

Book Review: "Organic Reaction Mechanisms"

James Tanko

J. Nat. Prod., **1992**, 55 (3), 399-399 • DOI:
10.1021/np50081a021 • Publication Date (Web): 01 July 2004

Downloaded from <http://pubs.acs.org> on April 4, 2009

More About This Article

The permalink <http://dx.doi.org/10.1021/np50081a021> provides access to:

- Links to articles and content related to this article
- Copyright permission to reproduce figures and/or text from this article



ACS Publications
High quality. High impact.

Journal of Natural Products is published by the American
Chemical Society, 1155 Sixteenth Street N.W., Washington,
DC 20036

BOOK REVIEW

Organic Reaction Mechanisms. 1989. Edited by A.C. KNIPE and W.E. WATTS. John Wiley and Sons, 605 Third Avenue, New York, NY 10158. 1991. 711 pp. 15 × 22.5 cm. \$395.00. ISBN 0-471-92825-9.

This volume is the twenty-fifth in an annual series that reviews developments in the field of organic reaction mechanisms; it covers the period December 1988–November 1989. The book is divided into fifteen chapters dealing with the following topics: 1. Reactions of Aldehydes and Ketones and their Derivatives; 2. Reactions of Acids and their Derivatives; 3. Radical Reactions, Part 1; 4. Radical Reactions, Part 2; 5. Oxidation and Reduction; 6. Carbenes and Nitrenes; 7. Nucleophilic Aromatic Substitution; 8. Electrophilic Aromatic Substitution; 9. Carbocations; 10. Carbanions and Electrophilic Aliphatic Substitution; 12. Elimination Reactions; 13. Addition Reactions, Polar Addition; 14. Addition Reactions, Cycloaddition; and 15. Molecular Rearrangements. In addition, the volume contains an Author Index (1989) and a comprehensive Subject Index covering the period 1985–1989.

This book is not and does not purport to be a textbook on mechanistic organic chemistry. Because of space considerations, the reviews can only provide scant details of any particular report. In most cases an entire paper (or series of papers) is abstracted in a single sentence. Further, the reviews are for the most part non-critical, and thus serve only to organize and summarize the results/conclusions of papers which appeared during the specified period. Consequently, it is unlikely that one would utilize this book to learn about a new area.

However, the book is an excellent resource in that it provides rapid and convenient entry into the mechanistic literature of the period. Sufficient detail is presented so that someone reasonably familiar with a given topic can gain understanding of recent developments in the area. The book is likely to be an enormous asset for anyone who requires a review of mechanistic chemistry in an area outside that of their personal interest. I have often used this series to update my lecture notes for the physical organic chemistry class I teach and to develop questions for exams, problem sets, etc.

The only liability of this volume is its cost, which has increased dramatically (70%) since *Organic Reaction Mechanisms*. 1987. Because of the high cost, this series is clearly not appropriate for one's personal library. The volume should prove a worthwhile addition to any major university or industrial library, although continued price escalations may force a reconsideration of this opinion.

JAMES M. TANKO, *Virginia Polytechnic Institute and State University*