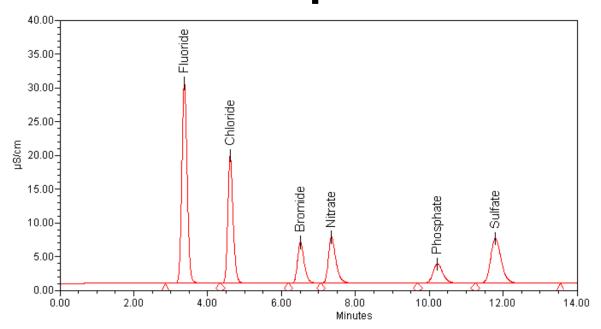
# IC Application Note S-350

# Parallel anion (and cation) analysis applying the Metrohm IC Driver 2.0 for Empower



Parallel anion and cation analysis is typically used when both anions and cation have to be analyzed. Here, the anion part of such an analysis is shown. The sample is injected to the anion channel from the 889 IC Sample Center by its built-in injector. The whole system is controlled by Empower applying the Metrohm IC Driver 2.0. For cation analysis, see AN-C-166.

# Results

Anion	Conc. [mg/L]	RSD [%, n = 6]	Anion	Conc. [mg/L]	RSD [%, n = 6]
Fluoride	10	0.7	Nitrate	10	0.7
Chloride	10	0.3	Phosphate	10	0.4
Bromide	10	0.3	Sulfate	10	0.2



## Sample

Standard solution

#### **Sample preparation**

None

## Columns

Metrosep A Supp 5 - 100/4.0	6.1006.510
Metrosep A Supp 4/5 Guard/4.0	6.1006.500

#### **Solutions**

Eluent	3.2 mmol/L sodium carbonate 1.0 mmol/L sodium hydrogen carbonate	
Suppressor regenerant	500 mmol/L sulfuric acid	
Rinsing solution	STREAM	

## **Analysis**

Conductivity detection after sequential suppression

## Instrumentation

940 Professional IC Vario ONE/SeS/HPG	2.940.1440
IC Conductivity Detector	2.850.9010
889 IC Sample Center - cool	2.889.0020
800 Dosino (Dosino regeneration)	2.800.0010
MSM Rotor A	6.2832.000
Adapter sleeve for Suppressor Vario	6.2842.020
Metrohm IC Driver 2.0 for Empower	6.6070.200
Empower 3.0	

#### **Parameters**

Flow rate	0.7 mL/min
Injection volume	20 μL
P <sub>max</sub>	20 MPa
Recording time	20 min
Column temperature	30 °C







IC Application Note S–350 Version 1, first published on March XX, 2017

www.metrohm.com

