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A Review of: HANDBOOK OF CAPILLARY ELECTROPHORESIS APPLICATIONS

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THE BOOK CORNER

HANDBOOK OF CAPILLARY ELECTROPHORESIS APPLICATIONS, H. Shintani, J. Polonsky, eds., Blackie Academic & Professional Publishers. This book can also be ordered from Chapman & Hall, 115 Fifth Avenue, New York, NY 10003, 1997, 737 pp., \$229.95.

Capillary Electrophoresis was first introduced by Hjerten in 1967 and popularized in 1981 by Jorgenson. The first commercial HPCE instrument was introduced in 1988. Since then, many companies have introduced CE instruments, and one can safely say that we are now looking at third generation instruments. CE has grown tremendously in the last ten years. There are at least 15 books, 2 handbooks, and 2 application books (including Handbook of CE Applications) other than those published by instrument companies. There are over 1000 published research papers. In short, CE is fully accepted as a high resolution microseparation technique which has been applied in every field of research, and for different types of ions and molecules, small organic to large biomolecules.

The present book, "Handbook of CE Applications," is a welcome addition to the analyst's library. It is well written, comprehensive, and up to date. The Hanbook is divided into seven main parts, in addition to the Introduction, Chapter 1, and Appendices.

Part One is Equipment Systems (Chapters 2-11); Part Two is Biochemistry Applications (Chapters 12-21); Part Three is Pharmaceutical Science Applications (Chapters 22-27); Part Four is Bioscience Applications (Chapters 28-33); Part Five is Ion Analysis Applications (Chapters 34-37); Part Six is Food Analysis Applications (Chapters 38-40); Part Seven is Environmental Science Applications (Chapters 41-43).

The Handbook is written by many authors. The organization of all chapters is similar (a credit to the editors), almost each has an introduction and a table summarizing the experimental conditions, along with the references.

This is a nice arrangement which makes it easy for the analyst to follow and reproduce the experiment without having to read the original article. I found the book to be both comprehensive and useful. I also found some omissions, for example, in Table 7.1 on LIF detection, there is no mention of the KrF UV laser which has been used in many CE applications. As mentioned earlier, the book is recommended to analytical chemists in diversified fields.

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Reviewed by Haleem J. Issaq, Ph.D. The Book Corner Editor