

Organometallic Chemistry Reviews; Annual Surveys: Si, Sb, Bi, Mn, Tc, Re, Heteronuclear Complexes (Journal of Organometallic Chemistry Library 17); edited by R.B. King and J.P. Oliver, Elsevier, Amsterdam, 1985, 577 pages, Dfl. 450, US \$166,75, ISBN 0-444-42515-2.

This latest volume in a well-regarded series marks a departure from the usual concentration on reviews of the chemistry of the Group IV elements into one issue. Silicon chemistry is the subject of two surveys (those concerning organo-silicon reaction mechanisms, bonding and structure, and the application of silicon in organic synthesis are not present), and the reviews of the other elements included are normally found in the *Journal of Organometallic Chemistry*. The surveys are as follows: "Organosilicon Survey 1983 – The Silicon–carbon bond", by G.L. Larson (162 pages, 447 refs.); "Silafunctional compounds; synthesis and reactivity; Annual Survey for the year 1983", by J.Y. Corey (147 pages, 599 refs.); "Antimony; Annual Survey covering the year 1983", by L.D. Freedman and G.O. Doak (41 pages, 136 refs.); "Bismuth; Annual Survey covering the year 1983", by G.O. Doak and L.D. Freedman (11 pages, 38 refs.); "Manganese, technetium and rhenium; Annual Survey covering the year 1983", by P.M. Treichel (32 pages, 218 ref.); "Complexes containing heteronuclear metal–metal bonds. Some recent advances 1982–83. B. Heterometallic cluster complexes and related compounds", by M.I. Bruce (149 pages, 234 refs.). Part A of the review by M.I. Bruce is in *Journal of Organometallic Chemistry*, 283 (1985) 339. Work by individual authors cited in the reviews can readily be located using the 28 page author index.

The reviews in this volume are up to date and comprehensive, and have few typographical errors. The text is reproduced from camera-ready copy but is fairly uniform from chapter to chapter. The diagrams and structures are well drawn, and this is particularly important in the chapter dealing with heteronuclear cluster complexes.

It is unfortunate that annual surveys for all the Group IV elements could not have been brought together in a single volume as is usual in this series; apart from those on silicon, the surveys on the Group IV elements are now seriously overdue. Although this volume covers an odd combination of elements, each survey is a highly useful and important addition to the literature of the elements concerned.

*School of Chemistry and Molecular Sciences,
University of Sussex, Brighton, BN1 9QJ (Great Britain)*

PAUL D. LICKISS