

Preface

The interest in inorganic clathrates has grown substantially over the past two decades, due to their unique physical properties as well as their potential for technological applications. New compositions as well as new synthetic approaches for the synthesis and crystal growth of inorganic clathrate compositions have recently been reported. This has led to fundamental insight into the unique physical properties these materials possess, specifically due to their unique crystal structures. The inspiration for this volume came about as a result of several conversations that convinced me of the interest in a book that encompasses these developments in addition to presenting an overview of the history of these materials and some of the different structure types that have been reported. The book is intended as a reference for both those working on specific aspects of research on inorganic clathrates and those who are interested in understanding the basics of what has been developed thus far in order to begin research on these materials.

The volume contains chapters written by prominent experts in the field as well as junior researchers that have been directly involved in clathrate-related research, in some cases for most of their careers. It naturally has an international character as the contributors are from several different countries. The choice of topics is partly due to the particular research interests of the contributors and partly from the research that has been in the spotlight most recently.

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