

BOOK REVIEWS

Organic Electronic Spectral Data, Volume 23. Edited by J.P. PHILLIPS, D. BATES, H. FEUER, and B.S. THYAGARAJAN. John Wiley and Sons, 605 Third Avenue, New York, NY 10158. 1987. xiii + 1051 pp. 16 × 23.5 cm. \$120. ISBN 0-471-63557-X.

This volume continues the listing of ultraviolet and visible absorption spectral data for literature published in 1981. Although most of the spectra listed are for synthetic compounds, natural products are well represented; there are references to 41 papers from the *Journal of Natural Products*, for example. The listing in each case consists of the molecular formula (using the *Chemical Abstracts* index system), the compound name, the solvent, the wavelengths of absorption maxima and the corresponding molar extinction coefficients, and a literature reference.

This and the previous volumes in the series are very useful to anyone wishing to find spectral data for a known compound. They are less useful when one has a new compound and wishes to determine the nature of the chromophore, although even here they can be a helpful source of spectral data for model compounds. It would be most helpful if the data in these volumes could be entered into a data bank to allow searching by spectroscopic parameters as well as by molecular formula.

Although the information in this volume is available in the literature, this compilation makes it readily accessible to the researcher. It should be on the shelves of any library serving the natural products research community, but its price and specialized nature will probably preclude individual purchase.

DAVID G.I. KINGSTON, *Virginia Polytechnic Institute and State University*

Nuclear Magnetic Resonance, General Concepts and Applications. WILLIAM W. PAUDLER, Portland State University. Wiley-Interscience, 605 Third Avenue, New York, NY 10158, 1987, xi + 291 pp., 10.5 × 23.5 cm., \$35.

This is the second nmr book written by Professor Paudler. It is similar to his 1971 book, *Nuclear Magnetic Resonance*, which was published by Allyn and Bacon. Much of the textual material is the same as in the earlier work; indeed, most of the chapters even have the same titles as before. However, new material has been added, dealing with such current topics as multinuclear nmr, high field instruments, F₂nmr, two-dimensional nmr, nmr of solids, and imaging. References and problems are found at the end of each chapter, but answers to the problems are not provided. The approach taken in covering the topics is not highly mathematical.

This book does not provide a good introduction to nmr. Poorly written text and/or outright errors were found on almost every page examined. For example, the captions for Figures 7.12 and 7.14, which were lifted from Figures 6.12 and 6.14 of the 1971 book, are wrong. On page 75, reference is made to Structures 10 and 11 but nowhere are they shown! Unfortunately, most of the errors are not such simple typographical blunders. On page 110 it is stated that quadrupolar nuclei give *broadened* signals when in a symmetrical electron charge distribution. This error also appears in the 1971 book. On page 107 the statement is made that "Generally the hydroxyl protons of dilute solutions of alcohols resonate between 4.0 and 5.5 ppm." The range is actually closer to 1.5–3 ppm. Problem 1 on page 140 provides one last example: "The difference in chemical shift between the methyl and methylene protons of a substituted ethane derivative is 24 cps. Estimate the electronegativity of the substituent." Inasmuch as this shift difference is dependent on the (unstated) strength of the applied field, the question is unanswerable.

It would appear that neither the author nor the publisher gave much attention to detail in the production of this book. It cannot be recommended for purchase by individuals or libraries.

HAROLD M. BELL, *Virginia Polytechnic Institute and State University*

Plant Molluscicides. Edited by KENNETH E. MOTT. John Wiley and Sons, Inc., 605 Third Avenue, New York, NY 10158, 1987, xii + 326 pp., 16 × 24 cm., \$75. ISBN 0-471-91228-x.

This volume consists of papers presented at a Meeting of the Scientific Working Group on Plant Molluscicides, UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases, held in Geneva, Switzerland in 1983.

The first chapter, by G. Webbe, discusses the role of molluscicides, mainly synthetic compounds, in control of schistosomiasis. The next chapter, by J. Duncan, deals with the mode of action of molluscicides, and the third chapter, by H. Kloos and F.S. McCullough, reviews 571 species of plants with recognized molluscicidal activities with 171 references. Using five tables, the authors summarize the activities of the plant extracts and components.

In Chapter 4, T.O. Henderson, N.R. Farnsworth, and their colleagues describe the biochemistry of known plant molluscicides, while in chapter 5, the longest chapter of this book, the same team describes how to use the literature to select and to predict plant candidates for bioassay. The sixth chapter, by G.E. Wickens, emphasizes the importance of taxonomic information in the search for molluscicidal plants.

In Chapter 7, C.B. Lugt discusses the feasibility of growth and production of molluscicidal plants. The following chapter, by J.H. Koeman, deals briefly with toxicological screening, and in the next two chapters, J. Duncan and R.F. Sturrock describe how to evaluate potential plant molluscicides in the laboratory and in the field.

In Chapter 11, Y.H. Kuo describes studies on plant molluscicides in the People's Republic of China, and the last chapter, by K. Hostettmann and A. Marston, presents a literature review on plant molluscicides from the 1983 Geneva meeting until 1986.

Regarding this book as a review of plant-originated molluscicides, it has carried out its purpose. As in any book with multiple authors, some inconsistencies are unavoidably present. In particular, I would like to see a specific proposal for the efficient use of natural molluscicides in pest management in the future.

This book can be recommended for scientists and libraries that deal with tropical diseases, especially schistosomiasis.

ISAO KUBO, *University of California, Berkeley*