

*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.