

CONTENTS

Organizing Committee	vii
Preface	ix
Acknowledgements	xi
Leukotrienes and Other Eicosanoids: Syntheses and Synthetic Methods E. J. COREY	1
Synthetic Approaches to Biologically Active Prostacyclin-Analogues W. BARTMANN, G. BECK, J. KNOLLE and R. H. RUPP	15
The Aldol Condensation as a Tool for Stereoselective Organic Synthesis C. H. HEATHCOCK	27
Studies Directed Towards Verrucarins: A Synthesis of Verucarol. An Approach to Verrucarin A B. M. TROST, P. G. McDOUGAL and J. H. RIGBY	45
New Approaches to the Total Synthesis of Biologically Active Natural Products M. E. JUNG	61
Studies Directed Towards the Chemical Synthesis of Yeast Alanine tRNA S. S. JONES, C. B. REESE and S. SIBANDA	71
Synthetic Aspects of 1-Oxacephem Antibiotics W. NAGATA	83
Studies Related to Beta-Lactam Compounds S. WOLFE	101
Stereochemistry of Palytoxin Y. KISHI	115
Diastereo- and Enantio-Selective Cycloaddition and Ene Reactions in Organic Synthesis W. OPPOLZER	131
Regio-, Diastereo-, and Enantioselective C-C Coupling Reactions Using Metalated Hydrazones, Formamides, Allylamines and Aminonitriles D. ENDERS	151
A New Methodology for the Generation of <i>o</i> -Quinodimethanes and Related Intermediates — An Approach to Asymmetric Synthesis of Polycycles Y. ITO	169
Asymmetric Synthesis Using Enantiomerically Pure Sulfoxides G. H. POSNER, K. MIURA, J. P. MALLAMO, M. HULCE and T. P. KOGAN	177
Stereocontrol via Cyclization Reactions P. A. BARTLETT	181
Stereocontrolled Synthesis of 25S,26-Dihydroxy and 1 α ,25S,26-Trihydroxy-cholecalciferol Side Chains A. D. BATCHO, J. SERENO, N. K. CHADHA, J. J. PARTRIDGE, E. G. BAGGIOLINI and M. R. USKOKOVIĆ	193
Carbohydrate Derivatives in the Asymmetric Synthesis of Natural Products B. FRASER-REID, L. MAGDZINSKI and B. MOLINO	197
Carbohydrates as "Chiral Templates" in Organic Synthesis — Target: Boromycin S. HANESSIAN, D. DELORME, P. C. TYLER, G. DEMAILLY and Y. CHAPLEUR	205
Stereochemical Control in Macrocyclic Synthesis E. VEDEJS, J. M. DOLPHIN, D. M. GAPINSKI and H. MASTALERZ	221

Stereochemical Control in Macrocyclic Compounds	233
W. C. STILL	
New Hydroborating Agents	247
H. C. BROWN	
Palladium- or Nickel-Catalyzed Cross Coupling Involving Proximally Heterofunctional Reagents	269
E. NEGISHI	
Selective Reactions Using Organoaluminum Reagents	281
H. YAMAMOTO and K. MARUOKA	
New Access to Conjugated Dienes Via Carbocupration of Alkynes	291
J. F. NORMANT and A. ALEXAKIS	
Quinone Synthesis with Organometallic Reagents	303
M. F. SEMMELHACK, T. SATO, J. BOZELL, L. KELLER, W. WULFF, A. ZASK and E. SPIESS	
Organo-Silicon Mediated Synthetic Reactions	311
I. KUWAJIMA	
Trimethylsilanol as a Leaving Group in Preparative Organic Chemistry	323
H. VORBRÜGGEN	
Reaction of Silyl Enol Ethers with Carbenes and Carbenoids. New Syntheses of Various Carbonyl Compounds	331
J.-M. CONIA and L. BLANCO	
A New Synthetic Approach to 1,4-Dicarbonyl Systems and Functionalized Cyclopentenones Based on the Horner-Wittig Reaction of Phosphonates Containing Sulfur	347
M. MIKOLAJCZYK	
Vinyl and Beta-Alkoxy Radicals in Organic Synthesis	359
G. STORK	
Selective Hydrogenolysis of C-C Bonds in Small Ring Compounds	371
H. MUSSO	
Recent Synthetic Developments in Annulene Chemistry	379
E. VOGEL	
Vicarious Nucleophilic Substitution of Hydrogen. A New Method of Nucleophilic Alkylation of Nitroarenes	401
M. MAKOSZA	
Dichlorine Monoxide. A Powerful and Selective Chlorinating Reagent	413
D. J. SAM, F. D. MARSH, W. B. FARNHAM and B. E. SMART	
Index	423