

## Graphical abstracts

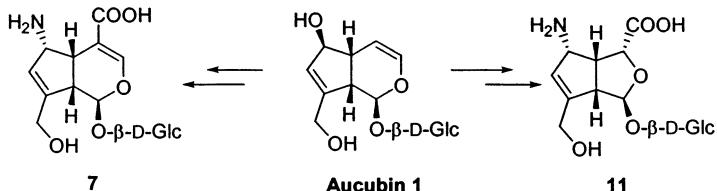
### **Homochiral rigid $\gamma$ -amino acid glycosides from aucubin**

*Tetrahedron: Asymmetry* 14 (2003) 1083

Christine Mourières,<sup>a</sup> Brigitte Deguin,<sup>a</sup> Foudil Lamari,<sup>b</sup> Marie-José Foglietti,<sup>b</sup> François Tillequin<sup>a,\*</sup> and Michel Koch<sup>a</sup>

<sup>a</sup>Laboratoire de Pharmacognosie UMR/CNRS no 8638, 4, Avenue de l'Observatoire, F-75006 Paris, France

<sup>b</sup>Laboratoire de Biochimie, Faculté des Sciences Pharmaceutiques et Biologiques, Université René Descartes, 4, Avenue de l'Observatoire, F-75006 Paris, France



### **Enantioselective hydrogenation catalyzed by highly active rhodium complexes of chiral phosphites with atropisomeric moieties**

*Tetrahedron: Asymmetry* 14 (2003) 1087

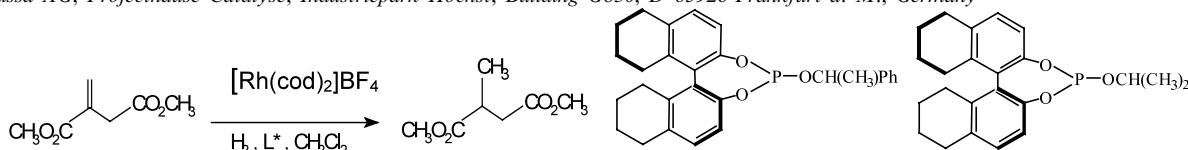
Ildikó Gergely,<sup>a</sup> Csaba Hegedüs,<sup>b</sup> Henrik Gulyás,<sup>b</sup> Áron Szöllősy,<sup>c</sup> Axel Monsees,<sup>d</sup> Thomas Riermeier<sup>d</sup> and József Bakos<sup>a,\*</sup>

<sup>a</sup>Department of Organic Chemistry, University of Veszprém, H-8201 Veszprém, Hungary

<sup>b</sup>Research Group for Petrochemistry, Hungarian Academy of Science, PO Box 158, H-8201 Veszprém, Hungary

<sup>c</sup>Department of General and Analytical Chemistry, Technical University of Budapest, H-1521 Budapest, Hungary

<sup>d</sup>Degussa AG, Projecthause Catalyse, Industriepark Höchst, Building G830, D-65926 Frankfurt a. M., Germany



### **Kinetic resolutions of racemic amines and alcohols catalyzed by an industrial glutaryl-7-aminocephalosporanic acid acylase with unexpected broad substrate specificity**

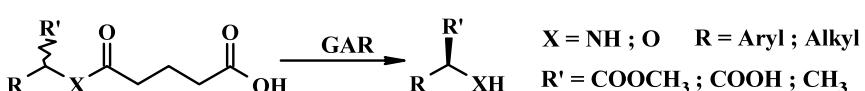
*Tetrahedron: Asymmetry* 14 (2003) 1091

Stefano Raimondi,<sup>a,b</sup> Luca Forti,<sup>b</sup> Daniela Monti<sup>a</sup> and Sergio Riva<sup>a,\*</sup>

<sup>a</sup>Istituto di Chimica del Riconoscimento Molecolare (ICRM), C.N.R., Via Mario Bianco 9, 20131 Milano, Italy

<sup>b</sup>Dipartimento di Chimica, Università di Modena & Reggio Emilia, Via Campi 183, 41100 Modena, Italy

An industrial glutaryl-7-aminocephalosporanic acid acylase (GAR) possesses a significant broad substrate specificity that crosses over the usual cephalosporanic skeleton. Enantioselective amidase and even esterase activities have been observed with all the glutarates of racemic substrates investigated, with a stereopreference for the (*S*)-enantiomer.

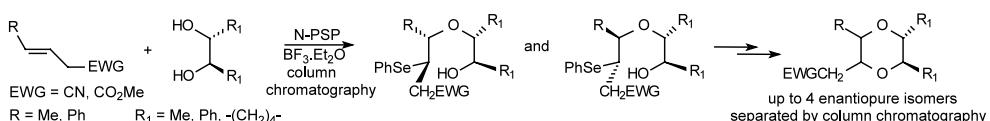


### **Synthesis of enantiomerically pure 1,4-dioxanes from alkenes promoted by organoselenium reagents**

*Tetrahedron: Asymmetry* 14 (2003) 1095

Marcello Tiecco,\* Lorenzo Testaferrri, Francesca Marini, Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Dipartimento di Chimica e Tecnologia del Farmaco, Sezione di Chimica Organica, Università di Perugia, I-06123 Perugia, Italy

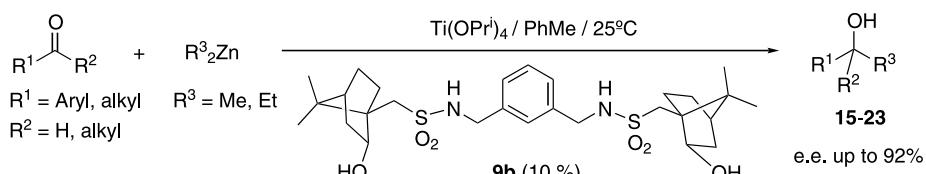


**Synthesis of new  $C_2$ -symmetrical bis(hydroxycamphorsulfonamide) ligands and their application in the enantioselective addition of dialkylzinc reagents to aldehydes and ketones**

Tetrahedron: Asymmetry 14 (2003) 1103

Miguel Yus,\* Diego J. Ramón and Oscar Prieto

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, Apdo. 99, E-03080 Alicante, Spain

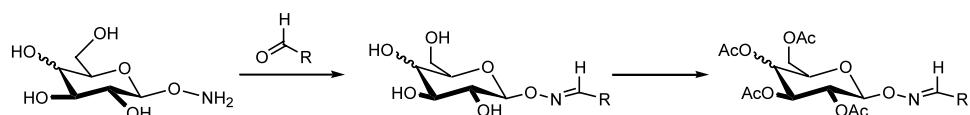


**Enantioselective catalysis. Part 148: Carbohydrate-derived oxime ethers stable towards hydrolysis—syntheses of ligands and complexes and a study of their catalytic properties**

Tetrahedron: Asymmetry 14 (2003) 1115

Henri Brunner,\* Maximilian Schönherr and Manfred Zabel

Institut für Anorganische Chemie, Universität Regensburg, 93040 Regensburg, Germany

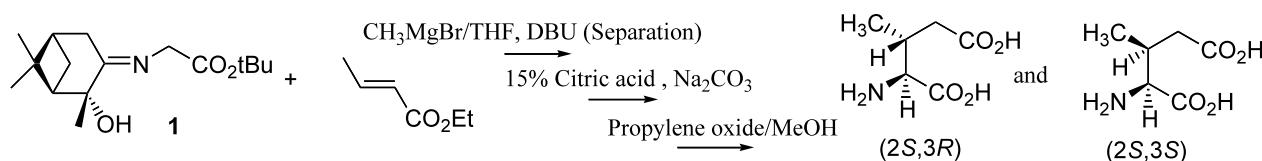


**Glutamate transporter blockers: enantiomerically pure (2S,3S)- and (2S,3R)-3-methyl glutamic acids**

Tetrahedron: Asymmetry 14 (2003) 1123

J. Wehbe, V. Rolland,\* M. L. Roumestant and J. Martinez

UMR 5810-CNRS-LAPP Universités Montpellier I et II, Place E, Bataillon-34095 Montpellier Cedex, France

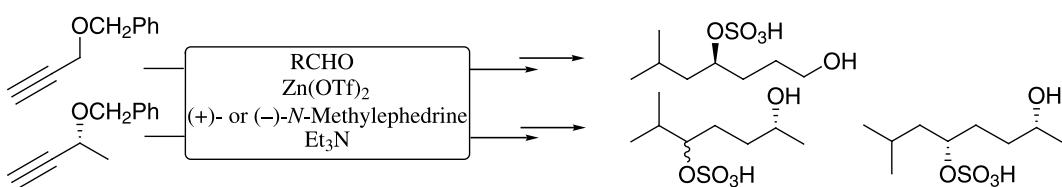


**Stereoselective synthesis of musclides A1, A2 and B**

Tetrahedron: Asymmetry 14 (2003) 1127

Jordi Ortiz, Xavier Ariza\* and Jordi Garcia\*

Departament de Química Orgànica, Universitat de Barcelona, Martí i Franquès 1, 08028 Barcelona, Catalonia, Spain

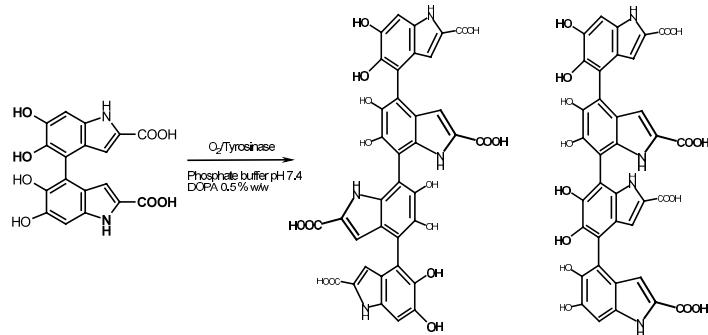


**Synthesis of optically active tetrameric melanin intermediates by oxidation of the melanogenic precursor 5,6-dihydroxyindole-2-carboxylic acid under biomimetic conditions**

Alessandro Pezzella,\* Davide Vogna and Giuseppe Prota

Department of Organic Chemistry and Biochemistry,  
University of Naples 'Federico II' Complesso Universitario  
Monte S. Angelo, Via Cinthia 45, I-80126, Naples, Italy

Tetrahedron: Asymmetry 14 (2003) 1133



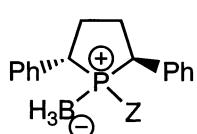
**Efficient enantiodiscrimination of chiral monophosphine oxides and boranes by phosphorus coupled  $^{13}\text{C}$  NMR spectroscopy in the presence of chiral ordering agents**

Tetrahedron: Asymmetry 14 (2003) 1141

Michaël Rivard,<sup>a</sup> Frédéric Guillen,<sup>a</sup> Jean-Claude Fiaud,<sup>a,\*</sup> Christie Aroulanda<sup>b</sup> and Philippe Lesot<sup>b,\*</sup>

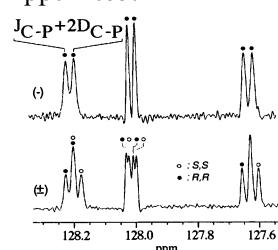
<sup>a</sup>Laboratoire de Catalyse Moléculaire,  
CNRS UMR 8075, ICMMO, Bât. 420,  
Université de Paris-Sud, 91405 Orsay,  
France

<sup>b</sup>Laboratoire de Chimie Structurale  
Organique, CNRS UMR 8074,  
ICMMO, Bât. 410, Université de Paris-Sud,  
91405 Orsay, France



Proton decoupled, phosphored  
coupled carbon-13 NMR  
spectroscopy

Chiral Ordering Agents



**Synthesis of agarofuran antifeedants. Part 6: Enantioselective synthesis of a key decalinic intermediate**

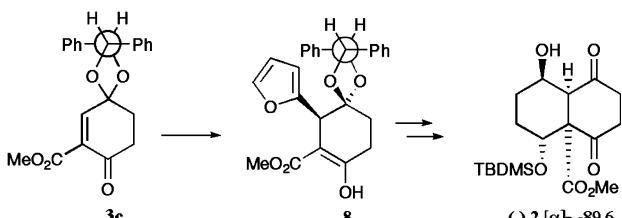
Tetrahedron: Asymmetry 14 (2003) 1153

François-Didier Boyer,<sup>a</sup> Thierry Prangé<sup>b</sup> and Paul-Henri Ducrot<sup>a,\*</sup>

<sup>a</sup>Unité de Phytopharmacie et Médiateurs Chimiques, INRA,  
Route de Saint-Cyr, F-78026 Versailles Cedex, France

<sup>b</sup>Chimie Structurale Biomoléculaire (UMR 7033 CNRS),  
93017 Bobigny Cedex, France

The synthesis of **2**, a key intermediate for the total synthesis of agarofurans antifeedants is described, using a diastereoselective addition of furan on keto ester **3c**, incorporating a chiral hydrobenzoin moiety.



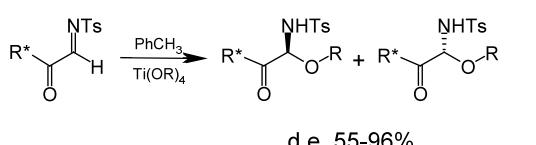
**Asymmetric addition of titanium and sodium alkoxides to chiral imines**

Tetrahedron: Asymmetry 14 (2003) 1161

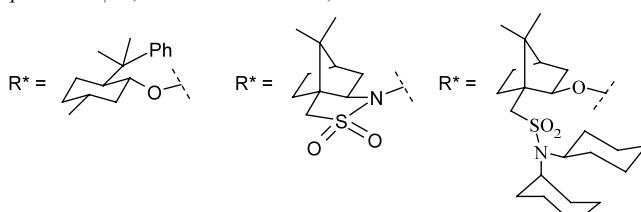
Anna Kulesza,<sup>a</sup> Adam Mieczkowski,<sup>a</sup> Jan Romański<sup>a</sup> and Janusz Jurczak<sup>a,b,\*</sup>

<sup>a</sup>Department of Chemistry, Warsaw University, Pasteura 1, PL-02-093 Warsaw, Poland

<sup>b</sup>Institute of Organic Chemistry, Polish Academy of Sciences, Kasprzaka 44/52, PL-01-224 Warsaw, Poland



R = Pr<sup>i</sup>, 1,2:3,4-di-O-isopropylidene- $\alpha$ -D-galactopyranoside

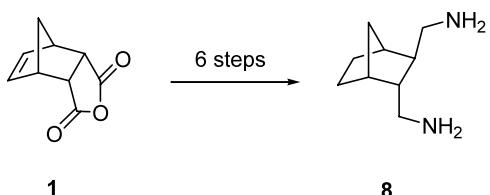


**The first enantioselective synthesis of chiral norbornane-type 1,4-diamine ligand**

Tetrahedron: Asymmetry 14 (2003) 1167

Cihangir Tanyeli\* and Salih Özçubukçu

Department of Chemistry, Middle East Technical University, 06531 Ankara, Turkey

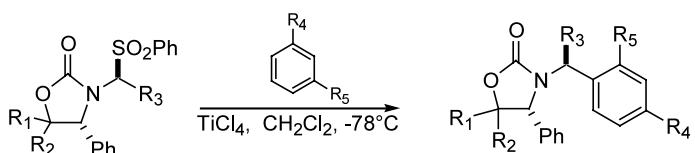


**Reactivity of chiral exocyclic N-acyliminium ions with aromatic derivatives**

Tetrahedron: Asymmetry 14 (2003) 1171

Tiziana Mecozzi, Marino Petrini\* and Roberto Profeta

Dipartimento di Scienze Chimiche, Università di Camerino, via S. Agostino, 1, I-62032 Camerino, Italy



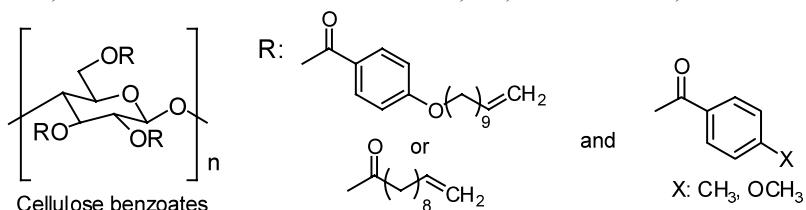
**Mixed cellulose-derived benzoates bonded on allylsilica gel as HPLC chiral stationary phases: influence of the introduction of an aromatic moiety in the fixation substituent**

Tetrahedron: Asymmetry 14 (2003) 1179

Jordi Garcés,<sup>a</sup> Pilar Franco,<sup>a</sup> Laureano Oliveros<sup>b</sup> and Cristina Minguillón<sup>a,\*</sup>

<sup>a</sup>Laboratori de Química Farmacèutica, Facultat de Farmàcia, Universitat de Barcelona, Avda. Diagonal s/n, E-08028 Barcelona, Spain

<sup>b</sup>Laboratoire de Chimie Générale, Conservatoire National des Arts et Métiers, 292, rue Saint-Martin, F-75141 Paris Cedex 03, France



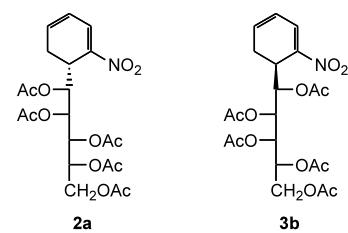
**Studies on the reactivity of (pentitol-1-yl)nitrocyclohexadienes with acetyl chloride in methanol**

Tetrahedron: Asymmetry 14 (2003) 1187

M. Baños, E. Román\* and J. A. Serrano

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Extremadura, 06071, Badajoz, Spain

The reaction of **2a** and **2b** with acetyl chloride in methanol depends on the nature of the sugar side-chain, as well as on the configuration at the stereogenic carbon of the cyclohexadiene ring. Whereas D-manno nitrocyclohexadiene **2a** led to a complex mixture of products with structures of benzofuran, chromane-3,4-diol, tridecane tricyclic ketal, bicyclic or tricyclic oximes, nitrobenzene and nitrocyclohexenol, the D-galacto isomer **3b** led exclusively to a bicyclic oxime.



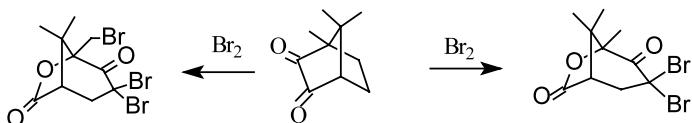
## The bromination of (-)-camphorquinone

Tetrahedron: Asymmetry 14 (2003) 1197

Desmond Cunningham,<sup>b</sup> David H. Grayson,<sup>a,\*</sup> Patrick McArdle<sup>b</sup>  
and John J. Walsh<sup>a</sup>

<sup>a</sup>Centre for Synthesis and Chemical Biology, University Chemical Laboratory, Trinity College, Dublin 2, Ireland

<sup>b</sup>Chemistry Department, University College, Galway, Ireland

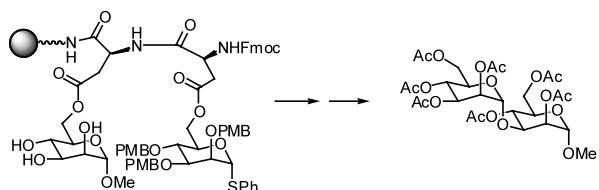


## Solid phase peptide templated glycosidic bond formation

Tetrahedron: Asymmetry 14 (2003) 1201

Richard J. Tennant-Eyles, Benjamin G. Davis and Antony J. Fairbanks\*

Dyson Perrins Laboratory, Oxford University, South Parks Road, Oxford OX1 3QY, UK



## The synthesis of (11*R*,12*S*)-lactobacillic acid and its enantiomer

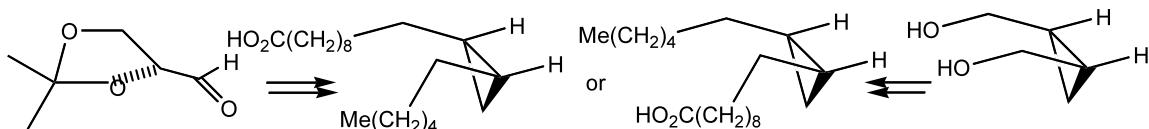
Tetrahedron: Asymmetry 14 (2003) 1211

Geoffrey D. Coxon,<sup>a,b</sup> Juma R. Al-Dulayymi,<sup>a</sup> Mark S. Baird,<sup>a</sup>  
Stefan Knobl,<sup>a</sup> Evan Roberts<sup>a</sup> and David E. Minnikin<sup>c,\*</sup>

<sup>a</sup>Department of Chemistry, University of Wales, Bangor, Gwynedd LL57 1BE, UK

<sup>b</sup>Department of Chemistry, University of Newcastle, Newcastle upon Tyne NE1 7RU, UK

<sup>c</sup>School of Biosciences, The University of Birmingham, Edgbaston, Birmingham B15 2TT, UK



## (*S*)-(3-Hydroxy-4,4-dimethyl-2-oxopyrrolidin-1-yl) acetic acid as a solid supported chiral auxiliary in the asymmetric synthesis of $\beta^2$ -homoarylglYCines

Tetrahedron: Asymmetry 14 (2003) 1223

Rhalid Akkari, Monique Calmès,\* Delphine Di Malta, Françoise Escale and Jean Martinez

Laboratoire des Aminoacides, Peptides et Protéines, UMR-CNRS 5810-Universités Montpellier I et II, UM II,  
Place E. Bataillon, 34095 Montpellier cedex 5, France

