The importance of capillary electrophoresis (CE) as an analytical tool has dramatically increased over the last ten years. It has changed from being an exploratory technique, mainly of academic interest, to one that is applied to solve "real" analytical problems. CE is easily adapted to its various modes of operation, often requiring little more than a change of the buffer solution, and is now used in nearly every area of chemistry, biochemistry, and biotechnology and includes suitable experiments designed to be attempted by university or college students, or anyone else wishing to familiarize themselves with CE.

Capillary Electrophoresis of Carbohydrates-Patrick Thibault 2003 A collection of cutting-edge techniques for using capillary electrophoresis (CE) to analyze complex carbohydrates. These readily reproducible protocols provide methods for sample preparation, analysis of mono- and oligosaccharides, glycoproteins, and glycoconjugates. A useful and comprehensive overview of carbohydrate analysis, containing over 300 chapters, 2600 works cited, and 1000 drawings, equations, tables, and photographs, the Handbook of Capillary Electrophoresis offers a comprehensive look at the latest breakthroughs and new technology, CE is a principle method for studying the physicochemical properties of proteins, peptides, and other macromolecules. Where applicable, the 30 chapters provide basic underlying theories as well as application-specific protocols, modes of detection, and specific aspects of CE data analysis. Applications of CE include simple cell analysis, CE in DNA sequencing, CE as a clinical diagnostic tool, identifying and quantifying drugs, and for homeland security. The book presents this method as an academic tool, but also provides applications for solving "real-world" analytical problems. This updated Second Edition reflects the increasing use of CE over the last ten years, how it is being applied, and the basic theoretical aspects of the separation and detection methodology of CE. Capillary Electrophoresis: Theory and Practice will appeal to students and professionals of analytical chemistry, physical biochemistry, and biotechnology, and includes suitable experiments designed to be attempted by university or college students, or anyone else wishing to familiarize themselves with CE.