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## Volume Editor's Preface

Ketones are the most important organic compounds in terms of their occurrence and utility in chemical and biochemical transformations and this volume on the synthesis of ketones is the second one of a series of nine volumes of the **Science of Synthesis** series, covering compounds with two carbon—heteroatom bonds.

This volume has been divided into eleven sections related to a class of ketone (aliphatic and alicyclic ketones, cyclobutanones and cyclopropanones, 1,2-diketones and related compounds,  $\alpha,\alpha$ -dihetero- and  $\alpha$ -heterosubstituted ketones, ynones, enones, saturated and unsaturated ketones with an additional functional group at a  $\beta$ - or more remote position, and finally saturated and unsaturated ketones with a heteroatom at a  $\beta$ - or more remote position). In all cases, the emphasis is on the formation of the ketone functionality. As aliphatic and alicyclic ketones can be obtained from a great variety of compounds, the section related to these classes of ketone is divided into ten subsections related to the starting material from which these compounds are prepared.

The material has been organized into methods of synthesis of the particular product class, usually with a brief discussion of the scope of the method, followed by specific and selected experimental procedures. In some cases, applications of the method to the preparation of compounds of interest is described. The synthesis of a product class is ordered using the usual **Science of Synthesis** pattern, with methods and variations within each class in the following order: synthesis by substitution, synthesis by elimination, synthesis by addition reactions (including C—C cleavage), synthesis by rearrangement. The coverage of the methods is not exhaustive, rather the most reliable methods for the synthesis of each class of ketones has been selected and a preference has been given to the more recent methods.

I would like to thank all of the authors, who had to read a large amount of publications and to extract and abstract the most important information to be included in their chapter. I would like to thank Prof. E. J. Thomas and Dr Joe Richmond for their help in planning and organizing this volume. Many thanks also to Prof. E. J. Thomas for his advice and comments. My thanks are also to Dr Fiona Shortt de Hernandez, Leigh Murray, Dr Mark Smith and to all the editors at Thieme, Dr K. L. Greenfield, Dr Karen Muirhead, Dr E. Smeaton and Dr C. Twomey for their professional and friendly assistance throughout the entire process of this book. It was a great pleasure for me to work with all of them.

**Volume Editor**

Janine Cossy

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