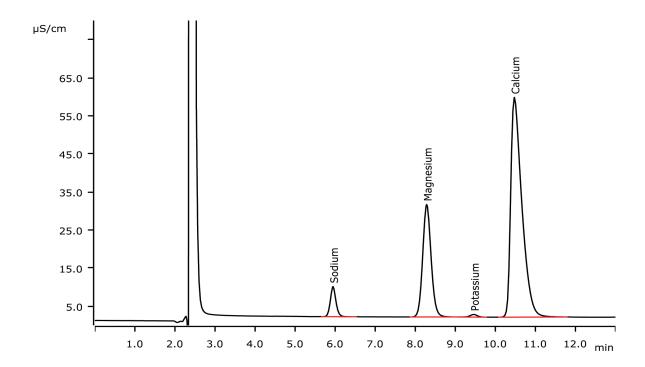
# IC Application Note C-154

# Fast IC: Cations in drinking water on a high-capacity column within eleven minutes



Fast and beautiful IC! Excellent peak shapes on columns with standard flow rate and strong eluents. Using Metrosep C 6 - 250/4.0, the high capacity cation column, usually means long retention times. Applying a strong eluent allows to determine the cations in drinking water with a short runtime and very symmetric peaks.

# Results

Cations	Concentration [mg/L]	Asymmetry
Sodium	6.26	1.11
Magnesium	18.76	1.11
Potassium	1.42	0.95
Calcium	79.70	1.80



#### Sample

Drinking water

## Sample preparation

None

# Columns

Metrosep C 6 - 250/4.0	6.1051.430
Metrosep C 6 Guard/4.0	6.1051.500

#### **Solutions**

Eluent	7.25 mmol/L nitric acid

## **Analysis**

Direct conductivity detection

#### Instrumentation

930 Compact IC Flex Oven/Deg	2.930.2160
IC Conductivity Detector	2.850.9010
858 Professional Sample Processor	2.858.0020

#### **Parameters**

Flow rate	0.9 mL/min
Injection volume	20 μL
P <sub>max</sub>	20 MPa
Recording time	13 min
Column temperature	30 °C



