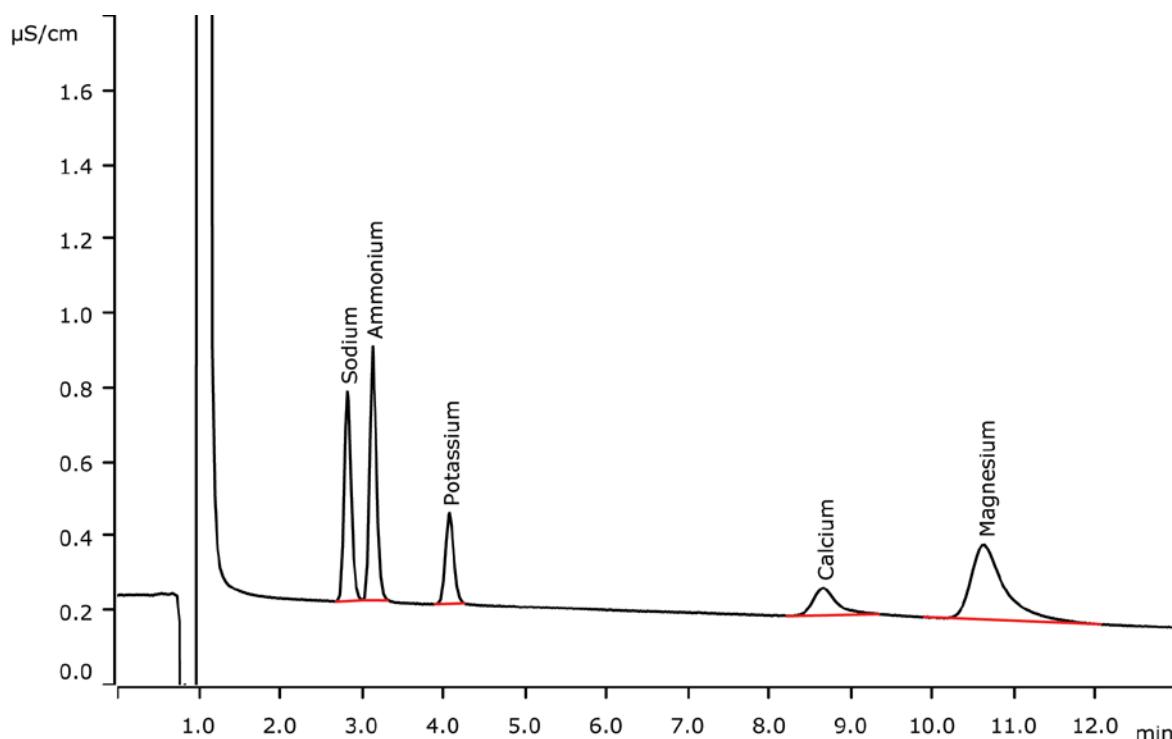


Fast IC: Separation of standard cations within eleven minutes



Fast IC means short runtimes on columns with relatively high flow rates and the standard eluent. Here, the standard cations have been separated within eleven minutes on a Metosep C 4 - 250/2.0. Under these conditions, baseline separation between sodium and ammonium is achieved.

Results

Cations	Concentration [mg/L]
Sodium	0.500
Ammonium	0.500
Potassium	0.500
Calcium	0.500
Magnesium	0.500

Sample

Standard solution

Sample preparation

None

Columns

Metrosep C 4 - 250/2.0	6.1050.230
Metrosep C 4 Guard/2.0	6.1050.600

Solutions

Eluent (941 Eluent Production Module)	1.7 mmol/L nitric acid 0.7 mmol/L dipicolinic acid
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Analysis

Direct conductivity detection

Instrumentation

940 Professional IC Vario ONE	2.940.1100
IC Conductivity Detector	2.850.9010
941 Eluent Production Module	2.941.0010
800 Dosino	2.800.0010
858 Professional Sample Processor	2.858.0020

Parameters

Flow rate	0.8 mL/min
Injection volume	5 µL
P _{max}	25 MPa
Recording time	13 min
Column temperature	25 °C

