

Journal of Organo metallic Chemistry

## Book reviews

Gmelin Handbook of Inorganic and Organometallic Chemistry, 8th edition, Rare Earth Elements, Volume 12b, Sc, Y, La–Lu, Compounds with Carbon Springer, Berlin and Heidelberg, 1994, pp. 362 + xviii DM 2,195.

ISBN 3-540-93689-0

This is not, as one might think, a presentation of the organometallic chemistry of the rare-earth elements. Rather it describes the inorganic carbon derivatives, which includes carbonates, mixed carbonates with alkali metals, thiocyanates and alkalimetal thiocyanates, and cyanides, cyanates, and selenocyanates. Carbides are dealt with in Volume 12a.

The presentation is in the usual immaculate format. The material seems to reflect an earlier age of inorganic chemistry, being mainly of the "prep and prop" variety, and in view of the intention of comprehensive coverage this is probably inevitable. However, the literature is cited until Spring 1993, if not later, though a cursory glance through the extensive reference lists suggests that not much work has been done very recently.

This is the kind of book that is invaluable for reference on the odd occasion. As such, it should be in every respectable library. For myself, it represents the kind of database that is the easiest to use. It will be a pity if the cost should persuade libraries that they can forego volumes such as this.

G.J. Leigh

School of Chemistry and Molecular Science
University of Sussex
Brighton BN1 9QJ
UK

Gmelin Handbook of Inorganic and Organometallic Chemistry, 8th edition, Molybdenum, Supplement Volume B9, Compounds with Se, Te, Po, Springer, Berlin, and Heidelberg, 1994, (pp. 165 + xvii) DM1, 050

ISBN 3-540-93691-2

The literature coverage in this latest contribution to the archiving of molybdenum chemistry is to at least mid 1992. In view of the rather bleak title (as judged at least by an organometallic chemist), this volume is surprisingly stimulating. It should not be necessary to state that the format and style are as good and as comprehensive as one has come to expect of Gmelin productions.

The more general interest arises from the specific compounds covered. For example, the volume begins with selenides, continues with oxyselenides, proceeds through selenide halides and finishes this section with a discussion of compounds of molybdenum with selenium and sulfur, and oxygen or halogens, when they are present.

Although the material is often of the older kind, the realisations that selenium has some biological significance, and that extended inorganic structures may give clues to important biological structures and also exemplify general principles of cluster design, mean that the diagrams are often quite thought-provoking.

The treatment of the tellurium systems follows a similar pattern, and rather surprisingly occupies considerably more space than the selenium material. There are two paragraphs and four references devoted to polonium. There seems to be a challenge there for some brave souls!

G.J. Leigh

School of Chemistry and Molecular Science University of Sussex Brighton BN1 9QJ UK

Inorganic Chemistry, 2nd edition

D.F. Shriver, P.W. Atkins, and C.H. Langford, Oxford University Press, Oxford, 1994, pp. 819 + xviii, plus appendices £48.00 hardback, £19.50 paperback ISBN 0-19-855397-8 (hardback); 0-19-855396-X (paperback)

This is an excellent textbook. I have taken the liberty of using my review copy for reference and undergraduate teaching in tutorials, and have found it to be of the greatest value. It addresses itself both to students and instructors and seems to be able to