

NUCLEIC ACID CHEMISTRY

IMPROVED AND NEW SYNTHETIC PROCEDURES,
METHODS AND TECHNIQUES

PART TWO

Edited by

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Salt Lake City, Utah

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(Retired)

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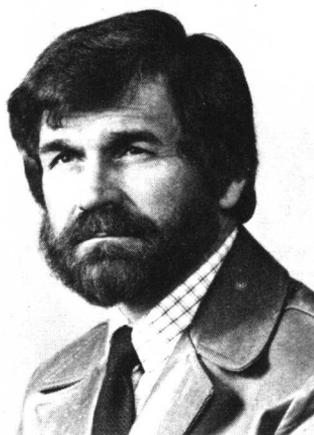
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NUCLEIC ACID CHEMISTRY
PART TWO



R. STUART TIPSON



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, Heterocyclic 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

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Kensington, Maryland
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CONTENTS

NUCLEOSIDES

Bicyclic Aglycone

Purines

85. 9- β -D-Arabinofuranosyladenine, 485
86. 9- β -D-Arabinofuranosyladenine (Spongoadenosine; *ara-Adenosine*), 491
87. 9-(3-Azido-3-deoxy- β -D-ribofuranosyl) adenine, 499
88. *N*-Benzoyl-9-(2,3-Di-*O*-benzoyl- β -D-arabinofuranosyl)-adenine, 505
89. 9-(3-Deoxy-3-iodo- β -D-xylofuranosyl) adenine, 511
90. 9-(2,3-Di-*O*-acetyl-5,6-dideoxy- β -D-xylo-hex-5-enofuranosyl) adenine, 515
91. 9-(2,3-*O*-Isopropylidene- α -L-talofuranosyluronic acid)-adenine and 9-(2,3-*O*-Isopropylidene- β -D- allofuranosyluronic acid) adenine, 521
92. L-Adenosine, 527
93. *N*⁶-[2-(3,4-Dihydroxyphenyl) ethyl] adenosine, 533
94. *N*⁶-Methyl-*N*⁶-nitrosoadenosine, 537
95. An Improved Synthesis of *S*-Adenosyl-L-homocysteine, 541
96. 9-(3-Amino-3-deoxy- β -D-xylofuranosyl) hypoxanthine, 547
97. 1- β -D-Ribofuranosylhypoxanthine, 553
98. 2-*O*-[2-Hydroxy-1(*R*) hypoxanthin-9-yl] ethylglycerol and 2-*O*-[2-Hydroxy-1(*R*)-(6-purinethione-9-yl) ethyl] glycerol, 559
99. Isoguanosine-5'-carboxylic Acid, Ethyl Ester [6-Amino-9-(ethyl- β -D-ribofuranosyluronate) purin-2-one], 565
100. 6-Amino-9-(2,3-anhydro- β -D-ribofuranosyl) purine [2',3'-Anhydroadenosine] from Adenosine, 577

101. 2-Amino-9-(2-deoxy- α -D-erythro-pentofuranosyl)-9H-purine-6-thiol (α -Deoxythioguanosine), 583
102. 2-Amino-9- β -D-ribofuranosylpurin-6-selone, 589
103. 8,2'-Anhydrides of Purine-8-thiol Nucleosides (or of Purine 2'-Thionucleosides), 595
104. 6-Chloro-9-(2-deoxy- β -D-erythro-pentofuranosyl) purine from the Chlorination of 2'-Deoxyinosine, 601
105. 6-Chloro-2-methyl-9- β -D-ribofuranosylpurine, 607
106. 6-Chloro-9- β -D-ribofuranosylpurine, 611
107. De-D-ribosylation of 7-Alkylpurine D-Ribonucleosides by a Reduction—Displacement Procedure, 615
108. 9-(3-Deoxy-3-nitro- α -L-ribofuranosyl)-6-(dimethylamino)-2-(methylmercapto) purine, 619
109. 1-(1,6-Dihydro-6-thioxopurin-9-yl)-1-S-ethyl-1-thio-D-pentitols, 627
110. 6-Fluoro-9- β -D-ribofuranosyl-9H-purine and 2-Amino-6-fluoro-9- β -D-ribofuranosyl-9H-2-purine, 639
111. 1-(2,3-*O*-Isopropylidene-D-ribofuranosyl)-6-oxo- and -6-imino-purines, 645
112. 6-Methylsulfonyl-9- β -D-ribofuranosylpurine, 651
113. *N*-[*N*-Methyl-(9- β -D-ribofuranosylpurin-6-yl) carbamoyl]-L-threonine (mt⁶A), 655
114. *N*-[(9- β -D-Ribofuranosyl-9H-purin-6-yl) carbamoyl]-L-threonine (t⁶A), 661
115. 9- β -D-Ribofuranosylpurin-6-yl-*p*-[bis(2-chloroethyl)-amino] benzylidenehydrazone, 667
116. 9- β -D-Ribofuranosyl-6-(selenoxo) purine, 2-Amino-9- β -D-ribofuranosyl-6-(selenoxo) purine, 9- β -D-Arabinofuranosyl-6-(selenoxo) purine, and 3- β -D-Ribofuranosyl-7-(selenoxo) pyrazolo [4,3-*d*] pyrimidine (Selenoformycin B), 673
117. The Synthesis of Purine Nucleoside 6-Sulfonates, 677

Others

118. 4-Amino-7- β -D-ribofuranosyl-7H-imidazo [4,5-*d*]-*v*-triazine (2-Aza-adenosine), 681
119. 7-Amino-3- β -D-ribofuranosyl-3H-1,2,3-triazolo [4,5-*d*] -pyrimidine (8-Azaadenosine), 687
120. 3-Deaza-adenosine (4-Amino-1- β -D-ribofuranosyl-1H-imidazol [4,5-*c*] pyridine), 693
121. *N*¹,*N*⁶-Ethenoadenosine-5'-(*N*-ethyl carboxamide), 701

122. 1-Methylformycin, 709
123. 4-Amino-1- β -D-ribofuranosylindole (1,3,7-Tridezaadenosine), 713
124. 1- β -D-Ribofuranosylindole, 721
125. 1-(2,3,4,6-Tetra-*O*-acetyl- β -D-glucosyl) isatin, 725
126. 6,7-Diphenyl-1- β -D-ribofuranosylumazine, 729
127. 4-Amino-7,8-dihydro-2-(methylmercapto)-8- β -D-ribofurano-sylpteridin-7-one, 735
128. 4-(Benzyloxo)-2-(dimethylamino)-7,8-dihydro-8- β -D-ribofuranosylpteridin-7-one, 741
129. 1- β -D-Ribofuranosylpyrazolo [3,4-*d*] pyrazine, 745
130. 4-Methyl-1- β -D-ribofuranosylpyrrolo [2,3-*b*] pyridine, 749

Monocyclic and Bicyclic Aglycones

131. *N,N'*-Bis (5'-deoxythymidin-5'-yl) azelaamide, *N,N'*-Bis (5'-deoxyadenosin-5'-yl) azelaamide, and *N*-(5'-Deoxyadenosin-5'-yl)-*N'*-(5'-deoxythymidin-5'-yl) azelaamide, 753
132. 2'- and 3'-*O*-Methyl-nucleosides, 759
133. 2',3'-*O*-Isopropylideneacetals of D-Ribonucleosides, 765
134. 2'-*O*-(*o*-Nitrobenzyl)-D-ribonucleosides, 771

NUCLEOTIDES AND POLYNUCLEOTIDES

Monocyclic Aglycone

135. 2'-Deoxy-5-iodocytidine 5'-Triphosphate and 2'-Deoxy-5-iodouridine 5'-Triphosphate, 779
136. 5'-Phosphates of the Anomers of 1-L-Ribofuranosyluracil, -cytosine, and -thymine, 783
137. The Synthesis of Pyrimidinethione Nucleoside 5'-Mono-, -Di-, and -Triphosphates, 793
138. Thymidine 3'-Phosphates, 801
139. 5'-*O*-[Bis (*p*-methoxyphenyl) phenylmethyl] thymidine 3'-Phosphodianilidate, 810
140. Bis [1-(5-*O*-phosphono- β -D-ribofuranosyl) uracil-5-yl] Disulfide, 813
141. 5-Bromouridine 3',5'-Cyclic Monophosphate, 817

Bicyclic Aglycone

142. 5'-Phosphates of the Anomers of 9-D-Ribofuranosyladenine, 821
143. Synthesis of AMP and ATP Analogs, 827

144. 8-Bromoadenosine and Its 5'-Phosphate, 837
145. *N*⁶-[6-(Iodoacetyl) aminohexyl] adenosine 5'Phosphate, 843
146. L-Homoserine 4-(5'-Adenylate) (HSAMP), 847
147. Tributylammonium Phosphorodiimidazolidate, 853
148. 6-Amino-9-β-D-arabinofuranosylpurine-8-thiol 3',5'-Cyclic Phosphate, 857

Monocyclic and Bicyclic Aglycones

149. Phosphorylation and Thiophosphorylation of Purine D-Ribonucleosides, 861
150. Nucleoside 5'-Phosphates, 865
151. Nucleoside 5'-Phosphoranilidates, 869
152. Ribonucleoside 2':3'-Cyclic Phosphates, 875

Others

153. Partially Thiolated Poly (cytidylic Acid), 881
154. 2'-*O*-(Tetrahydropyran-2-yl) uridylyl-(3'→5')-2',3'-di-*O*-benzoyluridine (2-Cyanoethyl) Ester, 885

ISOTOPICALLY LABELED COMPOUNDS

155. *S*-Adenosyl-L-methionine-*S*-CD₃ and *S*-Adenosyl-L-methionine-*S*-¹³CH₃, 889
156. 5-Fluorouridine and 5-Fluorocytidine, 895
157. Labeling of Pyrimidine Metabolites and Antimetabolites with Stable Isotopes, 901
158. Labeling of the Sulfur Atom of Pyrimidin-5-thione Nucleosides and Nucleotides with Sulfur-35, 917
159. Thymidine-6-¹³C-α,α,α-*d*₃-1,3-¹⁵N₂, 921
160. 5-Cyanouracil and 5-[¹⁴C] Cyanouracil, 927

CHEMICAL AND ENZYMIC SYNTHESIS

161. Poly (6-thioinosinic Acid), 931
162. 5-Amino-1-formylisoquinoline Thiosemicarbazone, an Inhibitor of Ribonucleotide Reductase, 945
163. Nucleoside 5'-Phosphates, 955
164. Direct Phosphorylation of Nucleosides, and Enzymic Polymerization to Polynucleotides, 963

165. Poly (pyrimidinethione Nucleotides) [Poly r(s²U), Poly r(s²U), Poly r(s²s⁴U), and Poly r (s²c)], 973
166. The Synthesis of Poly (2'-azido-2'-deoxyuridylic Acid), 977

REAGENTS, INTERMEDIATES, AND MISCELLANEOUS COMPOUNDS

167. (Chloromethylene) dimethylammonium Chloride, 989
168. Dianilidophosphorochloridate, 993
169. Diethoxymethyl Acetate, 995
170. Diphenyl Carbonate, 999
171. Phenyl Dihydrogen Phosphate, 1003
172. Tributyltin Hydride, 1007

INSTRUMENTAL OR ANALYTICAL TECHNIQUES AND APPLICATIONS

173. Analysis of Equilibrium Chemical Mixtures by Absorption, 1009
174. Application of High-Pressure Liquid Chromatography in the Synthesis of Oligonucleotides, 1037
175. Application of High-Speed Liquid Chromatography to Some Folic Acid Analogs, 1045
176. The Determination of Anomeric Configuration of *D*-Ribofuranosyl Nucleosides by Proton Magnetic Resonance Spectroscopy, 1055
177. Thin-Layer Chromatography of Purine Bases, Nucleosides, and Nucleotides, 1061

Author Index, i-1

Subject Index, i-31

Contents, Part 1

HETEROCYCLIC COMPOUNDS

Imidazole

1. 4(or 5)-(3,3-Dimethyl-1-triazeno) imidazole-5(or 4) carboxamide

Purines

2. 2-Acetamidopurin-6-one (*N*²-Acetylguanine)
3. 6-Amino-9-(4-dimethylaminobutyl)-9*H*-purine
4. 6-Chloropurine

5. 2,6-Di (hydroxyamino) purine
6. 9-Furfuryl-6-(furfurylamino)-9*H*-purine
7. Methylation of Carbon Atoms of Purines
8. Purine 3-Oxide
9. Isomerization of 6-(Trimethylammonio) purinides

Pyrimidines

10. 5-Fluorocytosine
11. Preparation of 2,5-Diamino-4,6-dichloropyrimidine via *N*-(4,6-Dichloro-5-nitropyrimidin-2-yl) acetamide
12. Substituted (2-Aminopurine-6-thiyl) pyrimidines
13. 1-(Tetrahydro-2-furyl) pyrimidines
14. A General Synthesis of 6-Alkyl (or aryl)-2-(carbamoylmethyl)-4-pyrimidinones
15. Substituted 4-(Benzyloxy)-6 (1*H*) pyrimidinones
16. *C*-Methylated 4-Methoxy-2 (1*H*) pyrimidinones
17. Bis (thymine-5-yl) Sulfone
18. 5-Formyluracil Dimethyl Acetal

Others

19. Potassium 1,2,3,4-Tetrahydro-2,4-dioxo-*s*-triazine-6-carboxylate (Potassium 5-Aza-orotate)
20. 6-Amino-8-methyl-8-azapurine (7-Amino-2-methyl-1,2,3-triazolo [4,5-*d*] pyrimidine)
21. 9-Benzyl-1,6-dihydro-8-azapurine (3-Benzyl-6,7-dihydro-1,2,3-triazolo [4,5-*d*] pyrimidine)
22. 1-Substituted 5-Azauracils and 1-Substituted 5-Aza-2,4-dithiouracils
23. 4-Acetamidopyrazolo [3,4-*d*] pyrimidine and 4-Dimethylamino-methyleneaminopyrazolo [3,4-*d*] pyrimidine
24. Substituted 4-(Alkylamino) pyrazolo [3,4-*d*] pyrimidines
25. 3,6-Dimethylpyrazolo [4,3-*d*] pyrimidin-7-one
26. Diethyl 3-Amino-4-chloropyridine-2, 6-discarbamate
27. Pyrrolo [3,2-*c*] pyridine-4,6 (5*H*, 7*H*) dione (3,7-Dideazaxanthine)
28. 2,4-Diamino-6,7-dihydro-5*H*-pyrrolo [3,4-*d*] pyrimidine

CARBOHYDRATES

29. 2,5-Anhydro-3,4,6-tri-*O*-benzoyl-D-allonothioamide and 3-Deoxy Derivatives
30. Anomers of 1-*O*-Acetyl-2,3,5-tri-*O*-benzoyl-D-arabinose
31. 2-*O*-*p*-Tolylsulfonyl-L-arabinose
32. (\pm)-(1,4/2)-4-Amino-2-hydroxycyclopentanemethanol and (\pm)-(1,4/3)-4-Amino-3-hydroxycyclopentanemethanol
33. Synthesis of Crystalline Pentofuranosyl Halides Suitable for the Synthesis of Nucleosides and Their Analogs
34. Methyl 2-Deoxy-4-thio- β -D-*erythro*-pentofuranoside and its α Anomer
35. Methyl 2,3-Anhydro-5-deoxy- α -D-ribofuranoside
36. Crystalline 2,3,5-Tri-*O*-acetyl- β -D-ribofuranosyl Chloride

NUCLEOSIDES**Monocyclic Aglycone****Imidazoles**

37. 2-Amino-1- β -D-ribofuranosylimidazole
38. Dimethyl-1-(2,3,5-tri-*O*-benzoyl- β -D-ribofuranosyl)-imidazole-4,5-dicarboxylate and Dimethyl 1- β -D-Ribofuranosylimidazole-4,5-dicarboxylate
39. 5-Fluoro-1- β -D-ribofuranosylimidazole-4-carboxamide

Pyrimidines

40. 2'-Azido-2'-deoxycytidine
41. 2'-Deoxy-5-methylcytidine
42. 6-Methylcytidine and 2'-Deoxy-6-methylcytidine
43. *O*'-Alkyl Derivatives of 1- β -D-Arabinofuranosylcytosine (AraC)
44. 4-Amino-1- β -D-*arabino*-pentofuranosyl-2-(1*H*)-pyrimidinone (1- β -D-Arabinofuranosylcytosine)
45. 1- β -D-Arabinofuranosylcytosine (AraC) and "Virazole"
46. 1-(5-Azido-5-deoxy- β -D-arabinofuranosyl) cytosine and 1-(5-Amino-5-deoxy- β -D-arabinofuranosyl) cytosine
47. 1-Cytosin-1-yl-1-*S*-ethyl-1-thio-D-xylitol

48. 2,5'-Anhydronucleosides of 2'-Deoxy-D-*erythro*-pentosyl-pyrimidines
49. 4-Amino-1-(2,3,5-tri-*O*-acetyl- β -D-arabinofuranosyl)-2(1*H*)-pyrimidinone Monohydrochloride [1-(2,3,5-Tri-*O*-acetyl-D-arabinofuranosyl) cytosine Hydrochloride]
50. Anomeric 1-(2-Deoxy-D-*erythro*-pentofuranosyl)-2(1*H*)-pyrimidinones
51. 3'-*O*-(Carboxymethyl) thymidine
52. 3',5'-Di-*O*-nitrothymidine
53. 1-(2,3-Dideoxy-3-fluoro- β -D-ribofuranosyl) thymine (3'-Deoxy-3'-fluorothymidine)
54. 1-[2,3-Dihydro-5-(hydroxymethyl) furan-2-yl] thymine (3'-Deoxy-3',4'-didehydrothymidine)
55. 1-(2-Deoxy- β -D-*erythro*-pentopyranosyl) uracil and its α -D Anomer
56. 1-(2-Deoxy-4-thio- β -D-*erythro*-pentofuranosyl)-5-fluorouracil and its α Anomer
57. (+)-(*R*)-5-Fluoro-1-(tetrahydrofuran-2-yl) uracil
58. 6-Methyl-3- β -D-ribofuranosyluracil
59. 5'-Amino-2',5'-dideoxy-5-iodouridine
60. 2,5'-Anhydrouridine and 2,5'-Anhydro-5-fluorouridine
61. 2'-Deoxy-L-uridine
62. 2'-Deoxy-5-formyluridine
63. 2'-Deoxy-5-(hydroxymethyl) uridine and 2'-Deoxy-5-formyluridine
64. 2'-Deoxy-5-(thiocyanato) uridine [1-(2-Deoxy- β -D-*erythro*-pentofuranosyl)-5-(thiocyanato) uracil]
65. 3',5'-Di-*O*-acetyluridine
66. 5-Fluorouridine
67. 5-(Methoxymethyl), 5-(Azidomethyl), and 5-(2-Chloroacetamidomethyl) Derivatives of 2'-Deoxyuridine
68. 2',3'-*O*-(Methoxymethylene) uridine
69. *O*'-Nitro Derivatives of Uridine
70. 2'-*O*-(*o*-Nitrobenzyl) uridine
71. Synthesis of 3'-Deoxyuridine
72. 2- and 4-Selenouridine
73. 1- β -D-Arabinofuranosyl-4-selenouracil, 1- β -D-Arabinofuranosyl-2-selenouracil, 4-Selenouridine, 4-Selenouracil, 2-Selenouridine, and 2'-Deoxy-4-selenouridine

74. 2'-*O*-(Tetrahydropyran-2-yl) uridine
75. 2',3',5'-Tri-*O*-benzoyl-5-nitrouridine

Others

76. 4-Amino-1- β -D-ribofuranosyl-*s*-triazin-2(1*H*)-one (5-Azacytidine)
77. Anomeric 4-Amino-1-(2-deoxy-D-*erythro*-pentofuranosyl)-*s*-triazin-2 (1*H*)-ones (2'-Deoxy-5-azacytidine and its α -D Anomer)
78. 3-Methyl-6-azauridine [4-Methyl-2- β -D-ribofuranosyl-*as*-triazin-3,5-(2*H*,4*H*)-dione]
79. 1- β -D-Ribofuranosyl-*s*-triazine-2,4(1*H*,3*H*)-dione (5-Azauridine)
80. 2,4,6-Trimethoxy-1- β -D-ribofuranosylbenzene
81. 3-(2,3,5-Tri-*O*-benzoyl- β -D-ribofuranosyl)-5-trichloromethyl-1,2,4-oxadiazole
82. 4-Amino-1- β -D-ribofuranosylpyrazole-3-carboxamide
83. Dimethyl 3-(2,3,5-Tri-*O*-benzyl- β -D-ribofuranosyl)pyrazole-4,5-dicarboxylate
84. 1- β -D-Ribofuranosylpyridin-2-one

Author Index, i-1

Subject Index, i-31

