

**Structure Elucidation by NMR in Organic Chemistry—A Practical Guide:** E. BREITMAIER, Wiley, Chichester, 1993. Pages xii + 265. £15.95 (softback). ISBN 0471 93745-2 (cloth), 0471 93381-3 (softback).

The area of structural determination by NMR is one in which several books have become established. However the reviewed book has a fresh approach and is well worth a consideration, both for an undergraduate course and for a place on your own library shelf.

The book is divided into the following sections:

- (a) Basic Principles (covered in two chapters and in 70 pages of text).
- (b) Problems (50 in all in 100 pages).
- (c) Solutions to problems (in 80 or so pages).

The novelty of the book really is due to the percentage of pages concerned with particular problems and their solving. There is no doubt that any organic chemist who solves all the problems can consider himself to have mastered NMR spectroscopy. In addition to the teaching of NMR spectroscopy via problem solving, the book has a longer term value as a source of basic information.

This reviewer though has a requirement in his own library for at least one NMR book which lists as much reference data as possible; this work does not satisfy this need entirely. It appears that the author's intentions was to cover as wide a range of features and techniques as possible and that the space made available did not allow for very deep coverage.

In this reviewer's opinion the book is to be recommended. The very valuable and interesting set of problems (and answers) is considered a very positive feature which far outweighs any drawbacks arising from the coverage of the basics of NMR spectroscopy.

J. L. WARDELL

**Advances in Chemical Diagnosis and Treatment of Metabolic Disorders, Volume 1:** I. MATSUMOTO (editor), Wiley, Chichester, 1992. pages xviii + 165. £30.00. ISBN 0-471-93615-4.

This book contains a collection of selected papers presented at the last three symposia held since 1989 in Kanazawa, Japan dealing with Chemical Diagnosis and Metabolic Disorders (SCDMD). However, the title of the book is slightly misleading in that this volume deals almost entirely with the use of sophisticated chromatographic techniques and Mass Spectroscopy in the diagnosis of inborn errors of metabolism and, in particular, organic acidaemias. The diagnosis and subsequent appropriate treatment of organic acidaemias is a complex undertaking and requires a high degree of skill and tenacity from paediatricians, both clinical and analytical chemists and also dieticians and this book presents a series of useful clinical presentations related to the use of modern and sophisticated techniques necessary for the diagnosis and treatment of these potentially life-threatening disorders. It is, however, a highly specialized book containing both complex and advanced clinical, chemical and analytical material. Consequently its readership will probably be drawn from neonatologists, paediatricians and clinical biochemists of either consultant/top grade status or those soon to complete their training. It will however, be a most useful addition to many specialized reference libraries.

This relatively small book is divided into several sections dealing essentially with organic acidaemias, urea cycle disorders and drug-induced metabolic defects. Each section contains a series of clinical case presentations followed by a description of the identification of the metabolites present in excess using Mass Spectroscopy, following separation by either GLC or HPLC, and their use in the diagnostic process. In addition, there is a small section describing analytical techniques for the quantitation of urinary acylcarnitines and the simultaneous measurement of serum peptide hormones. Although, this book contains a description of 'state of the art' techniques and their application to difficult, complex and potentially life threatening clinical situations there is some repetition within several of the sections and the usefulness of this volume could have been improved by increasing the breadth of clinical application. It is, however, a useful work of reference and is hopefully the first of a series discussing the use of sophisticated analytical techniques in the diagnosis, prognosis and treatment of a range of difficult metabolic diseases.

P. H. WHITING