

*Chromatographic Methods (Third Edition)*

By R. Stock and C. B. F. Rice

Chapman and Hall; London, 1974

viii + 383 pages. Cased edition (ISBN 0 412 10560 8) £ 5.25: Science Paperback edition (ISBN 0 412 20810 5) £ 2.90

This book covers the basic aspects of chromatography. A general introduction to the subject is followed by self-contained sections on liquid-phase, gas, thin-layer and paper chromatography and electrophoresis. There is sufficient theory to explain many of the principles involved, but the book serves essentially as an excellent introduction to the subject with some practical details about the methods available and the advantages and disadvantages of each one for carrying out the required separations. From the beginner's viewpoint it is confusing to find, for example, reference to the Craig process (p.36) but no explanation until p.260. One half of the model experiments presented in the last chapter deal with inorganic ions: this section could be improved for the benefit and interest of the numerous teachers and students working with these techniques in biological fields, e.g. dansyl amino acids may be separated very quickly on polyamide-coated thin-layer plates, a method which is economic in solvent and in space.

There are more than 400 references, a useful bibliography of related journals and books and a list of available visual aids. The format is good, the typeface easy to read and illustrated with diagrams and the contents particularly in the paperback edition provide good value for money.

This book is the latest to appear giving broad coverage

of chromatography or separation methodology at a general introductory level and would be of real value to students taking Biology and science courses in Universities and other institutions. Amongst more recent publications it falls neatly between the more elementary [1,2] and the more comprehensive and correspondingly more expensive texts [3,4]. Further reading involves reference to the numerous specialized texts on specific aspects of chromatography [5-8].

- [1] Abbott, D. and Andrews, R. S. (1970) *Introduction to Chromatography*, Longman; London.
- [2] Browning, D. R. (1973) *Chromatography*, Harrap; London.
- [3] Heftmann, E. (1969) *Chromatography*, 2nd Edn., Van Nostrand, Reinhold; New York.
- [4] Karger, B. L., Lloyd, R. S. and Horvath, C. (1973) *Introduction to Separation Science*, Wiley; London and New York.
- [5] Littlewood, A. B. (1970) *Gas Chromatography, Principles, Techniques and Applications*. 2nd Edn., Academic Press; New York.
- [6] Smith, I. and Feinberg, J. G. (1972) *Paper and Thin Layer Chromatography and Electrophoresis*, Longman; London.
- [7] Brown, P. R. (1973) *High Pressure Liquid Chromatography: Biochemical and Biomedical Applications*. Academic Press; London.
- [8] Lowe, C. R. and Dean, P. D. G. (1974) *Affinity Chromatography*, Wiley; London.

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*Gas Chromatographic Applications in Microbiology and Medicine*

by B. M. Mitruka

John Wiley and Sons; New York, London, Sydney, Toronto 1975

xviii + 472 pages. £ 13.50

This book contains seventeen chapters, five of which are by other contributors. The first chapter of this book by the author on the historical development of gas chromatography in fourteen pages manages to include

over 340 references. Subsequent chapters on theory, instrumentation, preparation of samples and gas chromatography are similar in content to those found in many textbooks on this subject. At this point the