

perimentally, it has been fair game for the theoretical chemists whose calculations are summarized in this book. The isomeric silysilylene, H_3SiSiH , also is discussed.

Whatever is known about the higher silanes, linear, branched, and cyclic, information obtained in large part in Féher's laboratories, also is presented, as are the available literature data on the ill-defined "low-valent" solid silicon hydrides ($\sim(\text{SiH}_{0.2})_x \sim (\text{SiH}_2)_x$). The final short chapter covers compounds that contain Si-O as well as Si-H bonds: $\text{H}_n\text{Si}(\text{OH})_{4-n}$ (theoretical calculations only), H_3SiOLi , $\text{H}_3\text{SiOSiH}_3$, cyclic $(\text{H}_2\text{SiO})_n$ oligomers, and $(\text{HSiO}_{1.5})_n$. The reader also is referred to "mysterious patent claims" on the preparation of "silicoformic acid". Most of the work on the synthesis, structure, and chemistry of siloxene was reported in the Gmelin "B" (1959), but the work reported in the 36 references published since then is detailed in the last 5 pages of the book.

The coverage of the literature in this book is well-nigh exhaustive and quite up-to-date (through the end of 1980, with some 1981 references included). In the SiH_4 literature patents play an important role when preparation, purification, and applications are concerned, and it would appear that only patents that have been abstracted in "Chemical Abstracts" are included.

The first supplement volume to the silicon B series is an excellent one, and we look forward to further additions.

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Gmelin Handbook of Inorganic Chemistry. 8th Supplement. B. Boron Compounds. 1st Supplement, Volume 3. Boron and Chalcogens. Carboranes. K. Beeker and T. Onak, volume authors, K. Niedenzu, volume editor. Gmelin Institut für Anorganische Chemie der Max-Planck-Gesellschaft zur Förderung der Wissenschaften and Springer-Verlag, Berlin/Heidelberg/New York. 1981. v + 397 pages. DM 799, \$471.50.

The present book is the third and final volume of the three-volume supplement to the twenty-volume series on inorganic and, in part, organic boron compounds that was published by the Gmelin Institute of Inorganic Chemistry during the period 1974-1979. It is the aim of the supplement volumes to bring all of the many topics covered to a common December 31, 1977, literature cutoff date. The present volume includes the following topics that remain: boron-chalcogen compounds and carboranes. It also provides a useful 139-page formula index for the three supplement volumes.

Covered in this book are all the diverse boron compounds that contain B-S, B-Se, and B-Te bonds, including inorganic compounds, boron hydride derivatives, adducts of sulfur-centered Lewis bases with trigonal boron compounds, and organic-substituted B-S and B-Se compounds.

Of greater interest to the organometallic chemist will be the 151-page up-date of carboranes to December 1977 from a cutoff date of ~ 1970 in Volume 2 of the boron series. Much new carborane chemistry, principally work by American and Russian authors, was published during those 7 years, and all this work is covered in this volume—from C_5B_1 to C_2B_{10} carboranes. Metallocarboranes are included for those cases in which the metal atom constitutes part of the principal polyhedral framework. Also included is a discussion of the ever-increasing organic chemistry of the C_2B_{10} carboranes.

The boron-chalcogen portion of this book is written in German but has added English chapter titles and section headings. Onak's carborane chapters, on the other hand, are written in English.

For anyone active in research in any area of boron chemistry

the now 23-volume Gmelin boron series will be an indispensable aid. The exhaustive literature coverage through the end of 1977 will provide a reliable starting point for further searching of newer literature. Five years have now passed since the 1977 cutoff, and research in boron chemistry has continued at a brisk pace. It is hoped that a second supplement will be published in the not too distant future.

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Topics in Current Chemistry. 104. Organotin Compounds. F. L. Boschke, Managing Editor. Springer-Verlag, Berlin/Heidelberg/New York. 1982. 137 pages. \$34.00.

"Topics in Current Chemistry" is a topical review journal that masquerades as a hard cover series. In short and pricey volumes it brings several reviews in selected areas that may be rather broad or very narrow. The present volume is in the second category and contains three reviews on organotin chemistry: "Structure and Reactivity of Monomeric, Molecular Tin(II) Compounds", by M. Veith and O. Recktenwald; "Chirality, Static and Dynamic Stereochemistry of Organotin Compounds", by M. Gielen; "Coordination Effects in Formation and Cross-Linking Reactions of Organotin Macromolecules", by Z. M. O. Rzaev.

The review on tin(II) compounds brings an up-to-date discussion by a leading contributor to this field. Dr. Veith has done some excellent research on tin(II) chemistry and has provided clear accounts of this work in the German literature. The present review, written in English, does an excellent job of summarizing an interesting and active area of tin chemistry. The review seems to be up-to-date, and it is written with authority. Unfortunately, the English is bad. Veith's review is full of awkward expressions and sentences and errors of usage, grammar, and spelling. Some sentences are downright confusing. One might have thought that the editor would be alert to such problems of translation, but in the case of this book, he must have been out to lunch.

Things are even worse in the third review by Rzaev that was translated from the Russian. Here the original writing style must have been bad to start with: very disjointed, with an abundance of one-sentence paragraphs, and too many alphabet-soup abbreviations, such as TASM, TBSM, TESM, DMSM, etc., that are difficult to keep straight. DMFA, never really defined, could be dimethyl formamide, but the formula associated with it (p 121), $(\text{CH}_3)_3\text{N}^+=\text{C}=\text{O}^-$ leaves one to wonder. This review is, on the whole, obscure, confusing, and of little use to the reader in terms of the chemistry that is presented. It is not quite clear whether this is because of the translation or whether it is because the tin chemistry and the science in general that are being proposed are just a bit strange and off-beat. In any case, this chapter decidedly is not a positive contribution to organotin chemistry.

Gielen's chapter, on the other hand, is a valuable contribution. It provides an excellent, authoritative, well-organized and well-written (in good English) summary of optically active organotin compounds, a field pioneered by the author of this chapter. He can be faulted on only one point: after stating at the end (p 102), "I have avoided the problem of referring to my research students by name by mentioning none of them; but their experimental work is gratefully acknowledged, and their names can be found in the references below," he cites more than a few references to his own work as "Gielen, M. et al.", thus relegating these coworkers to undeserved anonymity.

If this volume is typical of the "Topics in Current Chemistry" series, one must conclude that the series has some problems.

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