

Name Reactions for Carbocyclic Ring Formations, edited by Jie Jack Lie, 1st ed., Wiley: Hoboken, 2010, hardcover, 756 pp., €120, US\$159,- £100, ISBN: 978-0-470-08506-6

The weakest volume of the series, but still quite useful

Some years ago Jie Jack Lie wrote a book himself about named reactions and reagents, which experienced an outstanding attention. For several years he has been editing a book series devoted to this particular topic. Since named reactions and transformations are an essential vocabulary for organic chemists to express the course of transformation and employed reagents, such a comprehensive book series makes definitely sense. The splendid character of the previous four volumes created high expectations for the recently released fifth volume.

The book is entitled *Name Reactions for Carbocyclic Ring Formations* and is organized into six chapters. The first four chapters deal with three-membered up to six-membered carbocycles. This is then followed by a survey treating the synthesis of larger ring systems. The final section is entitled *Transformation of Carbocycles* but discusses six named reactions dealing with substitution reactions of arenes.

The selection of the individual named reaction in these areas is not always clear, for example the Staudinger ketene cycloaddition provides β -lactams but definitely no carbocycles – as promised by the title of the book. The individual chapters are not consistently made. The yields for

the conversions in chapter 3.6 are completely missing, which is in my opinion a loss of useful information. Furthermore, the structures in some schemes consist of very thin lines (e.g., pages 209, 212, 213, 215, 216, etc.) making them difficult to be read. The stereochemical terms are wrongly used in some chapters; enantio- and diastereoselectivity are mixed up (p. 52/53). Significant parts of chapter 4 are very elusively done: The intramolecular Friedel–Crafts alkylation via olefins could be wrapped up in a single contribution. The Bradsher reaction is treated in two surveys, which results in the fact that even the same examples are discussed in those chapters (4.4 and 4.5). The index for the monograph is well made and the reader should have no problem finding the respective topic in the book. However, a few chapters use many abbreviations which might be not that common. Consequently, an appendix with a list of employed abbreviations would be useful.

In conclusion, the fifth volume of the series cannot keep up with the ones previously published. The standard of the earlier books is significantly higher. However, the book fills up the gap in this particular series dealing with named reactions. With about 760 references and many citations leading to reviews and further reading, the book will be a valuable reference source. Therefore, the book will find its place in most scientific libraries.

Siegfried R. Waldvogel, Institute of Organic Chemistry, Johannes Gutenberg University Mainz, Germany