

Book review

Gmelin Handbook of Inorganic Chemistry, 8th Edition, New Supplement Series, Vol. 29, Organotin Compounds, Part 2, Tetraorganotin Compounds, R_3SnR' (480 pages, DM 788, \$323.10) and *Vol. 30, Organotin Compounds, Part 3, Tetraorganotin Compounds, $R_2SnR'_2$, $R_2SnR'R''$, $RR'SnR''R'''$, Heterocycles and Spiranes* (164 pages, DM 327, \$134.10), H. Schumann and I. Schumann, volume authors, H. Bitterer, volume editor, Gmelin Institut für Anorganische Chemie und Grenzgebiete der Max-Planck-Gesellschaft zur Förderung der Wissenschaften, Springer-Verlag, Berlin/Heidelberg/New York, 1976 (in German).

These books continue the Gmelin series on organotin compounds and conclude the coverage of tetraorganotin compounds*. Part 2 deals with the many compounds of type R_3SnR' , where R and R' can be alkyl, cycloalkyl, alkenyl, alkynyl, aryl or heterocyclic substituents bonded to tin through carbon. Halogenated and other functional groups are included when Sn-C bonds are involved. Trimethyl- and triethyltin compounds take up over half of Part 2 (249 pages), triphenyltin derivatives, Ph_3SnR , another 74 pages, As in Part 1, all available information concerning preparation, physical, spectroscopic and thermodynamic properties and chemical reactions is given. Biological properties and commercial applications are included when such data are available.

The much shorter Part 3 deals mainly with compounds with four Sn-C bonds of type $R_2SnR'_2$, $R_2SnR'R''$ and $RR'SnR''R'''$ in much the same manner. A short chapter on cyclic compounds in which a tin atom is part of a ring system in which it is bonded to two carbon atoms, including spiro compounds, concludes this volume.

Both Part 2 and Part 3 have a formula index which gives not only the empirical formula but also the substituents on tin for each compound, a feature which greatly enhances the utility of these volumes. Also of value to the reader will be the extensive list of general references dealing with preparation and reactions, physical and spectroscopic properties, analysis and applications of the compound classes which are included in the book. The user whose reading knowledge of German is poor will be aided by the English translations of the Table of contents and chapter and section headings. Literature coverage in both volumes is complete through 1973.

The organotin chemist is well served in these excellent volumes. We look forward to further additions to this series.

Department of Chemistry,
Massachusetts Institute of Technology
Cambridge, Massachusetts 02139 (U.S.A.)

DIETMAR SEYFERTH

* For a review of Part 1, see *J. Organometal. Chem.*, 107 (1976) C49.