D., Vance, M., Walsch, E.	100µm PDMS, 65µm PDMS/DVB 50°C, 5 min stirring, salt added methyl bis(dimethyl- gloximate) pyridinecobalt (III)	GC-MS
723	Methylmercury derivative in soil	Determination of methylmercury by SPME-ICP-MS: a new sample introduction method for volatile metal species *J. Anal. AT. Spectrom (2000) 15(7), 837-842* Mester, Z., Lam, J., Sturgeon, R, Pawliszyn, J.		ICP-MS
209		Applications of Sorbent Extraction in Environmental Analysis Chem. Anal. (Warsaw) 42 (3): 297-314 (1997) Gorlo, D., Namiesnik, J., Zygmunt, B.		
303	PAHs, amines, aromatic from soil & particulate	Coupled Subcritical Water Extraction with SPME for Determining Semivolatile Organics in Environmental Solids Anal. Chem. (1996) 68, 3892-3898 Hageman, K., Mazeas, L., Grabanski, C, Miller, D., Hawthorne, S.	100µm PDMS 15 min immersion	GC-ECD
884	Phenyl compounds in water	Determination of phenyl compounds in drinking water by solid phase microextraction coupled with capillary GC/MS Huanjing Huaxue (2001) 20(2) 191-195		
2572	**PCBs in sediment**	**Rapid screening of polychlorinated biphenyls in sediments using non-equilibrium SPME and fast gas chromatography with ECD *J. Chromatogr., A 1124, #1-2, 43-50 (2006-08-18)* Montes, R.; Ramil, M.; Rodriguez, I. ; Rubi, E.; Cela, R.**	**100µm PDMS 10 min @ 100°C headspace**	**GC-ECD**
920	PCBs in soil	Simple method for estimating PCH concentratons on soils and sediments using subcritical water extraction coupled with SPME *J. Chromatogr. A (1998), 814(1-2) 151-160* Hawthorne, S., Grabanski, C., Hageman, K. Miller, D.		
304	PCBs in soil	Solid-Phase Microextraction of Polychlorinated Biphenyls J. Chromatogr. A 800 (2): 257-266 (1998) Yang, Y., Miller, D., Hawthorne, S.	100µm PDMS 15 min immersion	GC-ECD
370	PCBs in soil	Adsorption versus Absorption of PCBs onto SPME Coatings Anal. Chem. 1998, Vol. 70, 1866-1869 Yang, Y., Hawthorne, S., Miller, D.	7µm PDMS 5 hr immersion stirring, salt added	GC-ECD
537	PCBs in soil & sediment water slurry	Headspace SPME for the determination of PCBs in soils and sediments J. Microcolumn Sep. (1999), 11(6), 307-402 Llompart, M., Li, K., Fingas, M.	100µm PDMS 30 min @ 100°C headspace	GC-MS

724	PAHs in sediment	Determination of PAHs in sediment using SPME w/GC-MS *J. Chromatogr. Sci. (2000), 38(2), 55-60* Cam, D., Gagni, S., Meldolesi, L., Galletti, G.	100µm PDMS	GC-MS
538	Bisphenol A in water	An attempt by SPME with on-column silylation for a rapid and highly sensitive determination of bisphenol A Bunseki Kagaku (1999) 48(6), 589-593 Takao, Y. Lee, H., Arizono, K.	BSTFA derivative Japanese	GC-MS
305	Organics from odoriferous samples	SPME of Semivolatile Organic Compounds from Odoriferous Samples Hazard. Ind. Wastes (28th) 734-738 (1996) Wojtowicz, C., Clifton, A., Willy, D.		
1014	Tin and butyltin in sediment	Assessment of tin and butyltin species in estuarine superficial sediments from Gipuzkoa, Spain *Chemosphere (2003) 51 (8), 643-649.* Arambarri, I.; Garcia, R.; Millan, E.	PDMS	GC-FID
1028	Methylmercury and butyltin in sediments	Determination of methylmercury and butyltin compounds in marine biota and sediments using microwave-assisted acid extraction, solid-phase microextraction, and gas chromatography with microwave-induced plasma atomic emission spectrometric detection. *Analytical Chemistry (2002) 74 (18), 4694-4701.* Tutschku, S.; Schantz, M. M.; Wise, S. A.*		GC-MIP-AES
1040	Bis(2-chloroethyl) sulfide in soil.	Application of headspace solid-phase microextraction and gas chromatography-mass spectrometry for detection of the chemical warfare agent bis(2-chloroethyl) sulfide in soil. *Journal of Chromatography, A (2002) 971 (1-2), 185-191.* Kimm, G. L.; Hook, G. L.; Smith, P. A.*	Polyacrylate	GC-MS
1068	Chlorophenols in landfill leachates	Direct determination of chlorophenols in landfill leachates by solid-phase micro-extraction-gas chromatography-mass spectrometry. *Journal of Chromatography, A (2002) 975 (2), 267-274.* Ribeiro, A.; Neves, M. H.; Almeida, M. F.; Alves, A.; Santos, L. *		GC-MS
1108	Musk compounds in sludge.	Determination of musk compounds in sewage treatment plant sludge samples by solid-phase microextraction *Journal of Chromatography A (2003) 999 (1-2), 185-193.* Cela, Rafael; Garcia-Jares, Carmen; Llompart, Maria; Polo, Maria; Salgado, Carmen	Various	GC-MS
1193	VX in soil	Detection of VX contamination in soil through solid-phase microextraction sampling and gas chromatography/mass spectrometry of the VX degradation product bis(diisopropylaminoethyl)disulfide. *Journal of Chromatography A (2003) 992 (1-2), 1-9.* Smith, Philip A.; Ding, Bangwei; Hook, Gary L.; Kimm, Gregory; Koch, David; Savage, Paul B.	PDMS	GC-MS
1220	Triazines in soil.	Determination of triazines in soil by microwave-assisted extraction followed by solid-phase microextraction and gas chromatography-mass spectrometry. *Journal of Chromatography, A (2003) 985 (1-2), 167-174.* Shen, G.; Lee, H. K.*		GC-MS
2713	**PAHs in sediment**	**New cold-fiber headspace Spme device for quantitative extraction of polycyclic aromatic hydrocarbons in sediment.** ***Journal of Chromatography, A 1124, #1-2, 35-42*** **Ghiasvand, A. R.; Hosseinzadeh, S.; Pawliszyn, J.**	**headspace**	**GC-MS**
1240	PAHs in sediment	Micellar microwave-assisted extraction combined with solid-phase microextraction for the determination of polycyclic aromatic hydrocarbons in a certified marine sediment. *Analytica Chimica Acta (2003) 477 (1), 81-91.* Pino, V.; Ayala, J. H.; Afonso, A. M.; Gonzalez, V. *	PDMS, polyacrylate.	GC-MS

		Detection of O -ethyl- S -(2-diisopropylaminoethyl) methylphosphonothiolare (VX) contamination in soil through solid-phase microextraction sampling and gas chromatography/mass spectrometry of the VX degradation product bis(diisopropylaminoethyl)disulfide.		
1255	VX nerve agent in soil.	*Journal of Chromatography, A (2003) 992 (1-2), 1-9.* Hook, G. L.; Kimm, G.; Koch, D.; Savage, P. B.; Ding, B. W.; Smith, P. A.*		GC-MS
		Determination of isocarbophos in soil samples by gas chromatography-mass spectrometry with combination of microwave-assisted extraction and solid-phased microextraction.		
1297	Isocarbophos in soil.	Fenxi Ceshi Xuebao (2003) 22 (4), 13-16. Yang, Y.; Li, G. K.*		GC-MS
		Determination of antifouling compounds in marine sediments by solid-phase microextraction coupled to gas chromatography-mass spectrometry.		
1320		*Journal of Chromatography, A (2003) 1010 (1), 1-8.* Lambropoulou, D. A.; Sakkas, V. A.; Albanis, T. A.*		GC-MS
		Determination of petroleum hydrocarbons in contaminated soils using solid-phase microextraction with gas chromatography-mass spectrometry.		
1363	Petroleum hydrocarbons in soil	Journal of Chromatographic Science (2001) 39(11), 481-486. Cam, D.; Gagni, S.	100 µm PDMS	GC-MS
		A new PVC-activated charcoal fibre coated on silver wire: application in determination of n-alkanes in the headspace of soil samples by SPME-GC.		
1385	n-alkanes in soil.	Analytical Sciences (2002) 18(1), 77-81. Farajzadeh, M.; Matin, A. A.	Activated charcoal/PVC	GC
		Determination of hydrocarbons in old creosote contaminated soil using headspace solid-phase microextraction and GC-MS.		
1394	Hydrocarbons in soil.	Chemosphere (2001) 44(7), 1641-1648. Eriksson, M.; Faeldt, J.; Dalhammar, G.; Borg-Karlson, A. -K.	30 µm PDMS	GC-MS
		Headspace solid-phase microextraction of butyltin species in sediments and their gas chromatographic determination.		
1411	Butyltin species in sediment.	Journal of Separation Science (2001) 24(6), 459-464. Gui-bin, Jiang; Ji-yan, Liu; Ke-wu, Yang; Qun-fang, Zhou	100 µm PDMS	
		Determination of chlorophenols in soil samples by microwave-assisted extraction coupled to headspace solid-phase microextraction and gas chromatography - Electron-capture detection		
1446	Chlorophenols in soil	*Journal of Chromatography A (2003) 1012(2), 111-118* Jen, Jen-Fon; Wei, Ming-Chi	85µm Polyacrylate, 1g soil in 6mL water, pH 2, 9mins. Headspace	GC-ECD
		Solid-phase microextraction coupled to gas chromatography- mass spectrometry for the study of soil adsorption coefficients of organophosphorus pesticides		
1461	Organophosphorus pesticides in soil	*Journal of Environmental Monitoring (2002) 4(4), 477-481* Zambonin, C. G.; Palmisano, F.; Losito, I.; Cilenti, A.		GC-MS
		Gas phase detection of tributyltin chloride arising from aqueous and solid matrices.		
1462	Tributyltin in water and soil	*Journal of Analytical Atomic Spectrometry (2002) 17(11), 1506-1510* Bancon-Montigny, Chrystelle; Lam, Joseph W.; Maxwell, Paulette; Mester, Zoltan; Sturgeon, Ralph E.; Yang, Lu		GC-MS
		Separation and identification of aromatic acids in soil and the Everglades sediment samples using solid-phase microextraction followed by capillary zone electrophoresis.		
1464	Aromatic acids in soil	*Journal of Chromatography A (2002) 979(1-2), 417-424* Deng, Yiwei; Fan, Xiaofang	85µm Polyacrylate	CZE

1486	Monoaromatic hydrocarbons in soil	Solid-phase microextraction-gas chromatographic determination of volatile monoaromatic hydrocarbons in soil. *Fresenius' Journal of Analytical Chemistry (2002) 370(8), 1096-1099* Zygmunt, Bogdan; Namiesnik, Jacek	100µm PDMS	GC-MS
1490	Tributyltin in sediment	Improvement in measurement precision with SPME by use of isotope dilution mass spectrometry and its application to the determination of tributyltin in sediment using SPME GC-ICP-MS. *Journal of Analytical Atomic Spectrometry (2002) 17(8), 944-949* Yang, Lu; Mester, Zoltan; Sturgeon, Ralph E.	100µm PDMS, sodium tetraethylborate derivative	GC-IDMS
2243	**Organometallic in water**	**Trace element speciation using solid phase microextraction** ***Spectrochimica Acta Part B: 60 #9-10, 1243-1269 (2005)*** **Mester, Zoltan; Sturgeon, Ralph**	**Review article**	
1491	Organometallics in soil	Gas phase sampling of volatile (organo)metallic compounds above solid samples. *Journal of Analytical Atomic Spectrometry (2002) 17(8), 868-871* Mester, Zoltan		ICP-MS
1150	Tributyltin in sediment	Determination of tributyltin compounds in surface sediments of harbour by gas chromatography with headspace solid-phase microextraction *Fenxi Ceshi Xuebao (2003) 22 (2), 28-30.* Lei, Z.; Huang, C. J.; Jia, L.; Shi, H. H.		GC-FPD
1326	Polycyclic musks in sewage.	Removal of two polycyclic musks in sewage treatment plants: freely dissolved and total concentrations. *Environmental Science and Technology (2003) 37 (14), 3111-3116.* Artola-Garicano, E.; Borkent, I.; Hermens, J. L. M.; Vaes, W. H. J.		GC-MS
2097	Chloro-benzenes in soil	SPME as a tool to predict internal concentrations of soil contaminants in terrestrial organisms after exposure to a laboratory standard soil *Chemosphere, 54, #4, 561-568* van der Wal, L.; van Gestel, C.; Hermens, J.	30µm PDMS 1 day sample headspace	GC
2098	Butyltin in sediment	Applicability of SPME combined with GC-MIP AED for the determination of butyltin compounds in sediment samples. *Analytical and Bioanalytical Chemistry, 380, #5-6, 853-857* Carpinteiro, J.; Rodriguez, I. *; Cela, R.	ethylated derivative headspace sonication	GC-MIP AED.
2099	Hydrocarbons in soil	Surface geochemical results complement conventional development approaches *World Oil, 225, #12, 54-65* Quinlan, W.; Wood, James; Wylie, Albert	headspace	GC
2100	Phenanthrene in soil	Plant-assisted degradation of phenanthrene as assessed by solid-phase microextraction (SPME) *Intl J of Phytoremediation, 6, #3, 253-268* Hynes, Russell K.; Farrell, Richard E.; Germida, James J.	headspace	GC-FID
2101	Prometryn in soil	Determination of prometryn in soil by GC-MS using microwave-assisted extraction associated with SPME *Fenxi Huaxue, 32, #6, 775-778* Yang, Y.; Luan, W.; Luo, X. J.; Li, G. K.*	microwave heated	GC-MS
2102	Fungistasis in soil	Soil volatile fungistasis and volatile fungistatic compounds *Soil Biol. Biochem.,36, #12, 1997-2004* Chuankun, Xu; Keqin, Zhang; Leming, Zhang; Minghe, Mo	Headspace	GC-MS
2103	BTEX in soil	Determination of benzene, toluene, ethylbenzene and xylenes in soils by multiple headspace SPME *J. Chromatogr. A, 1035, #1, 17-22* Ezquerro, O; Ortiz, G; Pons, B; Tena, M	75µm Carboxen 30min @ 30°C headspace over soil suspended in water	GC-FID
2104	Fungicides in soil	Determination of the fungicides vinclozolin and dicloran in soils using ultrasonic extraction coupled with SPME *Anal. Chim. Acta, 514, #1, 125-130* Albanis, Triantafyllos A.; Lambropoulou, Dimitra A.	85µm polyacrylate 5% acetone/water	GC-MS

2105	Fungicides in in soil	Determination of pyrimethanil and kresoxim-methyl in soils by headspace SPME and GC-MS *Anal. Bioanal. Chem., 379, #7-8, 1100-1105* Araujo, L; Navalon, A; Prieto, A; Vilchez, J	85µm polyacrylate headspace	GC-MS, SIM
2106	Tetracyclic diterpene from moss	The moss Physcomitrella patens releases a tetracyclic diterpene *Plant Cell Rep., 22, #10, 780-786* Kassner, H.; Schultze, W.; VonSchwartzenberg, K.	headspace	GC-MS
2107	Chlorinated solvents in	Static headspace versus head space SPME for the for the determination of volatile organochlorine compounds in landfill leachates by GC *Talanta, 63, #4, 809-814* Fernandez Martinez, E.; Fernandez Sanchez, M.; Florez Menendez, J.; Sanchez Uria, J.;Sanz-Medel, A.	headspace	GC-MS
2108	Organics in sebum	Optimization of microwave-assisted extraction followed by SPME-GC-MS detection for the assay of some semi-volatile organic *J. Chromatogr.B, 825, #1, 11-20* Diaz-Vazquez, Liz; Garcia, Oscar; Marrero, I.; Rosario, Osvaldo; Velazquez, Zorangelys		GC-MS
2109	Organic chemicals in sediment	Sediment dilution method to determine sorption coefficients of hydrophobic organic chemicals *Environ. Sci. Technol., 39. #11, 4220-4225* Busser, F; Hermens, J.; Klamer, H.; Mayer, P; Ter Laak, T	Immersed extract from sediment in water	GC
2698	**Dioxin congeners from cultures**	**Microbial dehalogenation of trichlorinated dibenzo-p-dioxins by a Dehalococcoides-containing mixed culture is coupled to carbon isotope fractionation** ***Environ. Sci. Technol.41, #22, 7744-7751 (15 NOV 2007)*** **Ewald, E. -M.; Wagner, A.; Nijenhuis, I.; Richnow, H. -H.; Lechner, U.**	**headspace**	**GC-MS**
2110	PCDDs/PCDF in soil	Simple device for the SPME screening of polychlorodibenzo-p-dioxins and polychlorodibenzo· furans in heavily contaminated soil samples. *Analytica Chimica Acta, 527, #2, 157-162* Chia, K. J.; Lee, T. Y.; Huang, S. D.*	100µm PDMS headspace sonicated	GC-MS

Air

725	Organic vapors in gaseous matrices	Application of SPME for determination of organic vapors in gaseous matrices *J. Chromatogr. A, 885(2000) 405-418* Namiesnik, J., Zygmunt, B., Jastrzebska, A.	review article	
846	Solvent vapors in air	Solvent vapour monitoring in work space by SPME *J Hazardous Materials (2001) 83(1-2), 83-91* Li, K.; Fingas, M.; Goldthorp, M.; Lambert, P.; Santilli, A.; Whiticar, S.	100µm PDMS 75µm Carboxen/PDMS	
2563	**Methylene chloride in air**	**Diffusive sampling of methylene chloride with SPME** ***J. Chromatogr., A 1137, #2, 138-144 (2006-12-29)*** **Chen, C. Y.; Hsiech, C. M.; Lin, J. M.**	**85µm Carboxen/PDMS diffuse sampling**	**GC-ECD**
2460	**Volatiles in air**	**Characterization of sorption mechanisms of SPME with volatile organic compounds in air samples using a linear solvation energy relationship approach** ***J. Chromatogr. A 1179, #1, 24-32 (25 JAN 2008)*** **Prikryl, P.; Sevcik, J.**	**100µm PDMS** **85µm polyacrylate**	GC
726	Volatiles in air	Airflow Rate in the Quantitation of Volatiles in Air Streams by Solid Phase Microextraction *Anal. Chem 2000, 72, 3949-3955* Bartelt, R., Zilkowski, B.	100µm PDMS 30 min	GC-FID
727	Volatile organic in air	Sorbent trapping of volatile organic compounds from air *J. Chromatogr. A, 885 (2000) 120-151* Harper, M.	75µm Carboxen/PDMS review article	GC-FID
		Air sampling with porous SPME fibers compounds		

758	Volatile organic in air	*Anal. Chem. 2000, 72, 5178-5186* Koziel, J., Jia, M., Pawliszyn, J.	75µm Carboxen/PDMS 65µm DVB/PDMS 5-10 sec air sampling	GC-FID
754	Volatile organic in air	Air sampling and Analysis of Volatile Organic compounds with Solid Phase Microextraction *J. Air & wasteManage. Assoc 51: 173-184* Koziel, J., Pawliszyn, J.	100um PDMS	GC-FID
55	BTEX in air	Analysis of Environmental Air Samples by Solid Phase microextraction and GC/Ion Trap Mass Spectrometry Environ. Sci. Technol. 29: 693-701 (1995) Chai, M., Pawliszyn, J.	100µm PDMS 3 min gas sampling	GC-MS
226	Petroleum hydrocarbons in air	Estimation of Air-Coating Distribution Coefficients for SPME Using Retention Indexes from Linear Temperature-Programmed Capillary Gas Chromatography. Application to the Sampling and Analysis of Total Petroleum Hydrocarbons in Air Anal. Chem. 69: 402-408 (1997) Martos, P., Saraullo, A., Pawliszyn, J.	100µm PDMS, 30µm PDMS 30-480 min	GC-FID
375	Formaldehyde derivatives in air	Sampling and Determination of Formaldehyde Using SPME with On-Fiber Derivatization Anal. Chem. 198, 70, 2311-2320 Martos, P., Pawliszyn, J.	65µm PDMS/DVB 10-150 sec gas sampling PFBHA derivatives	GC-MS
110	Amines in air	Determination of Amines in Air and Water Using Derivatization Combined with SPME J. Chromatogr. A 773: 249-260 (1997) Pan, L., Chong, M., Pawliszyn, J.	65µm Carbowax/DVB 30 min gas sampling DPTFA derivatives	GC-FID
539	Thiol and sulfides in air samples	Evaluation of SPME for sampling of volatile organic sulfur compounds in air for subsequent GC analysis with atomic emission detection J. Chromatogr., A 1999, 848(1+2), 305-315 Haberhauer-Troyer, C., Rosenberg, E., Grasserbauer, M	75µm Carboxen/PDMS	GC-AED
540	Sulfur compounds in water/ N2 & propane	Studies on the application of SPME for analysis of volatile organic sulfur compounds in gaseous and liquid samples Chem. Anal. (Warsaw), 1999, 44(3A), 485-493 Wardencki, W., Namiesnik, J.	100µm PDMS 10 min	FPD-GC
233	C5-C11 hydrocarbons, BTEX in air	Calibration of Solid-Phase Microextraction for Air Analyses Based on Physical Chemical Properties of the Coating Anal. Chem. 69: 206-215 (1997) Martos, P., Pawliszyn, J.	30µm & 100µm PDMS 15-450 sec gas sampling	GC-FID
541	Chlorobenzen and p-xylene in air	On Calibration of SPME-GC-MS system for analysis of organic air contaminants using gaseous standard mixtures Chem. Anal. (Warsaw) (1999), 44(2), 201-213 Namiesnik, J., Gorlo, D, Wolska, L, Zygmunt, B.	Optimization of sampling	GC-MS
2851	**Review article**	**SPME in environmental analysis** ***Anal. Bioanal. Chem. 386, #4, 1059-1073 (Oct 2006)*** **Ouyang, Gangfeng; Pawliszyn, Janusz**		
2903	**PAHs**	**Standard-free kinetic calibration for rapid on-site analysis by SPME** ***J. Sep. Sci.31, #6-7, 1167-1172 (April 2008)*** **Cai, Jibao; Li, Hui; Ouyang, Gangfeng; Pawliszyn, Janusz; Zhang, Xu**		**GC-MS**
2297	**PAHs**	**Calibration of SPME for quantitative analysis by gas chromatography** ***J. Chromatogr. A, 1097, #1-2, 9-16 (2006)*** **Chen, Yong; Ouyang, Gangfeng; Pawliszyn, Janusz; Setkova, Lucie**		**GC**
308	Organic vapors in air	Calibration Procedure for SPME-GC Analysis of Organic Vapors in Air Talanta 44 (9): 1543-1550 (1997)		

		Gorlo, D., Wolska, L., Zygmunt, B., Namiesnik, J.		
756	Organic vapors in air	Diffusion-Based Calibration for SPME Analysis of Aqueous samples *Anal. Chem. 2001, 73 (1), 13-18* Sukola, K., Koziel, J., Augusto, F., Pawliszyn, J.	Carboxen/PDMS DVB/PDMS 10sec. Passive sampling	
828		Determination of absolute amount extracted by SPME different approaches under examination *J.Microcolumn Separations (2000) 12(10), 550-557* Tuduri, L.; Desauziers, V.; Fanlo, J. L		
757	Aerosols, particulate in air	Sampling and Analysis of Airbourne Particulate matter and aerosols using In-Needle Trap and SPME fiber devices *Anal. Chem., 2001, 73(1), 47-54* Koziel, J., Odziemkowski, M., Pawliszyn, J.	7um PDMS 10 sec	GC-MS
739	Aerosols, particulate in air	Sampling and Raman Confocal Microspectroscopic Analysis of Airborne Particulate Matter Using Poly(dimethylsiloxane Solid-Phase Microextraction Fibers *Anal. Chem (2001) 73(13), 3131-3139* Odziemkowski, M.; Koziel, J.; Irish, D.; Pawliszyn, J.	PDMS	Raman
2714	**Volatiles in Indoor air**	**Study of preservation of polydimethylsiloxane/carboxen SPME fibres before and after sampling of volatile organic compounds in indoor air.** ***J. Chromatogr. A 1124, #1-2, 106-111 (2006-08-18)*** **Larroque, V.; Desauziers, V. ; Mocho, P**	**75µm Carboxen**	**GC-MS**
2236	**Volatiles in Indoor air**	**Volatile organic compounds in indoor environments** ***HANDBOOK OF ENVIRONMENTAL CHEMISTRY, (2004) p1-35*** **Ayoko, Godwin A.**	**book**	
574	Solvents in air	Application of SPME to monitoring indoor air quality. Fresenius'-J-Anal-Chem. Apr 1999; 363(7): 696-699 Gorlo,-D; Zygmunt,-B; Dudek,-M; Jaszek,-A; Pilarczyk,-M; Namiesnik,-J	100µm PDMS 15 min	GC-MS
542	Organic pollutants in air	Application of SPME to monitoring indoor air quality Fresenius' J. Anal. Chem. (1999), 363(7), 696-699 Gorlo, D., Zygmunt, B., Dudek, M., Jaszek, A, Pilarczyk, M., Maniesnik, J.	100µm PDMS	GC-MS
2293	**PAHs in water**	**Time-weighted average water sampling with a SPME device** ***Anal. Chem. 77 #22, 7319-7325 (2005)*** **Chen, Yong; Ouyang, Gangfeng; Pawliszyn, Janusz**	**PDMS**	**GC**
543	Organic vapors in Air	Time-Weighted Average Sampling with SPME Device; Implications for Enhanced Personal Exposure Monitoring to Airborne Pollutants Anal. Chem. (1999), 71(8), 1513-1520 Martos, p. Pawliszyn, J.	100µm PDMS	
932	Organic vapors in Air	Time-weighted average sampling of volatle and semi-volatile airborne organic compounds by the SPME device *J. Chromatogr. A (2000), 892(1-2), 455-467* Khaled, A, Pawliszyn, J.		
306	VOCs in water and air	Application of Solid Phase Microextraction for Determination of Volatile Halogenated Hydrocarbons in Air and Water of an Indoor Swimming Pool Fresenius' Environ. Bull. 5 (1+2): 55-60 (1996) Czerwinski, J., Zygmunt, B., Namiensnik, J.		
307	Pollution in air	A Case Study of Indoor Pollution by Chinese Cooking Toxicol. Environ. Chem. 65 (1-4): 217-224 (1998) Benfenati, E., Pierucci, P., Niego, A.		
347	VOCs	Nonequilbrium Quantitation of Volatiles in Air Stream by SPME Anal. Chem. Vol. 71, January 1, 1999, pg. 92-101	7µm, 30µm, 100µm	GC-FID

	in air	Bartelt, R., Zilkowski, B.	PDMS 27°C, 30 min gas sampling	
2605	**Volatiles in atmosphere**	**High-molecular products analysis of VOC destruction in atmospheric pressure discharge** ***J. Phys., Conf. Ser. (UK) 63, #1, 6 (2007)*** **Grossmannova, H.; Ciganek, M.; Krcma, F.**	**65µm CW/PDMS Car/DVB 30/50µm gas sampling**	**GC-FID**
544	Volatiles in atmosphere	The sampling and analysis of volatile organic compounds in the atmosphere React. Hudrocarbons Atmos. (1999), 119-157 Boob, Academic, Coden: 67ERAQ Cao, X, Hewitt, C.		
851	Toluene diisocyanate	Determination of gaseous toluene diisocyanate by use of solid-phase microextraction with on-fibre derivatisation. *Fresenius' J. Anal. Chem. (2001), 369(6), 524-529* Nilsson, U.; Batlle, R.; Colmsjo, A.	65µm DVB/PDMS 60min. dibutylamine derivative	LC-MS-MS
752	VOC, formaldehyde in air	Field air analysis with SPME device *Analytica Chimiera Acta 400 (1999) 153-162* Koziel, J., Jia, M., Khaled, A., Noah, J., Pawliszyn, J.	varied fibers 1-75 min air samples	GC-FID
753	VOC, formaldehyde in air	Field Sampling and Determination of Formaldehyde in Indoor Air with SPME and On-Fiber Derivatization *Environ Sci Technol 2001, Vol 35, pg. 1481-1486* Koziel, J., Noah, J., Pawliszyn, J.	65µm DVB/PDMS 10min. Headspace PFBHA Derivative	GC-FID
2702	**Aromatic VOCs in water**	**Field analysis of benzene, toluene, ethylbenzene and xylene in water by portable GC-micro-FID combined with headspace SPME** ***Talanta 69, #4, 894-899 (2006-06-15)*** **Ji, J.; Deng, C. H.; Shen, W. W.; Zhang, X. M.**	**65µm DVB/PDMS** **1min. Headspace** **sat. salt**	**GC-FID**
755	Aromatic VOCs in Indoor air	Design of Validation of Portable SPME devices for rapid field air sampling and diffusion-based calibration *Anal. Chem. 2001,73(3), 481-486* Augusto, F., Koziel, J., Pawliszyn, J.	65µm DVB/PDMS 30 sec air sampling	GC-FID
759	VOCs in Indoor air	Fast field sampling/sample preparation and quantification of volatile organic compounds in indoor air by SPME and portable GC *Field Analytical Chem. And Tech 4(2-3): 73-84,2000* Jia, M., Koziel, J., Pawliszyn, J.	65µm DVB/PDMS 1min. Headspace	GC-FID
545	Volatile organics in air	Analysis of volatile organic compounds in the ambient air of Algiers by GC with a beta-cyclodextrine capillary column J. Chromatogr A, 1999, 846(1+2), 287-293 Yassaa, N., Meklati, B., Cecinato, A.		
984	VOC's in air	Dynamic versus static sampling for quantitative analysis of VOC's in air. *J.Chromatogr. A (2002) 963(1-2), 49-56* Tuduri, L.; Desauziers, V.; Fanlo, J.L.	PDMS/carboxen	
1062	Volatile organics from steel.	Analysis of airborne volatile organic compounds of a steel industry by solid phase microextraction and gas chromatography/mass spectrometry. *Bulletin of Environmental Contamination and Toxicology (2003) 70 (5), 957-963.* de Lourdes Cardeal, Z.; de Carvalho, C. R.; Parreira, F. V.		GC-MS
1070	Hydrogen cyanide in air	Solid phase microextraction with analysis by gas chromatography to determine short term hydrogen cyanide concentrations in a field setting. *Journal of Separation Science (2002) 25 (14), 917-921.* Smith, P. A.; Sheely, M. V.; Kluchinsky, T. A, Jr.		GC-NPD

		Development of a quantification method for the analysis of malodorous sulphur compounds in gaseous industrial effluents by solid-phase microextraction and gas chromatography-pulsed flame photometric detection		
1114	Malodorous sulphur compounds in effluents	*Journal of Chromatography A (2003) 999 (1-2), 71-80.* Desauziers, Valerie; Fanlo, Jean-Louis; Lestremau, Francois; Roux, Jean-Claude	PDMS/carboxen	GC-PFPD
1144	Smoke plumes	Discrimination of combustion fuel sources using gas chromatography-planar field asymmetric-waveform ion mobility spectrometry *Journal of Separation Science (2003) 26 (6-7), 585-593.* Eiceman, Gary A.; Funk, Paul A.; Hughs, S. Edgar; Miller, Raanan A.; Nazarov, Erkijon G.; Tarassov, Alexander		GC-MS
1175	VOCs in air	Potential of solid-phase microextraction fibers for the analysis of volatile organic compounds in air. *Journal of Chromatographic Science (2001) 39(12), 521-529* Tuduri, Ludovic; Desauziers, Valerie; Fanlo, Jean Louis	Various fibers compared	
1187		Sampling and sample-preparation strategies based on solid-phase microextraction for analysis of indoor air. *Trends in Analytical Chemistry (2002) 21 (12), 840-850.* Koziel, J. A.; Novak, I.		
1194	PAHs	Screening direct analysis of PAHs in atmospheric particulate matter with SPME *Talanta (2003) 60 (4), 687-693.* Vaz, Jorge Moreira	PDMS	
2606	**PAHs in air**	**Monitoring of PAHs in air by collection on XAD-2 adsorbent then microwave-assisted thermal desorption coupled with headspace SPME and GC with mass spectrometric detection.** ***Anal. Bioanal. Chem. 387, #3, 999-1005 (2007-02)*** **Wei, M. C.; Chang, W. T.; Jen, J. F.**	**65µm PDMS/DVB headspace 35°C for 40 min. sat. salt**	**GC-MS**
1200	Benzene in air	Determination of benzene at trace levels in air by a novel method based on solic phase microextraction gas chromatography/mass spectrometry. *Rapid Communications in Mass Spectrometry (2001) 15(24), 2404-2408* Salvadori, Piero; Cuzzola, Angela; Pucci, Sergio; Raffaelli, Andrea; Saba, Alessandro		GC-ITMS
1305	Volatile aliphatic amines in air.	Determination of volatile aliphatic amines in air by solid-phase microextraction coupled with gas chromatography with flame ionization detection *Journal of Chromatography, A (2003) 1016 (1), 1-9.* Jastrzebska, Anna; Namiesnik, Jacek; Zygmunt, Bogdan		GC-FID
1313	Chemical warfare agents	Solid phase microextraction sampling and gas chromatography/mass spectrometry for field detection of the chemical warfare agent O-ethyl S-(2-diisopropylaminoethyl) methylphosphonothiolate (VX) *Journal of Separation Science (2003) 26 (12-13), 1091-1096.* Betsinger, Geoffrey; Hook, Gary L.; Kimm, Gregory; Logan, Tom; Savage, Paul B.; Smith, Philip A.; Swift, Austin	Various	GC-MS
1334	Odorant emissions from landfills.	Characterisation of odorants emissions from landfills by SPME and GC/MS *Chemosphere (2003) 51 (5), 357-368.* Davoli, E.; Gangai, M.L.; Morselli, L.; Tonelli, D.	DVB/Carboxen/PDMS	GC/MS
1342		A simple calibration procedure for volatile organic compounds sampling in air with adsorptive solid-phase microextraction fibres. *Analyst (2003) 128 (9), 1028-1032.* Tuduri, L.; Desauziers, V. *; Fanlo, J. L.	PDMS/CAR	GC-FID
		Screening for sarin in air and water by solid-phase microextraction-gas chromatography-mass spectrometry.		

1373	Sarin in air and water.	Journal of Chromatographic Science (2001) 39(10), 420-424. Schneider, J. F.; Boparai, A. S.; Reed, L. L.		GC-MS
1186	Perfume oil in household products.	Determination of perfume oil in household products by headspace solid-phase microextraction and fast capillary gas chromatography. *Chromatographia (2003) 57 (Supp), S199-S206.* Bothe, F.; Dettmer, K.; Engewald, W. *	Various	FCGC
1141	VOC's from irradiated mail.	Volatile organic compounds produced during irradiation of mail. *AIHA Journal (2003) 64 (2), 189-195.* Smith, Philip A.; Hakspiel, Shelly J.; Miller, Stephen; Sheely, Michael V.		
1126	Sulfur compounds	Evaluation of solid-phase microextraction for time-weighted average sampling of volatile sulfur compounds at ppb concentrations *Analytical Chemistry (2003) 75 (11), 2626-2632.* Andersson, Fras Annika T.; Desauziers, Valerie; Fanlo, Jean-Louis; Lestremau, Francois	Carboxen/PDMS	
1098	Ethylene oxide	Determination of low-level residual ethylene oxide by using solid-phase microextraction and gas chromatography. *Journal of AOAC International (2002) 85 (6), 1205-1209.* Ayoub, K.; Harris, L.; Thompson, B.		
1447	Volatile compounds in air	Characterization of volatile effluents of livestock buildings by solid-phase microextraction *Int. J. Environ. Anal. Chem. (2003) 83(10), 837-849* Begnaud, Frederic; Berdague, Jean-Louis; Peres, Christophe	75um Carboxen PDMS	GC-MS
1476	Isocyanates in air	Development of a personal isocyanate sampler based on DBA derivatization on solid-phase microextraction fibers. *Fresenius' Journal of Analytical Chemistry (2001) 371(4), 514-518* Nilsson, Ulrika; Batlle, Ramon; Colmsjo, Anders	65um PDMS/DVB, dibutylamine (DBA) derivative	HPLC-MS
1478	Volatiles in air	Traditional sampling with laboratory analysis and solid phase microextraction sampling with field gas chromatography/mass spectrometry by military industrial hygienists. *AIHAJ (2002) 63(3), 284-292* Thomas, Richard J.; Smith, Philip A.; Lee, Arthur P.; Kluchinsky, Timothy A., Jr.; Erickson, Richard P.; Savage, Paul B.; Stevens, Michael; Williams, Kenneth		
1479	VOCs in air	Solid phase microextraction : Measurement of volatile organic compounds (VOCs) in Dhaka City air pollution. *Journal of Environmental Science and Health Part A Toxic-Hazardous Substances & Environmental Engineering (2002) A37(7), 1223-1239* Hussam, A.; Alauddin, M.; Bhattacharjee, M.; Bibi, H.; Chowdhury, D.; Khan, A. H.; Sultana, S.		GC-MS
1523	Glutaraldehyde in air	Gas chromatographic determination of glutaraldehyde in the workplace atmosphere after derivatization with O-(2,3,4,5,6-pentafluorobenzyl)hydroxylamine on a solid-phase microextraction fibre. *Journal of Chromatography A (2002) 955(1), 117-124* Pieraccini, Giuseppe; Bartolucci, Gianluca; Boccalon, Pierpaolo; Dugheri, Stefano; Focardi, Leonardo; Pacenti, Marco	On-fiber derivatization with PFBHA	GC
1524	Valeraldehyde in air (TWA)	Time-weighted average sampling of airborne n-valeraldehyde by a solid-phase microextraction device. *Journal of Chromatography A (2002) 954(1-2), 191-198* Tsai, S.-W.; Chang, T.-A.	65um DVB PDMS, on-fiber derivatization with PFBHA	GC-FID
1543	Nicotine in air	Trace analysis of nicotine in indoor air by a SPME method. *Bulletin of Environmental Contamination and Toxicology (2002) 68(4), 485-489* Shuokui, H.; Huali, Y.; Jianfang, F.; Songting, G.		

1528	VOCs in air (dynamic sampling)	Dynamic air sampling of volatile organic compounds using solid phase microextraction *Journal of Environmental Science and Health Part B Pesticides Food Contaminants and Agricultural Wastes (2002) B37(4) 365-378* Razote, Edna; Chobpattana, Wannee; Jeon, Ike; Maghirang, Ronaldo	75um Carboxen PDMS	GC-MS
2674	**passive sampling**	**Configurations and calibration methods for passive sampling techniques** ***J. Chromatogr. A 1168, #1-2, 226-235 (19 OCT 2007)*** **Ouyang, G.; Pawliszyn, J.**		
2747	**Volatile organics in water**	**Compound-specific carbon isotope analysis of volatile organic compounds in water using solid-phase microextraction** ***J. CHROMATOGR. A 1163, #1-2, 260-268 (07 SEP 2007)*** **Palau, J.; Soler, A.; Teixidor, P.; Aravena, R.**	**75um Carboxen headspace and immersion**	**GC-MS**
2656	**Volatiles in water passive sampling**	**Time-weighted average water sampling with a diffusion-based SPME** ***J. Chromatogr. A 1138, #1-2, 42-46 (Jan 5 2007)*** **Alaee, Mehran; Ouyang, Gangfeng; Pawliszyn, Janusz; Zhao, Wennan**	**PDMS coatings**	**GC**
2638	**Volatiles in water passive sampling**	**Time-weighted average water sampling in Lake Ontario with SPME passive samplers** ***Environ. Sci. Technol. 41, #11, 4026-4031 (Jun 1 2007)*** **Alaee, M.; Bragg, L.; Ouyang, G.; Pawliszyn, J.; Qin, Z.; Zhao, W.**	**PDMS coatings**	**GC**
1547	Volatiles in air (passive sampling)	Evaluation of indoor exposition to benzene, toluene, ethylbenzene, xylene, and styrene by passive sampling with a solid-phase microextraction device. *Journal of Chromatographic Science (2002) 40(3), 122-126* Cardeal, Zenilda de L.; de Carvalho, Ciomara R.; Parreira, Fabricio V.	100um PDMS, 65um DVB PDMS	
1388	Perfumes	Atmospheric lifetimes and fates of selected fragrance materials and volatile model compounds. Environmental Science and Technology (2001) 35(18), 3595-3600. Aschmann, S. M.; Arey, J.; Atkinson, R. *; Simonich, S. L	PDMS	GC-MS
2111	Hydrocarbons in air	Measuring the effect of photocatalytic purifiers on indoor air hydrocarbons and carbonyl pollutants *J. Air Waste Manage. Assoc., 55, #1, 88-96* Disdier, Jean; Mas, Denis; Pichat, Pierre	15 min sampling	GC
2112	BTEX in air	Air sampling of aromatic hydrocarbons in the presence of ozone by SPME *J Chromatogr A, 1025, #1, 57-62* Xiong, G; Koziel, J.; Pawliszyn, J.	100µm PDMS headspace	GC-FID, GC-MS
2113	PCBs in indoor air	Sampling and analysis of PCBs in indoor air by sorbent enrichment followed by headspace SPME and GC-MS *J. Chromatogr. A,1072, #1, 99-106* Ares, S; Barro, R; Cela, R; Garcia-Jares, C; Llompart, M	headspace	GC-MS
2114	Organo-phosphate triesters in air	Air sampling of organophosphate triesters using SPME under non-equilibrium conditions. *Anal & Bioanalytical Chem, 378, #7, 1847-1853* Isetun, S.; Nilsson, U.; Colmsjo, A.; Johansson, R.	100µm PDMS 1 hr. sampling	GC
2115	Organo-phosphate triesters in Air	Evaluation of SPME w/ PDMS for air sampling of gaseous organophosphate flame-retardants and plasticizers *Anal & Bioanalytical Chem, 380, #2, 319-324* Isetun, Sindra; Nilsson, Ulrika; Colmsjo, Anders	100µm PDMS 8 hrs. sampling	GC
2328	**Flame retardants & plasticizers in water**	**Suitability of SPME for the determination of organophosphate flame retardants and plasticizers in water samples** ***J. Chromatogr. A 1108 #2, 158-165 (2006)*** **Calvo, F.; Cela, R.; Quintana, J.B.; Rodil, R.; Rodriguez, I.; Rubi, E.**	**65µm PDMS-DVB Direct extraction 40 min @ 21°C NaCl added**	**GC-NPD**
2116	Volatile sulfur compounds in air	Investigation of artefact formation during analysis of volatile sulfur compounds "in air" using SPME *Chromatographiam 59, #9-10, 607-613* Lestremau, F.; Andersson, F.; Desauziers, V. *	75µm Carboxen direct air sample	GC
		Determination of benzene, toluene, ethylbenzene and		

2117	BTEX in air	xylenes in air by SPME-GC-MS *Analytical & Bioanalytical Chem, 380, #5-6, 824-830* Tumbiolo, S.; Gal, J. -F.*; Maria, P. -C.; Zerbinati, O.	75µm Carboxen 30 min sampling	GC-MS
2174	**BTEX in air**	**SPME sampling of BTEX before GC/MS analysis:Examples of outdoor and indoor air quality measurements in public and private sites** ***Annali di Chimica 95, #11-12, 757-766 (2005)*** **Tumbiolo, S.; GAL, Jean-Francois; Maria, P.; Zerbinati, O.**		**GC-MS**
2118	Acetic acid in air	Use of SPME for the detection of acetic acid by ion-trap GC-MS and application to indoor levels in museums *J. Chromatogr. A, 1067, #1-2, 331-336* Godoi, Ana F.L.; Van Grieken, Rene; Van Vaeck, Luc		GC-ITMS
2119	Chloro-benzenes in air	Development of a sensitive methodology for the analysis of chlorobenzenes in air bycombination of SPE and headspace SPME *J. Chromatogr. A, 1045, #1-2, 189-196* Ares,S; Barro,R; Cela,R; Garcia-Jares,C; Llompart,M	65µm PDMS-DVB 65µm CW headspace	GC-MS GC-ECD
2120	Sarin in Air	Dynamic SPME for sampling of airborne sarin with GC-MS for rapid field detection and quantification *J. Sep. Sci., 27,#12, 1017-1022* Hook, G.; Lepage, C; Miller, S.; Smith, P.	Direct sampling of air	GC-MS
2121	Sulfur compd in air	Analysis of sulfur-containing compounds in ambient air using SPME-GC with pulsed FPD *Int. J. Environ. Anal. Chem., 84, #10, 749-760* Li, Kwong-Chi; Shooter, David	direct sampling	GC-FPD
2122	Aniline in air	Determination of aniline in silica gel sorbent by one-step in situ microwave assisted desorption coupled to headspace SPME and GC-FID *Talanta, 64, #3, 650-654* Jen, Jen-Fon; Shih, Ton-Sheng; Yan, Cheing-Tong	65µm PDMS-DVB headspace 3 min extraction	GC-FID
2123	Popylene glycol in air	Propylene glycol vapor contamination in controlled environment growth chambers: Toxicity to corn and soybean plants *J. Environ. Sci. Health Part B, 40, #3, 443-448* McConnell, Laura; Niu, Genhua; Reddy, Vangimalla R.	headspace	MD-GC-MS

Theory / Technique

856	Volatiles in water	An automated method for the determination of some volatile organic compounds in water samples after extraction by SPME and CGC-ECD analysis *Rev. Port. Farm (2000) 50(4) 141-149* Cunha, E.; Goncalves, C.; Alpendrurada, M. F.	(Portuguese)	GC-ECD
2	VOCs, BTEX, PAHs in water	Solid Phase MicroExtraction with Thermal Desorption Using Fused Silica Optical Fibers Anal. Chem. 62: 2145-2148 (1990) Arthur, C., Pawliszyn, J.	56µm PDMS 2 min stirring, salt added	GC-FID, GC-ECD
5	BTEX in water	Solid Phase MicroExtraction: An Attractive Alternative Environmental Lab. 11, Dec/Jan 1992/1993 pp 10-15 Arthur, C., Killam, L., Chai, M., Buchholdz, K., Potter, D., Zhang, Z., Pawliszyn, J.	100µm PDMS 14 min stirring salt added	GC-FID
9	BTEX in water	Automation and Optimization of Solid Phase MicroExtraction Anal. Chem. 64: 1960-1966 (1992) Arthur, C., Killam, L., Buchholz, K., Pawliszyn, J.	56µm & 100µm PDMS 2-40 min stirring, salt added	GC-FID
2392	**PAHs in water**	**Automation of solid-phase microextraction on a 96-well plate format** ***J. Chromatogr., A 1149, #2, 127-137 (2007-05-18)*** **Hutchinson, J. P.; Setkova, L.; Pawliszyn, J.**	**PDMS fibers**	
2446	**Review article**	**Strategies for interfacing SPME with liquid chromatography** ***J. Chromatogr., A 1152, #1-2, 2-13 (2007-06-08)*** **Lord, H. L.** **Automation of solid-phase microextraction**		

2337	**Review article**	***J. Sep. Sci. 28 #15, 2010-2022 (2005)*** **Chen, Y.; Hutchinson, J..; Linton, C..; Lord, H.; O'Reilly, J.; Pawliszyn, Janusz; Setkova, Lucie; Wang, Qing**		**GC & LC**
820	Jasmine plant beer	A versatile Robotic Arm for Static headspace sampling with SPME *LC-GC Europe, April 2001, 215-222* Pham-Tuan, H., Vercammen, J., Sandara, P.	85µm Polyacrylate 30min. headspace	GC-MSN
12	BTEX in water	Solventless Injection Technique for Microcolumn Separations J. Microcolumn Sep. 5: 51-56 (1993) Arthur, C., Chai, M., Pawliszyn, J.	100µm PDMS	GC-MS
13	BTEX, PAHs in water	Headspace Solid Phase MicroExtraction Anal. Chem. 65(14): 1843-1852 (1993) Zhang, Z., Pawliszyn, J.	56µm PDMS 1-5 min headspace	GC-FID
16	Nitroaromatics in water	Practical Use of Automated Solid Phase Extraction Amer. Lab. Nov. Vol. 25,1993, p18-24 Berg, J.	100µm PDMS 1-20 min immersion	GC-FID
17	Toluene in water	On-Line Monitoring of Flowing Samples Using SPME-GC Anal. Chim. Acta 284: 265-273 (1993) Motlagh, S., Pawliszyn, J.	56µm PDMS 20 min immersion, stirring	GC-FID
21	Phenols in water and air	Optimization of Solid Phase MicroExtraction (SPME) Conditions for Phenol Analysis Anal. Chem. 66: 160-167 (1994) Buchholz, K., Pawliszyn, J.	85µm polyacrylate 40 min immersion & headspace pH 2, salt added acetate derivatives	GC-MS
204	Phenols	Determination of Phenols by Solid-Phase Microextraction J. Chromatogr. A 767: 171-175 (1997) Bartak, P., Cap, L.		
391	Phenols, PAHs in water	SPME for Determining the Binding State of Organic Pollutants in Contaminated Water Rich in Hujic Organic Matter J. Chromatogr. A, 816 (1998) 159-167 Porschamann, J., Kopinke, F., Pawliszyn, J.	7µm PDMS 50°C, 90-180 min headspace, stirring	GC-MS
24	PAHs in soil and water	Silica-Fiber microextraction for Laser Desorption Ion Trap Mass Spectrometry Anal. Chem. 66: 1897-1901 (1994) Cisper, M., Earl, W., Nogar, N., Hemberger, P.	Trimethlysilyl coated fiber 3 min	MS
27	PAHs in water	Solid Phase microextraction Coupled to HPLC Anal. Chem. 67: 2530-2533 (1995) Chen, J., Pawliszyn, J.	15µm PDMS 6-60 min immersion	HPLC-UV
222		Potential Applications of Coupled SPME-HPLC LaborPraxis 20 (11): 66-68, 71 (1996) Haag, I.		HPLC
33	Fatty acids, PAHs, pesticides in methanol/water	Solvent-free Sample Introduction for Supercritical Fluid Chromatography Using Polymer Coated Fibers J. Microcolumn Res. 42: 1925-1930 (1994) Hirat, Y., Pawliszyn, J.	15µm PDMS, 85µm polyacrylate 5 min immersion	GC-FID
35	BTEX in water	Headspace SPME vs. Purge & Trap for the Determination of Substituted Benzenes in Water J. Chromatogr. Sci. 32(8): 317-322 (1994) MacGillevra, B.	100µm PDMS 40°C, 50 min headspace stirring, salt	GC-FID
		Quantitative Extraction Using an Internally Cooled Solid		

38	BTEX in water	Phase MicroExtraction Device Anal. Chem. 67(1): 34-43 (1995) Zang, Z., Pawliszyn, J.	50µm PDMS 22-80°C, 2-5 min headspace	GC-MS
43	Organophosphorus pesticides in water	Element-Selective Detection of Pesticides by Gas Chromatography Atomic Emission Detection and Solid Phase MicroExtraction J. Chromatogr. 683: 175-183 (1994) Eisert, R., Levser, K., Winsch, G.	100µm PDMS 20 min immersion	GC-AED
44	BTEX in water	Solid-Phase Microextraction: A Solvent-Free Alternative for for Sample Preparation Anal. Chem. 66(17): 844A-853A (1994) Zang, Z., Yang, M., Pawliszyn, J.	polyacrylate, PDMS immersion, salt	GC-FID
45	BTEX in water and air	New Solvent-Free Sample Preparation Techniques ES &T 28 (13): 569A-574A (1994) Boyd-Boland, A., Chai, M., Luo, Y. Zhand, Z. Yang., M., Pawliszyn, J.	Various fibers and extraction conditions	GC-FID,E1858 GC-MS
213		A New Separation and Extraction Method -- Solid-Phase Microextraction Sepu (Chinese) 15 (2): 118-119 (1997) Liu, J.		
56		SPME GIT Fachz. Lab. 39: 325-362 (1995) Popp, P.		
2761	**Organics in gases, liquid, solids**	**Sample-introduction systems coupled to ion-mobility spectrometry equipment for determining compounds present in gaseous, liquid and solid samples** **TrAC Trends Anal. Chem. 27, #2, 139-150, (Feb. 2008)** ***Arce, L.; Garrido-Delgado, R.; Menendez, M.; Valcarcel, M.***		**IMS**
57	BTEX in water	Sample Introduction Approaches for Solid Phase MicroExtraction-Rapid GC Anal. Chem. 67: 3265-3274 (1995) Gorecki, T., Pawliszyn, J.		GC-FID
58	BTEX in water	Solid Phase MicroExtraction/Isothermal GC for Rapid Analysis of Complex Organic Samples J.High Res.Chromatogr. 18 (2): 161-166 (1995) Gorecki, T., Pawliszyn, J.	15µm PDMS 2 min headspace, stirring	GC-FID
2659	**Semivolatiles in water**	**Examination of analyte partitioning to monocationic and dicationic imidazolium-based ionic liquid aggregates using SPME-GC** ***J. Chromatogr. A 1148, #1, 92-99 (Apr 27 2007)*** **Anderson, Jared L.; Baltazar, Quinner Q.; Pino, Veronica**		
2626	**Semivolatiles in water**	**Estimating the octanol-water partition coefficients of NPAHs and PAHs by SPME and gas chromatography-ion trap detector** ***Analytical Letters 40, #2, 307-319 (JAN 2007)*** **Wang, Yiru; Wang, Yonghong**	**immersion, stirring**	**GC-MS**
59	Semivolatiles in water	SPME as a Method for Estimating the Octanol Water Partition Coefficient Anal. Chem. 68: 130-133 (1996) Dean, J., Tomlinson, W., Makovskaya, V., Cumming, R., Hetheridge, M., Comber, M.	85µm polyacrylate min to 20 hr immersion, stirring	GC-FID
546	PAHs in water and octanol-water	Solubility and partitioning studies with PAHs using an optimized SPME procedure Fresenius' J. Anal. Chem. (1999), 363(4), 426-428 Paschke, A., Popp, P., Schueuermann, G.	100µm SPME stirred	GC-MS
728	PAHs in waste water	Determination of PAHs in waste water by off-line coupling SPME with column liquid chromatography *J. Chjromtogr. A, 897(2000) 153-159*	100µm PDMS 60 min	HPLC fluorescence

		Popp, P., Bauer, C., Moder, M., Paschke, A.		
547	Pesticides in water	Extracted amounts by SPME: a realistic approach to the partition coefficient K. J. Chromtogr. Sci. 1999, 37(8), 277-282 Urruty, L., Montury, M		
548	Volatiles in water	Determination of Henry's law coefficient by combination of the equilibrium partitioning in closed systems and SPME techniques J. Chromatogr, A., (1999), 830(2), 353-363 Dewulf, J., Van Langenhove, H., Everaert, P	100µm PDMS 30 min @ varied temp.	GC-FID
237	Organics in water and air	Partitioning of Organic Chemicals to Polyacrylate-Coated Solid-Phase Microextraction Fibers: Kinetic Behavior and Quantitative Structure-Property Relationships Anal. Chem. 68: 4458-4462 (1996) Vaes, W., Hamwik, C., Ramos, E., Verhaar, H., Hermens, J.	85µm polyacrylate immersion stirring	GC-FID, -ECD GC-MS
84		Solid Phase Microextracting Using Fused-Silica Fibers Coated with Graphitized Carbon Black Chromatographia 41: 678-684 (1995) Mangani, R., Cenciarini, R.		
88	Overview	New Direction in Sample Preparation for Analysis of Organic Compounds Trends Anal. Chem. 14 (3): 113-122 (1995) Pawliszyn, J.	Multiple applications	
121	Eugenol, 2,4-dimethylphenol, 2-phenylethanol in water	Solid Phase Microextraction for Quantitative Analysis in Nonequilibrium Situations Anal. Chem. 69: 1230-1236 (1997) Ali, J.	85µm polyacrylate 1-160 min immersion, stirring salt added	GC-MS
360	2-Octanol in water	SPME in Headspace Analysis, Dynamics in Non-Steady State Mass Transfer Anal. Chem., 70: 4822-4826, (1998) Ali, J.	85µm polyacrylate, 100µm PDMS headspace	GC-MS
2623	**Volatiles from Malaysian durians**	**Analysis of volatile compounds from Malaysian durians (Durio zibethinus) using headspace SPME coupled to fast GC-MS** ***J. Food Compos. Anal. (UK) 20, #1, 31-44 (Feb. 2007)*** **Nazimah, S.; Chin, S.; Quek, S.; Man, Y.; Rahman, R.; Hashim, D. M.**	**headspace**	**GC-MS**
2637	**Volatiles from citrus fruit**	**Characterization of volatile compounds in selected citrus fruits from Asia. Part I: freshly-squeezed juice** ***Flavour and Fragrance J. 22, #3, 228-232 (MAY-JUN 2007)*** **Dharmawan, Jorry; Kasapis, Stefan; Curran, Philip; Johnson, Jeffrey R.**	**headspace**	**GC-MS**
2725	**Volatiles from tropical fruit**	**Postharvest survey of volatile compounds in five tropical fruits using headspace-solid phase microextraction (HS-SPME).** ***HortScience 42, #2, 309-314 (2007)*** **Natta Laohakunjit; Orapin Kerdchoechuen; Matta, F.; Silva, J.; Holmes, W.**	**headspace** **sat. salt**	**GC-MS**
2556	**Volatiles from tropical fruit**	**Screening of Tropical Fruit Volatile Compounds Using SPME Fibers and Internally Cooled SPME Fiber** ***J. Agric. Food Chem. 54, #23, 8688-8696 (2006-11-15)*** **Carasek, E.; Pawliszyn, J.**	**PDMS coating**	**GC-MS**
214	Strawberries and apples in fruit homogenate	Solid-Phase Microextraction: Artifact Formation and Its Avoidance Chromatographia 46: 63-66 (1997) Verhoeven, H., Beuerle, T., Schwab, W.	85µm polyacrylate 30 sec immersion	GC-MS
2518	**Isophorone in food samples**	**Determination of isophorone in food samples by SPME-GC-MS** ***J Chromatography A 1155, #1, 100-104 (2007)*** **Kataoka, H.; Terada, Y.; Inoue, R.; Mitani, K.**	**65µm PDMS/DVB** **60°C, 45 min** **headspace**	**GC/MS**

2327	**Organics from PET coating**	**Study of barrier properties and chemical resistance of recycled PET coated with amorphous carbon through a plasma enhanced chemical vapour deposition (PECVD) process** ***Food Additives and Contaminants 23 #1, 100-106 (2006)*** **Cruz, S. A.; Zanin, M.; Nerin, C.; De Moraes, M. A. B.**	**headspace**	**GC/MS**
139	McReynolds probes in methanol	Studying Activity Coefficients of Probe Solutes in Selected Liquid Polymer Coatings Using SPME J. Phys. Chem. 100: 17648 (1996) Zhang, Z., Pawliszyn, J.	7µm PDMS 25-100°C, 15 min headspace	GC-FID
729	Lidocane from water	Multiple solid phase microextraction *J. Chromatogr. A. (2000) 878, 27-33* Koster, E., de Jong, G.	100µm PDMS 45min	HPLC
939		Fibers coated with molecularly imprinted polymers for SPME *Anal. Chem (2001) 73(13) 3140-3145* Koster, E; Crescenzi, C; den Hoedt, W; Ensing, K; de Jong, G		
579	BTEX and solvents in water	Study of polymer coatings for solid-phase microextraction Sepu. Jan 1999; 17(1): 10-13 Zhang,-DN; Wu,-CY; Ai,-F	88µm PDMS	
148	Maillard reaction products in water	A Study of the Behavior of Maillard Reaction Products Analyzed by SPME-GC-Mass Selective Detection J. Chromatogr. Sci. 34: 213 (1996) Coleman III, W.	100µm PDMS 5 min immersion stirring	GC-MS
207	Alkyl & alkoxy aroma & flavor compounds in water	A Study of the Behavior of Polar and Nonpolar SPME Fibers J. Chromatogr. Sci. 35 (6): 245-258 (1997) Coleman, W.	100µm PDMS 5 min immersion & headspace stirring, salt added	GC-MSD
730	Inorganic anions in water	SPME of inorganic anions based on polypyrrole film *Analyst (Cambridge, UK), 2000, 125(3), 391-394* Wu, J., Yu, Z, Lord, H., Pawliszyn, J.	Polypyrrole film	Ion Chrom.
764	Volatile organics PAHs, amines in water/air mixture	Preparation and appplication of polypyrrole films in SPME *J. Chromatogr. A (2001) 909(1) 37-52* Wu, J., Pawliszyn, J.	Polypyrrole film In-tube 20min. headspave	GC-FID LC-UV
163	Mercury, mercury compounds in water	SPME Combined with Electrochemistry Anal. Commun. 33(10): 361-364 (1996) Guo, F., Gorecki, T., Irish, D., Pawliszyn, J.	10µm gold on carbon steel electrode 5 min gas phase sampling stirring, KNO3 added	GC-MS
182		Use of SPME with Ion Mobility Spectrometry Anal. Lett. 30 (7): 20-22 (1997) Orzechowsa, G., Poziomek, E., Tersol, V.		GC-MS
2610	**VOCs in seawater**	**Occurrence of volatile organic compounds (VOCs) in Liverpool Bay, Irish Sea** ***Mar. Pollut. Bull. 54, #11, 1742-1753*** **Bravo-Linares, C.M.; Loyola-Sepulveda, R.H.; Mudge, S.M**	**headspace**	**GC-MS**
228	VOCs in seawater	SPME of Volatile Organic Compounds. Estimation of the Sorption Equilibrium from the Kovats Index Effect of Salinity and Humic Acids and the Study of the Kinetics by the Development of an "Agitated/Static Layer" Model J. Chromatogr. A 761: 205-217 (1997) Dewulf, J., Everaert, M., Van-Langenhove, H.	100µm PDMS 45 min immersion stirring salt added	GC-FID
		Determination of squalene in seawater by SPME-GC-MS and		

840	Squalene in seawater	the concentration variation of squalene in redtide seawater. *Fenxi Huaxue (2000) 28(11) 1326-1330* Zhao, M. Q.; Li, G. K.; Luan, T. G.; Zhang, Z. X.	100µm PDMS 45 min immersion stirring	GC-MS
165	Triazines, organic pesticides in sewage water	Development of a Prototype System for Quasi-Continuous Analysis of Organic Contaminants in Surface or Sewage Water Based on In-Line Coupling of SPME to GC J. Chromatogr. A 737 (1): 59-65 (1996) Eisert, R., Levsen, K.	85µm polyacrylate 10 min 300mL/min flow	GC-ECD, -FID
166	Pesticides in water	Design of Automated SPME for Trace Analysis of Organic Compounds in Aqueous Samples J. Chromatogr. A 776: 293-303 (1997) Eisert, R., Pawliszyn, J.	100µm PDMS 30 min stirring	GC-FID
184	BTEX, pesticides in water	Sample Preparation for GC with SPE & SPME Chromatogr. 37: 205-236 (1997) Penton, Z.	100µm PDMS 2-20 min immersion, stirring salt added	GC-FID
236	Aromatic hydrocarbons in water	Porous-Layer Solid-Phase Microextraction Using Silica Bonded Phase Anal. Chem. 69: 190-195 (1997) Liu, Y., Shen, Y., Lee, M.	30µm C8 silica bonded metal fiber 20 min stirring	GC-FID
189	PAHs in water extract	High Temperature Water Extraction Combined with SPME Anal. Commun. 33: 421-424 (1996) Daimon, H., Pawliszyn, J.	30µm PDMS 70 min stirring	GC-FID
220	C6-C11 hydrocarbons in water	Initial Bandwidth Resulting from Splitless and Solid-Phase Microextraction Gas Chromatographic Injections J. High Res. Chromatogr. 20 (2): 77-80 (1997) Snow, N., Okeyo, P.	100µm PDMS 10 min immersion stirring	GC-FID
138	PAHs in water	Optimizing Split/Splitless Injection Port Parameters for SPME J. Chromatogr. A 740 (1): 139-145 (1996) Langenfeld, J., Hawthorne, S., Miller, D.	7µm & 100µm PDMS 5 hr immersion, stirring	GC-FID
211	Nitro musk compounds in cosmetic products	Nitro Musks in Cosmetic Products: Determination by Headspace SPME and GC with Atomic Emission Detection: Dynamics of Organic Compound Extraction from Water, Using Liquid-Coated Fused Silica Fibers Chromatogrphia 45; 138-144 (1997) Struppe, C., Schaefer, B., Engewald, W.	100µm PDMS 1-60 min headspace	GC-AID
243		Dynamics of Organic Compound Extraction from Water, Using Liquid-Coated Fused Silica Fibers Anal. Chem. 66: 1186-1199 (1994) Arthur, C., Pawliszyn, J.		
437	Review	SPME and Its Utilization in Environmental Analysis Chem. Listy (1998), 92(8), 633-642 Sedlakova, J., Matisova, E., Slezackova, M.		
2592	**Review articles**	**New materials in sorptive extraction techniques for polar compounds** ***J. CHROMATOGR. A 1152, #1-2, 14-31 (08 JUN 2007)*** **Fontanals, N.; Marce, R. M.; Borrull, F.**		
549	Review of 52 refs.	Trends in SPME for determining organic pollutants in environmental samples Trends Anal. Chem. 1999, 18(8), 557-568 Penalver, A., Pocurull, E., Borrull, F., Marce, R.	Varied	
550	Proceeding of Extech	Advances in Extraction Technology: A report from Extech '99 LC-GC Current Trends and development in Sample Prep, Sept. 1999, Vol. 17., No. 90, S25-S30	Varied	

		Lord, H., Pawliszyn, J.		
551	Overview of SPME	Sample Preparation for GC with SPE and SPME Advances in Chromatography, Vol. 37, 1966, 205-236 Book chapter by M. Dekker, New York, 1996 Penton, Z.		
244		Solid Phase Microextraction -- A Unique Tool for Chemical Measurements Can. J. Chem. 74: 1297-1308 (1996) Gorecki, T., Boyd-Boland, A., Zhang, Z., Pawliszyn, J.		
245		Solvent Free Sample Preparation Techniques Based on Fiber and Polymer Technologies Environ. Sci. Technol. 28: 569A-574A (1994) Boyd-Boland, A., Chai, M., Luo, Y., Zhang, Z., Yang, M., Gorecki, T., Pawliszyn, J.		
246	BTEX, pesticides in water	Solid Phase Microextraction Tech. Aquat. Toxicol. 459-477 (1996) Webster, G., Sarna, L., Graham, K.	100µm PDMS 10-30 min immersion stirring	GC-FID, -ECD
247		Solid Phase Microextraction Technique for Gas Chromatography Huaxue 54 (3): 119 (1996) Huang, S.	overview article	
248	BTEX, pesticides in water	Sample Preparation for Gas Chromatography with SPE and SPME Adv. Chromatogr. (N.Y.) 37: 205-236 (1997) Penton, Z.	100µm PDMS 2-20 min immersion, stirring salt added	GC-FID
249	BTEX, pesticides in water	Solid Phase Microextraction-SPME, State of the Art Chromatography Kaiser, O. (Ed.) Incom, Dusseldorf, pp153-166 (1997) Kern, H., Penton, Z.	100µm PDMS 2-20 min immersion, stirring	GC-FID
2493	**Contaminants in SPME process**	**Potential sources of background contaminants in solid phase extraction and microextraction** ***J Separation Sci. 30, #7, 1029-1036 (MAY 2007)*** **Stiles, R.; Yang, III; Lippincott, R.; Murphy, E.; Buckley, B.**	**70µm CW/DVB**	
250	Reference book	Solid Phase Microextraction: Theory and Practice VCH, New York, 275pp (1997) Pawliszyn, J.	various fibers and conditions	
731	Reference book	Applications of Solid Phase Microextraction Edited by Janusz Pawliszyn RSC Chromatography Monographs	35 applications described	
732	Overview	Theory of solid phase microextraction *J. Chromatogr. Sci. (2000), 38(7), 270-278* Pawliszyn, J.		
733		Researchers are giving SPME a second look *R&D Magazine, February 1999, 44-45*	30:50 Carboxen/DVB/PDMS headspace	GC-FID
251	Overview	Sample Preparation and Solid-Phase Extraction LC-GC 15: 1106, 1108, 1110-1113, 1116-1117 (1997) Majors, R., Raynie, D.	no fibers or conditions shown	
252	Formaldehyde, surfactants in air and water	Recent Advances in Solid Phase Microextraction LC-GC May Supplement, ppS41-S46 (1998) Lord, H., Pawliszyn, J.	65µm PDMS/DVB, Carbowax/TPR fiber varied conditions	GC-MS, HPLC-UV

2494	**VOCs in air and water matrices**	**Sample preparation for the analysis of volatile organic compounds in air and water matrices** ***J. Chromatogr. A 1153, #1-2, 130-144 (JUN 15 2007)*** **Demeestere, Kristof; Dewulf, Jo; De Witte, Bavo; Van Langenhove, H.**	**review article**	
2495	**Review article sample handling methods**	**Sample handling strategies for the determination of persistent trace organic contaminants from biota samples** ***ANAL. CHIM. ACTA 590, #1, 1-16 (02 MAY 2007)*** **Fidalgo-Used, N.; Blanco-Gonzalez, E.; Sanz-Medel, A.**		
255	Thiophenes in water	Application of SPME/GC-MS to Characterize Metabolites in the Biodesulfurization of Organosulfur Model Compounds in Gitumen Environ. Sci. Technol. 32 (3): 421-426 (1998) MacPherson, T., et al.	85µm polyacrylate 20 min immersion pH 2	GC-MS
256		Construction of an Interface for SPME-PC-SFC J. High Resolut. Chromatogr. 34 (10): 275-277 (1997) Medvedovici, A., Sandar, P.		
		Automated In-Tube SPME Coupled to HPLC		
257	Phenylurea pesticides in water	Anal. Chem., Vol. 69, No. 16, August 15, 1997, 3140-3147 Eisert, R., Pawliszyn, J.	Omegawax 250 25µL, 10 flush cycles	HPLC-UV, 245nm
258	PAHs in water	Effect of Heating the Interface on Chromatographic Performance of SPME Coupled to HPLC Anal. Commun. 34 (11): 365-369 (1997) Daimon, H., Pawliszyn, J.	100µm PDMS 60 min immersion heat desorb 22-180°C	HPLC-UV, 254nm
259	PAHs in water	Effect of Heating the Interface on Chromatographic Performance of SPME Coupled to HPLC Analyst (Cambridge) 122 (11): 365-369 (1997) Daimon, H., Pawliszyn, J.	100µm PDMS 60 min immersion heat desorb 22-180°C	HPLC-UV, 254nm
2181	**Heated interface for HPLC**	**Development of an improved heated interface for coupling SPME to high-performance liquid chromatography** ***J. Chromatogr. A, 1105, #1-2, 208-212 (2006)*** **Alves, C.; Contadori, A..; Fernandes, C.; Lancas, F.; Neto, A. Santos; R., Jose C.**		
260	Hg (II) ion in water	SPME Combined with HPLC for the Determination of Metal Ions Using Crown Ether as Selective Extracting Reagent J. Microcolumn Sep. 167-173 (1998) Jia, C., Luo, Y., Pawliszyn, J.	polypropylene hallow fiber, 30 min immersion derivative: dibenzo-18-crown-6	HPLC-UV, 254nm
734	Dopamine in biological matrix	Analysis of biogenic amines by SPME and HPLC with electrochemical detection *J. Chromatogr. A, (2000) 873, 396* Auger, J., Boulay, R., Jaillais, B., Delion-Vancassel, S.	Carbowax-TPR	HPLC electrochem
368	Aromatic amines in wastewater	SPME Coupled with HPLC for the Determination of Aromatic Amines Anal. Chem., Vol. 71, No. 2, January 15, 1999, 310-316 Wu, Y., Huang, S.	50µm Carbowax/TPR, 65µm PDMS/DVB, 30 min or 20 min Na2SO4 buffer added	HPLC-UV, 280nm
		Automated In-Tube SPME Coupled to HPLC		
407	Phenylurea pesticides in water	Anal. Chem., Vol. 69, No. 16, August 15, 1997, 3141-3147 Eisert, R., Pawliszyn, J.	Omegawax 250 25uL, 10 flush cycles	UV, 245nm
2695	**Pesticides in apple samples**	**Headspace SPME in pesticide residues analysis: 2. Apple samples.** ***Pesticidi i Fitomedicina 22, #2, 173-176 (2007)*** **Durovic, R.; Milinovic, J.; Markovic, M.; Markovic, D.**	**100µm PDMS 60 min @ 60°C headspace**	**GC-MS**

2177	**Carbamate pesticides**	**Behaviour of carbamate pesticides in GC and their determination with SPE and SPME as preconcentration steps** ***J SepSci. 28, #16, 2130-2138 (2005)*** **Carabias-Martinez, R.; Garcia-Hermida, C.; Rodriguez-Gonzalez, E.; Ruano-Miguel, Luis**	**85µm polyacrylate**	**GC-MS**
735	Carbamate pesticides in water	Automated in-tube SPME-HPLC for Carbamate pesticide analysis *J. Chromatogr. A, (2000) 873(1), 137-147* Gou, Y, Eisert, R., Pawliszyn, J.	Intube capillaries	HPLC
736	Carbamate pesticides in water	In-tube SPME coupled to capillary LC for Carbamate analysis in water samples *Anal. Chem. 2000, 72(13), 2774-2779* Gou, Y., Pawliszyn, J.	Intube capillaries	HPLC
737	Carbamate pesticides in water	On-line coupling of in-tube SPME to HPLC for analysis of carbamates in water samples: comparison of two commercially available autosampler *J. Microcolumn Sep. (2000), 12(3), 125-134* Gou, Y., Tragas, C., Lord, H., Pawliszyn, J.	Intube capillaries	HPLC
789		Development of effective sample pretreatment by in-tube SPME and its application *Chromatography (2000) 21(4), 276-279* Kataoka, Hiroyuki; Wu, Jingcun; Lord, Heather L.; Pawliszyn, J.	Intube capillaries	
810		Sample preparation technique using fiber-in-tube SPME *Chromatography (2000), 21(4), 284-285* Jinno, K; Kawazoe, M; Saito, Y; Hayashida, M		
571	175 references review	On-line combination of aqueous-sample preparation and capillary gas chromatography J-Chromatogr,-A. 21 May 1999; 842(1-2): 391-426 Louter,-AJH; Vreuls,-RJJ; Brinkman,-UAT	various references of SPME & SPE	
552		Solid phase microextraction turned inside out Che. Aust. 1999, 66(6), 9-11 Tan, D., Marriott, P., Lee,H., Morrison, P.	Intube capillaries	
412		Solventless Analytical Separation Method -- SPME/Microcolumn LC Chromatography (1998), 19(2), 6063 Jinno, K.		HPLC
261	Fatty acid methyl esters in air and water	Derivatization/SPME: New Approach to Polar Analytes Anal. Chem. 69(2): 196-205 (1997) Pan, L., Pawliszyn, J.	85µm polyacrylate 2 hr headspace, pH 6 derivative: 1-pyrenyl-diazomethane	GC-FID
819	Formaldehyde	Solid phase analytical derivatization: enhancement of sensitivity and selctivity of analysis *J.Chromatogr. A., 843, 19-27* Rosenfeld, J.	On-fiber derivatization	
553	9 references	New Gas chromatographic approach to polar compounds by derivatization-SPME Bunseki, 1999 (7), 595-597 Takauchi, M.	Japanese	
262	Alcohol and ketones in water	Strategies for the Analysis of Polar Solvents in Liquid Matrixes Anal. Chem. 70 (1): 19-27 (1998) Gorecki, T., Martos, P., Pawliszyn, J.	Nafion fiber 10 min headspace, stirring	GC-ECD
		Absorption of hydrophobic compounds into the		

738	Phenanthrene, PCB pentachlorobenzene in water	poly(dimethylsiloxane) coating of SPME fibers: high partition coefficients and fluorescence microscopy images *Anal. Chem. (2000) 72(3), 459-464* Mayer, P., Vaes,W., Hermens, J.	7µm PDMS 10min	GC-MS
739	Hydrophobic compounds (PCBs) in water	Nonequilibrium SPME for determination of the freely dissolved concentration of hydrophobic organic compounds: matrix effects and limitations *Anal. Chem 2000, 72(13), 2802-2808* Oomen, A., Mayer, P., Tolls, J.	7µm PDMS 0.5-60min @ 37°C	GC-ECD
263	nC8 to nC14, neat	Methodological Aspects of Headspace SPME. Application J. High Resolut. Chromatogr. 20 (4): 217-221 (1997) Schafer, B. Hennig, P., Engewald, W.	various fibers 80°C, 5 min headspace	GC-FID
264	Phenol, alcohols in water	Headspace SPME. Dynamics and Quantitative Analysis Before Reaching a Partition Equilibrium Anal. Chem. 69 (16): 3260-3266 (1997) Ali, J.	85µm polyacrylate 1-80 min at 25°C, 1-40 min at 80°C headspace, stirring	GC-MS
413	Tetraethyllead in water	SPME as a Sample Introduction Technique for Radio Frequency Glow Discharge MS Anal. Commun. (1997), 34(10), 275-277 Gorecki, T., Belkin, M., Caruso, J., Pawliszyn, J.	30µm PDMS 5 min headspace, stirred	radio frequency glow discharge MS
265		Effect of Sample Volume on Quantitative Analysis by SPME, Part 1 - Theoretical Considerations Analyst (Cambridge) 122 (10): 1079-1086 (1997) Gorecki, T., Pawliszyn, J.		
2835	**Theory**	**Steady-state diffusion regime in solid-phase microextraction kinetics** ***Anal Chim Acta 609, #1, 113-119 (Feb 18 2008)*** **ter Laak, Thomas L.; van Leeuwen, Herman P.; Benhabib, Karim**		
740	Theory	Kinetics of SPE and SPME in thin adsorbent layer with saturated sorption isotherm *J.Chromatogr. A (2000) 873(1), 39-51* Emenov, S, Koziel, J., Pawliszyn, J.		
769	BTEX from water	The use of polymeric fullerenes as a new coating for SPME *Chromatographia (2000) 52(11/12), 803-809* Xiao, C.; Liu, Z. ; Wang, Z.; Wu, C.; Han, H.	headspace	GC-FID
266	Organics in water	SPME as a Tool to Determine Membrane/Water Partition Coefficients and Bioavailable Concentrations in vitro Systems Chem. Res. Toxicol. 10 (10): 1067-1072 (1997) Vae, W., et al.	85µm polyacrylate 9-17 min immersion, stirring	GC-FID
267	PAHs, phenols, anilines in water	Sol-Gel Coating Technology for the Preparation of SPME Fibers of Enhanced Thermal Stability Anal. Chem. 69 (19): 3889-3898 (1997) Chong, S. et al.	Solgel coating 30 min stirring	GC-FID
2231	**Metallic species**	**A review on SPME- HPLC as a novel tool for the analysis of toxic metal ions** ***Talanta 68 #3, 842-849 (2006)*** **Kaur, Varinder; Malik, Ashok Kumar; Verma, Neelam**	**review article**	**HPLC**
2150	**Organometallic**	**Applications of SPME for the determination of metallic and organometallic species** ***J. Sep. Sci., 29, #3, 333-345 (2006)*** **Kaur, Varinder; Malik, Ashok Kumar; Verma, Neelam**	**headspace** **NaBEt4 derivatives**	**GC-FID**
2615	**Co(II), Ni(II), Pd(II)**	**A new method for simultaneous determination of Co(II), Ni(II) and Pd(II) as morpholine-4-carbodithioate complex by SPME-HPLC-UV system**		**HPLC-UV**

	in water	***Talanta 73, #3, 425-430 (Sep 30 2007)*** **Kaur, Varinder; Malik, Ashok Kumar**		
2491	**Co(II), Ni(II), Pd(II) in water**	**A new approach for simultaneous determination of Co(II), Ni(II), Cu(II), and Pd(II) using 2-thiophenaldehyde-3-thiosemicarbazone (TPTS) . as reagent by SPME-HPLC** ***Anal Chim Acta 603, #1, 44-50 (2007 Nov 5)*** **Kaur, Varinder; Aulakh, Jatinder Singh; Malik, Ashok Kumar**	**PDMS fiber** **TPTS derivative**	**HPLC-UV**
911	Organometalics	Development of new SPME fibers by sol-gel technology for SPME-HPLC determination of organometals *Analytica Chimica Acta 1999, 402(1-2) 67-69* Gabatu, T., Sutton, K., Caruso, J.	Solgel coatings	HPLC
741	BTEX, herbicides in water	High-performance polyethylene glycol-coated SPME fibers using sol-gel technology *J. Chromatogr. A 893 (2000) 157-168* Wang, Z., Xiao, C., Wu, C., Han, H.	PAG sol-gel fiber 30°C, headspace salt added, pH adjusted	
554		Sol-gel method for the preparation of SPME fibers Anal. Lett., 1999, 32(8), 1675-1681 Zhou, Z., Wang, Z., Qu, C., Zhan, W., Xu, Y.	Solgel coatings	
268	BTEX in soil	Field-Portable SPME/Fast GC for Trace Analysis Field Anal. Chem. Technol. 1 (5): 277-284 (1997) Gorecki, T., Pawliszyn, J.	30µm PDMS 2 min, headspace, stirring	GC-FID, -PID
555		Optimization of the SPME device design for field applications Fresenius' J. Anal. Chem. 1999, 364(7), 610-616 Muller, L., Gorecki, T., Pawliszyn, J.	varied coatings	
742	Equipment design	Fiber Conditioners for SPME: Design, Testing, and application *J.High Resol. Chromatogr. 2000, 23(4) 343-347* Koziel, J., Shurmur, B., Pawliszyn, J.		
948	Organic pollutants environmental matrices	SPME- a convenient tool for the determination of organic pollutants in environmental matrices *Anal Chem (2001) 31(1), 1-18* Zygmunt, B.; Jastrzebska, A.; Namiesnik, J.	review article	
269	Organics in air and water	New Trends in SPME Crate. Rev. Anal. Chem. 27 (2): 103-135 (1997) Eisert, R., Pawliszyn, J.	various fibers and conditions	GC, HPLC
556	Review of technique	Solid Phase Microextraction TrAC, Trends Anal. Chem. (1999), 18(4), 272-282 Prosen, H., Zupancic-Kralj, L.,		
806	Review of technique	Solid-phase microextraction (SPME) with direct detection a new analytical dimension *Mitt. Lebensmittelunters. Hyg (2000) 91(6), 690-699* Luisier, J; Villettaz, J; Azodanlou, R; Amado, R		GC
270	C6-C16 hydrocarbons in water	Optimizing SPME-GC Injections LC-GC 15 (12): 1130-1136 (1997) Okeyo, P., Snow, N.	7µm, 30µm, 100µm PDMS 10 min stirring	GC-FID
403	PAHs in water	Theoretical and Practical Comparison of SPME and Liquid-Liquid Extraction with Large Volume Injection for Analysis of Aqueous Samples by GC Book chapter Snow, N.	overview article	GC-FID
2313	**1,4-hydroxy-**	**Rate constants for the reactions of OH radicals with a series of 1,4-hydroxyketones**	**headspace**	**GC-FID**

	ketones	***J Photochemistry and Photobiology B:176 #1-3, 143-148 (2006)*** **Baker, Jillian; Arey, Janet; Atkinson, Roger**	**hydroxylamine derivatives**	
743	Semivolatiles in water	Use of bench top photochemical reactor and SPME to measure semivolatile organic compound-hydroxyl radical rate constants *Environ. Toxicol. Chem 2000, 19(7), 1705-1710* Bernhard, M., Simonich., S.		
271	PCBs in water	Adsorption versus Absorption of Polychlorinated Biphenyls onto SPME Coatings Anal. Chem. 70 (9): 1866-1869 (1998) Yang, Y., Hawthorne, S., Miller, D., Liu, Y., Lee, M.	100µm & 7µm PDMS 5 hr stirring	GC-ECD
744	PCBs in water	Response to comments on adsorption versus absorption of polychlorinated biphenyls onto SPME coatings *Anal. Chem. 72 (3): 642-6643 (2000)* Yang, Y., Hawthorne, S., Miller, D., Liu, Y., Lee, M.	100µm PDMS 5 hr stirring	GC-ECD
817	Aroclor 1254	Application of SPME-GC-MS to characterize intermediate in a joint solar-microbial process for total mineralization of Aroclor 1254 *J.Chromatogr A 873 (2000) 53-61* Rhofr, C., Hawari, J.	85µm polyacrylate 40min. stirring 2pH w/H_3PO_4	GC-MS
2168	**Review article**	**Atomic spectrometry update. Clinical and biological materials, foods and beverages** ***J Anal At Spectrom 21, #4, 439-491 (2006)*** **Branch, S.; Day, .; Patriarca, M.; Taylor, A.; White, M.**		
745	Review article	Evolution of solid phase microextracton technology *J. Chromatogr. A 885(2000) 153-193* Lord, H., Pawliszyn, J.	various	
2488	**Review article**	**Recent developments in headspace microextraction techniques for the analysis of environmental contaminants in different matrices** ***J. Chromatogr. A 1152, #1-2, 70-96 (JUN 8 2007)*** **Lambropoulou, D.; Konstantinou, Ioannis K.; Albanis, Triantafyllos A.**		
2505	**Off-gassing products from siloxanes**	**Thermal degradation in a trimodal poly(dimethylsiloxane) network studied bymultiple quantum NMR** ***J Phys Chem B 111, #45, 12977-12984 (Nov 15 2007)*** **Alviso, C.; Chinn, S.; Giuliani, J.; Gjersing, E.; Herberg, J.; Jones, T.; Maxwell, R.; Pearson, M.; Wilson, T.**	**headspace**	**GC-MS**
2667	**Standarization method**	**Equilibrium in-fiber standardization method for determination of sample volume by solid phase microextraction** ***Analyst 132, #5, 425-30 (2007 May)*** **Niri, Vadoud H; Pawliszyn, Janusz**	**PDMS fiber headspace**	**GC-MS**
557	Benzene, 4-methylpentan-2one in water	Theory of analyte extraction by selected porous polymer SPME fibers Analyst (Cambridge, UK) (1999), 124(5), 643-649 Gorecki, T., Yu, Z., Pawliszyn, J.	PDMS/DVB, CW/DVB	
2390	**VOCs from water, pump oil**	**SPME-GC-TOFMS utilized for the evaluation of the new-generation super elastic fiber assemblies.** ***Anal. Chim. Acta 581, #2, 221-231 (2007-01-09)*** **Setkova, L.; Risticevic, S.; Linton, C.; Ouyang, G. ; Bragg, L.; Pawliszyn, J.**	**headspace**	**GC-TOFMS**
558	Organics in solvents	New SPME fibers, Not only for aqueous systems LaborPraxis (1999), 23(3), 30-32, 34 Haag, Ingo	PDMS/Carboxen/DVB Nafion	
573	BTEX in Methanol	New coating surfaces of fibers for SPME J-Microcolumn-Sep. May 1999; 11(5): 377-383 Ligor,-M; Scibiorek,-M; Buszewski,-B	evaluation of various coatings	
		SPME application in GC/olfactometry dilution analysis		

589	Coffee sample	J-Agric-Food-Chem. Apr 1999; 47(4): 1616-1618 Deibler,-KD; Acree,-TE; Lavin,-EH	PDMS fibers 15 min headspace	GC-FID
355	Terbutryn in water	SPME with Rotation of the Microfiber Anal. Chem 1998, 70, 3981-3982 Geppert, H.	30µm PDMS immersion stirring	GC-FID
409	Organics in water	Partitioning of Organic Chemicals to Polyacrylate-Coated SPME Fibers: Kinetic Behavior and Quantitative Structure Property Relationship Anal. Chem. 68: 4458-4462 (1996) Vaes, W., Harnwijk, C., Urreatarazu, R., Verhaar, H.	85µm polyacrylate 35 min immersion stirring pH 7.5	GC-FID, -ECD, MS
408	Methylmercury iodide in soil and water	Application of Isotope Dilution to Ion Trap GC-MS Anal. Chem 71, No. 2, Jan. 15, 1999, pg. 483-488 Barshick, C., Barshick, E., Walsch, E., Vance, M., Britt, P.	65µm PDMS/DVB 5 min immersion stirring	GC-MS
2748	**Anatoxin-a in water**	**Improved conditions for the application of SPME prior to HPLC-FLD analysis of anatoxin-a.** ***J Separation Sci. 30, #15, 2522-2528 (2007)*** **Rellan, S.; Gago-Martinez, A.**	**NBD-F derivative** **Various fibers**	**HPLC-FLD**
974	Anatoxin-a in aqueous samples	Analysis of anatoxin-a in aqueous samples by SPME using on fibre derivitization *J.Chromatogr. A (2002) 963(1-2), 295-302* Namera, A.; So, A.; Pawliiszyn, J.		HPLC
987	Polychlorinated biphenyls	Photolysis of polychlorinated biphenyls by SPME *J.Chromatogr. A (2002) 963(1-2), 37-47* Lores, M.; Llompart, M.; Gonzalez-Garcia, R.; Gonzalez-Barreiro, C.; Cela, R.		
994	Germanium	Comparison of chloride- and hydride-generation for quantitation of germanium by headspace SPME inductively coupled plasma-mass spectrometry. *Analytical and Bioananalytical Chemistry (2002) 373(8), 849-855* Guo, X.M.; Mester, Z.; Sturgeon, r.e.		ICP TOF MS
995		Sample preparation in chromatography for long dash concentration, purification and filtration: guide to choice of equipment. *Laboratorio 2000 (2002) 16 (6), 34-50* Polesello, A.		
1008		The development of selective and biocompatible coatings for solid phase microextraction *Journal of Separation Science (2003) 26 (3-4), 251-260.* Mullett, Wayne M.; Pawliszyn, Janusz		
1010		Rearrangement of p -menthane terpenes by Carboxen during HS-SPME. *Journal of Separation Science (2002) 25 (10-11), 685-690.* Zabaras, D.; Wyllie, S. G.	75µm Carboxen	GC-MS
1030	Review	Headspace analysis in modern gas chromatography. *Trends in Analytical Chemistry (2002) 21 (9-10), 608-617.* Snow, N. H.; Slack, G. C.		
1045		Time-weighted average passive sampling with a Solid-Phase Microextraction device *Analytical Chemistry (2003) 75 (9), 2004-2010.* Chen, Yong; Pawliszyn, Janusz	Various	
1061	Review article	Research progress in solid-phase microextraction. *Fenxi Kexue Xuebao (2002) 18 (5), 429-435.* Chen, M.; Yuan, D. X.; Xu, P. X.; Chang, D. H.		

1075	High concentration SPME	Extending the solid-phase microextraction technique to high analyte concentrations: measurements and thermodynamic analysis. *Analytical Chemistry (2002) 74(5), 1031-1037* Gill, K.; Brown, W. A.		
2897	**Flavors from custard desserts**	**Interactions between flavour release and rheological properties in model custard desserts: Effect of starch concentration and milk fat Food Chemistry 108, #4, 1183-1191 (JUN 15 2008) Kersiene, M.; Adams, An; Dubra, A. De Kimpe, N.; Leskauskaite, D.**	**headspace**	**GC/MS**
2309	**Flavors from milk protein**	**Properties of oregano (Origanum vulgare L.), citronella (Cymbopogon nardus G.) and marjoram (Majorana hortensis L.) flavors encapsulated into milk protein-based matrices *Food Res. Int. 39 #4, 413-425 (2006)* Baranauskiene, R.; Dewettinck, K.; Venskutonis, P.; Verhe, R.**	**65µm PDMS/DVB 85µm polyacrylate headspace 10 min**	**GC/MS**
1102	Static and dynamic sampling	Comparison of different methods: static and dynamic headspace and solid-phase microextraction for the measurement of interactions between milk proteins and flavour compounds with an application to emulsions. *Journal of Agricultural and Food Chemistry (2002) 50(6), 1497-1501* Fabre, M.; Aubry, V.; Guichard, E.		
1117		On-site calibration method based on stepwise solid-phase microextraction *Journal of Chromatography A (2003) 999 (1-2), 43-50.* Chen, Yong; Pawliszyn, Janusz; Xiong, Guohua	75 um Carboxen/PDMS	
1118		Solid-phase microextraction fibre-water distribution constants of more hydrophobic organic compounds and their correlations with octanol-water partition coefficients *Journal of Chromatography A (2003) 999 (1-2), 35-42.* Paschke, A.; Popp, P.	Various	
1134	VOCs	Optimization of solid-phase microextraction of volatiles. *Journal of Chromatography, A (2002) 960(1-2), 159-164* Matisova, E.; Medved apostrophe ova, M.; Vraniakova, J.; Simon, P.		
1203		Anodized zinc wire as a solid-phase microextraction fiber. *Chromatographia (2003) 57 (11-12), 799-804.* Djozan, D.; Abdollahi, L.		GC
1229		Monolithic silica column for in-tube solid-phase microextraction coupled to high-performance liquid chromatography. *Journal of Chromatography, A (2003) 985 (1-2), 351-357.* Shintani, Y.; Zhou, X. J.; Furuno, M.; Minakuchi, H.; Nakanishi, K.		HPLC
1230	PAH's in water	Thin-film microextraction. *Analytical Chemistry (2003) 75 (4), 1002-1010.* Bruheim, I.; Liu, X. C.; Pawliszyn, J. *		GC-MS
1245	Review	Coupling solid-phase microextraction to liquid chromatography. A review. *Analytical and Bioanalytical Chemistry (2003) 375 (1), 73-80.* Zambonin, C. G.		
1277		A new solid-phase microextraction adsorbent of polyphenylethylene-butyl acrylate and its application. *Fenxi Shiyanshi (2003) 22 (3, 1-4.)* Shen, S. C.; Wang, W. B.; An, H.		GC-FID
1288		Copper sulfide wire as a selective fiber in solid-phase microextraction. *Chromatographia (2003) 58 (3-4), 221-224.* Djozan, D.; Amir-Zehni, M.		GC-FID
1303		CE in a nonuniform capillary modulated by a cylindrical insert, and zone-narrowing effects during sample injection. *Analytical Chemistry (2003) 75 (14), 3656-3659.* Stoyanov, A. V.; Liu, Z.; Pawliszyn, J. *		CE

1304		Styrene-butyl acrylate copolymer as solid-phase microextraction adsorbent and its applications. *Sepu (2003) 21 (3), 285-287.* Xue, H. Y.; Shen, S. C.*; Wang, W. B.; An, H.	Styrene-butyl acrylate copolymer	
1353	Aliphatic alcohols, BTEX	Anodized aluminium wire as a solid-phase microextraction fibre. Analytical Chemistry (2001) 73(16), 4054-4058. Djozan, D.; Assadi, Y.; Haddadi, S. H.		GC
1393	Phenols	Solid-phase microextraction using fused-silica fibers coated with sol-gel-derived hydroxy-crown ether. Analytical Chemistry (2001) 73(11), 2429-2436. Zeng, Z. R.; Qiu, W. L.; Huang, Z. F.		
1433	GC tools	Tools simplify GC analysis of trace components Research and Development (2001) 43(8), 36-39. Marsill, R.		GC
1492	Field sampling with SPME	Solid-phase microextraction (SPME) for rapid field sampling and analysis by gas chromatography-mass spectrometry (GC-MS). *Trends in Analytical Chemistry (2002) 21(8), 534-543* Smith, Philip A.; Hall, Tara; Hook, Gary L.; Kimm, Gregory L.		GC-MS
1498	Headspace sampling	Headspace sampling: Critical part in evaluating true gas phase concentrations. *Abstracts of Papers American Chemical Society (2002) 224(1-2), AGFD 72* Zehentbauer, Gerhard N.; Eddy, Cindy L.; Pelfrey, Christa S.; Rodriguez, Pete A.		
1515	Use of SPME with complex environmental samples	Theoretical considerations on the use of solid-phase microextraction with complex environmental samples. *Environmental Science & Technology (2002) 36(15), 3385-3392* Zeng, Eddy Y.; Noblet, James A.		
1051	Organometallic arsenobetaine	Electrochemical control of solid phase micro-extraction: conducting polymer coated film material applicable for preconcentration/analysis of neutral species. *Talanta (2002) 58 (4), 739-745.* Yates, B. J.; Temsamani, K. R.; Ceylan, O.; Oztemiz, S.; Gbatu, T. P.; LaRue, R. A.; Tamer, U.; Mark, H. B., Jr.*		HPLC-ICP/MS
1073		Helical sorbent for fast sorption and desorption in solid-phase microextraction-gas chromatographic analysis. *Analytical Chemistry (2002) 74 (21), 5501-5506.* Ciucanu, I.	PDMS	GC
1078		Systematic error in automated in-tube solid-phase microextraction *Journal of Chromatography A (2003) 995 (1-2), 1-10.* Raghani, Anil R.; Schultz, Kristin N.		
1097		Flow-sampling system for solid-phase microextraction in situ. *Fenxi Huaxue (2002) 30 (11), 1394-1398.* Xu, D. Y.; Liu, M.; Liang, Y. L.; Liu, H. W.; Yin, B. Z.*		
1115	Organotin	Physico-chemical approach to study organotin sorption-desorption during solid-phase microextraction *Journal of Chromatography A (2003) 999 (1-2), 61-70.* Aguerre, Sandrine; Lespes, Gaetane; Potin-Gautier, Martine		
1124		High extraction efficiency solid-phase microextraction fibers coated with open crown ether stationary phase using sol-gel technique *Analytica Chimica Acta (2003) 486 (1), 63-72.* Yun, Lei	Various	

1125		A gas sample pre-concentration device based on solid phase microextraction (SPME) and temperature programmed desorption (TPD) *Instrumentation Science and Technology (2003) 31 (2), 155-164.* Basile, Franco	Various	
1136	Ehtylene oxide	Determination of ethylene oxide by solid-phase microextraction device with on-fiber derivatization. *Journal of Chromatography, A (2003) 991 (1), 1-11.* Tsai, S. W.; Wu, K. K.	Carboxen/PDMS	GC-MS
1137	Amines	Modified copper wire as solid-phase microextraction fibre, selective extraction of some amines. *Chromatographia (2002) 56 (9-10), 611-616.* Djozan, D.; Assadi, Y.; Karim-Nezhad, G.		GC
1143		Modified headspace-SPME-GC device for sampling volatile compounds in acidic medium *Journal of Separation Science (2003) 26 (6-7), 624-628.* Araujo, W.A.; Cappelaro, E.A.; Lacerda, C.A.; Lancas, Fernando M.		GC-FPD
1157		Hydroxyfullerene as a novel coating for solid-phase microextraction fibre with sol-gel technology. *Journal of Chromatography, A (2002) 978 (1-2), 37-48.* Yu, J. X.; Dong, L.; Wu, C. Y.*; Wu, L.; Xing, J.		GC-ECD
1212		Novel benzo-15-crown-5 sol-gel coating for solid-phase microextraction *Journal of Chromatography A (2003) 1005 (1-2), 1-12.* Peng, Jiagang; Wang, Danhua; Wu, Caiying; Xing, Jun		GC
1214		New high-performance cryofocalizer injector for in-tube solid-phase microextraction and headspace capillary gas chromatographic applications. *Journal of Chromatography, A (2003) 985 (1-2), 67-78.* Nardi, L.		
1247		Electrochemically assisted solid phase micro-extraction using L-dopa imprinted conducting polymer electrode fibers: Structural aspects. *Abstracts of Papers American Chemical Society (2003) 225 (1-2), anyl 98.* Schmiesing, Carla S.; Brooks, Elwood E.; Galal, Ahmed; LaRue, Rebecca A.; Mark, Harry B., Jr.; Temsamani, Khalid R.		
1259		Patterns in the precision of quantitative data from multicomponent gas chromatographic or gas chromatographic-mass spectrometric analysis *Journal of Chromatography, A (2003) 1008 (1), 105-114.* Garcia, M.A.; Martinez-Castro, I.; Sanz, J.; Soria, A.C.		GC-MS
1270		Solid-phase microextraction from small volumes of sample in a glass capillary. *Journal of Chromatography, A (2003) 988 (1), 25-32.* Zhu, P. L.; Liu, C. L.; Liu, M. C.		
1281		Hydroxycarbonyl products of the reactions of selected diols with the OH radical *Journal of Physical Chemistry A (2003) 107 (32), 6200-6205.* Arey, Janet; Atkinson, Roger; Bethel, Heidi L.		GC-FID
1329		A comparison of alkyl derivatization methods for speciation of mercury based on solid phase microextraction gas chromatography with furnace atomization plasma emission spectrometry detection *Journal of Analytical Atomic Spectrometry (2003) 18 (8), 902-909.* Grinberg, P.; Campos, R. C.; Mester, Z.; Sturgeon, R. E.*	PDMS	GC-FAPES
1332		Spectroscopic Studies of Sorbing Fibers Using Combined Elements with Multiple Attenuated Total Internal Reflection *Optics and Spectroscopy (2000) 89 (3), 413-417.* Bobasheva, A.S.; Enikeeva, A.G.; Malinin, I.V.; Mamedov, R.K.; Stolyarov, B.V.; Volchek, B.Z.		
		Negligible depletion solid-phase microextraction with radiolabeled analytes to study free concentrations and protein binding: An example with /sup3/H estradiol		

1337		*Analytical Chemistry (2003) 74 (23), 5993-5997.* Algra, Jon; Heringa, Minne B.; Hermenst, Joop L. M.; Pastor, Dolors; Vaes, Wouter H. J.		
1341		Solid phase micro-extraction in a miniature ion-trap mass spectrometer. *Analyst (2003) 128 (9), 1119-1122.* Riter, L. S.; Meurer, E. C.; Cotte-Rodriguez, I.; Eberlin, M. N.; Cooks, R. G.*	PDMS	
1350	Aromatic amines	Solid-phase microextraction of monocyclic aromatic amines using novel fibres coated with crown ether. Journal of Chromatography, A (2001) 934(1-2), 51-57. Zeng, Z. R.; Qiu, W. L.; Yang, M.; Wei, X. A.; Huang, Z. F.; Li, F.	Various	GC
2664	**Nitrate esters in water**	**Determination of nitrate esters in water samples: comparison of efficiency of solid-phase extraction and SPME** ***J Chromatogr A 1174, #1/2, 13-19 (2007)*** **Jezova, V.; Skladal, J.; Eisner, A.; Bajerova, P.; Ventura, K. Pedersen-Bjergaard, S.**	**65µm PDMS/DVB**	**HPLC-UV**
1400	Hydroxy alkyl nitrates.	Measurement of octanol-air partition coefficients using solid-phase microextraction (SPME): Application to hydroxy alkyl nitrates. Atmospheric Environment (2001) 35(33), 5843-5854. Rudich, Yinon; Shragina, Lea; Treves, Keren		
1429	Aromatic hydrocarbons	Application of low-temperature glassy carbon films in solid-phase microextraction Anal. Chem. (2001) 73(24), 5841-5851. Giardina, M.; Olesik, S.V.		GC-FID
1430		Atomic spectrometry update. Industrial analysis: Metals, chemicals and advanced materials J Anal At Spectrom (2001) 16(12), 1446-1469. Fairman, B.; Goodall, P.; Hinds, M.W.; Nelms, S.M.; Penny, D.M.		ICP-MS
1435	VOC's	Application of the polysilicone fullerene coating for solid-phase microextraction in the determination of semi-volatile compounds Journal of Chromatography A (2001) 927(1-2), 121-130. Han, S.; Wang, Z.; Wu, C.; Xiao, C.; Xing, J.	PDMS	GC-FID
1507	Aliphatic carboxylic acids	Solid-phase microextraction and on-line methylation gas chromatography for aliphatic carboxylic acids. *Analytical and Bioanalytical Chemistry (2002) 373(1-2), 64-69* Danielson, Neil D.; Cho, Seong R.; Liu, Yaqian	Various fibers compared	GC-MS
1502	VOCs from asphalt	Effect of masking agents on the emission of VOCs from asphalt. *Abstracts of Papers American Chemical Society (2002) 223(1-2), CHED 451* Smith, Crystal; Hardee, John		
2213	**Impurities in caprolactam**	**Determination of impurities in industrial caprolactam produced from toluene by SPME and GC-MS** ***J. Appl. Polym. Sci.100 #4, 3141-3144 (2006)*** **Li, Na; Zou, Jiankai**		**GC-MS**
1227	BTEX	Capillary extractors for left dbl quote negligible depletion right dbl quote sampling of benzene, toluene, ethylbenzene and xylenes by in-tube solid-phase microextraction. *Journal of Chromatography, A (2003) 985 (1-2), 85-91.* Nardi, L.		
1099	Chlorohydrocarbon in dry cleaning fabrics.	Method for determining chlorohydrocarbon residues in dry cleaning fabrics with gas chromatography-mass spectrometry. *Sepu (2002) 20 (6), 573-576.* Chen, J.	100 um PDMS	GC-MS

1257	Formic acid	Quantitation of formate by solid-phase microextraction and gas chromatography mass spectrometry utilizing a " 13 C"formate internal standard. *Journal of Chromatography, A (2003) 986 (2), 313-317.* Kim, J. K.; Shiraishi, T.; Fukusaki, E.; Kobayashi, A. *		GC-EIMS
Review				
1119	Review article	Before the injection - Modern methods of sample preparation for separation techniques *Journal of Chromatography A (2003) 1000 (1-2), 3-27.* Smith, Roger M.		
1269	Review	Derivatization - solid-phase microextraction techniques and its application to analysis of organic compounds. *Fenxi Huaxue (2003) 31 (4), 496-500.* Luan, T. G.; Zhang, Z. X.		
1371	Review	A field guide to instrumentation: modern sample preparation methodology. 1. Automated SPE. Inside Laboratory Management (2001) 5(5), 14-18. Sherma, J.; Larkin, J. D.; Larkin, F. H.		
2310	**volatile organic**	**A new thermal desorption SPME system for hand-held ion mobility spectrometry** ***Anal. Chim. Acta 559 #2, 159-165 (2006)*** **Grigoriev, A.; Liu, Xinyu; Lynds, Paul; Nacson, S.; Pawliszyn, J.**	**headspace**	**GC/MS**
2124	BTX solvents in water	Thermal desorption SPME inlet for differential mobility spectrometry *Appl Spectrosc, 59, #6, 754-762* De Harrington, Peter B.; Rainsberg, Matthew R.		differential mobility spectrometry
2125	pesticides various matrices	A review on SPME-HPLC analysis of pesticides *Crit. Rev. Anal. Chem., 35, #1,71-85* Aulakh, J.; Kaur, V; Malik, A.; Schmitt-Kopplin, P	in-tube	HPLC
2399	**PAH standards in water**	**Kinetic Calibration Using Dominant Pre-equilibrium Desorption for On-Site and in Vivo Sampling by Solid-Phase Microextractio** ***Anal Chem 80. #2, 481-90 (2008 Jan 15)*** **Zhou, Simon Ningsun; Zhao, Wennan; Pawliszyn, Janusz**		
2427	**Carbamate pesticide**	**On-fiber standardization technique for solid-coated SPME** ***Anal. Chem. 79, #3, 1221-1230 (2007-02-01)*** **Zhou, S. N. S.; Zhang, X.; Ouyang, G. F.; Es-haghi, A.; Pawliszyn, J.**	**50µm Carbowax/TPR,**	
2398	**Pre-loaded standard on fiber**	**Preparation and application of in-fibre internal standardization SPME** ***Analyst (Cambridge, U. K.) 132, #3, 256-261 (2007-03-15)*** **Zhao, W. N.; Ouyang, G. F.; Pawliszyn, J.**	headspace	GC
2183	**PAH standards in water**	**Flow-through system for the generation of standard aqueous solution of polycyclic aromatic hydrocarbons** ***J. Chromatogr. A, 1105, #1-2,176-179 (2006)*** **Chen, Yong; Ouyang, Gangfeng; Pawliszyn, Janusz**		
2126	Volatiles & seimivolatiles in air	System for the generation of standard gas mixtures of volatile and semi-volatile organic compounds fo calibrations of SPME and other sampling devices *J Chromatogr A, 1025, #1, 3-9* Koziel, Jacek; Martos, Perry.; Pawliszyn, J	headspace	GC
2191	**Sulfur compd from Mailard reaction**	**Origin of carbons in sulfur-containing aroma compounds from the Maillard reaction of xylose, cysteine and thiamine** ***Food Sci. Technol. 40, #8, 1309-1315 (Oct. 2007)*** **Cerny, C.**	**headspace**	**GC-MS**
2127	Sulfur compd from Mailard reaction	Small alpha -Mercaptoketone formation during the Maillard reaction of cysteine and C13 ribose *J Agrl Food Chem, 52, #4, 958-961* Cerny, C.; Davidek, T. *	headspace	GC-MS
2163	**Volatiles from D-fructose and L-alanine**	**Role of the solvent glycerol in the Maillard reaction of D-fructose and L-alanine** ***J Ag Food Chem, 54, #2, 574-577 (2006)*** **Cerny, Christoph; Guntz-Dubini, Renee**	**headspace 130 C**	**GC-MS**

2128	Review	SPME based on polypyrrole films with different counter ions *Anal. Chim. Acta, 520, #1-2, 257-264* Pawliszyn, Janusz; Wu, Jingcun	polypyrrole	
2129	Review	Coupling of dynamic headspace sampling and SPME *Chromatographia, 60, #11-12, 687-691* Silva, R. C.; Aguiar, P. M. S.; Augusto, F. *	headspace	GC
2130	organics from water	Extraction techniques *Anal. Bioanal. Chem., 372, #1, 39-40* Camel, Valerie	comparison w/SFE, microwave, pressure solvent	GC
2188	**Methyl benzoate from mold samples**	**Methyl benzoate as a marker for the detection of mold in indoor building materials** ***J. Sep. Sci., 28, #18, 2517-2525 (2005)*** **Wady, Loay; Parkinson, Don-Roger; Pawliszyn, Janusz**	**headspace**	**GC-MS**
2131	Odors from aging material	Study on the method of SPME-GC-MS to quantify organic gas component. *Zhipu Xuebao, 25, Suppl, 97-98* Yang, X. L.; Qin, J. Y.; Kang, B.		GC/MS
2132	Review	Solid-phase microextraction field sampler *Anal. Chem., 76, #22, 6823-6828* Chen, Yong; Pawliszyn, Janusz	field sampling	
2133	BTEX in water	Kinetics and the on-site application of standards in a solid-phase microextration fiber *Anal. Chem., 76, #19, 5807-5815* Chen, Yong; Pawliszyn, Janusz	preloaded fiber	GC
2134	Review	Modelling SPME data from kinetic measurements in complex samples. *Analyst (Cambridge, U. K.), 129, #11, 1137-1142* van Eijkeren, J. C. H.; Heringa, M. B.; Hermens, J. L. M.		GC
2135	Review	Modern extraction techniques. *Analytical Chemistry, 76, #16, 4659-4664* Raynie, D. E.		GC
2136	Polar analytes	Derivatization and solid-phase microextraction *TrAC Trends Anal. Chem., 23, #8, 553-561* Martinez, Jairo R.; Stashenko, Elena E.	review article	GC
2137	Review	The relationship between elimination rates and partition coefficients *Chemosphere, 57, #8, 745-753* Jager, T.; Kooi, B.W.; Kooijman, S.A.L.M.		GC
2138	PAHs	SPME coupled to GC-MS for determining PAH-micelle partition coefficients. *Anal Chem, 76, #15, 4572-4578* Pino, V.; Ayala, J. H.; Gonzalez, V.; Afonso, A.		GC-MS
2139	Aromatic standard on fiber	Equilibrium in-fibre standardisation technique for SPME *J. Chromatogr. A, 1072, #1, 13-17* Chen, Y; O'Reilly, J; Pawliszyn, Janusz; Wang, Y	headspace	GC-FID
2140	Review	Coupling spme to liquid chromatography. A review *Anal. Bioanal. Chem., 375, #1,73-80* Zambonin, Carlo G.		HPLC
2141	Peptides from tryptic digests	Approaches for coupling SPME to nanospray *J. Chromatogr. A, 1067, #1-2, 197-205* Dartiguenave, C; Gu, Yu; Lubda, D; Musteata, F; Pawliszyn, Janusz; Waldron, Karen; Walles, Markus	Restrictive access coated fibers	MS-nanospray
2142	Terpene & ketones in air	Experimental determination and calculation of distribution coefficients between air and fiber with PDMS coating for some groups of organic compounds *J. Chromatogr. A, 1077, #2, 195-201* Isidorov, Valery A.; Vinogorova, Vera T.	PDMS fibers	GC
2143	Review of extraction techniques	A survey on high-concentration-capability headspace sampling techniques in the analysis of flavors and fragrances. *J Chrom Sci, 42, #8, 402-409* Bicchi, C.; Cordero, C.; Rubiolo, P.	headspace	GC-MS

SPME Literature

Literature No.	Title
Biochemical / Food and Beverage	
T195869	Solid Phase Microextraction: Solventless Sample Preparation for Monitoring Flavor Compounds by Capillary Gas Chromatography (AYM)
T196901	Solid Phase Microextraction/Capillary GC Analysis of Drugs, Alcohols, and Organic Solvents in Biological Fluids (AYY)
T396110	SPME Reduces Extraction Time in HPLC Analyses of Food Antioxidants and Preservatives
T397140	Analysis of Fat Soluble Vitamins from Tablets, Using SPME/HPLC (BKK)
T398147	Solid Phase Microextraction of Odors in Drinking Water, for Analysis by GC-MS (BRG)
Pharmaceutical	
T394062	Monitor Organic Volatile Impurities (OVIs) in Pharmaceutical Products, Using Solid Phase Microextraction/Capillary GC (AQX)
Forensic	
T196901	Solid Phase Microextraction/Capillary GC Analysis of Drugs, Alcohols, and Organic Solvents in Biological Fluids (AYY)
T198922	SPME/GC for Forensic Applications: Explosives, Fire Debris, and Drugs of Abuse (BQS)
T394061	Solid Phase Microextraction/Capillary GC: Rapid, Sensitive Detection of Gasoline in Fire Debris (AQW)
T396098	SPME / HPLC Interface Combines Fast Sample Extraction with Efficient Analysis for Explosives (ASE)
Environmental	
T394006	Solid Phase Microextraction of Semivolatile Compounds in US EPA Method 625 (AOH)
T394011	Solid Phase Microextraction of Volatile Compounds in US EPA Method 524.4 (AOM)
T394017	Polyacrylate Film Fiber for Solid Phase Microextraction of Polar Semivolatiles from Water (AOS)
T394056	Fast Analysis of Volatile Organic Compounds by Solid Phase Microextraction/Capillary GC (AQL)
T394058	Fast Screening for Chlorinated Pesticides by Solid Phase Microextraction/Capillary GC (AQN)
T395081	Monitor BTEX Compounds and Fuels in Water, Using Solid Phase Microextraction and Capillary GC (ARO)
T395085	Solid Phase Microextraction/Capillary GC Analysis of Nitrogen-Containing Herbicides in Water (ARS)
T396094	Solid Phase Microextraction of Organophosphate Insecticides and Analysis by Capillary GC/MS (ASB)
T396099	SPME / HPLC: A Rapid and Sensitive Analysis of Polynuclear Aromatic Hydrocarbons in Water (ASF)
T396106	Analysis of Surfactants in Water by SPME/HPLC
T397121	Solid Phase Microextraction for HPLC Analysis of Carbamate and Urea Pesticides (BGU)
T397141	Air Sampling of VOCs Using SPME for Analysis by Capillary GC (BKF)
T397143	Field Sampling for Pesticides, Using Solid Phase Microextraction/Capillary GC (BJT)
T398147	Solid Phase Microextraction of Odors in Drinking Water, for Analysis by GC/MS (BRG)
Lab Hints and Selection Guides	
T101928	SPME Troubleshooting Guide (EDV)
T101929	Guide to Quantitation with SPME (EDW)
T198923	Solid Phase Microextraction: Theory and Optimization of Conditions (BQT)
T396098	SPME / HPLC Interface Combines Fast Sample Extraction with Efficient Analysis for Explosives (ASE)
T496037	Solid Phase Microextraction Sampling Stand (AWS)
T496049	SPME / HPLC Interface (AWV)
T497105	SPME Portable Field Sampler with Carboxen/PDMS Fiber (BIZ)
T497174	SPME Portable Field Sampler with 100 µm PDMS Fiber (BKL)

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Ordering Information:

	Fiber Core/ Assembly Type	Hub Description	Sampling and Analysis Mode			
			Manual Holder (w/ spring)		Autosampler (w/o spring)	
			23 Ga*	24 Ga*	23 Ga*	24 Ga*
Carboxen/Polydimethylsiloxane						
75 µm Carboxen/PDMS	Fused Silica/SS	Black/plain	**57344-U**	**57318**	**57343-U**	**57319**
85 µm Carboxen/PDMS	Metal alloy/Metal alloy**	Lt. Blue/plain			**57906-U**	
85 µm Carboxen/PDMS	Stableflex/SS	Lt. Blue/plain		**57334-U**	**57295-U**	**57335-U**
Polydimethylsiloxane (PDMS)						
7 µm PDMS	Metal alloy/Metal alloy**	Green/plain			**57919-U**	
7 µm PDMS	Fused Silica/SS	Green/plain		**57302**	**57291-U**	**57303**
30 µm PDMS	Metal alloy/Metal alloy**	Yellow/plain			**57922-U**	
30 µm PDMS	Fused Silica/SS	Yellow/plain		**57308**	**57289-U**	**57309**
100 µm PDMS	Metal alloy/Metal alloy**	Red/plain			**57298-U**	
100 µm PDMS	Fused Silica/SS	Red/plain	**57342-U**	**57300-U**	**57341-U**	**57301**
Polydimethylsiloxane/Divinylbenzene (PDMS/DVB)						
60 µm PDMS/DVB	Stableflex/SS	Brown/notched				**57317**
65 µm PDMS/DVB	Metal alloy/Metal alloy**	Blue/plain			**57902-U**	
65 µm PDMS/DVB	Fused Silica/SS	Blue/plain	**57346-U**	**57310-U**	**57345-U**	**57311**
65 µm PDMS/DVB	Stableflex/SS	Pink/plain		**57326-U**	**57293-U**	**57327-U**
Polyacrylate						
85 µm Polyacrylate	Fused Silica/SS	White/plain		**57304**	**57294-U**	**57305**
Divinylbenzene/Carboxen/Polydimethylsiloxane						
50/30 µm DVB/CAR/PDMS	Metal alloy/Metal alloy (1 cm)**		Gray/plain			**57912-U**
50/30 µm DVB/CAR/PDMS	Metal alloy/Metal alloy (2 cm)**		Gray/notched			**57914-U**
50/30 µm DVB/CAR/PDMS	Stableflex/SS (1 cm)	Gray/plain		**57328-U**	**57298-U**	**57329-U**
50/30 µm DVB/CAR/PDMS	Stableflex/SS (2 cm)	Gray/notched		**57348-U**	**57299-U**	
Polyethylene Glycol (PEG)						
60 µm PEG	Metal alloy/SS	Purple/plain	**57355-U**		**57354-U**	

* Ga - Needle gauge.
** Metal alloy fiber assemblies are provided 1/pk.

Fiber Assortment Kits

Name	Description of Fiber Coatings (1 ea.)	Recommended Use	Manual	Automated/HPLC Std. Needle	Automated/HPLC 23 Ga. Needle
Kit # 1	85 µm polyacrylate, 100 µm PDMS, 7 µm PDMS	GC	**57306**	**57307**	**57285-U**
Kit # 2	75 µm Carboxen/PDMS, 65 µm PDMS/DVB, 85 µm polyacrylate	GC	**57320-U**	**57321-U**	**57286-U**
Kit # 3	60 µm PDMS/DVB, 85 µm polyacrylate, 100 µm PDMS	HPLC	–	**57323-U**	–
Kit # 4	100 µm PDMS, 65 µm PDMS/DVB, 75 µm Carboxen/PDMS	GC	**57324-U**	**57325-U**	**57287-U**
StableFlex Kit	65 µm PDMS/DVB, 50/30 µm DVB/Carboxen/PDMS	GC	**57550-U**	**57551-U**	–
Kit # 5	100 µm PDMS, 65 µm PDMS/DVB, 85 µm Carboxen/PDMS	GC	**57324-U**	**57325-U**	**57287-U**
	50/30 µm DVB/Carboxen/PDMS	GC			**57362-U**

SPME Fiber Holders

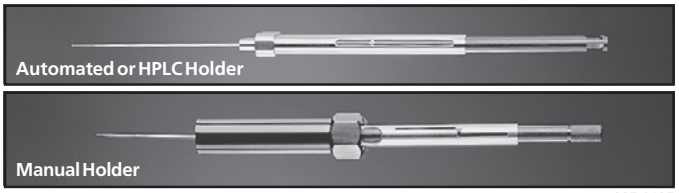
The holder protects the coated fiber, and controls exposure of the fiber during analyte adsorption and desorption. The holder is reusable indefinitely and accepts the replaceable fiber assembly. First time users must order both a holder and a fiber assembly.

Fiber Holder for Manual Sampling

An adjustable depth guide positions the fiber for sampling and for correct placement in the heated zone of the GC injection port. The fiber can be locked in the exposed position.

Fiber Holder for Automated Sampling or HPLC Analysis

Use this fiber holder with a Varian 8100/8200 AutoSampler or with our SPME/HPLC interface. An SPME upgrade kit is necessary for operation with the Varian AutoSampler – contact Varian Instrument Division for information concerning system requirements.



995-0125

Fiber Holder for CTC, Gerstel, and Thermo Autosamplers▲

Use this holder with SPME fiber assemblies that are designed for automated sampling.

Description	Cat. No.
Fiber Holder	
For Manual Sampling	**57330-U**
For Varian Autosampler or HPLC Analysis	**57331**
For CTC, Gerstel, and Thermo Autosamplers	**57347-U**

▲ Autosamplers distributed by Varian, Leap, Gerstel, and Thermo.

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