BOOK REVIEW

The Organic Compounds of Germanium; by M. Lesbre, P. Mazerolles and J. Satgé. Wiley, London, 1971. xii+701 pp, £16.00.

This book is one of a series on organometallic chemistry under the general editorship of Dietmar Seyferth, and follows volumes on the organic chemistry of lead (Shapiro and Frey), and of tin (Neumann).

Lesbre, Mazerolles and Satge have treated their subject very thoroughly. There are over 200 pages of tabulations of compounds, and more than 2000 references. Very little that is significant has been omitted, and the literature has been covered completely up to the end of 1968, and, in part, into 1969.

After a short introduction on general aspects of organogermanium chemistry, the remaining chapters are arranged in conventional fashion according to the nature of the group bonded to germanium : alkyl- and aryl-germanes; germacycloalkanes; germanium hydrides; germanium halides; compounds containing the Ge–O bond; the Ge–S, Ge–Se, and Ge–Te bonds; the Ge–N and Ge–P bonds; polygermanes; and compounds containing germanium-metal bonds. The various chapters are divided further into various sub-sections, and, although the treatment is exhaustive, it is not uncritical. The printing and general layout are excellent. The overall effect is one of a book which is both easy to read, and easy to use as a source of reference.

The classification along the lines of functional types is perhaps rather too rigid, and various topics that cut across the boundaries that this draws might have been brought out more clearly. For example, the discussion of the spectroscopic properties of the various types of compounds is scattered, and is not easy to evaluate. More attempt might also have been made to point out similarities and differences with the chemistry of the organic derivatives of silicon and of tin: often a point in organogermanium chemistry may seem obscure in isolation, but can readily be understood if it is considered in the more general context of the chemistry of these more familiar elements.

For the next decade, this will clearly be the definitive book on organogermanium chemistry.

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