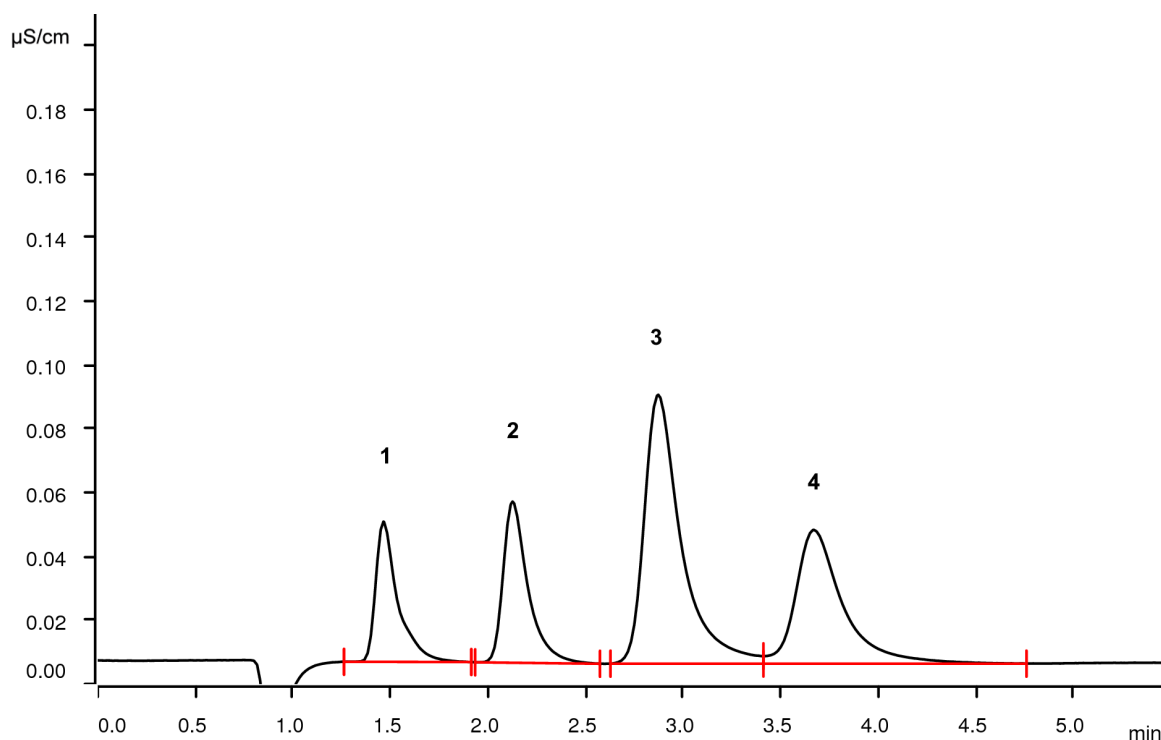


Fast IC with Metrosep C Supp 2 - 100/4.0: Four cations in five minutes



The short Metrosep C Supp 2 - 100/4.0 allows applying a higher eluent flow. Together with a more concentrated eluent (7.0 instead of 5.0 mmol/L nitric acid) the run time of the four cations, sodium, potassium, magnesium, and calcium can be reduced to 5 minutes. Conductivity detection after sequential suppression is applied.

Results

Cation	Concentration [$\mu\text{g/L}$]
1 Sodium	125
2 Potassium	250
3 Magnesium	250
4 Calcium	250

Sample

Standard solution

Sample preparation

Direct injection

Columns

Metrosep C Supp 2 - 100/4.0	6.01053.410
Metrosep C Supp 2 Guard/4.0	6.01053.500

Solutions

Eluent	7.0 mmol/L nitric acid 50 µg/L rubidium
<u>Suppressor regenerant</u>	70 mmol/L sodium carbonate 70 mmol/L sodium hydrogen carbonate
Rinsing solution	STREAM

Instrumentation

940 Professional IC Vario ONE/SeS/PP	2.940.1500
IC Conductivity Detector	2.850.9010
858 Professional Sample Processor	2.858.0020
MSM-HC Rotor C	6.2842.200

Analysis

Conductivity detection after sequential suppression

Parameters

Flow rate	2.0 mL/min
Injection volume	20 µL
P _{max}	25 MPa
Recording time	5.5 min
Column temperature	60 °C

