

**Contents**

Publisher's Announcement—American Regional Editor

p 1

**COMMUNICATIONS**
**An efficient asymmetric synthesis of furofuran lignans: (+)-sesamin and (-)-sesamin**

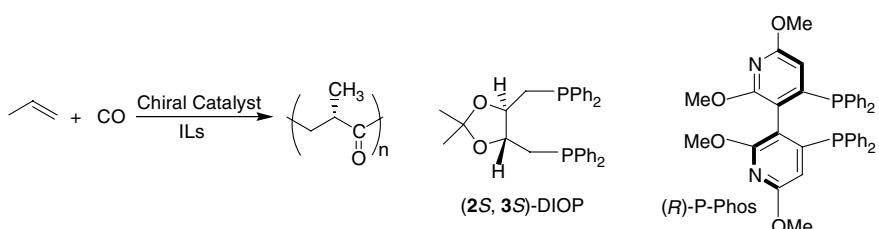
pp 3–6

Ju-Cheun Kim, Kwang-Hyun Kim, Jae-Chul Jung and Oee-Sook Park\*


**Pd-catalyzed asymmetric alternating co-polymerization of propene with carbon monoxide using ionic liquids**

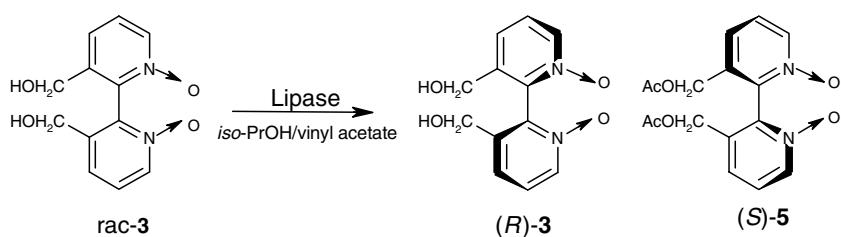
pp 7–11

Hai-Jun Wang, Lai-Lai Wang,\* Wing-Sze Lam, Wing-Yiu Yu and Albert S. C. Chan\*


**Lipase-catalysed resolution by an esterification reaction in organic solvent of axially chiral ( $\pm$ )-3,3'-bis(hydroxymethyl)-2,2'-bipyridine *N,N*-dioxide**

pp 12–14

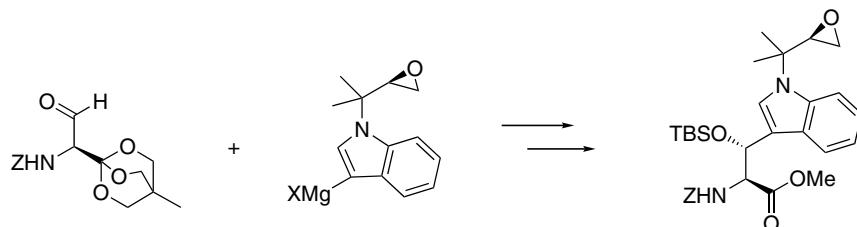
Claudia Sanfilippo,\* Nicola D'Antona and Giovanni Nicolosi



**ARTICLES****A stereoselective synthetic approach to (*2S,3R*)-*N*-(1',1'-dimethyl-2',3'-epoxypropyl)-3-hydroxytryptophan, a component of cyclomarin A**

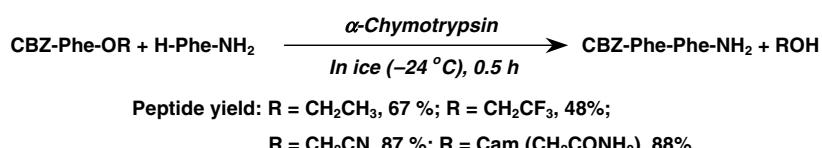
pp 15–21

Darren B. Hansen, Alan S. Lewis, Steven J. Gavalas and Madeleine M. Joullié\*

 **$\alpha$ -Chymotrypsin-catalyzed peptide synthesis in frozen aqueous solution using N-protected amino acid carbamoylmethyl esters as acyl donors**

pp 22–29

Sayed Mohiuddin Abdus Salam, Ken-ichi Kagawa and Katsuhiro Kawashiro\*

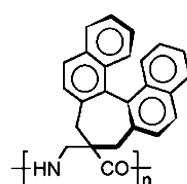


In the  $\alpha$ -chymotrypsin-catalyzed peptide synthesis in ice ( $-24^\circ\text{C}$ ), the carbamoylmethyl (Cam) ester was found to be a useful acyl donor. This approach was also applied to the synthesis of peptides containing D-amino acids. A high diastereoselectivity towards the L-L peptide was observed when the racemic Cam ester was used.

**Synthesis of linear and cyclic homo- $\beta$ -peptides based on a binaphthylidic  $\beta$ -amino acid with only axial chirality**

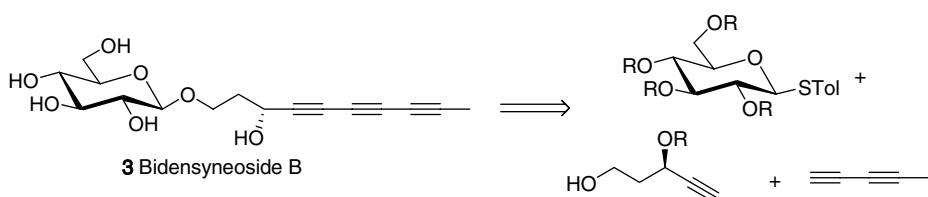
pp 30–39

Anne Gaucher, Laurence Dutot, Olivier Barbeau, Michel Wakselman, Jean-Paul Mazaleyrat,\* Cristina Peggion, Simona Oancea, Fernando Formaggio, Marco Crisma and Claudio Toniolo

**Total synthesis of two naturally occurring polyacetylenic glucosides (–)-bidensyneoside A1 and B, and an analogue of (–)-bidensyneoside C**

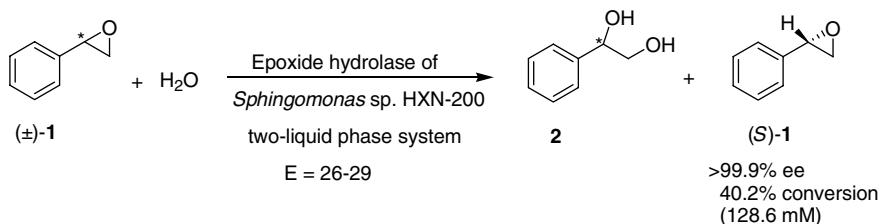
pp 40–46

Benjamin W. Gung,\* Ryan M. Fox, Robert Falconer and Daniel Shissler



**Enantioselective hydrolysis of styrene oxide with the epoxide hydrolase of *Sphingomonas* sp. HXN-200**  
Zeya Liu, Johannes Michel, Zunsheng Wang, Bernard Witholt and Zhi Li\*

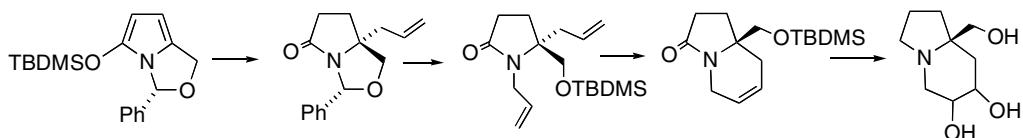
pp 47–52



**Creation of quaternary stereocentres: synthesis of new polyhydroxylated indolizidines**

Nicole Langlois,\* Bao Khanh Le Nguyen, Pascal Retailleau, Céline Tarnus and Emmanuel Salomon

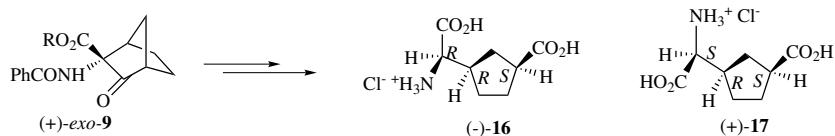
pp 53–60



**Enantioselective synthesis of epimeric *cis*-3-carboxycyclopentylglycines**

Francesco Caputo, Francesca Clerici, Maria Luisa Gelmi, Sara Pellegrino\* and Tullio Pilati

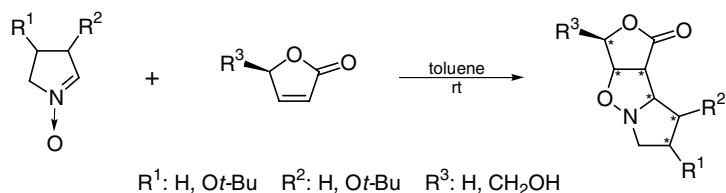
pp 61–67



**Double asymmetric induction in 1,3-dipolar cycloaddition of five-membered cyclic nitrones to 2-(5*H*)-furanones**

Sebastian Stecko, Konrad Paśniczek, Margarita Jurczak, Zofia Urbańczyk-Lipkowska and Marek Chmielewski\*

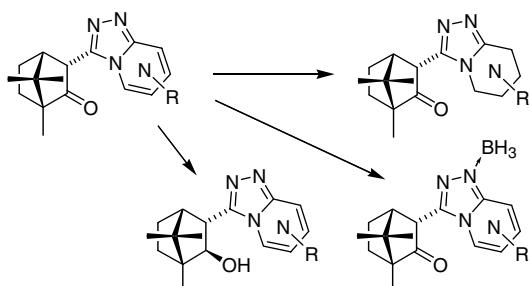
pp 68–78



**Reductions of (*1R,3R,4R*)-3-([1,2,4]triazolo[4,3-*x*]azin-3-yl)-1,7,7-trimethylbicyclo[2.2.1]heptan-2-ones and their analogues**

pp 79–91

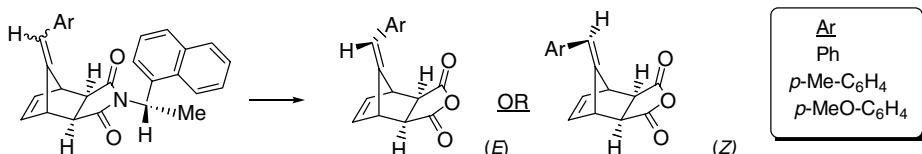
Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Branko Stanovnik and Jurij Svet\*



**cis–trans Enantiomerism in the Diels–Alder cycloadducts of 6-arylfulvenes with maleic anhydride: resolution of the *exo* adducts via the *N*-(*1S*)-1-(naphth-1-yl)ethyl)imide derivatives: assignment of the absolute configurations based on the crystal structure of an imide diastereomer**

pp 92–98

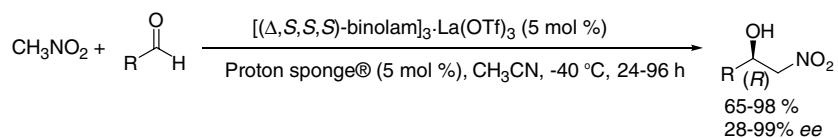
Sosale Chandrasekhar\* and Suresh Kumar Gorla



**Chiral monometallic lanthanide(III) salt complexes are arrayed acid–base networks for enantioselective catalysis: a direct, nitroaldol (Henry) reaction**

pp 99–106

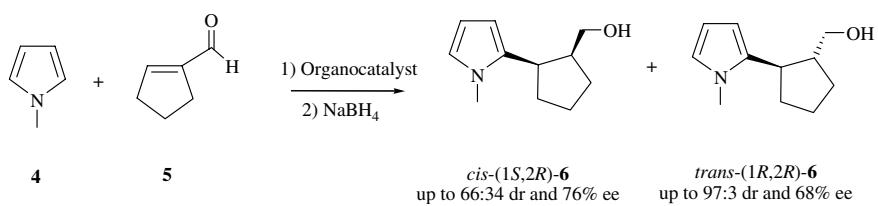
José M. Saá,\* Fernando Tur, José González and Manuel Vega



**Chiral pyrrolidinium salts as organocatalysts in the stereoselective 1,4-conjugate addition of *N*-methylpyrrole to cyclopent-1-ene carbaldehyde**

pp 107–111

Palle Breistein, Staffan Karlsson and Erik Hedenström\*

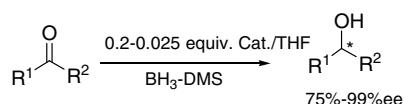


---

**Highly enantioselective carbonyl reduction with borane catalyzed by chiral spiroborate esters derived from chiral 1,2-aminoalcohols**

pp 112–115

Viatcheslav Stepanenko, Margarita Ortiz-Marciales,\* Wildeliz Correa, Melvin De Jesús, Sandraliz Espinosa and Lymaris Ortiz

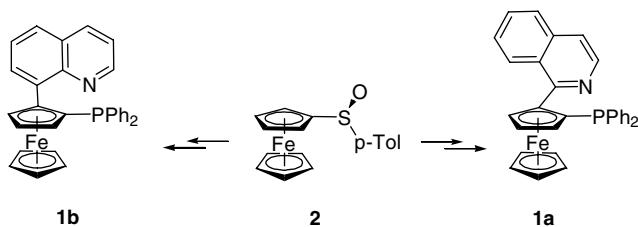


---

**Ferrocenyl-QUINAP: a planar chiral *P,N*-ligand for palladium-catalyzed allylic substitution reactions**

pp 116–123

Ralf J. Kloetzing and Paul Knochel\*

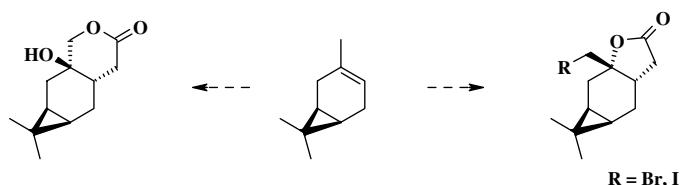


---

**Stereochemistry of terpene derivatives. Part 5: Synthesis of chiral lactones fused to a carane system—*insect feeding deterrents***

pp 124–129

Bożena Frąckowiak, Katarzyna Ochalik, Agata Białońska, Zbigniew Ciunik, Czesław Wawrzeńczyk and Stanisław Lochyński\*

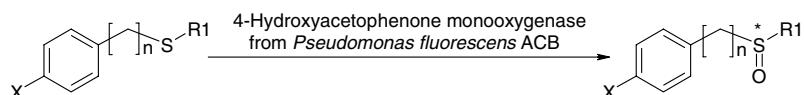


---

**4-Hydroxyacetophenone monooxygenase from *Pseudomonas fluorescens* ACB as an oxidative biocatalyst in the synthesis of optically active sulfoxides**

pp 130–135

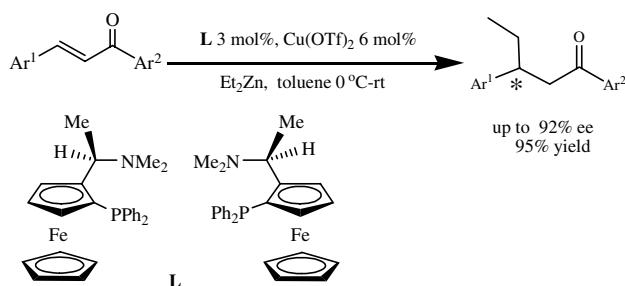
Gonzalo de Gonzalo,\* Daniel E. Torres Pazmiño, Gianluca Ottolina, Marco W. Fraaije and Giacomo Carrea



**The *ortho* effect: copper-catalyzed highly enantioselective 1,4-conjugate addition of diethylzinc to chalcones**

pp 136–141

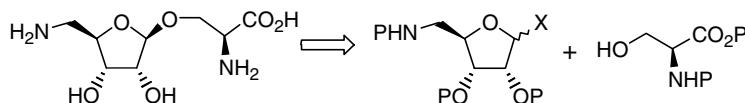
Lan-Tao Liu, Min-Can Wang,\* Wen-Xian Zhao, Yan-Li Zhou and Xiao-Dan Wang



**Chemical investigations in the synthesis of *O*-serinyl aminoribosides**

pp 142–150

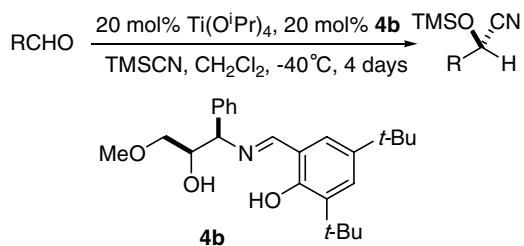
Maryon Ginisty, Christine Gravier-Pelletier\* and Yves Le Merrer\*



**Parallel synthesis of modular chiral Schiff base ligands and evaluation in the titanium(IV) catalyzed asymmetric trimethylsilylcyanation of aldehydes**

pp 151–160

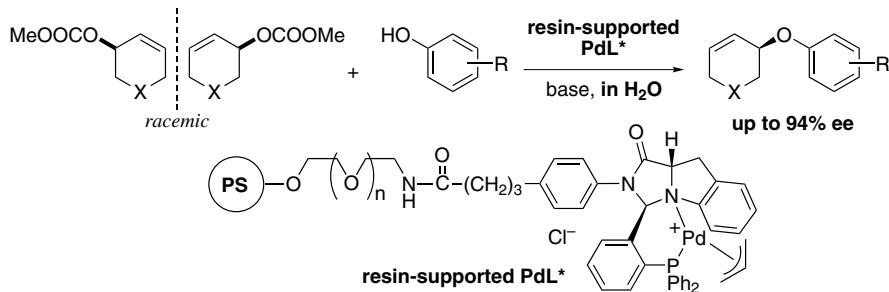
Belén Rodríguez, Mireia Pastó, Ciril Jimeno and Miquel A. Pericàs\*



**Asymmetric  $\pi$ -allylic etherification of cycloalkenyl esters with phenols in water using a resin-supported chiral palladium complex**

pp 161–166

Yasuhiro Uozumi\* and Masahiro Kimura



## OTHER CONTENTS

Stereochemistry abstracts  
Instructions to contributors  
Cumulative author index

pp A1–A42  
pp I–IV  
p V

\*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