
Volume Editor's Preface

This volume is one of seven of **Science of Synthesis** dealing with compounds with four and three carbon—heteroatom bonds (Category 3). The volume falls in the latter subcategory, and covers the synthesis of compounds possessing an amide bond, incorporating lactams and peptides. A chapter on acyl phosphorus compounds has also been included. However, it should be noted that amide polymers have not been included, even though they constitute an important class of amido compounds. This omission is primarily due to the fact that these macromolecules are not traditional targets for chemists working in the area of organic synthesis, and a treatment of polymers would not be of value to the vast majority of readers of **Science of Synthesis**.

The volume follows the same organization as the other Category 3 volumes of **Science of Synthesis**. 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 examples and representative experimental procedures. In general, the product classes are ordered using the usual **Science of Synthesis** pattern.

I would like to thank the many diligent authors who sifted through large amounts of material and selected important information for inclusion in their chapters. Syntheses of amido compounds of various types have previously been reviewed in considerable depth in several volumes of **Houben-Weyl**. For example, Volume E 5 (Parts 1 and 2) which were published in 1985 covered the synthesis of amides. In addition, Volume XIV (Parts 1 and 2) published in 1974 and Volume E22 (in four parts) which appeared in 2001–2 discussed the synthesis of peptides and peptidomimetics, along with protecting group strategies. However, the **Science of Synthesis** organization and degree of coverage is quite different from **Houben-Weyl**, and the new format required the authors to do considerably more than simply paraphrase and/or revise these older reviews. I am indebted to Dr. Joe Richmond for his help and guidance in planning and organizing this volume. I also thank the members of my research group at Penn State University who proofread various chapters prior to publication. Finally, it was a pleasure to once again work with Dr. M. Fiona Shortt de Hernandez and her group of capable editors at Thieme.

Volume Editor

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Steven M. Weinreb