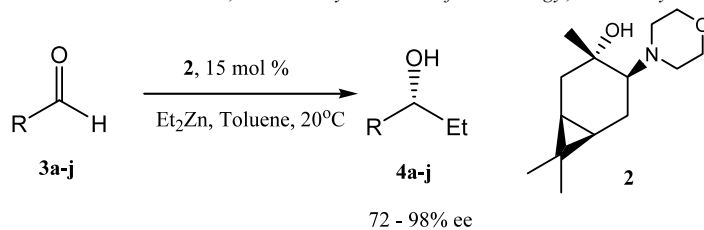
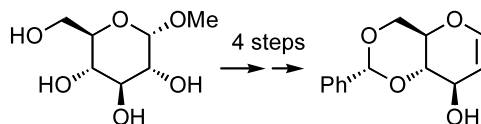
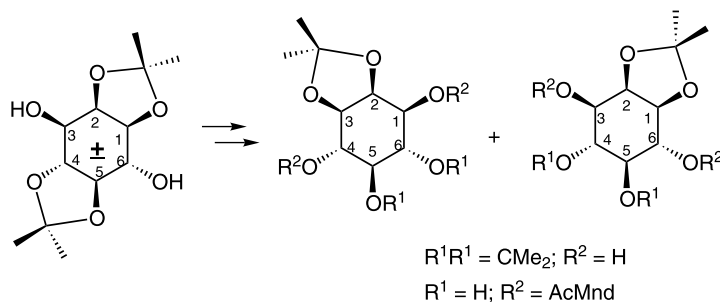
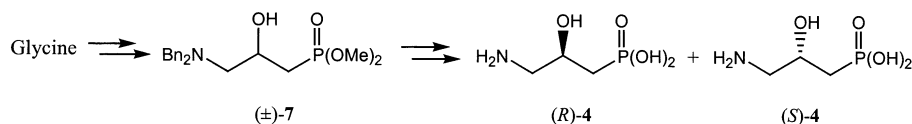


**Enantioselective addition of diethylzinc to aldehydes catalyzed by a  $\beta$ -amino alcohol derived from (+)-3-carene***Tetrahedron: Asymmetry 14 (2003) 1763*

Sudhir N. Joshi and Sanjay V. Malhotra\*

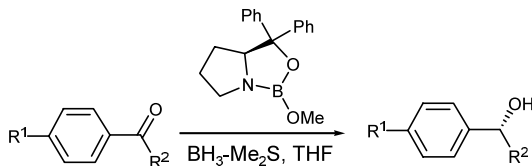
*Department of Chemistry and Environmental Science, New Jersey Institute of Technology, University Heights, Newark, NJ, USA***A facile synthesis of 4,6-*O*-benzylidene glucal***Tetrahedron: Asymmetry 14 (2003) 1767*David J. Chambers,<sup>a</sup> Graham R. Evans<sup>b</sup> and Antony J. Fairbanks<sup>a,\*</sup><sup>a</sup>*Dyson Perrins Laboratory, Oxford University, South Parks Road, Oxford OX1 3QY, UK*<sup>b</sup>*Celltech R & D, Granta Park, Great Abington, Cambridge CB1 6GS, UK***A simple and practical resolution of 1,2:4,5-di-*O*-isopropylidene-*myo*-inositol***Tetrahedron: Asymmetry 14 (2003) 1771*Kana M. Sureshan, Toru Yamasaki,  
Minoru Hayashi and Yutaka Watanabe\**Department of Applied Chemistry, Faculty of Engineering,  
Ehime University, Matsuyama 790-8577, Japan***Preparation of (*R*)- and (*S*)- $\gamma$ -amino- $\beta$ -hydroxypropylphosphonic acid from glycine***Tetrahedron: Asymmetry 14 (2003) 1775*Mario Ordóñez,\* Angelina González-Morales, César Ruíz, Ricardo De la Cruz-Cordero  
and Mario Fernández-Zertuche*Centro de Investigaciones Químicas, Universidad Autónoma del Estado de Morelos, Av. Universidad No. 1001. 62210 Cuernavaca,  
Mor., Mexico*

**Preparation of highly enantiomerically pure linear secondary alcohols via asymmetric reduction of prochiral ketones with borane**

*Tetrahedron: Asymmetry 14 (2003) 1781*

Jiayi Xu,\* Xianbin Su and Qihan Zhang

Key Laboratory of Bioorganic Chemistry and Molecular Engineering of Ministry of Education, Department of Chemical Biology, College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, China



a: R<sup>1</sup>= Et, R<sup>2</sup>= Me; b: R<sup>1</sup>= *n*-Pr, R<sup>2</sup>= Me; c: R<sup>1</sup>= *n*-Bu, R<sup>2</sup>= Me;  
d: R<sup>1</sup>= *n*-Am, R<sup>2</sup>= Me; e: R<sup>1</sup>= *n*-Am, R<sup>2</sup>= Et; f: R<sup>1</sup>= *n*-Am, R<sup>2</sup>= *n*-Pr;  
g: R<sup>1</sup>= *n*-BuO, R<sup>2</sup>= Et; h: R<sup>1</sup>= *n*-BuO, R<sup>2</sup>= *n*-Bu; i: R<sup>1</sup>= *n*-AmO,  
R<sup>2</sup>= Et; j: R<sup>1</sup>= *n*-AmO, R<sup>2</sup>= *n*-Bu; k: R<sup>1</sup>= *n*-HexO, R<sup>2</sup>= Et;  
l: R<sup>1</sup>= *n*-HexO, R<sup>2</sup>= *n*-Bu; m: R<sup>1</sup>= *n*-BuS, R<sup>2</sup>= Et.

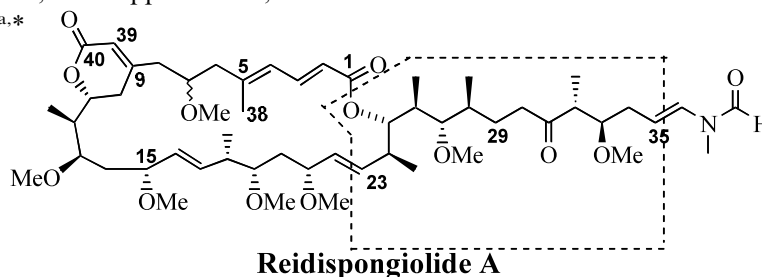
**Stereochemical assignment of the C23–C35 portion of sphinxolide/reidispongiolide class of natural products by asymmetric synthesis**

*Tetrahedron: Asymmetry 14 (2003) 1787*

Angela Zampella,<sup>a</sup> Valentina Sepe,<sup>a</sup> Rosa D'Orsi,<sup>a</sup> Giuseppe Bifulco,<sup>b</sup>  
Carla Bassarello<sup>b</sup> and Maria Valeria D'Auria<sup>a,\*</sup>

<sup>a</sup>Dipartimento di Chimica delle Sostanze Naturali, Università degli Studi di Napoli "Federico II", via D. Montesano 49, 80131 Naples, Italy

<sup>b</sup>Dipartimento di Scienze Farmaceutiche, Università degli Studi di Salerno, Via Ponte Don Melillo, 84084 Fisciano (Salerno), Italy

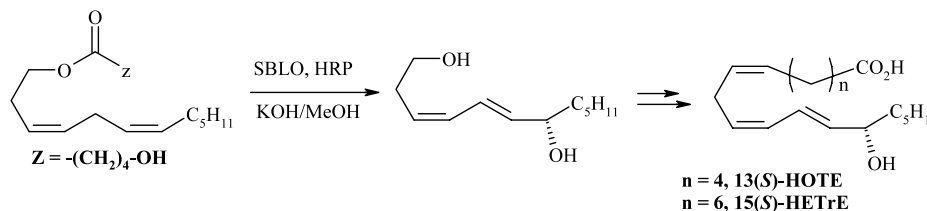


**Asymmetric synthesis of unnatural (Z,Z,E)-octadecatrienoid and eicosatrienoid by lipoxygenase-catalyzed oxygenation**

*Tetrahedron: Asymmetry 14 (2003) 1799*

S. Nanda\* and J. S. Yadav

Organic Division, Indian Institute of Chemical Technology, Hyderabad 500007, India



**Towards a novel explanation of *Pseudomonas cepacia* lipase enantioselectivity via molecular modelling of the enantiomer trajectory into the active site**

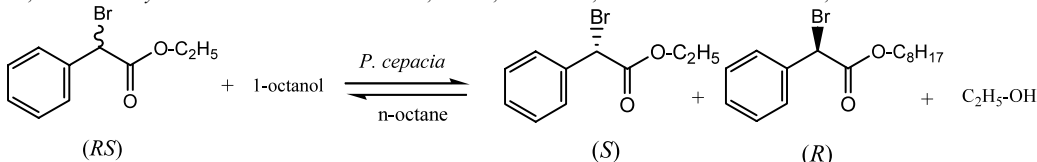
*Tetrahedron: Asymmetry 14 (2003) 1807*

David Guieysse,<sup>a</sup> Christophe Salagnad,<sup>b</sup> Pierre Monsan,<sup>a</sup> Magali Remaud-Simeon<sup>a,\*</sup> and Vinh Tran<sup>c</sup>

<sup>a</sup>Centre de Bioingénierie Gilbert Durand, Département de Génie Biochimique et Alimentaire, UMR CNRS 5504, UMR INRA 792, INSA, 135 Avenue de Rangueil, F-31077 Toulouse Cedex 4, France

<sup>b</sup>Aventis Pharma, Process Development Biotechnology, 9, quai Jules Guesde, F-94400 Vitry sur Seine, France

<sup>c</sup>Centre de Nantes, Unité de Physicochimie des Macromolécules, INRA, BP 71627, F-44316 Nantes Cedex 3, France

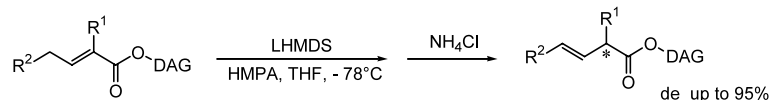


## Anionic versus photochemical diastereoselective deconjugation of diacetone D-glucose $\alpha,\beta$ -unsaturated esters

*Tetrahedron: Asymmetry 14 (2003) 1819*

Frédéric Bargiggia and Olivier Piva\*

Laboratoire de Chimie Organique, Photochimie et Synthèse, UMR CNRS 5622, Université Claude Bernard, Lyon I, 43, Boulevard du 11 novembre 1918, 69622 Villeurbanne, France



## Synthesis of chiral, nonracemic $\alpha$ -sulfanylphosphonates and derivatives

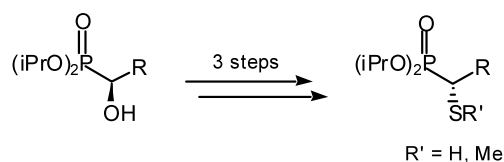
*Tetrahedron: Asymmetry 14 (2003) 1829*

Mihaela Gulea,<sup>a</sup> Friedrich Hammerschmidt,<sup>b,\*</sup> Patrice Marchand,<sup>a</sup> Serge Masson,<sup>a,\*</sup> Violeta Pisljagic<sup>b</sup> and Frank Wuggenig<sup>b</sup>

<sup>a</sup>Laboratoire de Chimie Moléculaire et Thioorganique, ISMRA-Université de Caen et CNRS, 6 boulevard du Maréchal Juin, F-14050 Caen, France

<sup>b</sup>Institut für Organische Chemie der Universität Wien, Währingerstrasse 38, A-1090 Wien, Austria

Optically active  $\alpha$ -sulfanylphosphonates and the corresponding methyl sulfides were prepared in three steps starting from chiral, nonracemic (ee 93–97%)  $\alpha$ -hydroxyphosphonates obtained by enzymatic resolution. Reaction conditions for the reduction of racemisation-prone substrates were found to preserve the enantiomeric excesses.



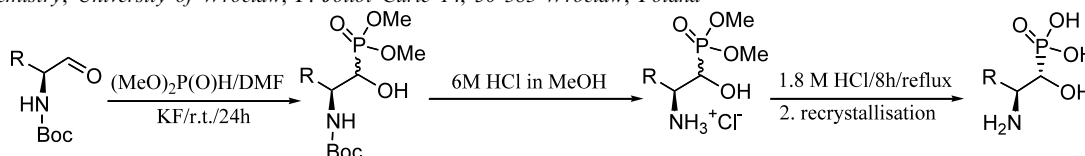
## Stereoselective synthesis, solution structure and metal complexes of (1*S*,2*S*)-2-amino-1-hydroxyalkylphosphonic acids

*Tetrahedron: Asymmetry 14 (2003) 1837*

Marcin Drag,<sup>a</sup> Rafal Latajka,<sup>a</sup> Elzbieta Gumienna-Kontecka,<sup>b</sup> Henryk Kozlowski<sup>b</sup> and Pawel Kafarski<sup>a,\*</sup>

<sup>a</sup>Institute of Organic Chemistry, Biochemistry and Biotechnology, University of Technology, Wybrzeze Wyspianskiego 27, 50-370 Wroclaw, Poland

<sup>b</sup>Faculty of Chemistry, University of Wroclaw, F. Joliot Curie 14, 50-383 Wroclaw, Poland

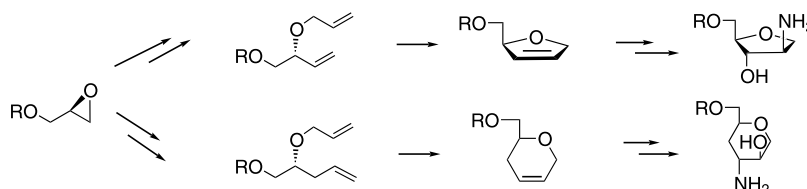


## Synthesis of amino-1,4-anhydro-D-pentitols and amino-1,5-anhydro-D-hexitols with the *arabino* configuration from (*R*)-glycidol

*Tetrahedron: Asymmetry 14 (2003) 1847*

Sílvia Aragonès, Fernando Bravo,\* Yolanda Díaz, M<sup>a</sup> Isabel Matheu and Sergio Castellón\*

Departament de Química Analítica i Química Orgànica, Facultat de Química, Universitat Rovira i Virgili, Pl. Imperial Tàrraco 1, 43005 Tarragona, Spain

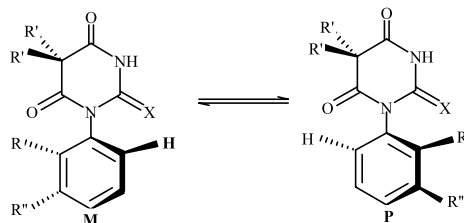


**Determination of energy barriers and racemization mechanisms for thermally interconvertible barbituric and thiobarbituric acid enantiomers**

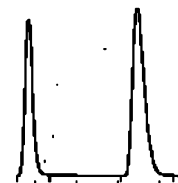
*Tetrahedron: Asymmetry 14 (2003) 1857*

S. Funda Oğuz and İlknur Doğan\*

Boğaziçi University, Chemistry Department, Bebek, Istanbul, Turkey



Chiralcel OD-H

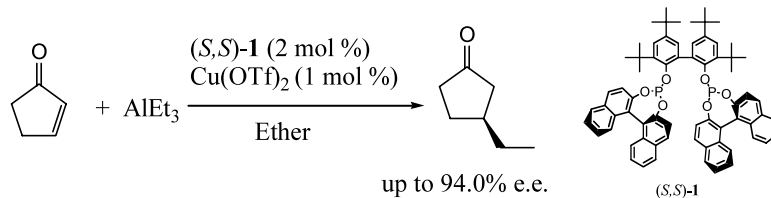


**Copper-catalyzed enantioselective conjugate addition of triethylaluminum to 2-cyclopentenone**

*Tetrahedron: Asymmetry 14 (2003) 1865*

Liming Su, Xingshu Li,\* Wing Lai Chan,\* Xian Jia and Albert S. C. Chan\*

Open Laboratory of Chirotechnology of the Institute of Molecular Technology for Drug Discovery and Synthesis and Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University, Hong Kong, China

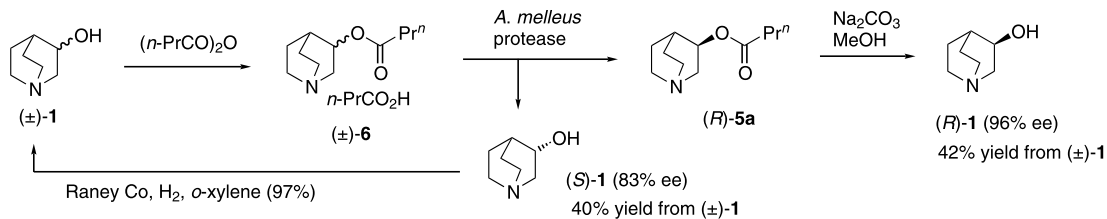


**A practical chemoenzymatic process to access (*R*)-quinuclidin-3-ol on scale**

*Tetrahedron: Asymmetry 14 (2003) 1871*

Fumiki Nomoto,\* Yoshihiko Hirayama, Masaya Ikuhara,\* Toru Inoue and Koutaro Otsuka

Research and Development Center, Nagase & Co., Ltd., 2-2-3 Murotani, Nishi-ku, Kobe 651-2241, Japan



**Synthesis and conformational study of homo-peptides based on (*S*)-Bin, a *C*<sub>2</sub>-symmetric binaphthyl-derived C<sup>α,α</sup>-disubstituted glycine with only axial chirality**

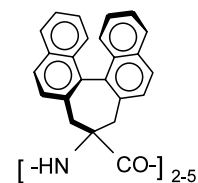
*Tetrahedron: Asymmetry 14 (2003) 1879*

Jean-Paul Mazaleyrat,<sup>a</sup> Karen Wright,<sup>a</sup> Anne Gaucher,<sup>a</sup> Michel Wakselman,<sup>a</sup> Simona Oancea,<sup>b</sup> Fernando Formaggio,<sup>b</sup> Claudio Toniolo,<sup>b,\*</sup> Vladimir Setnička,<sup>c</sup> Josef Kapitán<sup>c</sup> and Timothy A. Keiderling<sup>c</sup>

<sup>a</sup>SIRCOB, UMR CNRS 8086, Bât. Lavoisier, University of Versailles, F-78035 Versailles, France

<sup>b</sup>Institute of Biomolecular Chemistry, CNR, Department of Organic Chemistry, University of Padua, I-35131 Padua, Italy

<sup>c</sup>Department of Chemistry, University of Illinois at Chicago, Chicago, IL 60607-7061, USA



### Preparation of novel phenylfuran-based cyanohydrin esters: lipase-catalysed kinetic and dynamic resolution

*Tetrahedron: Asymmetry 14 (2003) 1895*

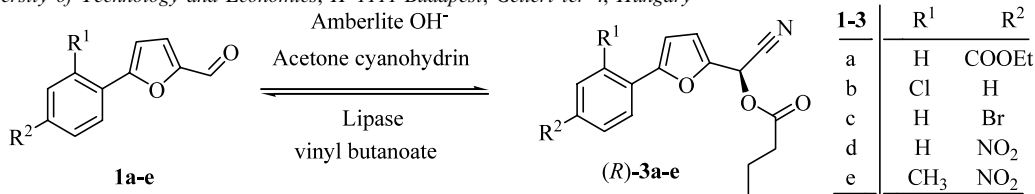
Csaba Paizs,<sup>a,b</sup> Petri Tähtinen,<sup>a</sup> Katri Lundell,<sup>a</sup> László Poppe,<sup>c</sup> Florin-Dan Irimie<sup>b</sup> and Liisa T. Kanerva<sup>a,\*</sup>

<sup>a</sup>Laboratory of Synthetic Drug Chemistry and Department of Chemistry, University of Turku, Lemminkäisenkatu 2, FIN-20520 Turku, Finland

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

<sup>c</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



### Chiral pyrophosphites—synthesis and application as ligands in Rh(I)-catalyzed asymmetric hydrogenation

*Tetrahedron: Asymmetry 14 (2003) 1905*

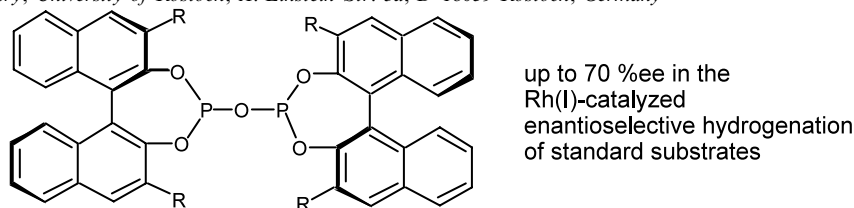
Andrei Korostylev,<sup>a,\*</sup> Detlef Selent,<sup>a</sup> Axel Monsees,<sup>b</sup> Cornelia Borgmann<sup>c</sup> and Armin Börner<sup>a,d,\*</sup>

<sup>a</sup>Leibniz-Institut für Organische Katalyse an der Universität Rostock e.V., Buchbinderstr. 5/6, D-18055 Rostock, Germany

<sup>b</sup>Degussa AG, Projekthaus Katalyse, Geschäftsbereich Creavis, Industriepark Hoechst, Gebäude G 830, D-65926 Frankfurt/Main, Germany

<sup>c</sup>Degussa AG, Oxeno C4-Chemie, Paul-Baumann-Strasse 1, D-45764 Marl, Germany

<sup>d</sup>Department of Chemistry, University of Rostock, A.-Einstein-Str. 3a, D-18059 Rostock, Germany

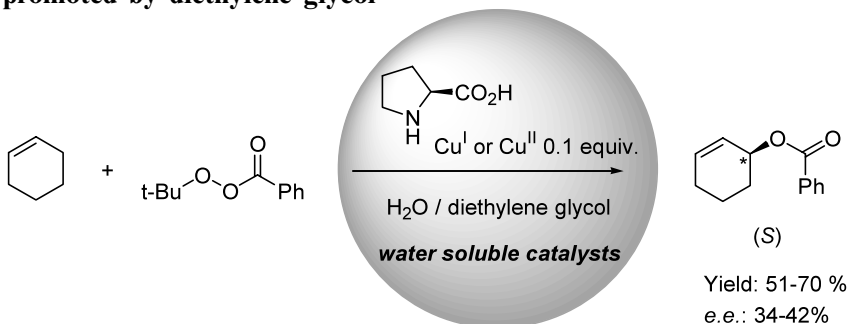


### Amino acid/copper-catalyzed enantioselective allylic benzyloxylation of olefins in water promoted by diethylene glycol

*Tetrahedron: Asymmetry 14 (2003) 1911*

Jean Le Bras\* and Jacques Muzart

Unité Mixte de Recherche 'Réactions Sélectives et Applications', CNRS-Université de Reims Champagne-Ardenne, BP 1039, 51687 Reims cedex 2, France



### Enantioselective Michael addition of 2-nitropropane to chalcone analogues catalyzed by chiral azacrown ethers based on α-D-glucose and D-mannitol

*Tetrahedron: Asymmetry 14 (2003) 1917*

Tibor Bakó,<sup>a</sup> Péter Bakó,<sup>a,\*</sup> György Keglevich,<sup>a</sup> Nikolettta Báthori,<sup>b</sup> Mátyás Czugler,<sup>b</sup> János Tatai,<sup>b</sup> Tibor Novák,<sup>a</sup> Gyula Parlagh<sup>c</sup> and László Tóke<sup>d</sup>

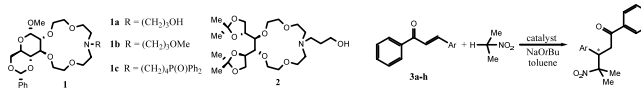
<sup>a</sup>Department of Organic Chemical Technology, Budapest University of Technology and Economics, 1521 Budapest, PO Box 91, Hungary

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

<sup>c</sup>Department of Physical Chemistry, Budapest University of Technology and Economics, 1521 Budapest, PO Box 91, 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 chalcone analogues, catalyzed by crown ethers **1a-c**, **2** afforded the adducts in 34–81% e.e.



## Synthesis of *N*-[2-(2-pyridyl)ethyl]-17 $\alpha$ -aza-D-homosteroids and their biomimetic copper-mediated ligand hydroxylations with molecular oxygen

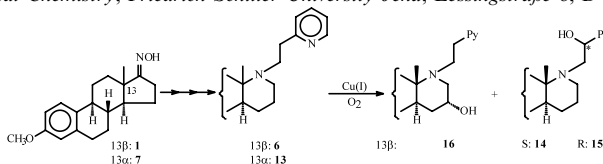
*Tetrahedron: Asymmetry* 14 (2003) 1925

Angéla Magyar,<sup>a</sup> Bruno Schönecker,<sup>b,\*</sup> János Wölfling,<sup>a</sup> Gyula Schneider,<sup>a</sup> Wolfgang Günther<sup>b</sup> and Helmar Görls<sup>c</sup>

<sup>a</sup>Department of Organic Chemistry, University of Szeged, Dóm tér 8, H-6720 Szeged, Hungary

<sup>b</sup>Institute of Organic Chemistry and Macromolecular Chemistry, Friedrich Schiller University Jena, Lessingstraße 8, D-07743 Jena, Germany

<sup>c</sup>Institute of Inorganic and Analytical Chemistry, Friedrich Schiller University Jena, Lessingstraße 8, D-07743 Jena, Germany

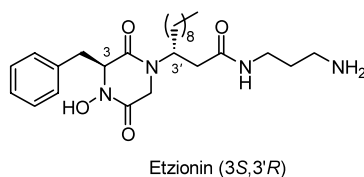


## Determination of the absolute stereochemistry of Etzionin

*Tetrahedron: Asymmetry* 14 (2003) 1935

Esther Vaz, Miryam Fernandez-Suarez and Luis Muñoz\*

Departamento de Química Orgánica, Facultade de Ciencias, Universidade de Vigo, 36200 Vigo, Spain



## Kinetic resolution of 1-(benzofuran-2-yl)ethanols by lipase-catalyzed enantiomer selective reactions

*Tetrahedron: Asymmetry* 14 (2003) 1943

Csaba Paizs,<sup>a</sup> Monica Toşa,<sup>a</sup> Viktória Bódoi,<sup>b,c</sup> György Szakács,<sup>c</sup> Ildikó Kmecz,<sup>d</sup> Béla Simándi,<sup>d</sup> Cornelia Majdik,<sup>a</sup> Lajos Novák,<sup>b</sup> Florin-Dan Irimie<sup>a,\*</sup> and László Poppe<sup>b,\*</sup>

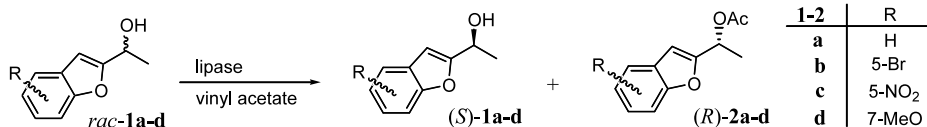
<sup>a</sup>Department of Biochemistry and Biochemical Engineering, Babeş-Bolyai University, Arany János 11, RO-3400 Cluj-Napoca, Romania

<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

<sup>c</sup>Department of Agricultural Chemical Technology, Budapest University of Technology and Economics, Gellért tér 4, H-1111 Budapest, Hungary

<sup>d</sup>Department of Chemical Engineering, Budapest University of Technology and Economics, Muegyetem Rkp 3, H-1521 Budapest, Hungary



## Efficient preparation of enantiomerically pure (*E*)-4-(tributylstannanyl)but-3-en-2-ol via lipase-mediated resolution

*Tetrahedron: Asymmetry* 14 (2003) 1951

Taeho Lee and Sanghee Kim\*

Natural Products Research Institute, College of Pharmacy, Seoul National University, 28 Yungun, Jongro, Seoul 110-460, Republic of Korea

