

Book review

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"Organic Reactions", Volume 23, W. G. Dauben, editor-in-chief,  
John Wiley & Sons, New York, 1976, vii + 520 pp., \$32.45, £19.75.

The latest volume of this well-established and useful series contains three chapters: "Reduction and Related Reactions of  $\alpha,\beta$ -Unsaturated Compounds with Metals in Liquid Ammonia", by D. Caine (258 pages, 543 references), "The Acyloin Condensation", by J. J. Bloomfield, D. C. Owsley and J. M. Nelke (145 pages, 356 references), and "Alkenes from Tosylhydrazones", by R. H. Shapiro (103 pages, 210 references). In each of these chapters the discussion sections devoted to mechanism, scope and limitations and experimental considerations are followed by a number of detailed experimental procedures and finally by extensive tables of examples of the applications of the reaction under discussion as culled from the original literature.

In the first chapter the literature is covered thoroughly through 1973, with inclusion of some 1974 references. The acyloin condensation was reviewed in "Organic Reactions" in 1948. The present survey of this reaction brings us up to date (through most of 1974), with emphasis on developments since 1960. The last chapter, with literature coverage through April 1973, includes a discussion of fragmentation and related reactions of tosylhydrazones. The book concludes with an author index and a chapter and topics index for volumes 1-23 of this series.

Metals and organometallic compounds play an important role in this volume. In all three chapters the alkali metals are protagon-

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ists, with, in the second chapter, able assistance by trimethyl-chlorosilane. Alkylolithiums find useful application in the reaction described in the last chapter.

This book is a valuable addition to the review literature of organic chemistry. Its main value lies in the completeness of its detailed coverage. The authors have done an excellent job.

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