

*Inorganic Chemistry Concepts*. Editors: C.K. Jorgensen, M.F. Lappert, S.J. Lippard, J.L. Margrave, K. Niedenzu, H. Noth, R.W. Parry and J.H. Yamatera. Vol. 11, by S. Kawaguchi, *Variety in Coordination Modes of Ligands in Metal Complexes*. Springer-Verlag, Berlin-Heidelberg-New York-London-Paris-Tokyo, 1988, 56 figs., pp. ix + 123, 415 g, hard cover, DM 128. ISBN 3-540-18305-1.

This book is Volume 11 in a series of *Inorganic Chemistry Concepts* published by Springer-Verlag.

The presentation of monoatomic, diatomic and polyatomic ligands is exemplified by hydride, carbon monoxide, nitrogen, thiocyanate ion and the diketones. It is argued that these systems portray the various coordination modes seen with most other ligands.

The information is presented as a kind of compendium of mini reviews. Each is broken into subsets such as, for example, the hydrogenation of olefins catalysed by Rh(I) which includes the formation of Rh(I) complexes, the mechanism of olefin hydrogenation and asymmetric hydrogenation.

Teachers will benefit from this book as a source of material for exemplars in coordination chemistry but it does not cover any topic in sufficient detail to be of great value for experienced researchers in the field. Honours students would gain by browsing through the book; it should whet their appetite to look for more detail elsewhere.

The Editor's Desk

*Organometallic Chemistry Reviews*. Journal of Organometallic Chemistry Library, 20. Editors: A.G. Davies (coordinating Editor), E.O. Fischer and O.A. Reutov, Elsevier, Amsterdam, 1988, pp. vii + 366, U.S. \$155.25 (Dfl. 295.00). ISBN 0-444-42950-6.

There are five chapters in this volume. The first, by Grushin and co-workers, concerns the syntheses and properties of carboranes (12) containing boron-element bonds. Comparisons are made between the chemistry of three-coordinate boron and aliphatic and aromatic carbon.

The second review, the largest in the book, by Lukevics and Segal, considers pyridine and quinoline derivatives of group IVB elements (silicon, germanium, tin and lead). The chapter is subdivided into sections on group IVB element bonding to carbon, nitrogen and other elements such as oxygen and sulphur in substituted pyridine and quinoline systems. Particular attention is given to the question of the interaction of the  $\pi$  system with the the  $d$  orbitals of the group IVB metals.

In the third chapter by Goldberg, Dirnens and Lukevics, from the same institution, phase transfer catalysis in organosilicon chemistry is discussed.

There follows a fairly lengthy chapter, by Holloway and Melnik, dealing with organometallic and carbonyl complexes of rhenium classified according to their crystallographic and structural data.

The last short chapter, written in German, by von Klapötke and Köpf, presents a review of cyclopentadienyl complexes with maleinitriledithiolate complexes and related analogues with selenium and tellurium.

This volume continues the series of books which contains scholarly articles on aspects of organometallic chemistry. Those collecting the complete library will no doubt wish to buy this volume, but the rather varied nature of the chapters contained herein may inhibit the more casual purchaser. The manuscript is photo-offset from camera-ready copy of a fairly high standard. There is no index.

The Editor's Desk

*Chemical Structure Software for Personal Computers.* Editors: Daniel E. Meyer, Wendy A. Warr and Richard A. Love, ACS Professional Reference Book Series, American Chemical Society, Washington, D.C., 1988, 107 pp. Paperbound, U.S. and Canada US\$39.95; export US\$47.95. ISBN 0-8412-1539-1. Clothbound, U.S. and Canada US\$49.95; export US\$59.95. ISBN 0-8412-1538-3.

As stated in the preface, the primary intent of *Chemical Structure Software for Personal Computers* is to serve as a directory of the available commercial and public domain software packages for creating and using chemical structures. The book contains chapters on structure drawing, graphics terminal emulation, structure database management, 3-D modelling, calculation and graphics, and other special applications such as front-end manipulation of structure information for on-line database searching. The programs listed are almost exclusively for IBM and MacIntosh machines. As a directory, the book is quite useful, providing brief descriptions of the capabilities of the software, listing the required hardware, printer and mouse support, industrial and academic prices and vendor addresses. Separate appendixes table the package names according to function, type of computer and price. Sample print-outs of structure-drawing and graphics programs and a glossary of terms are also included. A valuable feature is that the authors note compatibilities between the products reviewed and other programs, such as wordprocessors, and the existence of integrated program packages accomplishing many of the functions listed above. However, as a