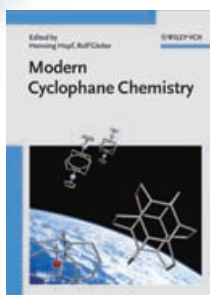




Modern Cyclophane Chemistry



Edited by Rolf Gleiter and Henning Hopf. Wiley-VCH, Weinheim 2004. 566 pp., hardcover € 149.00.—ISBN 3-527-30713-3

The present book, *Modern Cyclophane Chemistry*, is best classified as an extensive monograph consisting of 20 chapters, written by a group of authors whose names read like a “Who’s Who?” of cyclophane chemistry. The book is clearly written for the academic researcher/lecturer and graduate students in the field of organic chemistry. On over 500 pages, it contains everything the reader always wanted to know, but never dared to ask, about cyclophane chemistry.

The book fits well into the vastly popular “Modern ...” series from Wiley-VCH: *Modern Acetylene Chemistry I and II*, *Modern Arene Chemistry*, *Modern Allene Chemistry*, etc., and has the same aspiration to quality and comprehensiveness. Overall, it is a superb book, edited by two giants in the field of cyclophane chemistry.

I have read a few of the 20 chapters and has browsed through the rest of them. The first impression is that of a very carefully edited and aesthetically pleasing opus. All of the chapters are well structured, pedagogically valuable, and easily readable, and give excellent references to published material, including work of the authors and of other groups. The use of graphics, figures,

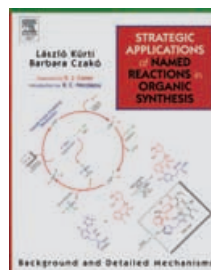
and pictures is very appropriate and helps in the easy understanding of the topics that are discussed. A significant amount of information could be gleaned from the beautiful, carefully done, and high-quality graphics. This monograph gives an excellent historical overview, as well as a timely review of the ever-growing and fascinating field of cyclophane chemistry. A particularly attractive feature for academic teachers is the inclusion of many exciting structures and reactions, which can easily be used for topics in a graduate class. The book describes sophisticated, yet important, examples of organic reactions that are valuable for the construction of non-natural products.

The subject index is easy to use, and gives excellent access to the topics treated in this volume. Particularly advantageous is that the UV/Vis spectra (Chapter 11) are tabulated and easily accessible, almost as in a reference book. Overall, it was a pleasant experience to read and review this excellent, exciting, yet rounded monograph about cyclophane chemistry, which should be bought by interested graduate students and university teachers. The book should be in every library. Both the editors, as well as the authors of the individual chapters, did an excellent job in the creation of this opus.

Uwe H. Bunz
School of Chemistry and Biochemistry
Georgia Institute of Technology
Atlanta, Georgia (USA)

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Strategic Applications of Named Reactions in Organic Synthesis



Background and Detailed Mechanisms. By Laszlo Kürti and Barbara Czako. Elsevier, Amsterdam 2005. 757 pp., softcover \$ 94.95.—ISBN 0-12-429785-4

For the organic chemist engaged in synthesis, named reactions form a useful

and very special vocabulary, as the name immediately conveys information about the type of reaction, the starting materials, the conditions required, and the mechanism. In such a complex field as organic synthesis, a vocabulary with so concentrated an information content serves as an efficient means of communication between chemists, and therefore named reactions occur very frequently in the chemical literature.

Two PhD students at the University of Pennsylvania have written an impressive monograph that deals with the use of classical and modern named reactions as key steps in building up complex organic molecules. This work sets new standards, both in its comprehensiveness and in the topicality of the examples discussed. The users who are likely to benefit from this rich source of information range from the student who is seeking details about a particular named reaction, to the university teacher who wants quick access to up-to-date examples of certain transformations used in the total synthesis of natural products.

The work begins with about 50 pages that list common abbreviations, with explanations and descriptions in the form of text and structural formulas. The authors describe 250 named reactions and named reagents, as well as other transformations that are not linked to a chemist’s name, such as olefin metathesis. The selection covers all the most important named reactions, considered from the standpoint of their use in complex organic syntheses. Each named reaction is treated concisely on two pages. In choosing the most appropriate names for the reactions, the authors have followed a strict chronological principle, and it is pleasing to see that their choices have overridden any possible national or cultural prejudices.

The literature references are divided into three groups: original publications; review articles; variants and improvements. As there are, on average, about 40 references for each named reaction, they have been collected together near the end of the book. The authors have searched the literature and compiled the references with great care.

For each reaction, the first half-page is occupied by a paragraph explaining its importance. Related transformations