

Book Reviews

Organometallic Chemistry Reviews: Section B — Annual Surveys, Vol. 6.

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No. 1. MAIN GROUP METALS, GROUPS IA, IIA AND IIB ANNUAL SURVEYS COVERING THE YEAR 1969

This issue deals with lithium (60 pages, 239 references), sodium and potassium (6 pages, 46 references) reviewed by W.H. Glaze; beryllium (6 pages, 11 references), magnesium (138 pages, 237 references) and calcium (2 pages, 4 references) reviewed by E.C. Ashby, zinc (18 pages, 54 references) and cadmium (8 pages, 23 references) reviewed by J.G. Noltes, and mercury (83 pages, 240 references) reviewed by D. Seyferth.

No. 2. MAIN METALS. GROUPS IIIB, IVB (EXCLUDING SILICON) AND VB, ANNUAL SURVEYS COVERING THE YEAR 1969

This volume is the latest in a series which started in 1965. The stated aim of *Annual Surveys* is to provide a comprehensive and critical survey of organometallic chemistry on a year-to-year basis. This reviewer can attest to the utility and success of this approach. Our research interests span much of transition metal chemistry and boron chemistry, two large and previously separate areas. *Annual Surveys* is the most efficient method for keeping abreast of both areas simultaneously. In addition, research ideas have often been suggested upon scanning the many reactions and structural formulas which appear in the *Surveys*.

In the first several volumes, Professors Seyferth and King personally reviewed the literature. However, more recent volumes utilize other reviewers, each one a well-known research worker in the area of his survey. In this issue, D.S. Matteson (Washington State University) surveys boron chemistry; J.J. Eisch (Catholic University) reports on aluminum, gallium, indium, and thallium; the group at Utrecht (E.J. Bulten, J.G.A. Luijten and L.C. Willemsens) reviews germanium, tin, and lead, and G.O. Doak and L.D. Freedman (North Carolina State University) review arsenic, antimony, and bismuth. The quality of the reviews is excellent as usual. They are concise and comprehensive; each contains valuable critical and comparative comments and is cross-referenced with those in previous volumes.

This reviewer has enjoyed, in particular, the surveys of boron chemistry written by Professor Matteson in the past several volumes. His reviews are characterized by incisive comments and a readable, sometimes humorous style. For example, in this issue he discusses in some detail (p. 359) the published work on asymmetric induction in hydroboration, comparing literature results and comments and injecting his own interpretation. At

several points (pp. 331 and 347) he humorously comments on the state of nomenclature in boron hydride and carborane chemistry.

In a preface to the Author Index of Volume 5, the Editors announced that "as of 1970, we must reluctantly go over to a two volumes-a-year publication scheme ...". The reason is exemplified by a comparison of the boron chapters in the latest issue with the chapter in Volume 1. In 1965, the boron chapter was 27 pages long and listed 147 references. The latest boron chapter is 76 pages long and encompasses 283 references. Although it is understandable, the plans of the Editors have again changed, the rate of publication in organometallic chemistry is such that three volumes are now apparently scheduled for 1971. At a price of \$69.00 per year (\$23.00 per volume), this is now beyond the means of the average chemist; it is also rapidly approaching the limit for university libraries with shrinking budgets. This is quite unfortunate; *Annual Surveys* represents one of the most efficient and rewarding ways of keeping abreast of the literature in the whole of organometallic chemistry and, as such, it should be available to any chemist working in the field.

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No. 3. TRANSITION METAL GROUPS VIII AND IB. ANNUAL SURVEYS COVERING THE YEAR 1969

This issue deals with ferrocene, ruthenocene and osmocene (47 pages, 231 references) reviewed by M. I. Bruce; iron, ruthenium and osmium (47 pages, 222 references) reviewed by J.A. McCleverty; cobalt, rhodium and iridium (32 pages, 145 references) reviewed by M. Green; nickel, palladium and platinum (114 pages, 287 references) and copper, silver and gold (9 pages, 41 references) reviewed by J. Powell.

No. 4. TRANSITION METALS, GENERAL, STRUCTURES, GROUPS IIIA, IVA, VA, VIA AND VIIA. ANNUAL SURVEYS COVERING THE YEAR 1969.

Author Index to Volume 6.

Results of general interest in the transition metals area are reviewed by P.S. Braterman (21 pages, 245 references); organometallic structures (transition metals) are reviewed by M.I. Bruce (61 pages, 179 references), the lanthanides and actinides (4 pages, 18 references), titanium, zirconium and hafnium (24 pages, 74 references), and vanadium, niobium and tantalum (9 pages, 44 references) are reviewed by F. Calderazzo; whilst G.R. Dobson reviews chromium, molybdenum and tungsten (53 pages, 291 references) and A. Wojcicki reviews manganese, technetium and rhenium (67 pages, 187 references).

NEW JOURNAL AND MONOGRAPHS OF INTEREST TO COORDINATION CHEMISTS

Organometallics in Chemical Synthesis edited by J.G. Noltes and D. Seyferth has commenced publication and will appear quarterly. It is published by Elsevier Sequoia S.A. at

a subscription cost of Sfrs. 108.50 (postage Sfrs. 6.25). Sample copies are available upon request.

Aspects of Homogenous Catalysis, A Series of Advances is a new annual monograph edited by R. Ugo and published by Carlo Manfredi, Milan.

Plenum Press have begun publication of the new bimonthly periodical *Journal of Crystal and Molecular Structure* edited by M.F.C. Ladd. The subscription price is \$30.00 (postage \$2.00).

Articles of interest to coordination chemists also appear in *Thermochimica Acta*, a new bimonthly periodical published by Elsevier Publishing Company at a subscription cost of \$22.50 (plus \$1.50 postage). The Editor is W.W. Wendlandt.