

Book Review

Contemporary Boron Chemistry

M.G. Davidson, A.K. Hughes, T.B. Marder and K. Wade (Eds.); RSC, Cambridge, 2000, pp. xvi + 538, ISBN 0854048359, GB £92.50

This book is based on lectures presented at the Tenth International Conference on Boron Chemistry, IMEBORON X, held at the University of Durham, UK, in July 1999. It is thanks to the editors that the large number of contributions, 80 in all, has found a uniform and clear layout. These reports span a wide field of research in organoboron chemistry, ranging from theoretical studies and synthetic methods to applications of boron chemistry in medicine, materials science and catalysis. The editors have attempted to organize the material by arranging it into nine sections, as follows. *Applications to Polyolefin Catalysis* deals with the application of boraheterocycles and carbaboranes as ligands in transition metal catalysts for olefin polymerization and the preparation of aluminoxanes via boron compounds. In *Materials and Polymers* a variety of organoboron polymers, as well as B–N and B–O materials, is described. The section *Medicinal Applications* deals with BNCT therapy. The sections *Cluster Synthesis*, *Carboranes*, and *Metallaboranes* and *Metallaheteroboranes* summarize synthetic pathways to these classes of cluster. *Organic and Inorganic Chemistry of Mono- and Di-boron Systems* deals with a range

of chemistry from transition-metal complexes of boron to organoborane reagents for a symmetric synthesis. The content of *Theoretical and Computational Studies* is less broad than those of the preceding sections. Here mainly polyhedral boranes are discussed.

Within each section, for example in *Medicinal Applications*, *Materials and Polymers* and *Cluster Synthesis*, the reports are presented one after the other, as during a conference, without an obvious imposed order. Here I missed an introduction to each of the chapters, highlighting the contents and giving a short overview on the state of the art. It is not the intention of this review to comment on individual contributions to this book. Current developments in boron chemistry are presented in all of them. Literature references are included for further information. Their completeness and relevance is down to the authors at the time of writing.

Altogether, this book gives a nice overview over ‘contemporary boron chemistry’ from several points of view. Thus, it may stimulate further research in this field and give both new and not-so-new boron chemists a quick run-down on current trends.

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