NUCLEIC ACID CHEMISTRY

IMPROVED AND NEW SYNTHETIC PROCEDURES, METHODS AND TECHNIQUES

PART TWO

Edited by

Dr. LEROY B. TOWNSEND

The University of Utah
Salt Lake City, Utah

Dr. R. STUART TIPSON

(Retired)

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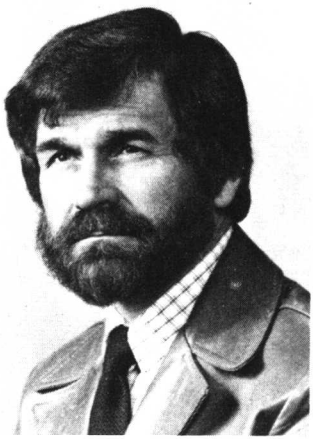

LEROY B. TOWNSEND

PREFACE

The present two volumes contain a collection of new or improved synthetic procedures, methods, and techniques in the field of nucleic acid chemistry and are subdivided into discussions of eight main topics: in Part 1, I, Heterocylic Compounds; II, Carbohydrates; and III, Nucleosides; in Part 2, IV, Nucleotides and Polynucleotides; V, Isotopically Labeled Compounds; VI, Chemical and Enzymic Syntheses; VII, Reagents, Intermediates, and Miscellaneous Compounds; and VIII, Instrumental or Analytical Techniques and Applications. They provide an up-to-date source of information on all the important aspects of the subject. Each contribution was written by experienced research workers to guide the reader by giving representative descriptions with ample details, so that even a novice will be able to apply the information.

The present collection was intended to be a successor to Volume 1 of *Synthetic Procedures in Nucleic Acid Chemistry,* edited by W. W. Zorbach and R. S. Tipson, but an enlarged scope and different format necessitated both a title change and an extension to two volumes.

Although intended primarily for use by organic chemists, these books should prove valuable to medicinal chemists and biochemists, because the rapid expansion of these fields has produced an urgent need for a compilation of reliable methods. The extensive literature now makes it difficult, even for the expert in the field, to select a suitable procedure, but the detailed information given here exemplifies the most modern approaches to the various problems encountered. Most of the authors of the articles were investigators who had either originated these methods or acquired detailed knowledge of them through extensive use in the laboratory. We thank all of them for their enthusiasm and their gratifying responses to our request for contributions. We also thank Ms. M. E. Siedenstrang for typing camera ready copy of both volumes, compiling and typing subject and author indices, and handling all correspondence related to the publication of these two volumes. We also thank Ms. S. Mason and Dr. D. S. Wise for their help in the preparation and proofing of reaction

schemes. The reception accorded Volumes 1 and 2 will determine whether this series will be continued.

LEROY B. TOWNSEND
R. STUART TIPSON

Salt Lake City, Utah
Kensington, Maryland
April 1978

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