



## Tetrahedron: Asymmetry reports

Tetrahedron: *Asymmetry* reports are generally specially commissioned, however, suggestions for topics and authors are welcomed by the Editors.

- Alexakis, A.; Mangeney, P. Chiral acetals in asymmetric synthesis. *Tetrahedron: Asymmetry* **1990**, *1*, 477.
- Bravo, P.; Resnati, G. Preparation and properties of chiral fluoroorganic compounds. *Tetrahedron: Asymmetry* **1990**, *1*, 661.
- Cox, P. J.; Simpkins, N. S. Asymmetric synthesis using homochiral lithium amide bases. *Tetrahedron: Asymmetry* **1991**, *2*, 1.
- Burgess, V. A.; Davies, S. G.; Skerlj, R. T. NADH mimics for the stereoselective reduction of benzoylformates to the corresponding mandelates. *Tetrahedron: Asymmetry* **1991**, *2*, 299.
- Xie, Z.-F. *Pseudomonas fluorescens* lipase in asymmetric synthesis. *Tetrahedron: Asymmetry* **1991**, *2*, 733.
- Blaser, H.-U. Enantioselective synthesis using chiral heterogeneous catalysts. *Tetrahedron: Asymmetry* **1991**, *2*, 843.
- Sonawane, H. R.; Bellur, N. S.; Ahuja, J. R.; Kulkarni, D. G. Recent developments in the synthesis of optically active  $\alpha$ -arylpropanoic acids: an important class of nonsteroidal anti-inflammatory agents. *Tetrahedron: Asymmetry* **1992**, *3*, 163.
- d'Angelo, J.; Desmaële, D.; Dumas, F.; Guingant, A. The asymmetric Michael addition reactions using chiral imines. *Tetrahedron: Asymmetry* **1992**, *3*, 459.
- Carless, H. A. J. The use of cyclohexa-3,5-diene-1,2-diols in enantiospecific synthesis. *Tetrahedron: Asymmetry* **1992**, *3*, 795.
- Walker, A. J. Asymmetric carbon-carbon bond formation using sulfoxide-stabilised carbanions. *Tetrahedron: Asymmetry* **1992**, *3*, 961.
- Frost, C. G.; Howarth, J.; Williams, J. M. J. Selectivity in palladium catalysed allylic substitution. *Tetrahedron: Asymmetry* **1992**, *3*, 1089.
- Lohray, B. B. Recent advances in the asymmetric dihydroxylation of alkenes. *Tetrahedron: Asymmetry* **1992**, *3*, 1317.
- Wallbaum, S.; Martens, J. Asymmetric syntheses with chiral oxazaborolidines. *Tetrahedron: Asymmetry* **1992**, *3*, 1475.
- Harmange, J.-C.; Figadère, B. Synthetic routes to 2,5-disubstituted tetrahydrofurans. *Tetrahedron: Asymmetry* **1993**, *4*, 1711.
- Sakai, K.; Suemune, H. Application of chiral cyclic diols to asymmetric synthesis. *Tetrahedron: Asymmetry* **1993**, *4*, 2109.
- Chelucci, G. Synthesis of chiral pyridines by cobalt(I)-catalyzed cocyclotrimerization of acetylene with optically active nitriles. *Tetrahedron: Asymmetry* **1995**, *6*, 811.
- Gladiali, S.; Bayón, J. C.; Claver, C. Recent advances in enantioselective hydroformylation. *Tetrahedron: Asymmetry* **1995**, *6*, 1453.
- Ward, R. S. Dynamic kinetic resolution. *Tetrahedron: Asymmetry* **1995**, *6*, 1475.
- Bernardi, A.; Gennari, C.; Goodman, J. M.; Paterson, I. The rational design and systematic analysis of asymmetric aldol reactions using enol borinates: applications of transition state computer modelling. *Tetrahedron: Asymmetry* **1995**, *6*, 2613.
- Bommarius, A. S.; Schwarm, M.; Stingl, K.; Kottenhahn, M.; Huthmacher, K.; Drauz, K. Synthesis and use of enantiomerically pure *tert*-leucine. *Tetrahedron: Asymmetry* **1995**, *6*, 2851.
- Donohoe, T. J.; Garg, R.; Stevenson, C. A. Prospects for stereocontrol in the reduction of aromatic compounds. *Tetrahedron: Asymmetry* **1996**, *7*, 317.
- Pichon, M.; Figadère, B. Synthesis of 2,5-disubstituted pyrrolidines. *Tetrahedron: Asymmetry* **1996**, *7*, 927.
- Enders, D.; Knopp, M.; Schiers, R. Asymmetric [3,3]-sigmatropic rearrangements in organic synthesis. *Tetrahedron: Asymmetry* **1996**, *7*, 1847.
- Aversa, M. C.; Barattucci, A.; Bonaccorsi, P.; Giannetto, P. Chiral sulfinyl-1,3-dienes. Synthesis and use in asymmetric reactions. *Tetrahedron: Asymmetry* **1997**, *8*, 1339.
- Osborn, H. M. I.; Sweeney, J. The asymmetric synthesis of aziridines. *Tetrahedron: Asymmetry* **1997**, *8*, 1693.
- Enders, D.; Reinhold, U. Asymmetric synthesis of amines by nucleophilic 1,2-addition of organometallic reagents to the CN-double bond. *Tetrahedron: Asymmetry* **1997**, *8*, 1895.
- Arsequell, G.; Valencia, G. O-Glycosyl  $\alpha$ -amino acids as building blocks for glycopeptide synthesis. *Tetrahedron: Asymmetry* **1997**, *8*, 2839.
- Avalos, M.; Babiano, R.; Cintas, P.; Jiménez, J. L.; Palacios, J. C. Nonlinear stereochemical effects in asymmetric reactions. *Tetrahedron: Asymmetry* **1997**, *8*, 2997.
- Ebrahim, S.; Wills, M. Synthetic applications of polymeric  $\alpha$ -amino acids. *Tetrahedron: Asymmetry* **1997**, *8*, 3163.
- Ager, D. J.; Laneman, S. A. Reductions of 1,3-dicarbonyl systems with rutheniumbiaryl-bisphosphine catalysts. *Tetrahedron: Asymmetry* **1997**, *8*, 3327.
- Barco, A.; Benetti, S.; De Risi, C.; Marchetti, P.; Pollini, G. P.; Zanirato, V. D-(-)-Quinic acid: a chiron store for

- natural product synthesis. *Tetrahedron: Asymmetry* **1997**, *8*, 3515.
32. Ghosh, A. K.; Mathivanan, P.; Cappiello, J. C<sub>2</sub>-Symmetric chiral bis(oxazoline)-metal complexes in catalytic asymmetric synthesis. *Tetrahedron: Asymmetry* **1998**, *9*, 1.
33. Nelson, S. G. Catalyzed enantioselective aldol additions of latent enolate equivalents. *Tetrahedron: Asymmetry* **1998**, *9*, 357.
34. Juaristi, E.; Escalante, J.; León-Romo, J. L.; Reyes, A. Recent applications of  $\alpha$ -phenylethylamine ( $\alpha$ -PEA) in the preparation of enantiopure compounds. Part 1: Incorporation in chiral catalysts. Part 2:  $\alpha$ -PEA and derivatives as resolving agents. *Tetrahedron: Asymmetry* **1998**, *9*, 715.
35. Kolodiazny, O. I. Asymmetric synthesis of organophosphorus compounds. *Tetrahedron: Asymmetry* **1998**, *9*, 1279.
36. Pu, L. Recent developments in asymmetric catalysis using synthetic polymers with main chain chirality. *Tetrahedron: Asymmetry* **1998**, *9*, 1457.
37. Richards, C. J.; Locke, A. J. Recent advances in the generation of non-racemic ferrocene derivatives and their application to asymmetric synthesis. *Tetrahedron: Asymmetry* **1998**, *9*, 2377.
38. Sulikowski, G. A.; Cha, K. L.; Sulikowski, M. M. Stereoselective intramolecular carbon-hydrogen insertion reactions of metal carbenes. *Tetrahedron: Asymmetry* **1998**, *9*, 3145.
39. Yurovskaya, M. A.; Karchava, A. V. Stereoselective reduction of endocyclic carbon-nitrogen double bond: application to the synthesis of biomolecules. *Tetrahedron: Asymmetry* **1998**, *9*, 3331.
40. Cativiela, C.; Díaz-de-Villegas, M. D. Stereoselective synthesis of quaternary  $\alpha$ -amino acids. Part 1: Acyclic compounds. *Tetrahedron: Asymmetry* **1998**, *9*, 3517.
41. Boiadjiev, S. E.; Lightner, D. A. Optical activity and stereochemistry of linear oligopyrroles and bile pigments. *Tetrahedron: Asymmetry* **1999**, *10*, 607.
42. Palmer, M. J.; Wills, M. Asymmetric transfer hydrogenation of C=O and C=N bonds. *Tetrahedron: Asymmetry* **1999**, *10*, 2045.
43. Nájera, C.; Yus, M. Pyroglutamic acid: a versatile building block in asymmetric synthesis. *Tetrahedron: Asymmetry* **1999**, *10*, 2245.
44. Juaristi, E.; León-Romo, J. L.; Reyes, A.; Escalante, J. Recent applications of  $\alpha$ -phenylethylamine ( $\alpha$ -PEA) in the preparation of enantiopure compounds. Part 3:  $\alpha$ -PEA as chiral auxiliary. Part 4:  $\alpha$ -PEA as chiral reagent in the stereodifferentiation of prochiral substrates. *Tetrahedron: Asymmetry* **1999**, *10*, 2441.
45. Arsequell, G.; Valencia, G. Recent advances in the synthesis of complex N-glycopeptides. *Tetrahedron: Asymmetry* **1999**, *10*, 3045.
46. McReynolds, K. D.; Gervay-Hague, J. Examining the secondary structures of unnatural peptides and carbohydrate-based compounds utilizing circular dichroism. *Tetrahedron: Asymmetry* **2000**, *11*, 337.
47. Cativiela, C.; Díaz-de-Villegas, M. D. Stereoselective synthesis of quaternary  $\alpha$ -amino acids. Part 2: Cyclic compounds. *Tetrahedron: Asymmetry* **2000**, *11*, 645.
48. Asano, N.; Nash, R. J.; Molyneux, R. J.; Fleet, G. W. J. Sugar-mimic glycosidase inhibitors: natural occurrence, biological activity and prospects for therapeutic application. *Tetrahedron: Asymmetry* **2000**, *11*, 1645.
49. Avalos, M.; Babiano, R.; Cintas, P.; Jiménez, J. L.; Palacios, J. C. From parity to chirality: chemical implications revisited. *Tetrahedron: Asymmetry* **2000**, *11*, 2845.
50. Eames, J.; Weerasooriya, N. Recent advances into the enantioselective protonation of prostereogenic enol derivatives. *Tetrahedron: Asymmetry* **2001**, *12*, 1.
51. Daverio, P.; Zanda, M. Enantioselective reductions by chirally modified alumino- and borohydrides. *Tetrahedron: Asymmetry* **2001**, *12*, 2225.
52. Lauret, C. Epoxy ketones as versatile building blocks in organic synthesis. *Tetrahedron: Asymmetry* **2001**, *12*, 2359.
53. Seco, J. M.; Quiñoá, E.; Riguera, R. A practical guide for the assignment of the absolute configuration of alcohols, amines and carboxylic acids by NMR. *Tetrahedron: Asymmetry* **2001**, *12*, 2915.
54. Brenna, E.; Fuganti, C.; Serra, S. Enantioselective perception of chiral odorants. *Tetrahedron: Asymmetry* **2003**, *14*, 1.
55. North, M. Synthesis and applications of non-racemic cyanohydrins. *Tetrahedron: Asymmetry* **2003**, *14*, 147.
56. Perry, M. C.; Burgess, K. Chiral N-heterocyclic carbene-transition metal complexes in asymmetric catalysis. *Tetrahedron: Asymmetry* **2003**, *14*, 951.
57. García-Pajón, C. M.; Hernández-Galán, R.; Collado, I. G. Biotransformations by *Colletotrichum* species. *Tetrahedron: Asymmetry* **2003**, *14*, 1229.
58. Robinson, D. E. J. E.; Bull, S. D. Kinetic resolution strategies using non-enzymatic catalysts. *Tetrahedron: Asymmetry* **2003**, *14*, 1407.
59. Sutcliffe, O. B.; Bryce, M. R. Planar chiral 2-ferrocenyl-oxazolines and 1,1'-bis(oxazoliny)ferrocenes—syntheses and applications in asymmetric catalysis. *Tetrahedron: Asymmetry* **2003**, *14*, 2297.
60. Nakamura, K.; Yamanaka, R.; Matsuda, T.; Harada, T. Recent developments in asymmetric reduction of ketones with biocatalysts. *Tetrahedron: Asymmetry* **2003**, *14*, 659.
61. Baudequin, C.; Baudoux, J.; Levillain, J.; Cahard, D.; Gaumont, A.-C.; Plaquevent, J.-C. Ionic liquids and chirality: opportunities and challenges. *Tetrahedron: Asymmetry* **2003**, *14*, 3081.
62. Chung, C. W. Y.; Toy, P. H. Chiral auxiliaries in polymer-supported organic synthesis. *Tetrahedron: Asymmetry* **2004**, *15*, 387.
63. Kaufman, T. S. Synthetic pathways to salsolidine. *Tetrahedron: Asymmetry* **2004**, *15*, 1203.
64. Chelucci, G.; Murineddu, G.; Pinna, G. A. Chiral pyridine N-oxides: useful ligands for asymmetric catalysis. *Tetrahedron: Asymmetry* **2004**, *15*, 1373.
65. Jerphagnon, T.; Renaud, J.-L.; Bruneau, C. Chiral monodentate phosphorus ligands for rhodium-catalyzed asymmetric hydrogenation. *Tetrahedron: Asymmetry* **2004**, *15*, 2101.
66. Diéguez, M.; Pàmies, O.; Claver, C. Recent advances in Rh-catalyzed asymmetric hydroformylation using phosphite ligands. *Tetrahedron: Asymmetry* **2004**, *15*, 2113.
67. Clark, T. P.; Landis, C. R. Recent developments in chiral phospholane chemistry. *Tetrahedron: Asymmetry* **2004**, *15*, 2123.
68. Drexler, H.-J.; Zhang, S.; Sun, A.; Spannenberg, A.; Arrieta, A.; Preetz, A.; Heller, D. Cationic Rh-bisphosphine-diolefin complexes as precatalysts for enantioselective catalysis—what information do single crystal structures contain regarding product chirality? *Tetrahedron: Asymmetry* **2004**, *15*, 2139.
69. Atomi, H.; Imanaka, T. Thermostable carboxylesterases from hyperthermophiles. *Tetrahedron: Asymmetry* **2004**, *15*, 2729.

70. Burton, S. G.; Dorrington, R. A. Hydantoin-hydrolysing enzymes for the enantioselective production of amino acids: new insights and applications. *Tetrahedron: Asymmetry* **2004**, *15*, 2737.
71. Lutz, S. Engineering lipase B from *Candida antarctica*. *Tetrahedron: Asymmetry* **2004**, *15*, 2743.
72. Sakai, T. 'Low-temperature method' for a dramatic improvement in enantioselectivity in lipase-catalyzed reactions. *Tetrahedron: Asymmetry* **2004**, *15*, 2749.
73. Yazbeck, D. R.; Martinez, C. A.; Hu, S.; Tao, J. Challenges in the development of an efficient enzymatic process in the pharmaceutical industry. *Tetrahedron: Asymmetry* **2004**, *15*, 2757.
74. Ema, T. Rational strategies for highly enantioselective lipase-catalyzed kinetic resolutions of very bulky chiral compounds: substrate design and high-temperature biocatalysis. *Tetrahedron: Asymmetry* **2004**, *15*, 2765.
75. Dzyuba, S. V.; Klibanov, A. M. Stereoselective oxidations and reductions catalyzed by nonredox proteins. *Tetrahedron: Asymmetry* **2004**, *15*, 2771.
76. Buist, P. H. Catalytic diversity of fatty acid desaturases. *Tetrahedron: Asymmetry* **2004**, *15*, 2779.
77. Phillips, R. S. Synthetic applications of tryptophan synthase. *Tetrahedron: Asymmetry* **2004**, *15*, 2787.
78. Ghanem, A.; Aboul-Enein, H. Y. Lipase-mediated chiral resolution of racemates in organic solvents. *Tetrahedron: Asymmetry* **2004**, *15*, 3331.
79. Duhamel, L.; Duhamel, P.; Plaquevent, J.-C. Enantioselective protonations: fundamental insights and new concepts. *Tetrahedron: Asymmetry* **2004**, *15*, 653.
80. Matsuda, T.; Harada, T.; Nakamura, K. Asymmetric synthesis using hydrolytic enzymes in supercritical carbon dioxide. *Tetrahedron: Asymmetry* **2005**, *16*, 909.
81. Afarinkia, K.; Bahar, A. Recent advances in the chemistry of azapyranose sugars. *Tetrahedron: Asymmetry* **2005**, *16*, 1239.
82. Husinec, S.; Savic, V. Chiral catalysts in the stereoselective synthesis of pyrrolidine derivatives via metalloazomethine ylides. *Tetrahedron: Asymmetry* **2005**, *16*, 2047.
83. Chelucci, G. Stereoselective synthesis of optically active 1-substituted-1-pyridyl-methylamines. *Tetrahedron: Asymmetry* **2005**, *16*, 2353.
84. Davies, S. G.; Smith, A. D.; Price, P. D. The conjugate addition of enantiomerically pure lithium amides as homochiral ammonia equivalents: scope, limitations and syn-thetic applications. *Tetrahedron: Asymmetry* **2005**, *16*, 2833.
85. Kolodiazhnyi, O. I. Asymmetric synthesis of hydroxyphosphonates. *Tetrahedron: Asymmetry* **2005**, *16*, 3295.
86. Berkowitz, D. B.; Charette, B. D.; Karukurichi, K. R.; McFadden, J. M.  $\alpha$ -Vinyl amino acids: occurrence, asymmetric synthesis, and biochemical mechanisms. *Tetrahedron: Asymmetry* **2006**, *17*, 869.
87. Guillena, G.; Ramón, D. J. Enantioselective  $\alpha$ -heterofunctionalisation of carbonyl compounds: organocatalysis is the simplest approach. *Tetrahedron: Asymmetry* **2006**, *17*, 1465.
88. Bhowmick, K. C.; Joshi, N. N. Syntheses and applications of C<sub>2</sub>-symmetric chiral diols. *Tetrahedron: Asymmetry* **2006**, *17*, 1901.
89. Fraser-Reid, B.; Lu, J.; Jayaprakash, K. N.; López, J. C. Synthesis of a 28-mer oligosaccharide core of *Mycobacterium lipoarabinomannan* (LAM) requires only two *n*-pentenyl orthoester progenitors. *Tetrahedron: Asymmetry* **2006**, *17*, 2449.
90. Boruwa, J.; Gogoi, N.; Saikia, P. P.; Barua, N. C. Catalytic asymmetric Henry reaction. *Tetrahedron: Asymmetry* **2006**, *17*, 3315.
91. Ordóñez, M.; Cativiela, C. Stereoselective synthesis of  $\gamma$ -amino acids. *Tetrahedron: Asymmetry* **2007**, *18*, 3.
92. Almaşi, D.; Alonso, D. A.; Nájera, C. Organocatalytic asymmetric conjugate additions. *Tetrahedron: Asymmetry* **2007**, *18*, 299.
93. Cativiela, C.; Díaz-de-Villegas, M. D. Recent progress on the stereoselective synthesis of acyclic quaternary  $\alpha$ -amino acids. *Tetrahedron: Asymmetry* **2007**, *18*, 569.
94. Guillena, G.; Ramón, D. J.; Yus, M. Organocatalytic enantioselective multicomponent reactions (OEMCRs). *Tetrahedron: Asymmetry* **2007**, *18*, 693.
95. Grajewska, A.; Rozwadowska, M. D. Stereoselective synthesis of cytozoxone and its analogues. *Tetrahedron: Asymmetry* **2007**, *18*, 803.
96. Risseuw, M. D. P.; Overhand, M.; Fleet, G. W. J.; Simone, M. I. A compendium of sugar amino acids (SAA): scaolds, peptide- and glyco-mimetics. *Tetrahedron: Asymmetry* **2007**, *18*, 2001.
97. Guillena, G.; Nájera, C.; Ramón, D. J. Enantioselective direct aldol reaction: the blossoming of modern organocatalysis. *Tetrahedron: Asymmetry* **2007**, *18*, 2249.
98. Chen, X.; Li, X.; Hu, A.; Wang, F. Advances in chiral ionic liquids derived from natural amino acids. *Tetrahedron: Asymmetry* **2008**, *19*, 1.
99. De Risi, C.; Fanton, G.; Pollini, G. P.; Trapella, C.; Valente, F.; Zanirato, V. Recent advances in the stereoselective synthesis of *trans*-3,4-disubstituted-piperidines: applications to (-)-paroxetine. *Tetrahedron: Asymmetry* **2008**, *19*, 131.
100. Faigl, F.; Fogassy, E.; Nögrádi, M.; Pálóvics, E.; Schindler, J. Strategies in optical resolution: a practical guide. *Tetrahedron: Asymmetry* **2008**, *19*, 519.
101. Abraham, E.; Davies, S. G.; Roberts, P. M.; Russell, A. J.; Thomson, J. E. Jaspine B (pachastrissamine) and 2-*epi*-jaspine B: synthesis and structural assignment. *Tetrahedron: Asymmetry* **2008**, *19*, 1027.
102. Shibata, A.; Mizuta, S.; Kawai, H.; Recent advances in enantioselective trifluoromethylation reactions. *Tetrahedron: Asymmetry* **2008**, *19*, 2633.
103. Mosey, Robert A.; Fisk, Jason S.; Tepe, Jetze J. Stereoselective syntheses of quaternary substituted  $\alpha$ -amino acids using oxazol-5-(4*H*)-ones. *Tetrahedron: Asymmetry* **2008**, *19*, 2755.
104. Cativiela, C.; Ordóñez, M. Recent progress on the stereoselective synthesis of cyclic quaternary  $\alpha$ -amino acids. *Tetrahedron: Asymmetry* **2009**, *20*, 1.
105. Geary, L. M.; Hultin, P. G. The state of the art in asymmetric induction: the aldol reaction as a case study. *Tetrahedron: Asymmetry* **2009**, *20*, 131.
106. Ogasawara, M. Catalytic enantioselective synthesis of axially chiral allenes. *Tetrahedron: Asymmetry* **2009**, *20*, 259.
107. Bastos Borges, K.; de Souza Borges, W.; Durán-Patrón, R.; Tallarico Pupo, M.; Sueli Bonato, P.; González Collado, I. Stereoselective biotransformations using fungi as biocatalysts. *Tetrahedron: Asymmetry* **2009**, *20*, 385.
108. Matsuda, T.; Yamanaka, R.; Nakamura, K. Recent progress in biocatalysis for asymmetric oxidation and reduction. *Tetrahedron: Asymmetry* **2009**, *20*, 513.
109. Winchester, B. G. Iminosugars: from botanical curiosities to licensed drugs. *Tetrahedron: Asymmetry*, **2009**, *20*, 645.
110. Davis, B. G. A silver-lined anniversary of Fleet iminosugars: 1984–2009, from DIM to DRAM to LABNAc. *Tetrahedron: Asymmetry* **2009**, *20*, 652.
111. Compain, P.; Chagnault, V.; Martin, O. R. Tactics and strategies for the synthesis of iminosugar C-glyco-

- sides: a review. *Tetrahedron: Asymmetry*, **2009**, *20*, 672.
112. Thompson, A. L.; Watkin, D. J. X-ray crystallography and chirality: understanding the limitations. *Tetrahedron: Asymmetry*, **2009**, *20*, 712.
  113. Simons, J. P.; Davis, B. G.; Cocinero, E. J.; Gamblin, D. P.; Stanca-Kaposta, E. C. Conformational change and selectivity in explicitly hydrated carbohydrates. *Tetrahedron: Asymmetry*, **2009**, *20*, 718.
  114. Luderer, M. R.; Bailey, W. F.; Luderer, M. R.; Fair, J. D.; Dancer, R. J.; Sommer, M. B. Asymmetric addition of achiral organomagnesium reagents or organolithiums to achiral aldehydes or ketones: a review. *Tetrahedron: Asymmetry* **2009**, *20*, 981.
  115. Błażewska, K. M.; Gajda, T. Assignment of the absolute configuration of hydroxy- and aminophosphonates by NMR spectroscopy. *Tetrahedron: Asymmetry* **2009**, *20*, 1337.
  116. Pandey, S. K.; Prasad, J.; Dikshit, D. K. Pyroglutamic acid: a unique chiral synthon. *Tetrahedron: Asymmetry* **2009**, *20*, 1581.