

**BOOK REVIEWS**

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*The Organic Compounds of Lead*; by H. Shapiro and F. W. Frey, Interscience, New York, 1969, xiii + 486 pages, 170s.

This book presents an up-to-date and comprehensive account of compounds containing carbon-lead bonds; methods of analysis, uses, and physiological properties are described as well as syntheses, reactions, and physical properties, and many lists of compounds are presented. Although the authors in their preface say that the book "describes all recent advances in critical fashion", the critical approach is confined to a small proportion of the text, and it is doubtful whether such an approach could be generally successful in the present state of development of organolead chemistry. Even rationalization of the greatly fragmented information is still very difficult, and the account is necessarily mainly an item by item statement of reported facts, though well-ordered and clearly presented. This is just what the great majority of its readers will want, and the book can be strongly recommended to all chemists interested in organolead chemistry.

C. Eaborn

*Oxidation*, Vol. 1; edited by R. L. Augustine, Marcel Dekker, New York, 1969, x + 368 pages, \$18.75. (Series: Techniques and applications in organic synthesis).

This interesting and useful book contains chapters on Hydrocarbon Oxidation using Transition Metal Compounds and Oxidation of Oxygen- and Nitrogen-containing Functional Groups with Transition Metal Compounds, both by D. G. Lee; Selenium Dioxide Oxidation, by E. N. Trachtenberg; Glycol Cleavage and Related Oxidations, by A. S. Perlin; Peracid and Peroxide Oxidations, by S. N. Lewis, and Ozonization by J. S. Belew. (A second volume covering other aspects of oxidation is promised.) The book is primarily intended for the synthetic organic chemist, and contains short experimental procedures in heavy type within the text, while yields are given for many of the examples quoted. The authors have interpreted their commissions rather differently; thus the chapter on ozonolysis contains lengthy accounts of mechanism and apparatus, while the chapters on transition metal oxidations pay little attention to apparatus or mechanism. It is a defect, though a minor one, that the account of transition metal catalysis omits the commonly used names for a number of the most important reagents, such as the Jones Reagent for 8N-chromium trioxide in acetone-sulphuric acid, and the Sarett reagent for chromium trioxide in pyridine, although the literature cited does, of course, refer to the authors concerned. The text is generally well produced, but a number of diagrams (*e.g.* on p. 69, 70, 80, 208, and 228) are incorrect.

Much of the value of books of this kind lies in the fact that the reader can, by glancing through the pages, find various alternative procedures for carrying out a reaction of interest. Their place is thus in the laboratory and not on library shelves, and it is thus a pity that the price is so high.

J. R. Hanson