

BOOK REVIEW

Polyhedral Boranes; by EARL L. MUETTERTIES AND WALTER H. KNOTH, Marcel Dekker Inc., New York, 1968, viii + 197 pages, \$13.50.

This book provides much interesting new material on a complex and fascinating subject. The topic has been developed extensively, during the last six or seven years, and the authors have been leaders of one of the major groups responsible for significant advances in this area. It is a little surprising, at first sight, that this book should be so novel in its impact, because there have been recent reviews by five other leaders, namely, M. F. Hawthorne, R. Köster, W. N. Lipscomb, R. Schaeffer, and T. Onak. A minor criticism, of the present work, is that these earlier reviews are not acknowledged.

The book is divided into five chapters, dealing with: Structure and Theory, Polyhedral Rearrangements, Structure-Reactivity Correlation, Synthesis of Polyhedral Boranes, and Chemistry. The approach to "Structure and Bonding" is particularly thoughtful and there are interesting correlations between geometries found in boron compounds and in transition metal complexes. The section on Bonding is somewhat more elementary. The chapter on Rearrangements is exceptionally intriguing and one is constantly amazed at the versatility and sophistication of boron chemistry.

The book can be recommended, not only to specialists, but to everyone interested in modern inorganic chemistry.

M. F. LAPPERT