

**First practical synthesis of enantiomerically pure (*R*)- and (*S*)-desmethylsibutramine (DMS) and unambiguous determination of their absolute configuration by single-crystal X-ray analysis**

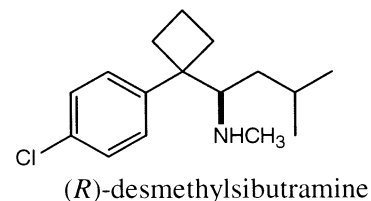
Zhengxu Han,<sup>a</sup> Dhileepkumar Krishnamurthy,<sup>a,\*</sup> Derek Pflum,<sup>a</sup> Qun K. Fang,<sup>a</sup> Hal Butler,<sup>a</sup> T. Stanley Cameron,<sup>b</sup> Stephen A. Wald<sup>a</sup> and Chris H. Senanayake<sup>a,\*</sup>

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<sup>b</sup>Department of Chemistry, Dalhousie University, Halifax, NS, Canada B3H 4J3

A practical second-generation synthesis of enantiomerically pure (*R*)-DMS and (*S*)-DMS is outlined along with an improved synthesis of racemic desmethylsibutramine. This route was used for kilo-scale production of enantiomerically pure (*R*)- and (*S*)-DMS.

*Tetrahedron: Asymmetry* 13 (2002) 107

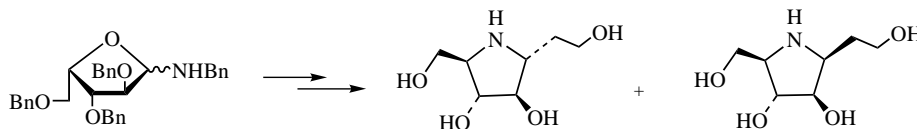


**Synthesis of 6-deoxy-homoDMDP and its C(5)-epimer: absolute stereochemistry of natural products from *Hyacinthus orientalis***

Jean-Bernard Behr and Georges Guillerme\*

Laboratoire de Chimie Bioorganique UMR 6519, UFR Sciences BP 1039, 51687 Reims Cedex 2, France

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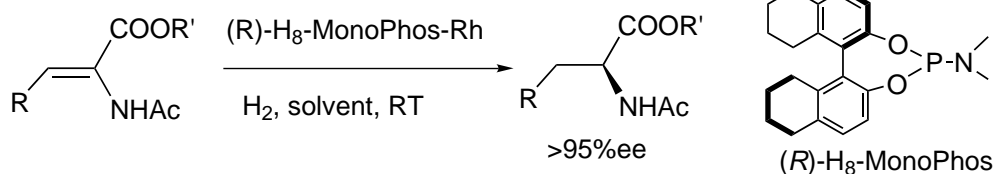


**Highly enantioselective hydrogenation of  $\alpha$ -dehydroamino acids by rhodium complex with  $H_8$ -MonoPhos**

Qingle Zeng,<sup>a</sup> Hui Liu,<sup>a</sup> Xin Cui,<sup>a</sup> Aiqiao Mi,<sup>a</sup> Yaozhong Jiang,<sup>a,\*</sup> Xingshu Li,<sup>b</sup> Michael C. K. Choi<sup>b</sup> and Albert S. C. Chan<sup>b</sup>

<sup>a</sup>Union Laboratory of Asymmetric Synthesis, Chengdu Institute of Organic Chemistry, Chinese Academy of Sciences, Chengdu 610041, China

<sup>b</sup>Open Laboratory of Chirotechnology and Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University, Hong Kong, China

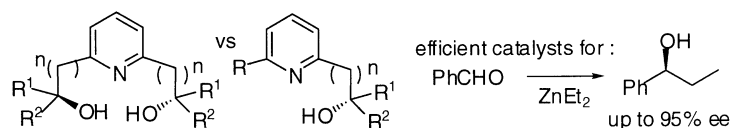


*Tetrahedron: Asymmetry* 13 (2002) 115

**Chiral tridentate versus bidentate pyridines as catalysts in the enantioselective alkylation of benzaldehyde with diethylzinc**

David Le Goanvic, Michel Holler and Patrick Pale\*

Laboratoire de synthèse et réactivité organique, associé au CNRS, Institut Le Bel, Université L. Pasteur, 67000 Strasbourg, France



*Tetrahedron: Asymmetry* 13 (2002) 119

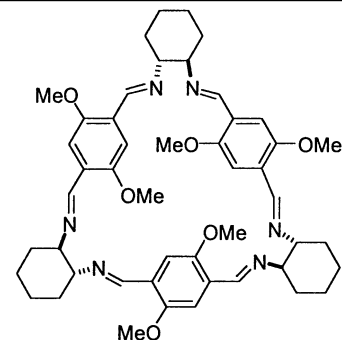
## Synthesis of novel enantiomerically pure trianglimine and trianglamine macrocycles

*Tetrahedron: Asymmetry 13 (2002) 123*

Nikolai Kuhnert,\* Christian Straßnig and Ana M. Lopez-Periago

*Synthetic Biological and Organic Chemistry Laboratory, Department of Chemistry, University of Surrey, Guildford GU2 7XH, UK*

Novel substituted trianglimines are synthesised using a [3+3] cyclocondensation.

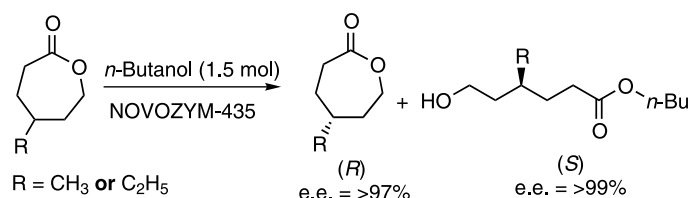


## Lipase-catalyzed solvent-free kinetic resolution of substituted racemic $\epsilon$ -prolactones

*Tetrahedron: Asymmetry 13 (2002) 129*

Leelakrishna Kondaveti, Talal F. Al-Azemi and Kirpal S. Bisht\*

*Department of Chemistry, University of South Florida, 4202 East Fowler Avenue, Tampa, FL 33620, USA*



## Synthesis and resolution of 2-(2-diphenylphosphinyl-naphthalen-1-yl)-1-isopropyl-1H-benzoimidazole; a new atropisomeric P,N-chelating ligand for asymmetric catalysis

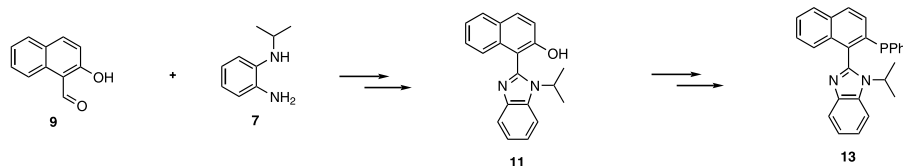
*Tetrahedron: Asymmetry 13 (2002) 137*

Axel Figge,<sup>a</sup> Hans J. Altenbach,<sup>a,\*</sup> David J. Brauer<sup>b</sup> and Patrick Tielmann<sup>c</sup>

<sup>a</sup>Fachbereich 9, Organische Chemie, Bergische Universität GH Wuppertal, Gaußstr. 20, D-42097 Wuppertal, Germany

<sup>b</sup>Fachbereich 9, Anorganische Chemie, Bergische Universität GH Wuppertal, Gaußstr. 20, D-42097 Wuppertal, Germany

<sup>c</sup>Max-Planck-Institut für Kohlenforschung, Kaiser-Wilhelm-Platz 1, D-45470 Mülheim an der Ruhr, Germany

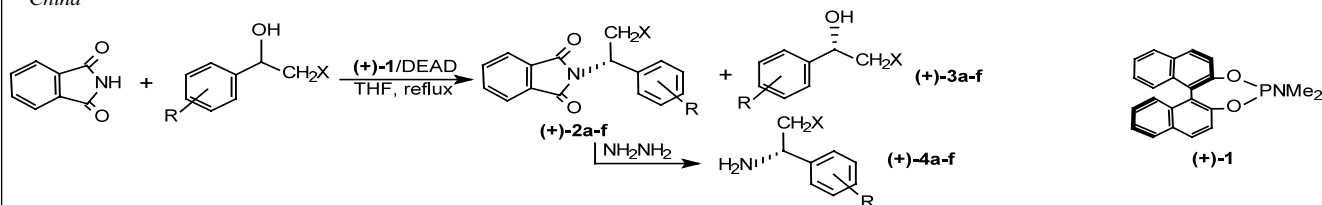


## Enantioselective reaction of secondary alcohols with phthalimide in the presence of a chiral tri-coordinate phosphorus reagent in Mitsunobu reaction

*Tetrahedron: Asymmetry 13 (2002) 145*

Zhaoming Li, Zhenghong Zhou, Lixin Wang, Qilin Zhou and Chuchi Tang\*

*State Key Laboratory of Elemento-Organic Chemistry, Institute of Elemento-Organic Chemistry, Nankai University, Tianjin 300071, PR China*



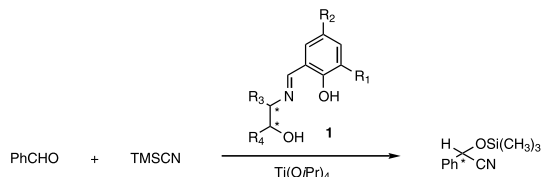
### Steric effects in the design of chiral Schiff base–titanium complexes: new catalysts for asymmetric trimethylsilylcyanation of aldehydes

*Tetrahedron: Asymmetry* 13 (2002) 149

Angeles Gama,<sup>a</sup> Lucía Z. Flores-López,<sup>a</sup> Gerardo Aguirre,<sup>a</sup> Miguel Parra-Hake,<sup>a</sup> Ratnasamy Somanathan<sup>a,\*</sup> and Patrick J. Walsh<sup>b,\*</sup>

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<sup>b</sup>Department of Chemistry, University of Pennsylvania, 231 South 34<sup>th</sup> Street, Philadelphia, PA 19104-6323, USA

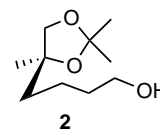


### Asymmetric synthesis of (*S*)-4-(2,2,4-trimethyl-1,3-dioxolan-4-yl)-1-butanol, a key intermediate for (1*S*,5*R*)-(–)-frontalin via asymmetric bromolactonization

*Tetrahedron: Asymmetry* 13 (2002) 155

Sang-sup Jew,\* Doo-Yeon Lim, Jin-Yee Kim, Sung-ji Kim, Eun-young Roh, Hyo-Jeong Yi, Jin-Mo Ku, Boon-saeng Park, Byeong-seon Jeong and Hyeung-geun Park\*

Research Institute of Pharmaceutical Science and College of Pharmacy, Seoul National University, Seoul 151-742, South Korea



A new enantioselective synthetic method for (*S*)-4-(2,2,4-trimethyl-1,3-dioxolan-4-yl)-1-butanol **2**, a key intermediate for (1*S*,5*R*)-(–)-frontalin, has been developed via asymmetric bromolactonization using (*S*)-(–)-proline as a chiral auxiliary from the  $\alpha,\beta$ -unsaturated acid **7** in eight steps (40%, 99% ee).

### Synthesis of chiral bis(oxazoliny)bipyridine ligands and related helical metal complexes

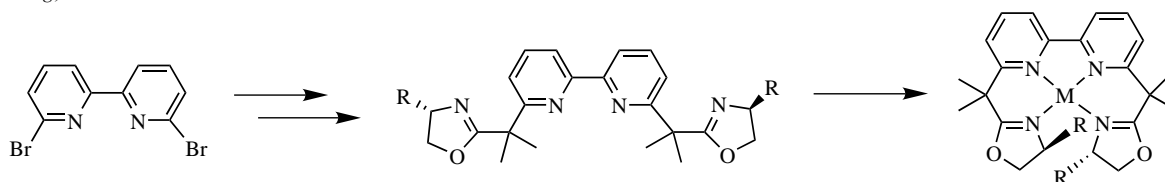
*Tetrahedron: Asymmetry* 13 (2002) 161

Yi-Zhou Zhu,<sup>a</sup> Zhi-Peng Li,<sup>b</sup> Jun-An Ma,<sup>a</sup> Fang-Yi Tang,<sup>b</sup> Li Kang,<sup>b</sup> Qi-Lin Zhou<sup>a,\*</sup> and Albert S. C. Chan<sup>c</sup>

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<sup>b</sup>Institute of Fine Chemicals, East China University of Science and Technology, Shanghai 200237, China

<sup>c</sup>Open Laboratory of Chirotechnology and Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University, Hong Kong, China



### Enantioselective synthesis of 4-hydroxy-D-pyroglyutamic acid derivatives by an asymmetric 1,3-dipolar cycloaddition

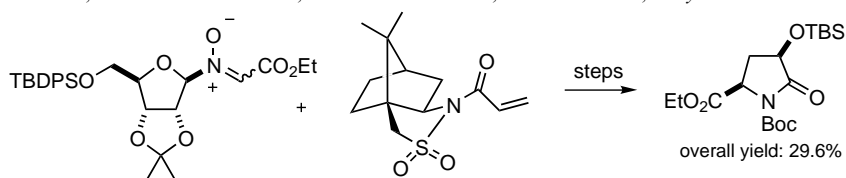
*Tetrahedron: Asymmetry* 13 (2002) 167

Pedro Merino,<sup>a,\*</sup> Julia Revuelta,<sup>a</sup> Tomas Tejero,<sup>a</sup> Ugo Chiacchio,<sup>b,\*</sup> Antonio Rescifina,<sup>b</sup> Anna Piperno<sup>c</sup> and Giovanni Romeo<sup>c</sup>

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<sup>b</sup>Dipartimento di Scienze Chimiche, Università di Catania, Viale Andrea Doria 6, Catania 95125, Italy

<sup>c</sup>Dipartimento Farmaco-Chimico, Università di Messina, Via SS. Annunziata, Messina 98168, Italy



### Experimental and theoretical study of the 1,3-dipolar cycloaddition between D-glyceraldehyde nitrones and acrylates.

*Tetrahedron: Asymmetry 13 (2002) 173*

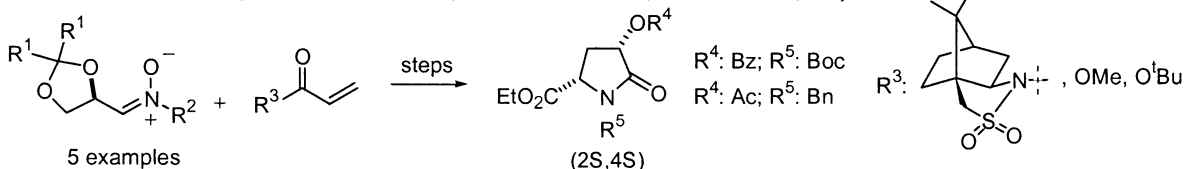
#### Diastereoselective approach to 4-hydroxy pyrrolutamic acid derivatives

Pedro Merino,<sup>a,\*</sup> Juan A. Mates,<sup>a</sup> Julia Revuelta,<sup>a</sup> Tomas Tejero,<sup>a</sup> Ugo Chiacchio,<sup>b</sup> Giovanni Romeo,<sup>c,\*</sup> Daniela Iannazzo<sup>c</sup> and Roberto Romeo<sup>c</sup>

<sup>a</sup>Departamento de Química Orgánica, ICMA, Facultad de Ciencias, Universidad de Zaragoza, E-50009 Aragon, Spain

<sup>b</sup>Dipartimento di Scienze Chimiche, Università di Catania, Viale Andrea Doria 6, Catania 95125, Italy

<sup>c</sup>Dipartimento Farmaco-Chimico, Università di Messina, Via SS. Annunziata, Messina 98168, Italy



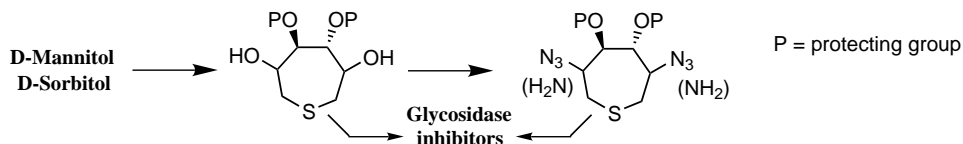
### Synthesis of new enantiopure thiepane derivatives and their evaluation as glycosidase inhibitors

*Tetrahedron: Asymmetry 13 (2002) 191*

Antonio Arcelli,<sup>a</sup> Vanda Cerè,<sup>b,\*</sup> Francesca Peri,<sup>b</sup> Salvatore Pollicino<sup>b</sup> and Alfredo Ricci<sup>b</sup>

<sup>a</sup>Department of Chemistry 'G. Ciamician' University of Bologna, Via Selmi, 2, I-40126 Bologna, Italy

<sup>b</sup>Department of Organic Chemistry, 'A. Mangini' University of Bologna, Viale Risorgimento, 4, I-40136 Bologna, Italy



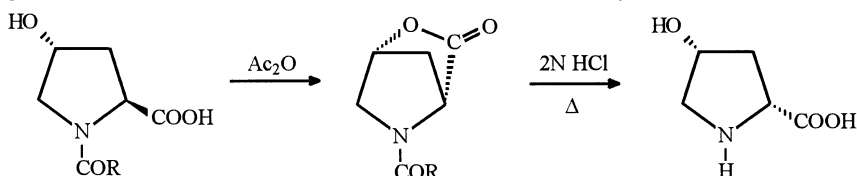
### Stereoselective synthesis of (1R,4R)-N-acyl-2-oxa-5-aza-bicyclo-[2.2.1]heptan-3-ones via mesoionic compounds. An improved synthesis of cis-4-hydroxy-D-proline

*Tetrahedron: Asymmetry 13 (2002) 197*

Piero Dalla Croce<sup>a</sup> and Concetta La Rosa<sup>b,\*</sup>

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<sup>b</sup>Istituto di Chimica Organica, Facoltà di Farmacia, V. Venezian 21, I-20133 Milano, Italy



### Enantioselective Michael reaction of 2-nitropropane with substituted chalcones catalysed by chiral azacrown ethers derived from α-D-glucose

*Tetrahedron: Asymmetry 13 (2002) 203*

Tibor Bakó,<sup>a</sup> Péter Bakó,<sup>a,\*</sup> Áron Szöllösy,<sup>b</sup> Mátyás Czugler,<sup>c</sup> György Keglevich<sup>a</sup> and László Töke<sup>d</sup>

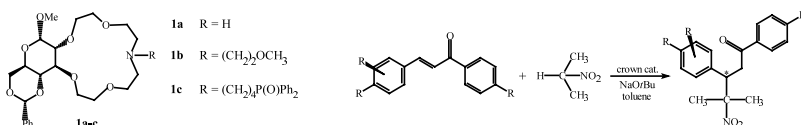
<sup>a</sup>Department of Organic Chemical Technology, Budapest University of Technology and Economics, 1521 Budapest, PO Box 91, Hungary

<sup>b</sup>Institute for General and Analytical Chemistry, Budapest University of Technology and Economics, 1521 Budapest, Hungary

<sup>c</sup>Chemical Research Institute for Chemistry, Hungarian Academy of Sciences, 1525 Budapest, PO Box 17, Hungary

<sup>d</sup>Organic Chemical Technology Research Group of the Hungarian Academy of Sciences at the Budapest University of Technology and Economics, 1521 Budapest, PO Box 91, Hungary

Michael addition of 2-nitropropane to substituted chalcones, catalysed by crown ethers **1a-c**, afforded the adducts in 14–78% e.e.



# Synthesis of optically active 3-substituted-10-alkyl-10H-phenothiazine-5-oxides by enantioselective biotransformations

*Tetrahedron: Asymmetry* 13 (2002) 211

Monica Toşa,<sup>a</sup> Csaba Paizs,<sup>a</sup> Cornelia Majdik,<sup>a</sup> Lajos Novák,<sup>b</sup> Pál Kolonits,<sup>b</sup> Florin-Dan Irimie<sup>a,\*</sup> and László Poppe<sup>b,\*</sup>

<sup>a</sup>Department of Biochemistry and Biochemical Engineering, Babeş-Bolyai University, RO-3400, Cluj-Napoca, Arany János 11, Romania

<sup>b</sup>Institute for Organic Chemistry and Research Group for Alkaloid Chemistry of the Hungarian Academy of Sciences, Budapest University of Technology and Economics, H-1111 Budapest, Gellért tér 4., Hungary

