

information, and should be available to all chemists who work with organometallic compounds. The author expresses the hope that readers will get as much benefit and enjoyment out of it as he did in its composition; readers could undoubtedly derive much benefit from it, but I find it difficult to believe that many will find enjoyment in it; indeed, it is hard to see how the author could have found enjoyment in compiling it, consisting as it does mainly of brief abstract after brief abstract, rather in the style of an annual survey, but he can certainly take satisfaction in having discharged a very worthwhile task, and he deserves our gratitude.

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COLIN EABORN

Spectroscopic Properties of Inorganic and Organometallic Compounds. Vol. 16, Royal Society of Chemistry, London, 1984, 363 pages, £78.00. ISBN 0-85186-143-1.

This latest volume in an excellent series maintains the high standard of its predecessors. It provides as thorough a guide to relevant literature as can reasonably be expected, and the contents of a very large number of relevant papers are indicated (see below). This particular series of Specialist Periodical Reports to my mind provides a model for reports of its type, in that it is reasonably up-to-date, is well-organized, and aims to include every relevant reference. Wisely in my view (but contrary to an opinion expressed in this journal in a review of Volume 15) it gives little space to comment; what most readers want from such a publication are references, not opinions.

The chapters are as follows: nuclear magnetic resonance spectroscopy (of nuclei other than ^1H) (B.E. Mann, 130 pages, 2539 refs.); nuclear quadrupole resonance spectroscopy (K.B. Dillon; 18 pages, 120 refs.); rotational spectroscopy (S. Cradock; 14 pages, 190 refs.); characteristic vibrations of compounds of Main Group elements (S. Cradock; 21 pages, 308 refs.); vibrational spectra of transition-element compounds (G. Davidson; 25 pages, 350 refs.); vibrational spectra of some coordinated ligands (G. Davidson; 53 pages, 412 refs.); Mössbauer spectroscopy (S.J. Clark, J.D. Donaldson, and S.M. Grimes; 87 pages; 676 refs.); gas-phase molecular structures determined by electron diffraction (D.W.H. Rankin and H.E. Robertson; 14 pages, 55 refs.). The survey is described as providing a 'review of the recent literature published up to late 1982', and the great majority of the references are from 1982.

Organometallic (and inorganic) chemists owe a considerable debt to the contributors and the Senior Reporters (G. Davidson and E.A.V. Ebsworth). This volume and the series as a whole are virtually essential for the efficiency of organometallic laboratories. Furthermore it represents excellent value for money. Professor Ebsworth in a Foreword rightly points out that higher sales would lead to even lower prices; conversely, falling sales would lead to higher prices in future, and so ultimately to disappearance of a very valuable aid to research. It is to be hoped that readers of this journal will ensure satisfactory

sales of this volume and later ones in the series. Chemists frequently express anger these days about the cost of specialist books and journals (usually, in my experience, because they do not understand that the prices of such items are determined by the sales, rather than the sales by the prices) but they should consider the number of such publications which could be purchased for the cost of a single postdoctoral research assistant.

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Reductions in Organic Chemistry; by M. Hudlicky. Ellis Horwood, Chichester, 1984, xvi + 309 pages. £35.00. ISBN 0-85312-345-4.

In his Preface the author says "This book encompasses indiscriminately all the types of reductions and superimposes them over a matrix of types of compounds to be reduced", and this gives a good indication of its scope and form. (It would have been wiser, though, to omit the adverb 'indiscriminately'; the author means by it that he has dealt with all types of reduction and not just a selected few, but it tends also to imply that he has not exercised judgement in his account, which is far from the case.) He also describes it as a "Pocket Dictionary of Reductions" and this description also is a good one, indicating as it does that the volume provides a classified source of concise information on the properties of a very wide range of reducing agents and the conditions under which they are used.

The scope and organization are well indicated by the titles of the four main sections, viz. (i) categories of reduction (37 pages), (ii) the reduction of specific types of organic compounds (137 pages), (iii) correlation tables (23 pages), and (iv) procedures (18 pages), along with the sub-headings in the first section, viz. catalytic hydrogenation (13 pages), reduction with hydrides and complex hydrides (9 pages), electroreduction and reduction with metals (9 pages), and reductions with non-metal compounds (6 pages). There are 1175 references, and also a useful list of reviews and monographs on specific reduction methods, an author index, and a clear comprehensive subject index.

Of the chapters dealing with the various methods, that on catalytic reduction is the least satisfactory, but this is not important because so many reviews of that subject are already available. Very useful indeed are the so-called "correlation tables", which reveal at a glance which types of reducing agent can be used with specific types of organic compounds, and refer the reader to the pages under which the relevant reactions are discussed. Also very valuable are the descriptions of 50 typical experimental procedures (which rightly present reports of methods used for specified compounds, not just generalized guidance). The book will be of immediate use to a very wide range of research supervisors and their research assistants at all levels, and I certainly expect to make extensive use of it. It should not just be in all libraries associated with organic and organometallic laboratories but also available widely in those laboratories as a handbook.