

BURGER'S MEDICINAL CHEMISTRY, DRUG DISCOVERY, AND DEVELOPMENT

Methods in Drug Discovery

Volume 1

Edited by Donald J. Abraham David P. Rotella



CONTENTS

PREFACE

vii

CONTRIBUTORS		ix
1	History of Quantitative Structure-Activity Relationships	1
2	Mass Spectrometry and Drug Discovery	97
3	Chirality and Biological Activity	127
4	Analog Design	167
5	SNPs: Single Nucleotide Polymorphisms and Pharmacogenomics:	
	Individually Designed Drug Therapy	181
6	Design of Peptidomimetics	205
7	Medicinal Chemistry Approaches for Multitarget Drugs	249
8	Combinatorial Chemistry and Multiple Parallel Synthesis	275
9	Allosteric Proteins And Drug Discovery	369
10	Principles of Drug Metabolism	403
11	Pharmacophores	455
12	Use Of Biological Fingerprints Versus Structure/Chemotypes To Describe Molecules	481
13	Recent Advances in Development, Validation, and Exploitation of QSAR Models	505
14	The Application of Recombinant DNA Technology in Medicinal Chemistry	
	and Drug Discovery	535
15	Structural Genomics, Its Application in Chemistry, Biology, and Drug Discovery	569
INI	INDEX	