Volume Editor’s Preface

This volume of *Science of Synthesis*, dealing with the various approaches to alkenes, is meant to aid researchers around the world who are engaged in developing synthetic approaches to new chemical entities or improving existing routes to known compounds of any importance. The carbon—carbon double bond with which every alkene is endowed, be it a hydrocarbon or not, is one of the most versatile functional groups in an organic molecule. Considering the multitude of other functionalities with which most methods for the synthesis of alkenes are compatible, alkenes gain even more importance in organic synthesis. The classical methods of alkene preparation comprise mainly elimination reactions of various kinds. However, the development of alkene syntheses, even of the eliminations, has never stopped. On top of these developments, the classical approaches have been supplemented with new elimination methods, and the arsenal of tools has been broadened particularly by the various carbonyl alkenation methodologies, the multitude of metal-catalyzed and metal-mediated cross couplings, including the Mizoroki–Heck reaction, as well as the modern ways of converting simple alkenes into more complex ones by the so-called metathesis principle. The development of these latter methods especially is continuing at a rapid rate, creating new improvements with wider applicability every year. Thus, this volume on alkenes covers the whole spectrum of alkene syntheses, and their applications, that have been discovered in more than 130 years.

As the volume editor I have enjoyed once again collaborating with a highly competent team of scientific editors, copy editors, artwork producers, and others at Thieme, directed by the managing editor Dr. M. Fiona Shortt de Hernandez. Their professionalism and impressively great care in their permanent engagement has brought forward a quality product that is virtually unequalled. It goes without saying that all of this would not have been achieved without the tremendous efforts of all of the authors who have contributed to this volume. Finally, I would like to thank Prof. Dr. Eric N. Jacobsen, the responsible member of the Editorial Board, and Dr. Joe P. Richmond, the independent advisor for *Science of Synthesis*, for their invaluable help at the beginning of this endeavour, especially in organizing the table of contents and putting together a list of competent authors.

Volume Editor
Armin de Meijere
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