Volume Editor's Preface

This is the seventh volume in the series of nine covering the synthetic chemistry of Hetarenes and Related Ring Systems, which make up Category 2 of **Science of Synthesis**. The nine volumes are arranged with a progression of structures ranging from smaller to larger ring sizes, and incorporate within their framework increasing numbers and diversity of heteroatoms. Volume 15 describes the methods for synthesis of six-membered hetarenes with one nitrogen or phosphorus atom. It follows the volume dealing with six-membered hetarenes with one chalcogen, and precedes the volume with sections on six-membered hetarenes containing two identical heteroatoms. As the present volume deals with major hetarenes such as pyridines, quinolines and isoquinolines, including the related pyridinones, quinolinones and isoquinolinones, it is very substantial in size. These rather mature hetarenes together make up approximately 75% of the volume content. The remaining nitrogen heterocyclic systems: the quinolizinium salts, naphthyridines, acridines (and acridinones) and phenanthridines (and phenanthridinones) are relatively short, but no less interesting in their particular ways. The sections on the related phosphorus systems are also relatively brief, reflecting the rather recent but nevertheless growing development of this area.

The syntheses of most of the hetarenes have been the subject of previous volumes of **Houben–Weyl**, those with nitrogen heteroatoms appearing in Volumes E 7a and E 7b, and those with phosphorus heteroatoms appearing in Volume E 1. There are some differences between the style of **Houben–Weyl** and **Science of Synthesis**. The former was comprehensive in its coverage, while the latter is more selective. Furthermore, the **Houben–Weyl** coverage of pyridines, quinolines, isoquinolines, acridines and phenanthridines did not include formal consideration of the related pyridinones, quinolinones, isoquinolinones, acridinones and phenanthridinones. While the current authors would have found the **Houben–Weyl** accounts of great use as a source of early literature, they have had to exercise their expert judgment in selecting the most appropriate material and then organising it, together with newer material, into quite a different kind of coverage. Given the inclusion of specific experimental instructions in both series, it is not surprising that some of the **Houben–Weyl** examples are quite deliberately and sensibly carried over into **Science of Synthesis**. The "on-line" nature of the access to experimental methods in **Science of Synthesis** provides a dramatic technical advance since **Houben–Weyl** was published, and promises to be a major benefit of the current series.

I should like to thank all the authors, who have put such an enormous and altruistic effort into this volume, for the benefit of the synthetic chemical community. They have shown serious expertise in their fields, sound judgment, great dedication and considerable patience to bring this volume to fruition. They are to be credited with the high level of scientific quality displayed. In many cases, the vast amount of literature led to more lengthy initial contributions, which were then carefully pruned to try and reduce the overall enormity of the volume. I am also indebted to the publishing team at all levels, for their total professionalism, efficiency, and friendly working style. In particular, I should like to thank Dr Joe Richmond, who helped me in the planning and organizational stages, Dr Fiona Shortt de Hernandez, the Managing Editor, and her team, including Lindsey Sturdy, Dr. Karen Muirhead and Leigh Murray, who were always available for detailed advice and help, and finally Dr Kay Greenfield, whose outstanding copyediting played a major part in delivering the volume as you see it.

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David StClair Black