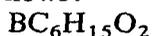


BOOK REVIEW

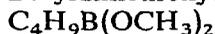
Handbook of Organometallic Compounds, edited by N. Hagihara, M. Kumada, and R. Okawara, Benjamin, New York, 1968, 1044 pages, \$ 35.—

This volume is an English translation and revision of a Japanese text.

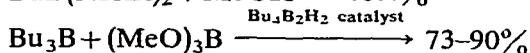
The major part (Part I, 930 pages) consists of Tables of Organometallic compounds, treated in sections—alkali metals; alkaline earth metals; boron; aluminium; gallium, indium, and thallium; silicon (240 pages); germanium, tin, and lead; phosphorus, arsenic, antimony, and bismuth; selenium, tellurium, and polonium; and transition metals (including Zn, Cd, and Hg) (154 pages). Each section is prefaced by brief discussions of nomenclature, methods of synthesis, and physical and chemical properties, and a brief bibliography to secondary sources. A typical entry reads as follows:



(1) Butyldimethoxyborane



(2) $\text{BuB}(\text{NHet})_2 + \text{MeOH} \rightarrow 73.4\%$



(3) Liq. (37~8°/21, 43~5°/25)· n_D 1.3933 (20°)· d 0.8372 (20°/4°).

(4) Izv. OKhN 1958, 777.

This example illustrates the rather uncritical approach. Thus the reaction $\text{BuB}(\text{NHet})_2/\text{MeOH}$ does not provide a realistic procedure for making $\text{BuB}(\text{OMe})_2$, since both $\text{BuB}(\text{NHet})_2$ and $\text{BuB}(\text{OMe})_2$ are in practice readily obtained from BuBCl_2 .

The minor part (Part II) consists of a brief (32 p.) glossary of technical terms. This appears to be fairly accurate, but it is difficult to visualise the category of reader to whom it is addressed. Typical entries (which are listed alphabetically) are "diamagnetism", "dry-box", "ligand", "Grignard reagent", and "semipolar bond". For example, under "silicone", we find as first sentence "This name was first proposed by Wohler in 1851, but was often used by Kipping for the description of organosilicon compounds having the *experimental* formula $\text{R}_2\text{SiO}\dots$ " (my italics).

The malapropism quoted in the last sentence is one example of many. "Amusing" sentences abound throughout the text (e.g., on p. 924, "stable for some day in a cold chest"). I do not think I have ever seen so many clerical mistakes in any serious text-book (e.g., on p. 17, Professor Gilman is transparently disguised as "H. Oilman").

I find it impossible to recommend this book. On a purely scientific plane, the data are chosen at random, are not selective, and often inaccurate [for example, (i) for the synthesis of Vaska's compound on p. 881, the quoted synthesis is now obsolete (see *J. Chem. Soc.*, (1967) 604); (ii) compounds not listed include Ph_3SiLi , $\text{Me}_3\text{Sn-NMe}_2$, $\text{Ti}(\text{CH}_3)_4$, $(\text{Ph}_3\text{P})_3\text{RhCl}$, or any σ -alkyl derivative of Ir; (iii) under $\text{Fe}_3(\text{CO})_{12}$ on p. 830, incorrect structures are drawn and the statement made that "the structure has not been definitely determined," thus ignoring *J. Amer. Chem. Soc.*, 88 (1966) 1821]. From a production (proof-reading, etc.) point of view the book is a disaster, but for this the distinguished editors are clearly not responsible.

M. F. Lappert