

Book review

"Topics in Phosphorus Chemistry", E. J. Griffiths and M. Grayson, editors, John Wiley & Sons, Inc., New York/London/Sydney/Toronto, Vol. 8, 1976, viii + 611 pages, \$ 52.00, £ 30.70, and Volume 9, 1977, vii + 516 pages, \$ 55.00 £ 32.65.

After an interruption of some five years, two further volumes of this useful organophosphorus review series have appeared.

Volume 8 contains eight reviews on diverse topics of both inorganic and organic phosphorus chemistry: "The Chemistry of Phosphorohydrazides and Azides" (Cremlyn and Wakeford); "The Mass Spectra of Organophosphorus Compounds" (Granoth); "NMR Parameters of the Proton Directly Bonded to Phosphorus" (Brazier, Hovalla, Loenig and Wolf); "Phosphorus Sulfides" (Hoffman and Becke-Goehring); "Phosphoryl Coordination Chemistry: A Study of Isolated Complexes of Neutral Ligands" (De Bolster and Groeneveld); "Chemical Analysis of Phosphate Rock" (Young); "The Chemistry of P-C-N Systems" (Redmore), and "The Reaction of Disulfides with Trivalent Phosphorus Compounds" (Mukaiyama and Takei). Volume 9 brings three more: "Transition Metal Complexes of Phosphorus Ligands" (Stelzer); "Phosphate Ceramics" (Westman), and "ESR of Phosphorus Compounds" (Schipper, Jansen and Buck).

As far as the readers of this Journal are concerned, the long reviews on transition metal complexes of phosphorus ligands in Volume 9 (M-P bonds; 229 pages) and metal complexes of phosphoryl ligands in Volume 8 (M-O-P bonds; 178 pages) will be of greatest interest. The former provides thorough coverage of all aspects of this compound class: chemical, physical and spectroscopic. The latter, dealing with a more manageable subject, can afford the luxury of listing all known phosphoryl complexes in a table that is organized according to ligand.

Other chapters will be of interest to organometallic chemists: in Volume 8, the chapters on mass spectroscopy will be useful to transition metal chemists who use organophosphorus ligands; in Volume 9, the chapter on ESR spectroscopy of organophosphorus compounds will be a source of useful information to those preparing and using phosphorus ligands.

When one examines these reviews to determine the cut-off date of the literature coverage, one comes to realize that there must have been some problem in bringing these volumes out. The

review on transition metal complexes with phosphine ligands, tying in to previous reviews, covers the literature of 1970-1973 with 1288 references. An addendum treating another 499 references dating from 1973 and 1974 was added after the review was completed. The phosphoryl complex review has similar problems, with an initial literature cut-off date of July 1973, and with an addendum continuing the coverage to May 1975. Other reviews in these two volumes are even more outdated. Thus, for instance, the chapter on the mass spectra of organophosphorus compounds has an addendum as well - to the 1972-1973 literature! The most recent review appears to be that on ESR spectra of phosphorus compounds which is based on literature which appeared through mid-1974. Such delays in getting these reviews to the readers are most unfortunate. However, in view of the current literature deluge, it is better to find a review on a subject of one's interest that is a bit out of date than to find none at all - so we cannot deny that the editors and authors of these volumes have rendered us a service.

These volumes have a subject index for the reviews which they contain and also a cumulative index for all previous volumes of this series. We would welcome further volumes of this series, but we sincerely hope that the editors and the publishers will solve the problems which caused the delay of the publication of the present volumes.

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