Journal of Organometallic Chemistry, 309 (1986) C70-C74 Elsevier Sequoia S.A., Lausanne - Printed in The Netherlands

## **Book reviews**

Handbook of Heterocyclic Chemistry; by A.R. Katritzky, Pergamon Press, Oxford, 1985; 542 pages; Flexicover, U.S. \$ 29.95, £ 22.95; Hardcover, U.S. \$ 80, £ 61.50. ISBN 0 08 0307264 and 0 08 0262171.

This is in fact a multiauthor text based on chapters from the eight volume work 'Comprehensive Heterocyclic Chemistry'. It is a valuable text in its own right but will be particularly useful on the bookshelves of heterocyclic chemists who have access to the complete (and very expensive) work through their library. Reference is made to the larger work where appropriate but the text is well referenced in its own right and contains a great deal of information for its size. Saturated, unsaturated, and aromatic compounds are dealt with, the latter group comprising the major part of the work. The book is organised into three main sections describing structure, reactivity and synthesis of heterocyclic compounds

Since heterocyclic compounds are used as ligands, organometallic chemists may find the many tables of selected physical data particularly useful. These include X-ray and microwave-derived bond lengths and bond angles: ionisation energies;  $pK_a$  values; UV maxima; and  $^1H$ ,  $^{13}C$ ,  $^{14}N$  and  $^{14}N$  NMR spectra. In the main only heterocyclic compounds containing the heteroatoms nitrogen, oxygen and sulphur are discussed, so that for information on compounds which might be of more interest to organometallic chemists (P, As, Sb, Bi, Si, Ge, Pb, B and transition metal-containing heterocyclic compounds), the reader must refer to the larger work. Similarly, encapsulation of metals by heterocyclic compounds such as porphyrins and corrins, crown ethers and cryptates receives scant attention. Reasonable discussion is made of the synthesis and reactions of organometallic derivatives of heterocyclic compounds such as Grignard derivatives and sodium, lithium, and mercury compounds.

This work will be a useful and cheap handbook for practising heterocyclic chemists and will prove to be of some use in the departmental library of the organometallic chemist.

School of Chemistry and Molecular Sciences, University of Sussex, Brighton BN1 9QJ (Great Britain) DOUGLAS W. YOUNG

Houben-Weyl Methoden der Organischen Chemie, Carbocyclische π-Electronen-Systeme, 4th edition, Volume V, part 2c, edited by H. Kropf, Georg Thieme Verlag, 1985, xiv + 870 pages, DM 940, ISBN 3-13-202804-5.

The Houben-Weyl series has as its purpose to give a detailed account of the synthesis and reaction of various classes of organic compounds. It thus complements the Gmelin inorganic and Beilstein organic series, which are more concerned with comprehensive listings of compounds and their properties. This present volume