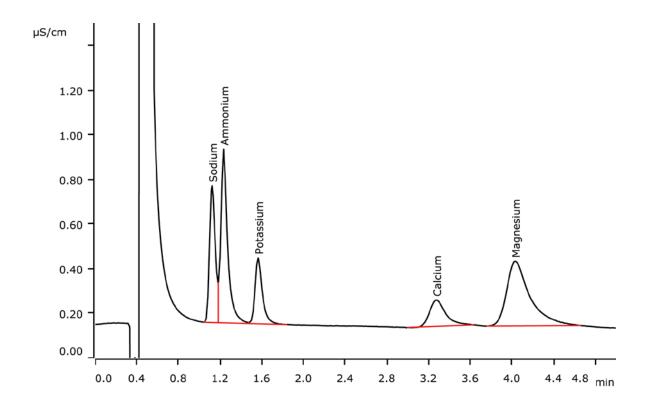
## IC Application Note C-151

# Fast IC: Separation of standard cations within five minutes



Fast IC means short runtimes on columns with high flow rates. Even faster than in AN-C-150 is the separation on Metosep C 4 - 150/2.0 at 1.1 mL/min. Here, the standard cations have been separated within five minutes. Under these conditions, baseline separation between sodium and ammonium is not fully 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 - 150/2.0	6.1050.220
Metrosep C 4 Guard/2.0	6.1050.600

#### **Solutions**

<u>Eluent</u>	(941	Eluent	1.7 mmol/L nitric acid
Producti	on Mod	lule)	0.7 mmol/L dipicolinic
			acid

#### **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	1.1 mL/min
Injection volume	5 μL
P <sub>max</sub>	25 MPa
Recording time	5 min
Column temperature	25 °C





