IC Application Note No. O-36

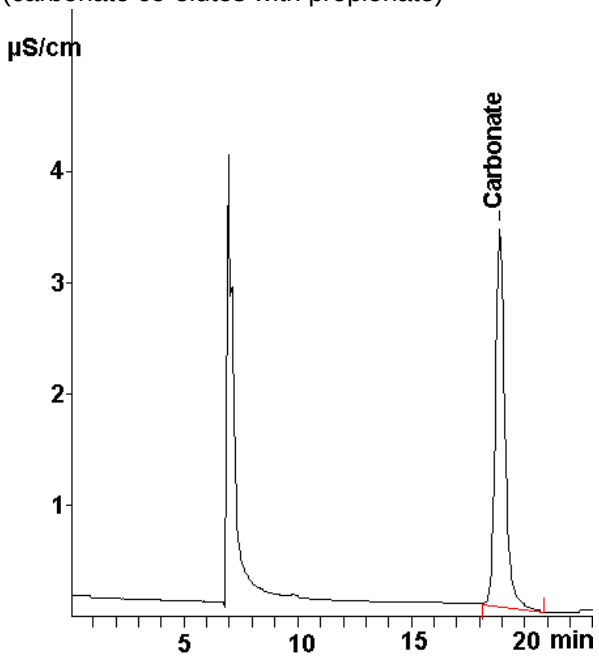
Title:	**The use of Metrohm CO_2 Suppressor (MCS) in the determination of organic acids**

***Summary*:**	Determination of formate, acetate, propionate, isobutyrate, butyrate, isovalerate, valerate and capronate added to tap water applying anion chromatography with conductivity detection after suppression. The MCS is placed upfront of the chemical suppressor to remove interfering CO_2.

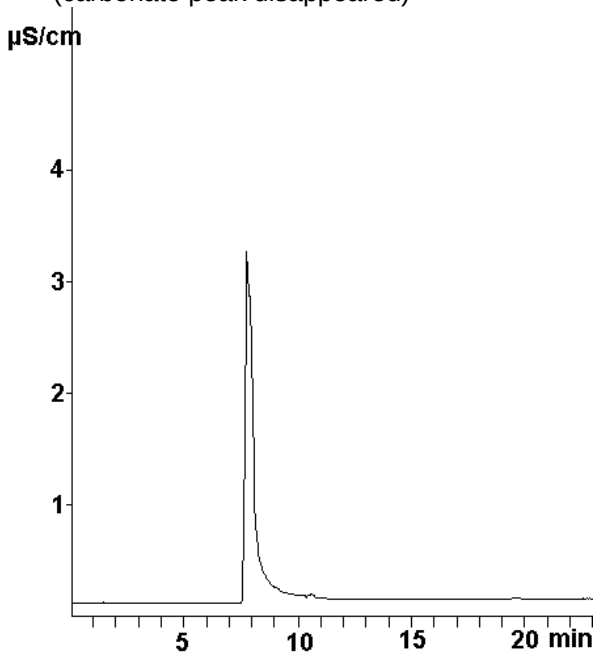
Sample:	Tap water spiked with organic acids
Sample Preparation:	Direct injection

Column:	6.1005.200 Metrosep Organic Acids – 250
Eluent:	0.5 mmol/L perchloric acid
Suppressor:	Metrohm Suppressor Module (MSM, 10 mmol/L LiCl)
Flow:	0.5 mL/min
Injection Volume:	20 µL

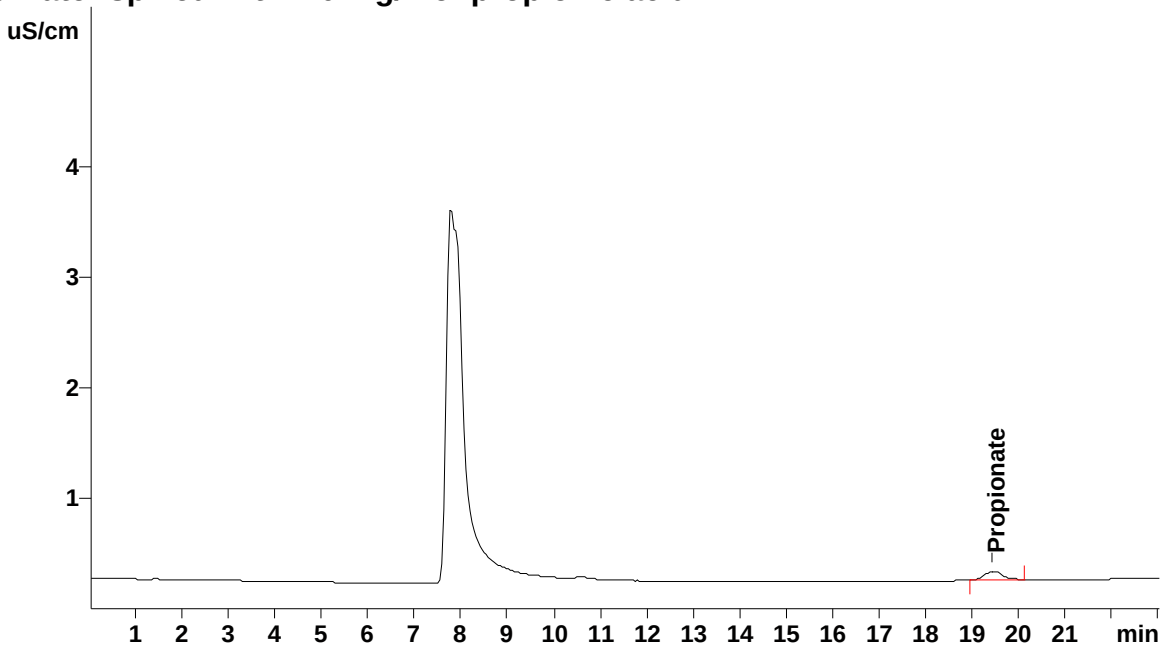
Tap water analyzed without MCS
(carbonate co-elutes with propionate)



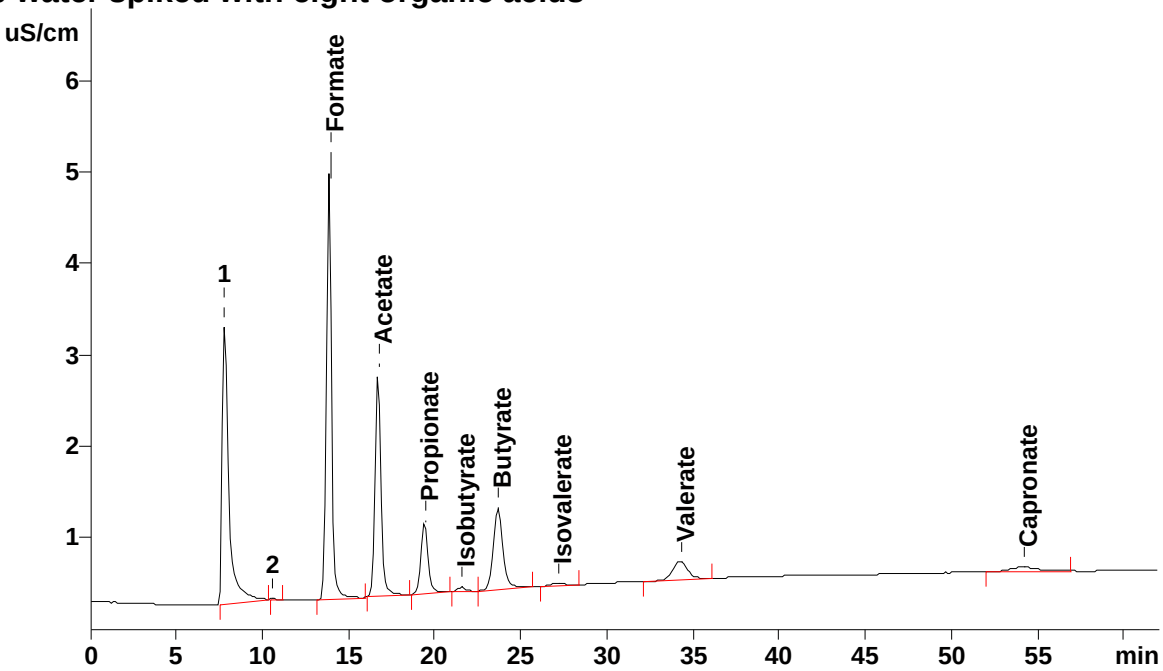
Tap water analyzed with MCS
(carbonate peak disappeared)



Tap water spiked with 1.0 mg/L of propionic acid



Tap water spiked with eight organic acids



Results:	Formate mg/L	Acetate mg/L	Propionate mg/L	Isobutyrate mg/L	Butyrate mg/L	Isovalerate mg/L	Valerate mg/L	Capronate mg/L
	20	**20**	**10**	**1**	**20**	**1**	**10**	**5**