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Preface

Over the past few decades, interest in organozirconium chemistry has been rapidly increasing. This special interest arises from the combination of transition metal behavior, such as the coordination of a carbon-carbon multiple bond, oxidative addition, reductive elimination, β -hydride elimination, addition reaction and from the behavior of classical σ -carbanion towards electrophiles. The reactivity of the resulting carbanion can be easily modified by a whole gamut of transmetalation reactions.

In this volume of *Topics in Organometallic Chemistry*, some remarkable recent achievements of organozirconium derivatives are described giving a unique overview of the many possibilities of these organometallic compounds as reagents and catalysts, which is one of the main reasons for their enduring versatility as intermediates over the years.

In this multi-authored monograph, several experts and leaders in the field bring the reader up to date in these various areas of research (synthesis and reactivity of zirconaaziridine derivatives, zirconocene-silene complexes, stereodefined diene zirconocenes complexes, octahedral allylic and heteroallylic zirconium complexes as catalysts for the polymerization of olefins and finally the use of zirconocene complexes for the preparation of cyclopropane derivatives). It is their expertise that will familiarize the reader with the essence of the topic.

I wish to express my sincere and deep appreciation to all of them. Reading their contribution was not only a pleasure but will also undoubtedly stimulate future developments in this exciting field of research.

Haifa, September 2004

Ilan Marek

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