
Contents

<i>Preface</i>	v
<i>Contributors</i>	ix

PART I PRINCIPLES AND INSTRUMENTAL

1 The CE-Way of Thinking: "All Is Relative!"	3
<i>Philippe Schmitt-Kopplin and Agnes Fekete</i>	
2 A Semiempirical Approach for a Rapid Comprehensive Evaluation of the Electrophoretic Behaviors of Small Molecules in Free Zone Electrophoresis	21
<i>Philippe Schmitt-Kopplin and Agnes Fekete</i>	
3 Derivatization in Capillary Electrophoresis	37
<i>M. Luisa Marina and María Castro-Puyana</i>	
4 Statically Adsorbed Coatings for High Separation Efficiency and Resolution in CE-MS Peptide Analysis: Strategies and Implementation	53
<i>Martin Pattky, Katalin Barkovits, Katrin Marcus, Oliver H. Weiergräber, and Carolin Huhn</i>	
5 Micellar Electrokinetic Chromatography of Aminoglycosides.....	77
<i>Ulrike Holzgrabe, Stefanie Schmitt, and Frank Wienen</i>	
6 Microemulsion Electrokinetic Chromatography	91
<i>Wolfgang Buchberger</i>	
7 Nonaqueous Capillary Electrophoresis Mass Spectrometry	111
<i>Christian W. Klampfl and Markus Himmelsbach</i>	
8 Ionic Liquids in Capillary Electrophoresis	131
<i>Ulrike Holzgrabe and Joachim Wahl</i>	
9 CZE-CZE ESI-MS Coupling with a Fully Isolated Mechanical Valve	155
<i>Felix J. Kohl and Christian Neusüß</i>	
10 Capillary Electrophoresis-Inductively Coupled Plasma Mass Spectrometry. . .	167
<i>Bernhard Michalke</i>	
11 Use of CE to Analyze Solutes in Pico- and Nano-Liter Samples from Plant Cells and Rhizosphere	181
<i>A. Deri Tomos</i>	

PART II APPLICATIONS FROM SMALL TO MACROMOLECULES

12 Analysis of Small Ions with Capillary Electrophoresis.....	197
<i>Jatinder Singh Aulakh, Ramandeep Kaur, and Ashok Kumar Malik</i>	
13 Metal Ions Analysis with Capillary Zone Electrophoresis	217
<i>Ashok Kumar Malik, Jatinder Singh Aulakh, and Varinder Kaur</i>	

14	Bioanalytical Application of Amino Acid Detection by Capillary Electrophoresis	249
	<i>Daniela Fico, Antonio Pennetta, and Giuseppe E. De Benedetto</i>	
15	Enantiomer Separations by Capillary Electrophoresis.	277
	<i>Gerhard K.E. Scriba, Henrik Harnisch, and Qingfu Zhu</i>	
16	Capillary Electrophoresis of Mono- and Oligosaccharides	301
	<i>Mila Toppazzini, Anna Coslovi, Marco Rossi, Anna Flamigni, Edi Baiutti, and Cristiana Campa</i>	
17	Use of Capillary Electrophoresis for Polysaccharide Studies and Applications	339
	<i>Amelia Gamini, Anna Coslovi, Mila Toppazzini, Isabella Rustighi, Cristiana Campa, Amedeo Vetere, and Sergio Paoletti</i>	
18	Separation of Peptides by Capillary Electrophoresis	365
	<i>Gerhard K.E. Scriba</i>	
19	Microbial Analysis of <i>Escherichia coli</i> ATCC, <i>Lactobacteria</i> and <i>Saccharomyces cerevisiae</i> Using Capillary Electrophoresis Approach	393
	<i>Paweł Pomastowski, Viorica Railean-Plugaru, and Bogusław Buszewski</i>	
20	Capillary Electrophoretic Analysis of Classical Organic Pollutants	407
	<i>Ashok Kumar Malik, Jatinder Singh Aulakh, and Varinder Kaur</i>	
21	Capillary Electrophoresis in Metabolomics	437
	<i>Tanja Verena Maier and Philippe Schmitt-Kopplin</i>	
22	Capillary Electrophoresis in Food and Foodomics	471
	<i>Clara Ibáñez, Tanize Acunha, Alberto Valdés, Virginia García-Cañas, Alejandro Cifuentes, and Carolina Simó</i>	
23	Capillary Electrophoresis in Wine Science	509
	<i>Christian Coelho, Franck Bagala, Régis D. Gougeon, and Philippe Schmitt-Kopplin</i>	
	<i>Index</i>	525