DESCRIPTION

A comparative examination of electron-deficient species -from leading researchers in the field.

The Borane, Carborane, Carbocation Continuum explores the emerging understanding of the similarities of properties and behavior shared by these electron-deficient species. Based on the work presented at a trailblazing symposium held at the Loker Hydrocarbon Research Institute of the University of Southern California, it brings together the contributions of distinguished scientists from around the world, including Nobel Prize winners George A. Olah and William N. Lipscomb, to illustrate the results of research on the structures and bonding characteristics of boranes, carboranes, and carbocations.

As electron-deficient compounds find a place in today's high-field NMR systems and other cutting-edge areas, this unique volume contains important information for advanced students as well as professionals working in organic, inorganic, or physical chemistry, with sections on:

• Patterns of structure in boranes and carboranes -including vertex homogeneity, boron cluster patterns, and seco-systematization of boranes and heteroboranes

• The carborane -carbocation continuum -from boron super-electrophiles and their carbocation analogs to cage systems

• Untangling molecular structures -mechanistic patterns in carborane reactions, advances in metallacarborane sandwich chemistry, and other topics
• New species of boranes and carboranes - such as isoelectronic borane, hydrocarbon, and carbocation metal complexes, and cyclic organohydroborate anions.

ABOUT THE AUTHOR

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