## **Volume Editor's Preface**

This volume of **Science of Synthesis** covers modern synthetic methods to give quinones and their heteroatom analogues and is one of nine volumes comprising Category 4 (Compounds with Two Carbon—Heteroatom Bonds). As an exception to the other volumes in this category and in **Science of Synthesis** in general, a specific class of compounds is described here, quinones and heteroatom analogues. The decision to collect these target structures in one separate volume was motivated by the fact that a huge und excellent collection of procedures covering the literature up until 1978 is available in *Houben—Weyl* 7/3a–c. Another argument for slightly breaking the systematic rules of the **Science of Synthesis** volumes is that many of these compounds play an important role as constituents of biologically relevant molecules often serving as electron acceptors in electron-transport chains and as versatile intermediates in organic synthesis, biological chemistry, inorganic chemistry, and materials science. Thus, there is considerable interest in the synthetic community to find experimental procedures and solutions for synthetic problems directly connected with quinone structures.

The volume has been divided into twelve sections related to classes of quinones (benzo-1,4- and benzo-1,2-quinones, naptho-1,4- and naphtho-1,2-quinones, anthraquinones, phenanthrene-9,10-diones, and positional isomers) and quinone analogues (sulfur, selenium, and the large class of quinone imines and diimines, quinone diazides, and quinomethanes). In all cases, the emphasis is on the formation of the quinone functionality. Many experimental details and procedures are given in order to help the user to find the optimal process for the specific synthetic problem. Whenever appropriate and motivated by the reactivity of the compounds, the typical reaction pattern of the compounds is described in typical and general examples.

I would like to thank all of the authors, who had to read and carefully evaluate the extensive literature on quinones and their heteroatom analogues that appeared in the last two decades. Many thanks also to Prof. Daniel Bellus and Dr. Joe Richmond for planning and organizing this volume together with my co-worker Elmar Zimmermann and myself. The Thieme team in Stuttgart did a great job and I appreciate very much working with them. Many thanks to Dr. Fiona Shortt de Hernandez, Dr. Karen Muirhead, Dr. Elizabeth Smeaton, Dr. Mark Smith, Dr. Roxane M. Owen, and the other editors at Thieme for their friendly assistance.

**Volume Editor** Axel G. Griesbeck Cologne, May 2006