

mobility of your analytes.

## Ionic Strength Changes in Capillary Electrophoresis

When you change the Ionic Strength (Buffer Concentration) in your CZE method, the following changes can be expected.

**Joule Heating:** An increase in ionic strength (buffer concentration) will produce more heating. See the effects of change in temperature for effects.

**Viscosity:** An increase in ionic strength or buffer concentration will cause an increase in viscosity. See the effects of change in viscosity for effects.

Electro Osmotic Flow: High ionic strength buffers will cause a decrease in EOF.

**Analyte to Wall Interaction:** A higher ionic strength buffer (buffer concentration) can lessen or eliminate Protein to Wall interactions.

Migration Time: An increase in ionic strength buffers can increase your migration times.

**Resolution:** An increase in ionic strength buffers can increase your capillary selectivity and therefore resolution. **Electrophoretic Mobility:** An increase in ionic strength (buffer concentration) can increase the electrophoretic

Printed from the Chrom Resource Center

MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451 tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com

Date: 05-14-2024