
Volume Editor's Preface

This volume of **Science of Synthesis** covers compounds containing two carbon–heteroatom bonds. These heteroatom analogues of aldehydes and ketones are extensively used for the synthesis of complex organic molecules and thus have been studied for a very long period of time. The book consists of 23 chapters that discuss the different functional groups of interest. The pattern in which each chapter is covered follows a regular plan ordered according to **Science of Synthesis** guidelines. First, there is a general equation illustrating various approaches toward the synthesis of the particular functional group being reviewed. Each reaction is discussed with emphasis on its particular value and limitations. A limited amount of background and theory is often included, not only to account for the path that the reaction takes, but also for its limitations and any byproducts formed. Finally, examples are given, many in sufficient detail to permit preparation in the laboratory and others to illustrate minor variations not necessarily presented in the discussion. Treatment is both selective and critical, the most important fact desired is the preferred methods of synthesis of a particular functional group.

Emphasis is placed on providing recent references, since the original synthetic method may have been improved. Some references are included as benchmark papers and others for their historical interest. Many review references are also included. With the explosive growth of synthetic organic chemistry still continuing, it is impossible to avoid omissions. Each author is an authority in the field and references are provided through 2003. The best synthetic methods available as well as additional information on the scope and limitations of each functional group are nicely summarized by this group of experts.

A number of people must be thanked for their contributions and help in completing this project. I am grateful to Dr. Joe P. Richmond for his assistance in the planning stage, Dr. Daniel Bellus for his support and encouragement, the authors for all their hard work in putting the book together, and finally Dr. M. Fiona Shortt de Hernandez and her capable team at Thieme for their support and constructive input.

Volume Editor

Albert Padwa

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