Volume Editors’ Preface

Metal-catalyzed reactions, especially cyclizations, remain the most useful methods for the efficient construction of cyclic compounds and thus have continuously attracted attention. These methodologies have also been comprehensively applied as the key steps in various novel strategies for the synthesis of natural products and drug molecules. Many new discoveries and advances have been reported, which provide new tools for synthetic organic chemists, medicinal chemists, and even materials chemists. A timely summary is now required of the well-established advances that will shape the future development of this field and its application. On the basis of these considerations, the Editorial Board of Science of Synthesis planned two volumes in the Reference Library that focus on metal-catalyzed cyclization reactions. After a careful selection made by the Volume Editors, some of the most significant and practical metal-catalyzed reactions for modern organic synthesis are presented. The organization of these two volumes is based on the types of reaction, which mainly include metal-catalyzed C—C, C—O, and C—N bond formations, as well as epoxidation, aziridination, cyclopropanation, Pauson–Khand reactions, cycloadditions, radical reactions, and metathesis. We hope that these volumes can serve as a reference work for chemists in related areas to inspire future research and the development of new applications.

We would like to take this opportunity to express our sincere thanks for the support and contributions from all of the outstanding authors; without their dedication and professionalism, this project would not have been possible. We are also grateful to Alex Russell and Joe P. Richmond, scientific editors at Science of Synthesis, who solved a lot of problems to enable the project to proceed smoothly over the past two and a half years. It has been a very pleasant journey to work with the editorial team at Thieme, especially Michaela Frey and Guido F. Herrmann. We appreciate the professional spirit and passion of all members of this team, which have brought the manuscripts together into a two-volume set.

Volume Editors

Shengming Ma and Shuanhu Gao

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