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Publisher *Taylor & Francis*

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Journal of Liquid Chromatography & Related Technologies

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713597273>

The Book Corner

Haleem J. Issaq^a

^a SAIC, NCI-FCRDC, Frederick, Maryland

To cite this Article Issaq, Haleem J.(2009) 'The Book Corner', Journal of Liquid Chromatography & Related Technologies, 32: 19, 2917 – 2921

To link to this Article: DOI: 10.1080/10826070903304248

URL: <http://dx.doi.org/10.1080/10826070903304248>

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HANDBOOK OF MEMBRANE SEPARATIONS: CHEMICAL, PHARMACEUTICAL, FOOD AND BIOTECHNOLOGICAL APPLICATIONS, Anil K. Pabby, Syed S. H. Rizvi, and Ana Maria Sastre, Eds., CRC Press, Boca Raton, FL, USA.

This handbook is a massive volume (1164 pages) that deals with all aspects of membrane separations in a comprehensive manner. The term membrane covers a large variety of structures and materials with very different properties. The same is true for membrane processes. The Handbook is divided into three main sections totaling 43 chapters. Section I is a presentation of membrane applications in various industries, including the chemical and pharmaceutical industries, while Section II is devoted to applications in biotechnology, food processing, life sciences, and energy conservation. Section III is a discussion of membrane applications in industrial waste; it presents future trends in membrane science. Each chapter contains up-to-date references. It is not unusual that some of the chapters contain over 200 references, which means that the authors are well versed in their areas of expertise. Each chapter is well illustrated with figures. The discussion is clear and to the point.

In general, the Handbook presents in-depth knowledge of membrane separation mechanisms, comprehensive membrane applications in different industries from pharmaceutical to nuclear waste; and information on various membrane components and processes. The Table of Contents shows the wide range of topics discussed in this Handbook. Those who are interested in membrane separations are advised to purchase a copy of the **Handbook of Membrane Separations, Chemical, Pharmaceutical, Food and Biotechnological Applications**. The editors as well as the authors have done a commendable job.

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Haleem J. Issaq, Ph.D.
SAIC, NCI-FCRDC
Frederick, Maryland

MULTIDIMENSIONAL LIQUID CHROMATOGRAPHY

Theory and Application in Industrial Chemistry and the Life Sciences,
Steven A. Cohen and Mark D. Schure, Eds., Wiley-Interscience,
New York, USA, 2008.

This book is the most recent introduction to the liquid chromatography library. It is edited by two well known chromatographers, Drs. Steven A. Cohen and Mark D. Schure. The book is divided into five sections with a total of eighteen chapters. Part I (Chapters 2–4) deals with theory of chromatography; Part II (Chapters 5–8) discusses different aspects of columns, instrumentation, and method development; Part III (Chapters 9–14) introduces the reader to various life science applications, while Part IV (Chapters 15, 16) deals with multidimensional separations including capillary electrophoresis. The final part, Part V (Chapters 17, 18), is devoted to industrial applications. In total, the book comprises 456 pages, hundreds of references, and tens of illustrations. The references are current and the illustrations are clear and easy to understand. The authors of the chapters are well versed in their areas of expertise. They include Tanaka, Jorgenson, Unger, Lubman, Washburn, Armstrong, Dovichi, Issaq, and others. It is refreshing that the editors of this book wrote or co-authored six chapters. The book is well organized. It contains a balanced mix of theory and experiment, as the list of chapters indicate, and will be beneficial to the novice as well as the expert. The editors should be commended on a job well done!

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Haleem J. Issaq, Ph.D.
SAIC, NCI-FCRDC
Frederick, Maryland