

Preface

This special issue of *Main Group Chemistry* focuses on the chemistry of polyfunctional boranes and closely related compounds. It was inspired by a symposium entitled 'Polyfunctional Boranes – From Molecules to Materials' held at the 232nd National ACS Meeting in San Francisco on 11–12 September 2006. The collection of articles published in this issue nicely reflects the range of topics discussed during the symposium.

Specifically, the contributions of Simon Aldridge, Narayan Hosmane, Wolfgang Kaim and Yohsuke Yamamoto demonstrate how organoboron chemistry continues to provide stimulating synthetic goals and demonstrate elegant solutions to tackle the challenges. These contributions also help to shed new light on unusual electronic structures and bonding interactions in boron chemistry.

The articles by Yoshiki Chujo, Noriyoshi Matsumi and Frieder Jäkle are dedicated to the development of polymers containing boron or its heavier group 13 congener, aluminum. These works stress the growing importance of group 13 elements for the design of macromolecules with unusual materials properties and diverse potential uses ranging from new electronic materials to electrolytes for battery applications and polymeric reagent and catalysts, just to name a few.

Finally, the contribution of François Gabbai illustrates that polyfunctional Lewis acids containing boron can serve as powerful receptors for small anions and hence underscores their growing importance in sensor-related applications.

It has been an enriching experience to organize this symposium and work on this special issue, which we hope, you will enjoy reading. We want to thank those who contributed and are extremely grateful to Narayan Hosmane for acting as Guest Editor for this special issue.

François Gabbai and Frieder Jäkle
20 August 2007