

This supplement covers a wide range of organic ligands (including their protonation equilibria), inorganic halides, oxyanions etc. In addition, there is a bibliographic listing of many ligands which were considered by the authors but not included in this volume.

By looking up a specific ligand *and* referring back to its entry in earlier supplements, one obtains a complete survey of the stability constants for that ligand up to 1985.

We owe a debt of gratitude to Drs. Smith and Martell for bringing this compilation to the literature. Arthur Martell is especially to be congratulated for having been involved in the initiation of this series in the early 1960s and for having stayed with it all these years.

The Editor's desk

Inorganic Reactions and Methods, Volume 10 (The Formation of Bonds to C, Si, Ge, Sn, Pb, (Part 2)) edited by A.P. Hagen (Founding Editor, J.J. Zuckerman), VCH, New York, 506 pp. ISBN 0-89573-260-2. Price DM 410; subscription price DM 354.

Inorganic Reactions and Methods is a series of books designed to present the art of synthetic inorganic chemistry. Eighteen volumes are planned and they are based upon bond formation and type of reaction. The editors have developed a logical but somewhat complex framework upon which all the data can be presented. These are not review chapters but rather a continuous series of subsections which deal in a stepwise fashion with the formation of a particular bond. The production of this book relies heavily upon the computer and sophisticated word processing capabilities thereof.

Thus the first chapters deal with the formation of compounds between elements of group 4 (carbon, silicon, germanium, tin, lead) and those of group 3B (boron, aluminium, gallium, indium, thallium). A typical set of subheadings would start with formation of C-B bonds and then a subsection for boron hydrides and then a further subsection by addition to olefins and acetylenes. Thus the reader is led through a series of subsections dealing with consecutive aspects of the formation of a particular bond. Running heads on every page are three layers deep, indicating exactly where one is in the text with respect to this set of subheadings.

All the information in this book has been collected from contributing authors, of whom there are 12 in this volume. The information for any particular process is given in considerable depth such that the reader has a very clear idea of what is involved. Obviously there is also very extensive referencing to the material presented.

Since this material was generated on a computer, the editor has made use of the indexing capabilities of the computer such that the indexing is probably one of the most detailed that one can ever expect to see in a book of this kind. Thus every compound is listed in a compound index not only in the standard *Chemical Abstracts* order but also in various permuted orders such that one can look up any element component to find a particular compound. In addition there is a general subject index and an author index for the innumerable references. The formula index also includes the structural presentation of the specific molecule, not just simply its formula, and also indications of whether this species is simply being used as a reactant or is a compound whose preparation is described, etc. An indication of the completeness of the compound index can be obtained from the fact that it is 110 pages long while the author index is 37 pages long. While this is obviously useful, the reader will have to decide whether the additional cost that this must have generated is worthwhile.

This book contains an incredible amount of real preparative chemistry and as such it makes fascinating reading to those whose interests lie in the subtleties of chemical reactions. This series should certainly be purchased by those who call themselves synthetic chemists.

The Editor's desk

The Chemistry of Macrocyclic Ligand Complexes by Leonard F. Lindoy.
Cambridge University Press, The Edinburgh Building, Shaftesbury Rd.,
Cambridge CB2 2RU, 1989. Price \$69.50. ISBN 0-521-25261-X.

Lindoy has been involved with macrocyclic chemistry throughout his career and is therefore eminently suited to present an exposé of this subject. The book begins with a survey of the various types of natural and synthetic macrocycles together with aspects of their structure, especially hole size. This is followed by a chapter dealing with synthetic procedures presented in a fairly general fashion. It is a useful and complete survey of a wide range of strategies, especially template and ring closures. The third chapter extends the categories of macrocycle by discussing macrocycles with pendent groups, and interlocked and binucleating macrocycles. This is followed by a survey of the polyether crown species, cryptands, and related species. The word 'survey' is pertinent here because this chapter does not contain an in-depth discussion of these species but rather presents the various types of such molecule and their principal properties with leads via the bibliography to further study. There is, however, further discussion of the polyethers in the next chapter which describes host-guest interactions including some of the elegant supramolecular work. This chapter also covers cyclophanes and cyclodextrin.