references. Also it is annoying that the literature references appear not to have been finally checked by the publishers before going to press. Even a cursory glance through author names and journal titles quickly reveals many careless mistakes. This can have irritating results when one wishes to refer to original publications, especially when it affects volume or page numbers or the year. The index is very brief (less than five pages), but the clear organization of the text offers an alternative approach, at least when one is searching for a particular class of compounds.

Shortly after the publication of James Grimshaw's monograph, there also appeared the fourth, enlarged, edition of *Organic Electrochemistry*, a multiauthor work edited by Lund and Hammerich. It contains almost 1400 pages, and is thus over three times longer than the book reviewed here. Readers wanting a more concise overview of the often neglected field of organic electrosynthesis in just over 400 pages will find Grimshaw's book useful. Electrochemical methods of synthesis offer important advantages in many cases and deserve to be used more often, and therefore it is to be hoped that this monograph focusing mainly on synthetic applications, with its clear structure, easy readability, and avoidance of theoretical ballast, will help to encourage that.

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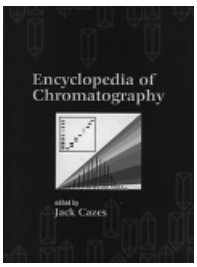
Encyclopedia of Chromatography. Edited by *Jack Cazes*. Marcel Dekker, New York 2001. 952 pp., hardcover $ 250.00.—ISBN 0-8247-0511-4

Chromatography and related methods have played a vital role in solving analytical problems in innumerable areas of science and technology during the 20th century, and will certainly continue to do so in the future. Their importance is now reinforced by the publication of this *Encyclopedia of Chromatography*, a single-volume work which also covers techniques such as field-flow fractionation and capillary electrophoresis. However, the work is not claimed to provide an exhaustive coverage of the field, as is explained in the preface by the editor, Jack Cazes, who has an international reputation in the area of analytical separation techniques through his books and original publications.



The 317 articles in the encyclopedia, occupying 885 pages, are the work of 218 authors, and contain a wealth of information about the theory and practice of analytical separation methods. The contents are not arranged under topic areas or keywords, but appear alphabetically according to the first word of each article, from "Absorbance Detection in Capillary Electrophoresis" to "Zone Dispersion in Field-Flow Fractionation". The articles deal with many different aspects of chromatographic techniques, which range from gas chromatography to HPLC, capillary electrophoresis, affinity chromatography, and exclusion chromatography. Applications in many different fields are described, including biotechnology, pharmacy, environmental sciences, polymer analysis, food science, pathology, toxicology, fossil fuels, and nuclear chemistry. The detailed and wide-ranging information will be of particular value to readers with experience in chromatography who wish to improve or refresh their knowledge of the whole field of separation science.

Unfortunately the articles by different authors and on different topics vary greatly in the depth of treatment and writing style. Some effort by the editor at achieving consistency would have improved the work, although that may be asking too much considering the large number of authors and topics. Nevertheless, the failure to even keep to a consistent set of symbols, and the absence of cross-references within the work, are serious shortcomings in my view. The keyword index fails to compensate for the latter fault, as it often does not list all the articles relating to a particular topic. This makes it difficult to search effectively in the book, leaving it to chance whether one finds the important information that one is seeking. For example, under "band broadening" an article which contains information about band-broadening mechanisms in HPLC is not listed. One would need to know that there was also the possibility of finding something on that topic under "diffusion". Another example: although the Knox equation is mentioned in the article "Efficiency in Chromatography", there is no mention anywhere of its importance in HPLC. Searching under "Knox" in the author index, one is referred to six page numbers, but on looking these up one finds only literature citations. The index does not direct the reader to page 276 in the article "Efficiency in Chromatography", where the Knox equation would be found. The same article also gives the van Deemter equation, but that is not mentioned in the keyword index. Unfortunately these examples are typical of many more. Therefore, the work only appears at its most attractive when one is browsing randomly, being reminded of things that one has forgotten, and at the same time coming across new information.

Suggestions for further reading are given at the end of each article, but these are often articles or books by the same author, or literature that is familiar to the author. These suggestions do not necessarily cover the literature that would provide the most worthwhile extension for the subject. That leads to a further qualification: the work is not very suitable for beginners or for occasional users of chromatographic methods who are looking for an introduction to a particular area of chromatography with relevant literature references. Thus, the encyclopedia is of little value for a group who might have been potential users.

Despite the work's inadequacies, it is a substantial reference source in which readers already experienced in the use of analytical separation methods can find answers to all kinds of questions about chromatography and related techniques. It will be a useful addition to the libraries of laboratories working in this field.

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