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Book Review

Chromatographic systems — Maintenance and troubleshooting, by J. Q. Walker, M. T. Jackson, Jr. and J. B. Maynard, Academic Press, New York, San Francisco, London, 2nd ed., 1977, XV + 359 pp., price US\$ 14.50, £ 10.30, ISBN 0-12-732052-0.

Chromatographers are practical people, and a book devoted to the present area will surely attract a large number of hopeful readers. That the authors have succeeded to some degree can be inferred from the appearance of this second edition, and the continued popularity of the short course taught by them and used as a guide for the present book.

About one quarter of the present book is devoted to high-performance liquid chromatography (LC) and the balance to gas chromatography (GC). In each case, the approach used is to present a minimum of chromatographic background and theory, and then to discuss individual equipment modules (sample injectors, detectors, etc.) in more detail. At the end of most chapters there appears a question-and-answer section which addresses common problems or questions of interest to the chromatographer. Each section (GC and LC) ends with a comprehensive troubleshooting guide that is organized around the symptoms of various problems.

An obvious problem in writing a book such as this is the diversity of equipment from different manufacturers, on the one hand, and the need to avoid overlapping similar written material provided by each manufacturer. I think this problem must be most acute at the beginning stage of a new chromatographic technique, and perhaps for this reason the GC section comes across as much more practical and useful. In fact, I fully recommend the GC section, but find it difficult to praise the LC section. The amount of practical, useful information in the GC section is impressive, as are the many valuable examples used to illustrate various points. This section also reflects a long experience by the authors with many different types of equipment.

The present book is a photocopy production of a typewritten text. The print itself is more pleasing than in the first edition, and the large number of typographical errors in the first edition have been somewhat reduced here. However, it appears to me that there was almost no editing of the book. Specifically, the writing style shows many faults that an editor should have caught at the first reading. There are also important errors in production that affect the readability of major sections of the book; e.g. the final trouble-shooting summary for GC. Many of the figures are poorly drawn, and again it is obvious that the publisher simply took what was submitted by the authors—with no attempt at improvement or standardization.

In short, we have in the present book another distressing example of the problems commonly encountered in attempting rapid production in the "cold-type" mode. It seems that publishers no longer feel any real necessity of editing such productions,

and the authors are further denied the normal opportunity to catch their own errors and those of the editor and typesetter at the galley-proof stage. I urge future authors to study this problem before blindly proceeding with similar endeavors of their own.

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Book Review

Mass spectrometry in drug metabolism, edited by A. Frigerio and E. L. Ghisalberti, Plenum, New York, London, 1977, XII + 532 pp., US\$ 51.00, ISBN 0-306-31018-X.

This volume is a collection of reviews and papers presented at the International Symposium on Mass Spectrometry in Drug Metabolism held at the Mario Negri Institute in Milan in June 1976. Currently mass spectrometric methods play an important role in studies in this area and the contents illustrate the utility of these methods when used in combination with other spectroscopic techniques for the identification of drugs and their metabolites, and the unique ability of mass spectral methods to give high sensitivity in combination with specificity for quantitative studies. The use of direct probe, combined gas chromatography-mass spectrometry with electron impact and chemical ionization mass spectrometry are well illustrated in a number of contributions in this text. In addition the utility of field desorption mass spectrometry as a method for identifying the salts of drugs and the value of computerization in this area are shown in other papers.

Detailed studies are presented on the metabolism and quantification of a wide variety of drugs and biologically important molecules illustrating the interplay of mass spectral and other methods of study in this area, e.g. the paper by Vink, De Ridder, Timmer and De Nijs (p. 167) shows how prior clean-up of plasma extracts by high-pressure liquid chromatography provides improved selected ion monitoring data in drug quantification.

In addition to the contributed papers the volume contains reviews on Selected ion monitoring (A. Frigerio and E. L. Ghisalberti), Chemical ionization mass spectrometry (E. L. Ghisalberti), the Role of computers in gas chromatography-mass spectrometry (J. Roboz) and the Use of gas chromatography-mass spectrometry in identifying drugs of abuse (H. Brandenberger). These reviews provide a useful introduction to workers new to this area to some of the advantages and disadvantages of current methods.