

# Polysaccharides

Determination of Glucose Ladder using Capillary Electrophoresis and Laser Induced Fluorescence Detection

## Instruments:

Capillary Electrophoresis: TSP Spectra PHORESIS 100  
Detector: Picometrics ZETALIF 2000 detector  
Laser: Argon Ion laser 488 nm, 15 mW

## Sample:

Glucose Ladder Standard solution, G1 to G30 at least, diluted in water.

## Reagents:

Derivatization agent: 1-aminopyrene-3,6,8-trisulfonate (APTS)

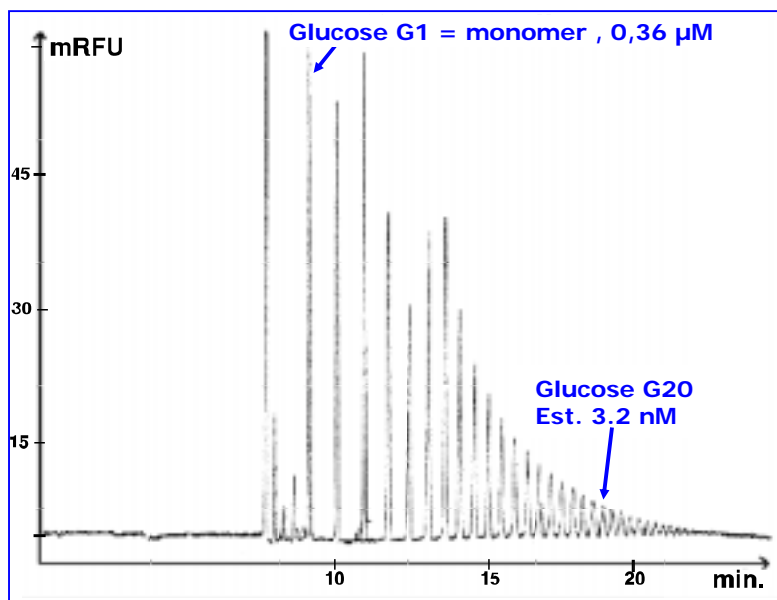
## Methods:

Capillary: 75 µm ID, 70 cm length (40 cm effective length)  
Buffer: 40 mM Phosphoric acid, 28 mM Triethylamine, pH=2,7  
Voltage: 30 kV, 22 µA  
Injection: 10 seconds at 100 mbar

**Limit of Detection\*:**  
 $7 \times 10^{-10} \text{ M}$  for G20

\* Estimated for a S/N of 3

Total monomer concentration 65 µg/L



Source: Picometrics application lab. 02/2002.