

Introduction

The ability to make new materials with well-defined properties under controlled conditions represents one of the most interesting challenges of present-day science. The organometallic chemist plays a crucial role in the transformation of molecules to materials, not only in devising and synthesizing new precursors, but also in gaining an understanding of the various assembly processes. The present volume stems from invitations to leading organometallic chemists who have made meritorious contributions to the field of materials science. The response to these invitations was excellent as is evident from the 27 contributions that are included in this special issue. The general theme of the issue is 'Organometallic Chemistry in Materials Science'. Reflective of the breadth of this theme, the 27 contributions address many of the currently important areas of materials chemistry. The list includes semiconductors, organometallic polymers, polymers with non-linear optical responses, ceramics, porous solids, intermetallics and metal films.

It has been a rewarding experience to serve as Guest Editor for this special issue of the *Journal of Organometallic Chemistry*. I wish to express my gratitude to the authors for their contributions, to the referees for their constructive comments and to the Publisher for encouragement.

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