

## Contents

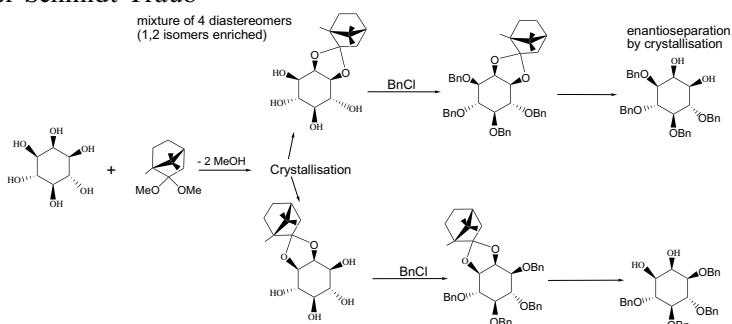
## COMMUNICATIONS

**Advances in analysis and synthesis of *myo*-inositol-derivatives through resolution by crystallisation**

Wolfgang Wewers,\* Hartmut Gillandt and Henner Schmidt Traub

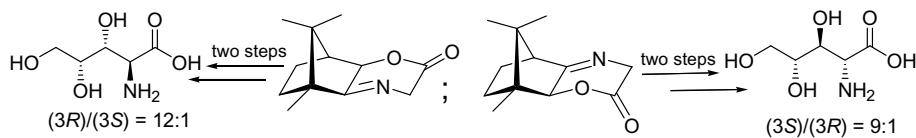
pp 1723–1728

Process for the preparation of 1,4,5,6-tetra-*O*-benzyl-*myo*-inositol and 3,4,5,6-tetra-*O*-benzyl-*myo*-inositol using optical resolution by crystallisation.


**A straightforward route to the asymmetric synthesis of 3,4-diepipolyoxamic acid and its isomers**

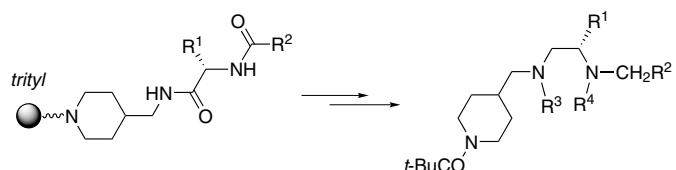
Shuo Li, Xin-Ping Hui, Shao-Bo Yang, Zhong-Jian Jia, Peng-Fei Xu\* and Ta-Jung Lu

pp 1729–1731


**Design and solid-phase synthesis of chiral acyclic and cyclic diamine ligands**

Dehe Li and Dennis G. Hall\*

pp 1733–1736

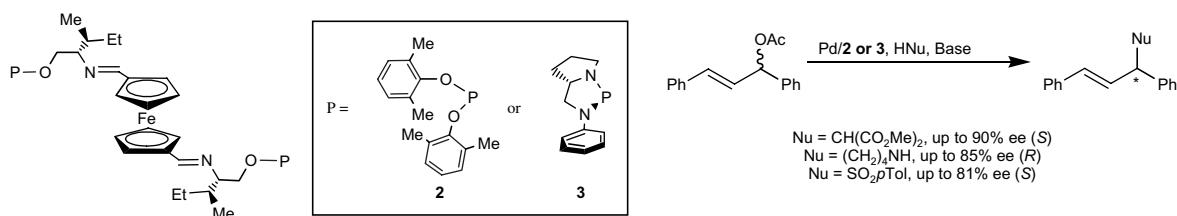


## ARTICLES

## Enantioselective Pd-catalyzed $C^*-C$ , $C^*-N$ , and $C^*-S$ bond formation reactions using first $P,P,N,N$ -tetradentate chiral phosphites

pp 1737–1741

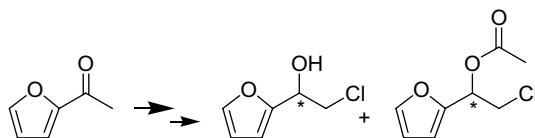
Vasily N. Tsarev,\* Stanislav I. Konkin, Alexei A. Shyryaev, Vadim A. Davankov and Konstantin N. Gavrilov



## Chemoenzymatic synthesis of both enantiomers of 2-chloro-1-(2-furyl)ethanol

pp 1743–1746

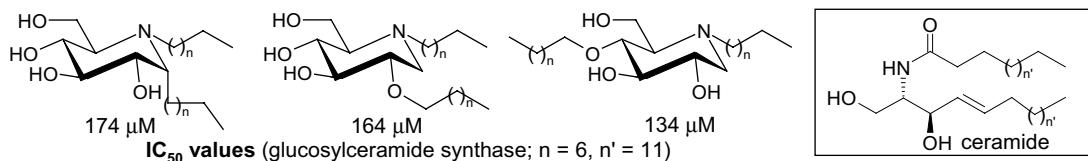
Zuhal Gercek, Deyrim Karakaya and Ayhan S. Demir\*



## **Design and synthesis of iminosugar-based inhibitors of glucosylceramide synthase: the search for new therapeutic agents against Gaucher disease**

pp 1747–1756

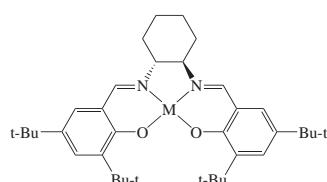
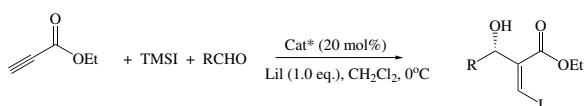
Charlotte Boucheron, Valérie Desvergne, Philippe Compain,\* Olivier R. Martin,\* Alan Lavi, Muckram Mackeen, Mark Wormald, Raymond Dwek and Terry D. Butters



## The first asymmetric catalytic halo aldol reaction of $\beta$ -iodo allenotes with aldehydes by using chiral salen catalyst

pp 1757–1762

Dianjun Chen, Li Guo, S. R. S. Saibabu Kotti and Guigen Li\*

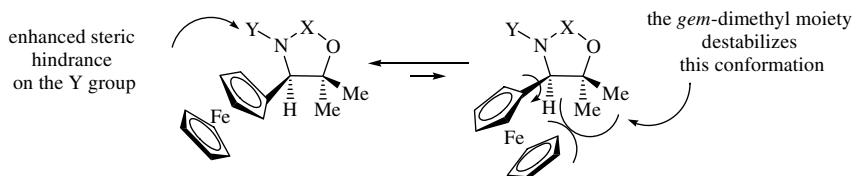


- |           |   |
|-----------|---|
| <b>1a</b> | CrCl  |
| <b>1b</b> | MnCl  |
| <b>1c</b> | CoI   |
| <b>1d</b> | AlI   |
| <b>1e</b> | AlCl  |
| <b>1f</b> | Al <sub>2</sub> O <sub>3</sub> -Al <sub>2</sub> salen |

**1-Amino-1-ferrocenyl-2-methyl-2-propanol: a case study on the conformational control of asymmetric induction**

pp 1763–1778

Agustí Bueno, Rosa M<sup>a</sup> Moreno and Albert Moyano\*

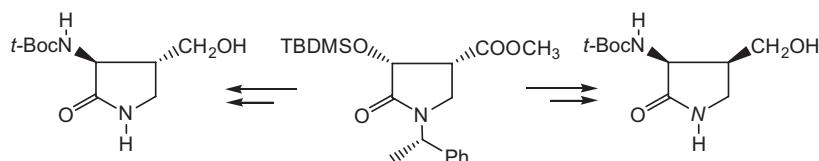


The introduction of a *gem*-dimethyl moiety at C1 in 2-amino-2-ferrocenylethanol exerts a strong conformational control on the ferrocenyl group when this compound is incorporated into a heterocyclic ring, leading to increased levels of asymmetric induction in reactions mediated by chiral auxiliaries or ligands derived from this chiral  $\beta$ -amino alcohol.

**Chiral 3-hydroxypyrrolidin-2-ones. Part 2: Stereodivergent synthesis of conformationally restricted analogues of  $\beta$ -homoserine**

pp 1779–1787

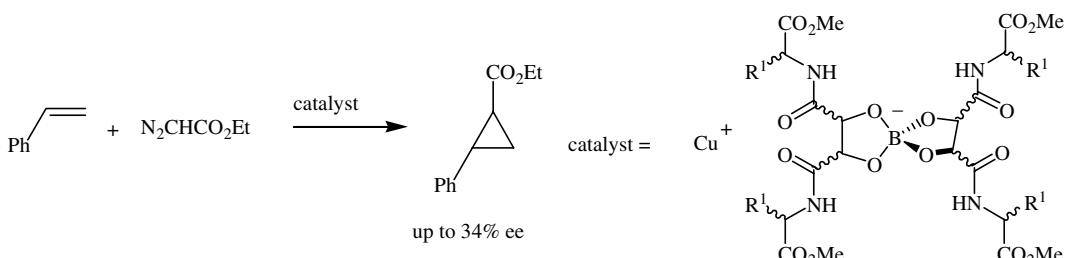
Roberta Galeazzi, Gianluca Martelli, Desiré Natali, Mario Orena\* and Samuele Rinaldi



**Synthesis of a library of chiral  $\alpha$ -amino acid-based borate counteranions and their application to copper catalyzed olefin cyclopropanation**

pp 1789–1799

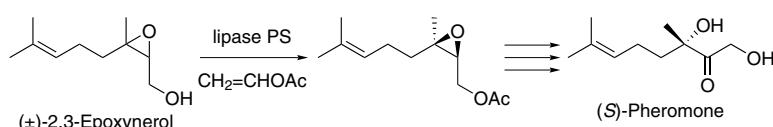
David B. Llewellyn and Bruce A. Arndtsen\*



**Enzyme-assisted synthesis of (*S*)-1,3-dihydroxy-3,7-dimethyl-6-octen-2-one, the male-produced aggregation pheromone of the Colorado potato beetle, and its (*R*)-enantiomer**

pp 1801–1806

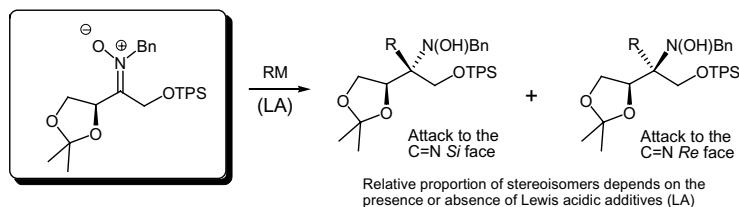
Takuya Tashiro and Kenji Mori\*



**Stereoselective addition of organometallic reagents to a chiral acyclic nitrone derived from L-erythulose**

pp 1807–1816

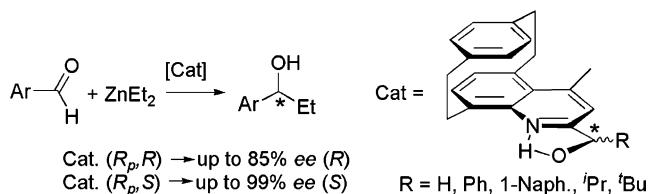
Juan Murga,\* Raul Portolés, Eva Falomir, Miguel Carda and J. Alberto Marco



**([2]Paracyclo[2](5,8)quinolinophan-2-yl)carbinols as catalysts for diethylzinc addition to aldehydes: cooperative effects of planar and central chirality on the asymmetric induction**

pp 1817–1827

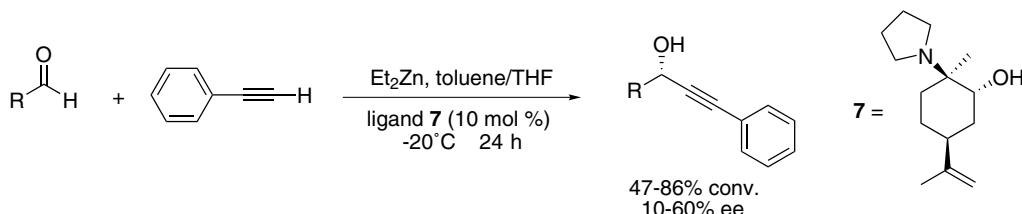
Giacomo Ricci and Renzo Ruzziconi\*



**Enantioselective alkynylations of aromatic and aliphatic aldehydes catalyzed by terpene derived chiral amino alcohols**

pp 1829–1835

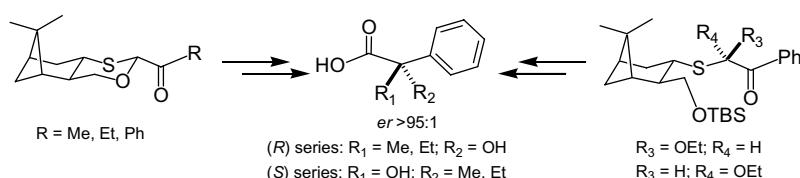
Cian Christopher Watts, Praveen Thoniyot, Lacie C. Hirayama, Talia Romano and Bakthan Singaram\*



**Enantioselective synthesis of either enantiomer of α-alkyl-α-hydroxy-α-phenylacetic acids using chiral auxiliaries**

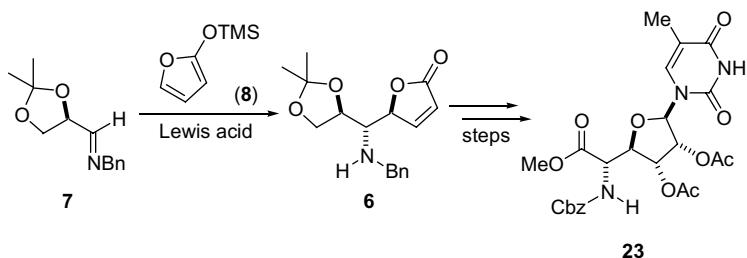
pp 1837–1843

Salvador Pérez-Estrada, Selene Lagunas-Rivera, María Elena Vargas-Díaz, Pedro Velázquez-Ponce, Pedro Joseph-Nathan and L. Gerardo Zepeda\*



**A formal synthesis of thymine polyoxin C**  
Kenn E. Harding and Jack M. Southard\*

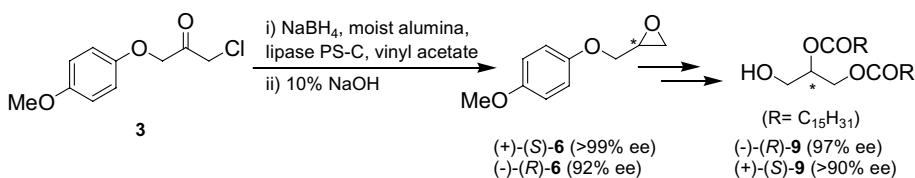
pp 1845–1854



**A facile and convenient chemoenzymatic synthesis of optically active O-(4-methoxyphenyl)-glycidol and 1,2-diacyl-sn-glycerol**

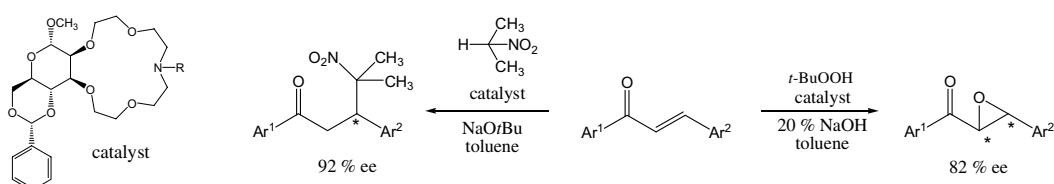
Ahmed Kamal,\* Mahendra Sandbhor, Ahmad Ali Shaik and M. Shaheer Malik

pp 1855–1859



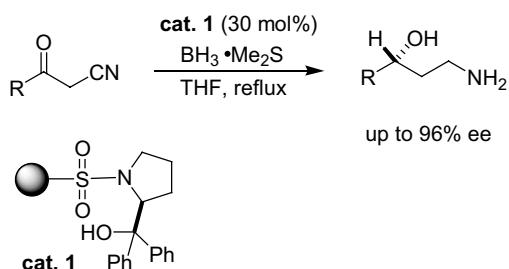
**Synthesis of D-mannose-based azacrown ethers and their application in enantioselective reactions**  
Péter Bakó,\* Attila Makó, György Keglevich, Miklós Kubinyi and Krisztina Pál

pp 1861–1871



**Polymer-supported chiral sulfonamide catalyzed one-pot reduction of  $\beta$ -keto nitriles: a practical synthesis of (R)-fluoxetine and (R)-duloxetine\***  
Guangyin Wang, Xingshun Liu and Gang Zhao\*

pp 1873–1879

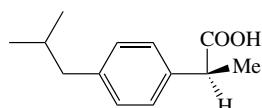


---

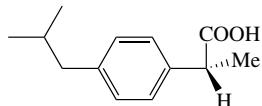
**Determination of the enantiomeric composition of ibuprofen solutions  
via a rapid and sensitive mass spectrometry method**

pp 1881–1885

Daniella Vasconcellos Augusti and Rodinei Augusti\*



(S)-ibuprofen



(R)-ibuprofen

---

**OTHER CONTENTS**

- Corrigendum  
Stereochemistry abstracts  
Instructions to contributors  
Cumulative author index

- p 1887  
pp A339–A383  
pp I–IV  
pp V–IX

\*Corresponding author



Full text of this journal is available, on-line from **ScienceDirect**. Visit [www.sciencedirect.com](http://www.sciencedirect.com) for more information.

---



This journal is part of **ContentsDirect**, the *free* alerting service which sends tables of contents by e-mail for Elsevier books and journals. You can register for **ContentsDirect** online at: <http://contentsdirect.elsevier.com>

---

Indexed/Abstracted in: Beilstein, BIOSIS Previews, Chemical Abstracts, Current Contents: Physical, Chemical and Earth Sciences, Derwent Biotechnology Abstracts, Derwent Drug File, Ei Compendex, EMBASE/Excerpta Medica, PASCAL, Research Alert, Science Citation Index, SciSearch

---



ISSN 0957-4166