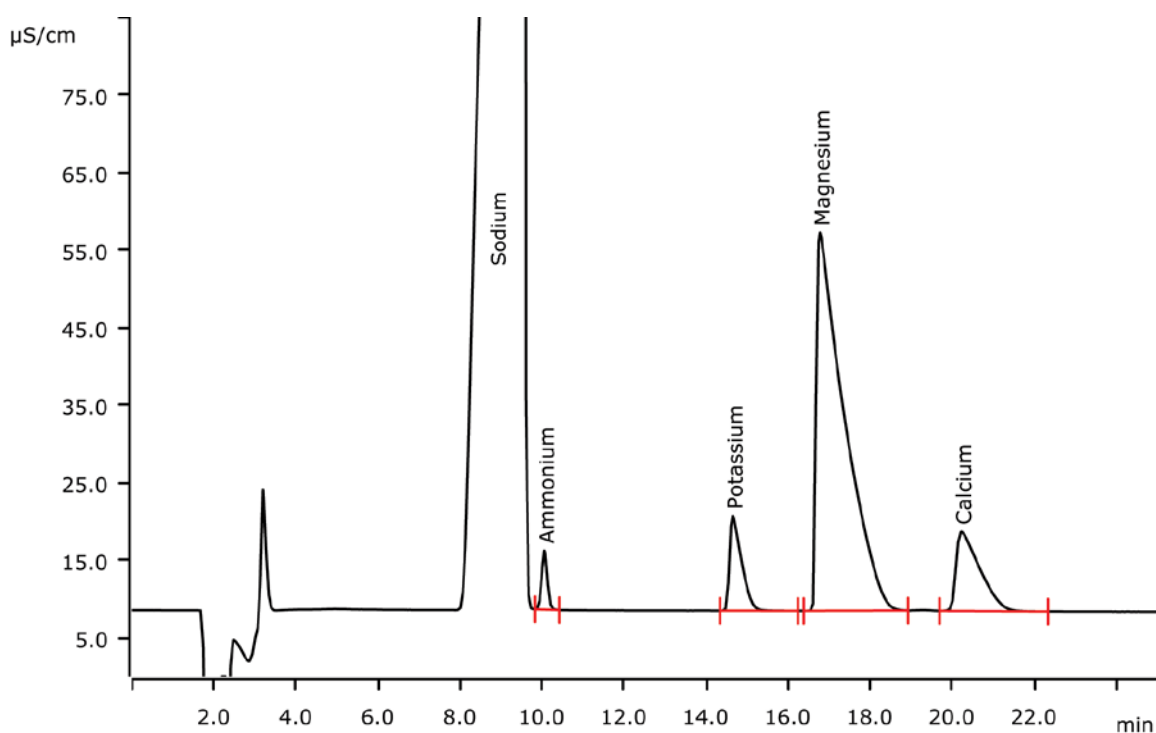


Ammonium besides standard cations in maritime interstitial water



Maritime interstitial water contains percentage levels of sodium. Analyzing ammonium in such a sample requires a high column capacity as well as an excellent sodium/ammonium selectivity. With a 2 µL injection onto the high-capacity Metrosep C 6 - 250/4.0 column, this task is perfectly solved.

Results

Cation	Concentration [mg/L]
Ammonium	41
Potassium	3044
Magnesium	8206
Calcium	2754

Sodium not quantified

Sample

Maritime interstitial water

Sample preparation

None

Columns

Metrosep C 6 - 250/4.0	6.1051.430
Metrosep C 4 Guard/4.0	6.1050.500

Solutions

Eluent	4.0 mmol/L nitric acid 1.0 mmol/L <u>dipicolinic acid</u>
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Analyses

Direct conductivity detection

Instrumentation

881 Compact IC pro – Cation	2.881.0010
IC Conductivity Detector	2.850.9010
889 IC Sample Center	2.889.0010

Parameters

Flow rate	0.9 mL/min
Injection volume	2 μ L
P _{max}	20 MPa
Recording time	25 min
Column temperature	30 °C
Needle height	6.0 mm

