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Book Reviews

Handbook of Natural Products Data: Vol. 1. Diterpenoid and Steroidal Alkaloids. By Atta-ur Rahman, Elsevier, 1990. ISBN 0-444-88173-5. vii + 970 pp. Price: US$353·75; Dfl.690·00.

The pace of structure elucidation of natural products has quickened since the advent of high field n.m.r. spectrometry and high resolution mass spectrometry. But the resultant plethora of spectral data is scattered through dozens of journals, and Atta-ur Rahman seeks to resolve this problem through the publication of a series of collections of such data.

In this first book he has assembled physical and spectral data for 971 diterpenoid and steroidal alkaloids. The information includes molecular formulae, molecular weights, melting points, optical rotations together with UV, IR, ^{1}H n.m.r., ^{13}C n.m.r. and mass spectral data. Leading literature references are also supplied. Such an assemblage of information is not available elsewhere. The *Dictionary of Organic Compounds*, 5th edition, 1982, Chapman and Hall, contains some physical constants and references to the sources of spectral data; but this is the only competitor publication.

The book is thus invaluable if you require instant information about these classes of alkaloids. Other volumes on less esoteric classes of natural products will be eagerly awaited, though librarians may be less enthusiastic at the prospect of buying an encyclopaedic work at US$350 per volume.

J. Mann

Flavour Science and Technology. Edited by Y. Bessière & A. F. Thomas, John Wiley & Sons Ltd, Chichester. 1990. xiii + 369 pp. ISBN 0-47192-782-1. Price: £60.

The original aim of the Weurman symposium was to provide a forum where a limited number of flavour scientists could discuss their research interests

and ideas on an informal basis. The symposia have now grown to be truly international in character and offer a valuable insight into the wide range of food flavour research being undertaken throughout the world. This book contains the proceedings of the sixth Weurman symposium held in May 1990 in Geneva, Switzerland. The sixty-two papers are arranged under six chapter headings: general and analytical chemistry of flavours; reaction flavours, including Maillard reactions, oxidations and so on; biotechnology and flavours; instrumental analysis and extraction methods; computerization and statistics; physical chemistry and technology of flavours. Each chapter comprises a useful review of the subject and a number of shorter research papers.

It would perhaps be invidious to single out any of the numerous research papers presented, but those describing the chirospecific analysis of chiral flavour molecules in the chapter on the analysis and chemistry of flavours are particularly worthy of mention. The procedures involved are very elegant and, if generally applicable, must introduce a new dimension into the description 'nature-identical'.

The editors and publishers are to be congratulated on producing this volume in less than six months from the date of the symposium. However, the variations in type face and style resulting from the use of camera ready manuscripts have had an adverse effect on the overall clarity of the text. Nevertheless, this book presents an interesting collection of papers on a broad range of topics and will be of considerable value to newcomers to the flavour area as well as to established workers.

D. McHale

Biotechnology and Food Process Engineering. Edited by Henry G. Schwartzberg & M. Anandha Rao, Marcel Dekker Inc., New York, 1990. 544 pp. ISBN 0-8247-8363-8. Price: $69·75 (US & Canada); $83·50 (all other countries).

This book contains a selection of papers presented at the Advances in Bio- and Food Process Engineering symposium held in Chicago in June 1989. The editors have endeavoured to include food process engineering operations which have illustrated significant developmental advances in recent years. The book contains 14 chapters: Chapters 1 to 4 deal with some applications of biotechnology to food processing; Chapters 5 to 12, with the exception of Chapter 9, cover developments in food unit operations; and Chapters 13 and 14 explore the role of robotics and computers in food processing.