

CONTENT

	Page
MAJOR PRESENTATIONS	
	1
1. Approaches for Asymmetric Synthesis as Directed Toward Natural Products	3
2. Synthetic Control Leading to Natural Products	21
3. Asymmetric Synthesis of Chiral Tertiary Alcohols in High Enantiomeric Excess	37
4. Acyclic Stereoselection via the Aldol Condensation	55
5. Asymmetric Carbon—carbon Bond Forming Reactions via Chiral Chelated Intermediates: Diastereoselective Asymmetric synthesis of 1,2-Disubstituted Cycloalkanecarboxaldehydes	73
6. Asymmetric Carbon—carbon Bond Forming Reactions via Chiral Oxazolines	83
7. Highly Selective Synthesis with Novel Metallic Reagents	99
8. Novel Approaches to the Asymmetric Synthesis of Peptides	109
9. Asymmetric Carbon—carbon Bond Formation Using Enantiomerically Pure Vinyllic Sulfoxides	139
10. Asymmetric Reactions: A Challenge to the Industrial Chemist	155
11. Stereochemistry of Heterogeneous Asymmetric Catalytic Hydrogenation	169
12. Asymmetric Grignard Cross-Coupling Catalyzed by Chiral Phosphine-Nickel and Phosphine-Palladium Complexes	177
13. Rhodium (I) Catalyzed Enantioselective Hydrogen Migration of Prochiral Allylamines	187
14. Application of Immobilized Enzymes for Asymmetric Reactions	195
15. Asymmetric Synthesis Using Cofactor-Requiring Enzymes	205
16. Mechanistic Considerations of Biomimetic Asymmetric Reductions	219
17. Stereochemistry of One-Carbon Transfer Reactions	229
18. A Useful and Conveniently Accessible Chiral Stationary Phase for the Liquid Chromatographic Separation of Enantiomers	245
SHORT COMMUNICATIONS	
	261
New Asymmetric Reactions Using (<i>S</i>)-2-Aminomethylpyrrolidine Derivatives	263
Liquid Chromatographic Resolution of Enantiomeric α -Amino Acid Derivatives Employing a Chiral Diamide Phase	266
Asymmetric Reduction with Chiral NADH Model Compounds	268
Asymmetric Hydrogenation of Cyclic Dipeptides Containing α,β -Dehydroamino Acid Residues and Subsequent Preparation of Optically Pure α -Amino Acids	272
2,2-Bis(diphenylphosphino)-1,1-binaphthyl: A New Axially Dissymmetric Bis(triaryl)phosphine	274
Asymmetric Reduction of Ketones with Metal Hydride Reagents Modified with Chiral	

Aminodiols and Aminotriols	278
Resolution by Optically Active Poly(triphenylmethyl Methacrylate)	280
Highly Active Catalysts for Enantioselective Hydrogenation of Ketones	283
Reversibility of η^4 -Cyclobutadiene Metal Formation from Complexed Alkynes: Unimolecular Isomerization of Labeled Racemic and Enantiomerically Enriched η^5 -Cyclopentadienyl- η^4 -cyclobutadiene Cobalt Complexes	285
Index	287