

addition to the monograph literature of organo-element chemistry. They will be of interest and of use not only to the organophosphorus specialist, but also to organometallic, organic and inorganic chemists.

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Advances in Organometallic Chemistry, Vol. 11; edited by F.G.A. Stone and R. West, Academic Press, New York – London, 1973, xi + 510 pages, \$27.00

Volume 11, like its predecessors in this excellent series, consists of invited or specially commissioned chapters covering a variety of topics in organometallic chemistry authored by acknowledged experts in the respective areas. Two articles deserve mention at the outset of this review due to their special nature. "Boranes in Organic Chemistry"; by H.C. Brown (18 pages, 67 references) is a concise overview of this important area of research and provides personal insight into factors which shaped and continue to move the author's career. The "scientific autobiography" of major figures in organometallic chemistry has become a fixture with this series and is in the reviewer's opinion one of its strongest points. "The Literature of Organo-Transition Metal Chemistry: 1971" by M.I. Bruce is an update of a similar article covering the period 1950–1970 which appeared in Volume 10 of the series. Textbooks, review articles, primary and abstracting journals and abstracts of conferences are included, along with an Appendix in which review articles are divided by topic. The Appendix has its own author index which is quite useful. In conjunction with its companion chapter in Volume 10 this article should be an invaluable aid in beginning a systematic literature search.

The other chapters included in this Volume are "Transition Metal–Isocyanide Complexes" by P.M. Treichel, "Insertion Reactions of Transition Metal–Carbon σ -Bonded Compounds I: Carbon Monoxide Insertion", by A. Wojcicki, (Part II, "Sulfur Dioxide Insertion" will appear in Volume 12), "Recent Advances in Organothallium Chemistry", by A. McKillop and E.C. Taylor, "The Radiochemistry of Organometallic Compounds" by D.R. Wiles, "Organometallic Complexes with Silicon–Transition Metal or Silicon–Carbon–Transition Metal Bonds", by C.S. Cundy, B.M. Kingston and M.F. Lappert, and "Preparation and Reactions of Organocobalt(III) Complexes," by J.M. Pratt and P.J. Craig. The articles are current, being liberally sprinkled with 1971 and 1972 references. Both the editors and the individual authors are to be commended for their diligence on this point. Tables and Figures are used well and the entire volume is quite readable. Cumulative lists of authors and titles for Volumes 1–11 are included and should be of moderate utility.

As evidenced by the chapter titles there is "something for everyone" in this volume and the great breadth of the area of organometallic chemistry comes through quite clearly. A nice balance is also struck between relatively mature and emerging areas of investigation although, as Professor Brown notes, such distinctions should be made with great caution. In summary, this is a welcome addition to the chemical literature and should, in spite of its price, find its way to the book shelves of many individuals working in the areas reviewed.

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"MTP International Review of Science. Inorganic Chemistry", H.J. Emeléus (consulting editor). *Series 1*. University Park Press, Baltimore, Maryland, 1972: *Vol. 1, Main Group Elements. Hydrogen and Groups I-IV*, edited by M.F. Lappert, 355 pages; *Vol. 2, Main Group Elements, Groups V-VI*, edited by C.C. Addison and D.B. Sowerby, 327 pages; *Vol. 3, Main Group Elements. Group VII and Noble Gases*, edited by V. Gutmann, 291 pages; *Vol. 4, Organometallic Compounds of the Main Group Elements*, edited by B.J. Aylett, 412 pages; *Vol. 5, Transition Metals, Part 1*, edited by D.W.A. Sharp, 396 pages; *Vol. 6, Transition Metals, Part 2*, edited by M.J. Mays, 442 pages; *Vol. 7, Lanthanides and Actinides*, edited by K.W. Bagnall, 367 pages; *Vol. 8, Radiochemistry*, edited by A.G. Maddock, 335 pages; *Vol. 9, Reaction Mechanisms in Inorganic Chemistry*, edited by M.L. Tobe, 393 pages; *Vol. 10, Solid State Chemistry*, edited by L.E.J. Roberts, 313 pages; *Index Volume* 200 pages. Each volume \$24.50; £10.00.

The MTP International Review of Science represents a mammoth and very ambitious undertaking. It seeks to provide a "comprehensive, systematic, continuously updated reference source covering in a final and definitive manner the entire field of chemistry today", as the publisher's prospectus tells us. Its three main sections (Inorganic Physical and Organic Chemistry) total 33 text volumes in the 1972 Series 1. It is intended to completely rewrite and reissue each volume in consecutively numbered series every two years. We review here the 10 volume series on inorganic chemistry, but must restrict ourselves to the organometallic aspects.

Two of these volumes are devoted entirely to organometallic chemistry: Volume 4, which covers the main group metals, and Volume 6, which deals with organic derivatives of the transition metals. In addition, in other volumes various aspects of organometallic chemistry are reviewed; *e.g.*, the carboranes in Volume 1, metal carbonyls with nitrogen-containing pseudohalide and with sulfur-containing ligands in Volume 2, the organometallic chemistry of the lanthanides and actinides in Volume 7, and much on organometallic reaction mechanisms in Volume 9.