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Book Review

Steric exclusion liquid chromatography of polymers (Chromatographic Science Series, Vol. 25), edited by J. Janča, Marcel Dekker, New York, Basle, 1984, XVIII + 329 pp., price SFr. 153.00, ISBN 0-8247-7065-X.

Size exclusion liquid chromatography (SELC) has developed rapidly during the last twenty years. From a technique used exclusively for research with interpretation involving complex mathematical techniques, SELC has become an accepted technique covering such diverse applications as quality control in industry to research in universities. The rapid gains in instrumentation technology have been matched in part by the theoretical assessment of SELC, including the separation mechanism, calibration techniques and experimental technology. The basic literature has been the reference source for these advances with few text-books available to match this upsurge in the use and practicality of SELC. This monograph capably fills that gap, bringing together a select group of well known and respected authors.

The first three chapters provide the basic theoretical background needed for a full understanding of the current state of the art of SELC. Thus in Chapter 1 Josef Janča has written an excellent account of the separation mechanism(s) applicable in SELC, Chapter 2 is a critical survey by John Dawkins of calibration techniques whilst Chapter 3 by Archie Hamielec provides an excellent review of axial dispersion in SELC. The remaining four chapters are all concerned with the practicalities of operation of SELC with particular emphasis on polymer analysis and cover the topics of experimental techniques, polymer analysis, data treatment and accuracy.

Overall the monograph provides an excellent single source reference text for those involved in SELC. Although the stated intention of the editor was to provide a text mainly for researchers in the field I feel that they may have underestimated the need for a text such as this for the instruction of advanced undergraduate or post-graduate students and apart from the cost, this monograph could meet this need.

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