

L634 .303 L

THE ORGANIC CHEMISTRY OF DRUG SYNTHESIS

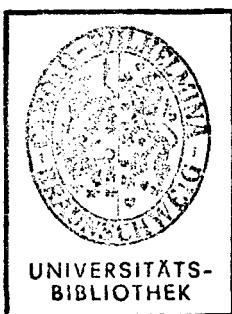
VOLUME 3

DANIEL LEDNICER

Analytical Bio-Chemistry Laboratories, Inc.
Columbia, Missouri

LESTER A. MITSCHER

The University of Kansas School of Pharmacy
Department of Medicinal Chemistry
Lawrence, Kansas



See 1762

A WILEY-INTERSCIENCE PUBLICATION

JOHN WILEY AND SONS

New York • Chichester • Brisbane • Toronto • Singapore

Contents

Chapter 1.	Alicyclic and Cyclic Compounds	1
1.	Cyclopentanes	1
a.	Prostaglandins	1
b.	Retenoids	11
c.	Miscellaneous	13
	References	16
Chapter 2.	Phenethyl and Phenoxypropanolamines	19
1.	Phenylethanamines	20
	References	34
Chapter 3.	Arylaliphatic Compounds	37
1.	Arylacetic Acid Derivatives	37
2.	Anilines, Benzyl Amines, and Analogues	45
3.	Diarylmethane Analogues	47
4.	Stilbene Analogues	50
	References	52
Chapter 4.	Monocyclic Aromatic Agents	55
1.	Aniline Derivatives	55
2.	Benzoic Acid Derivatives	58
3.	Benzenesulfonic Acid Derivatives	61
	References	63
Chapter 5.	Polycyclic Aromatic Compounds	65
1.	Indanones	65

2.	Naphthalenes	68
3.	Tricyclic Compounds: Anthracene, Phenanthrene, and Dibenzocycloheptene	72
	References	78
Chapter 6.	Steroids	81
1.	Estranes	82
2.	Androstanes	87
3.	Pregnanes	90
4.	Miscellaneous Steroids	99
	References	107
Chapter 7.	Compounds Related to Morphine	109
1.	Bridged Polycyclic Compounds	111
2.	Piperidines	116
3.	Miscellaneous Compounds	121
	References	124
Chapter 8.	Five-Membered Heterocycles	127
1.	Pyrroles and Pyrrolidines	127
2.	Furans	129
3.	Imidazoles	131
4.	Triazoles	137
5.	Pyrazolines	137
6.	Isoxazoles	138
7.	Tetrazoles	139
8.	Miscellaneous	139
	References	141
Chapter 9.	Six-Membered Heterocycles	145
1.	Pyridines	145
2.	Pyridazines	151
3.	Pyrimidines	152
4.	Miscellaneous Heterocycles	157
	References	162
Chapter 10.	Five-Membered Heterocycles Fused to Benzene	165
1.	Indoles	165
2.	Benzimidazoles	172
3.	Benzothiazoles	178
	References	179
Chapter 11.	Benzofused Six-Membered Heterocycles	183
1.	Quinoline Derivatives	183
2.	Isoquinoline Derivatives	186

3. Benzopyran Derivatives	188
4. Benzodioxane Derivatives	191
5. Benzoazolinone Derivatives	191
6. Quinazolinone Derivatives	192
7. Phthalazines	195
8. Benzodiazapines and Related Substances	195
9. Miscellaneous	198
References	199
 Chapter 12. Beta Lactams	 203
1. Penicillins	203
2. Cephalosporins	209
References	221
 Chapter 13. Miscellaneous Fused Heterocycles	 225
References	250
 Cross Index of Drugs	 253
Cumulative Index, Vols. 1-3	261
Index	279