

Graphical abstracts

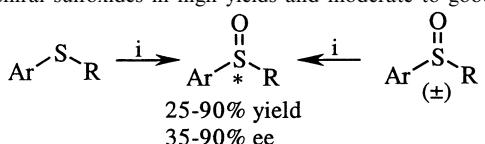
WO₃-30% H₂O₂-cinchona alkaloids: a new heterogeneous catalytic system for the asymmetric oxidation of sulfides and the kinetic resolution of racemic sulfoxides

Tetrahedron: Asymmetry 14 (2003) 407

Vinay V. Thakur and A. Sudalai*

Process Development Division, National Chemical Laboratory, Pashan Road, Pune 411008, India

WO₃-catalyzed asymmetric oxidation of thioethers as well as kinetic resolution of sulfoxides with 30% aq. H₂O₂ in the presence of cinchona alkaloids affords chiral sulfoxides in high yields and moderate to good enantioselectivity.



(i) WO₃ (5 mol%), (DHQD)₂-PYR (10 mol%), aq. 30% H₂O₂ (1.1 equiv.), THF.

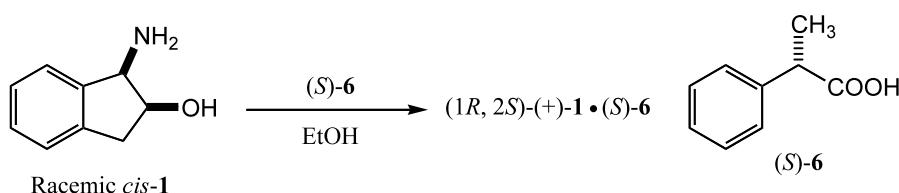
Resolution of racemic *cis*-1-amino-2-indanol by diastereomeric salt formation with (S)-2-phenylpropionic acid

Tetrahedron: Asymmetry 14 (2003) 411

Rumiko Sakurai^a and Kenichi Sakai^{b,*}

^aDepartment of Biomolecular Engineering, Graduate School of Engineering, Tohoku University, Sendai 980-8579, Japan

^bR & D Division, Yamakawa Chemical Industry Co., Ltd., Kitaibaraki 319-1541, Japan

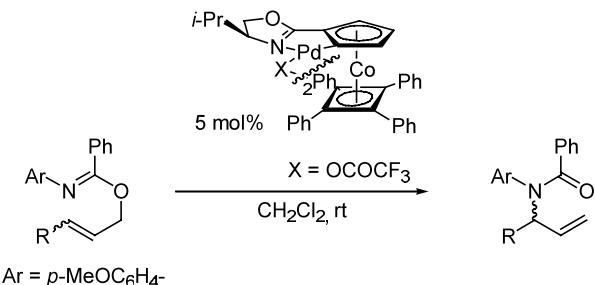


The effect of face-blocking in the enantioselective aza-Claisen rearrangement of allylic imides

Tetrahedron: Asymmetry 14 (2003) 415

Jahyo Kang,* Tae Hyung Kim, Kyoung Han Yew
and Wook Ki Lee

Department of Chemistry, Sogang University, Seoul 121-742, Korea



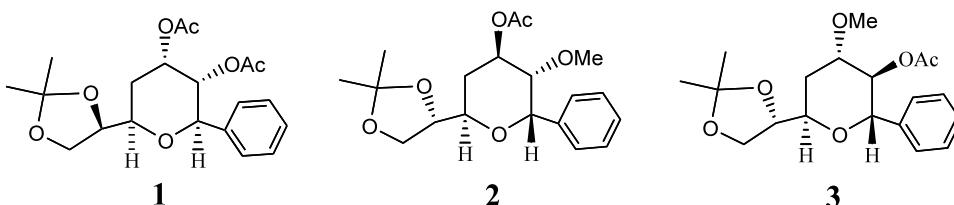
Stereoselective synthesis of C-phenyl D- and L-glycero heptopyranosides

Tetrahedron: Asymmetry 14 (2003) 419

Palakodety Radha Krishna,* B. Lavanya and G. V. M. Sharma

D-206/B, Discovery Laboratory, Organic Chemistry Division-III, Indian Institute of Chemical Technology, Hyderabad 500 007, India

Synthesis of D- and L-glycero-C-phenyl heptopyranosides **1**, **2** and **3** by an intramolecular nucleophilic ring closure protocol is reported.



Resolution of (\pm)-5-substituted-6-(5-chloropyridin-2-yl)-7-oxo-5,6-dihdropyrido[3,4b]pyrazine derivatives-precursors of (S)-(+)-Zopiclone, catalyzed by immobilized *Candida antarctica B* lipase in aqueous media

Tetrahedron: Asymmetry 14 (2003) 429

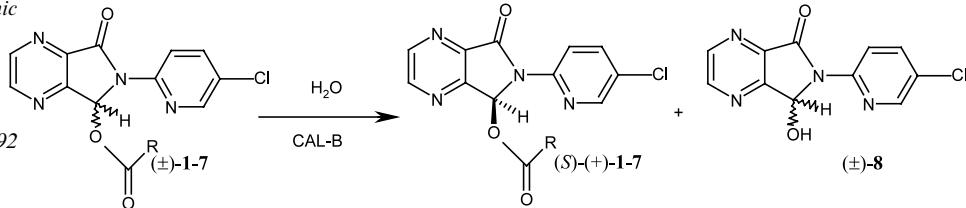
Jose M. Palomo,^a Cesar Mateo,^a Gloria Fernández-Lorente,^a Laura F. Solares,^b Monica Diaz,^b Víctor M. Sánchez,^c Miguel Bayod,^c Vicente Gotor,^b Jose M. Guisan^{a,*} and Roberto Fernandez-Lafuente^{a,*}

^aDepartment of Biocatalysis, Institute of Catalysis, CSIC, Campus UAM, Cantoblanco, 28049 Madrid, Spain

^bDepartment of Organic and Inorganic

Chemistry, Faculty of Chemistry,
University of Oviedo, 33071 Oviedo,
Spain

^cAstur-Pharma S.A. Polígono
industrial de Silvota, Parcela 23, 33192
Llanera (Asturias), Spain

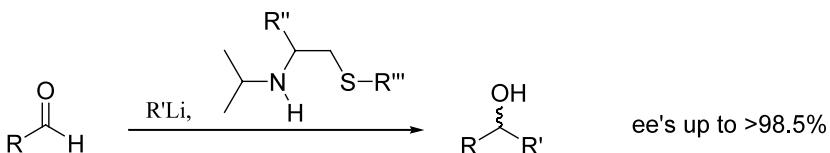


Chiral lithium amido sulfide ligands for asymmetric addition reactions of alkyllithium reagents to aldehydes

Tetrahedron: Asymmetry 14 (2003) 439

Johan Granander, Richard Sott and Göran Hilmersson*

Department of Chemistry, Organic Chemistry, Göteborg University, S-412 96 Göteborg, Sweden

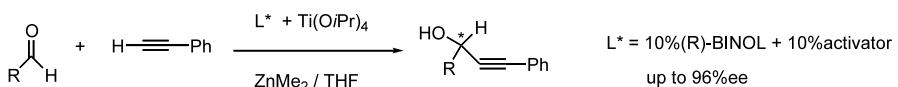


Effective activation of chiral BINOL/Ti(O*i*Pr)₄ catalyst with phenolic additives for the enantioselective alkynylation of aldehydes

Tetrahedron: Asymmetry 14 (2003) 449

Gui Lu, Xingshu Li, Gang Chen, Wing Lai Chan* 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



Ephedrine derived reusable chiral auxiliary for the synthesis of optically pure 3-hydroxy-4-aryl-β-lactams

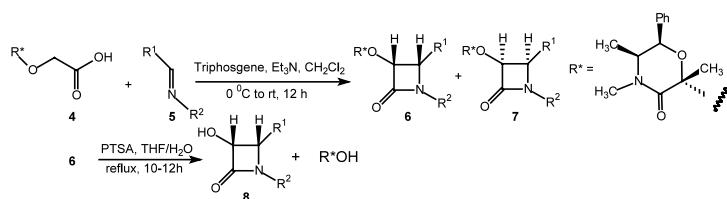
Tetrahedron: Asymmetry 14 (2003) 453

Bidhan A. Shinkre,^a Vedavati G. Puranik,^b B. M. Bhawal^c and A. R. A. S. Deshmukh^{a,*}

^aDivision of Organic Chemistry (Synthesis), National Chemical Laboratory, Pune 411 008, India

^bDivision of Physical Chemistry, National Chemical Laboratory, Pune 411 008, India

^cEmcure Pharmaceuticals Ltd., Emcure House, T-184, M. I. D. C., Bhosari, Pune 411026, India



Immobilization of catalysts derived from *Cinchona* alkaloids on modified poly(ethylene glycol)

Tetrahedron: Asymmetry 14 (2003) 461

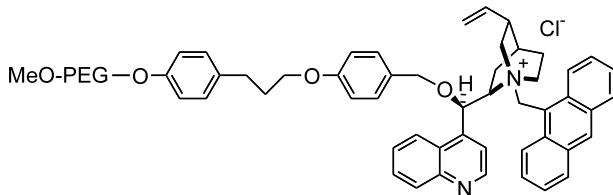
Tamara Danelli,^a Rita Annunziata,^{a,c} Maurizio Benaglia,^{a,c,*} Mauro Cinquini,^{a,b,c} Franco Cozzi^{a,b,c} and Graziella Tocco^d

^aDipartimento di Chimica Organica e Industriale, Università' degli Studi di Milano, Via Golgi 19, I-20133 Milano, Italy

^bCNR-ISTM, Università' degli Studi di Milano, Via Golgi 19, I-20133 Milano, Italy

^cCentro di Eccellenza CISI, Università' degli Studi di Milano, Via Golgi 19, I-20133 Milano, Italy

^dDipartimento Farmaco Chimico Tecnologico, Università' degli Studi di Cagliari, via Ospedale 72, I-09124 Cagliari, Italy

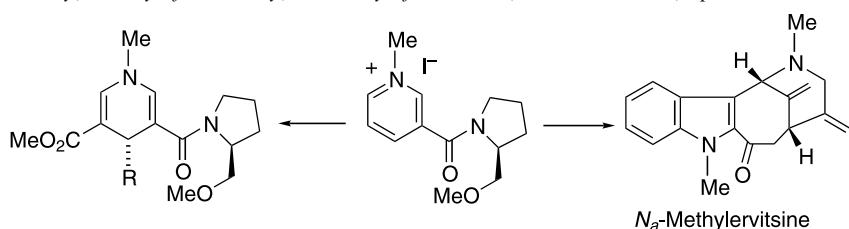


Nucleophilic addition to chiral pyridinium salts: stereoselective synthesis of (-)-N_a-methylervitsine

Tetrahedron: Asymmetry 14 (2003) 469

M.-Lluïsa Bennasar,* Ester Zulaica, Yolanda Alonso and Joan Bosch

Laboratory of Organic Chemistry, Faculty of Pharmacy, University of Barcelona, Barcelona 08028, Spain



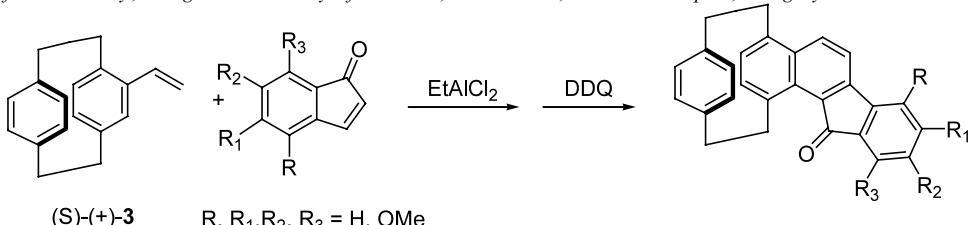
Synthesis of enantiopure angularly condensed [2.2]paracyclophanes containing five-membered rings

Tetrahedron: Asymmetry 14 (2003) 481

Lucio Minuti,^{a,*} Aldo Taticchi,^{a,*} Assunta Marrocchi,^a Daniela Lanari,^a Alessandra Broggi^a and Eszter Gacs-Baitz^b

^aDipartimento di Chimica, Università degli Studi di Perugia, Via Elce di Sotto 8, 06123 Perugia, Italy

^bCentral Institute for Chemistry, Hungarian Academy of Sciences, PO Box 17, H-1525 Budapest, Hungary

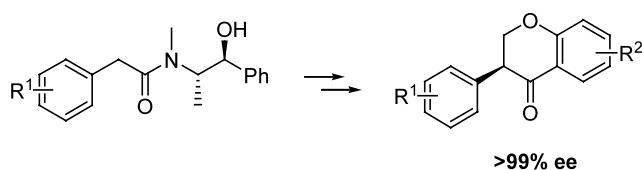


An easy and straightforward approach to the asymmetric synthesis of isoflavanones

Tetrahedron: Asymmetry 14 (2003) 489

Jose L. Vicario, Dolores Badía* and Luisa Carrillo

Departamento de Química Orgánica, Facultad de Ciencias, Universidad del País Vasco-Euskal Herriko Unibertsitatea, PO Box 644, 48080 Bilbao, Spain

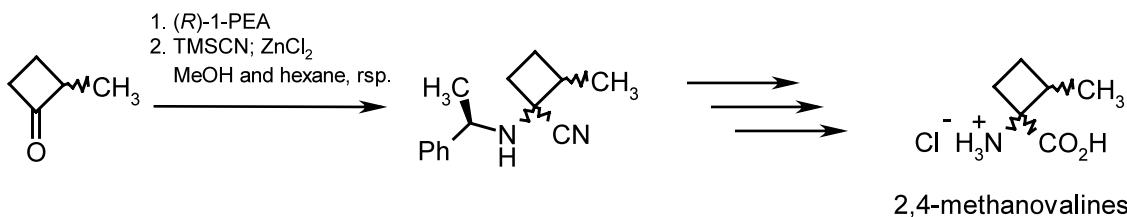


Cyclobutane amino acids (CBAAs): asymmetric Strecker synthesis of enantiopure *cis*- and *trans*-2,4-methanovalines

Tetrahedron: Asymmetry 14 (2003) 497

Franz-J. Volk, Marita Wagner and August W. Frahm*

Lehrstuhl für Pharmazeutische Chemie, Albert-Ludwigs-Universität, Albertstraße 25, D-79104 Freiburg, Germany



Enantioselective synthesis of arylmethoxyacetic acid derivatives

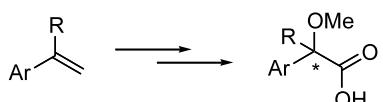
Tetrahedron: Asymmetry 14 (2003) 503

F. Javier Moreno-Dorado,^a Francisco M. Guerra,^a María J. Ortega,^b Eva Zubía^b and Guillermo M. Massanet*,^a

^aDepartamento de Química Orgánica, Facultad de Ciencias, Universidad de Cádiz, Apartado 40, 11510 Puerto Real, Cádiz, Spain

^bDepartamento de Química Orgánica, Facultad de Ciencias del Mar y Ambientales, Universidad de Cádiz, Apartado 40, 11510 Puerto Real, Cádiz, Spain

The preparation of several arylmethoxyacetic acids by a sequence of asymmetric dihydroxylation and further oxidation of the resulting glycol with TEMPO/NaClO/NaClO₂ is described. The scope and limitations of the reaction are discussed.

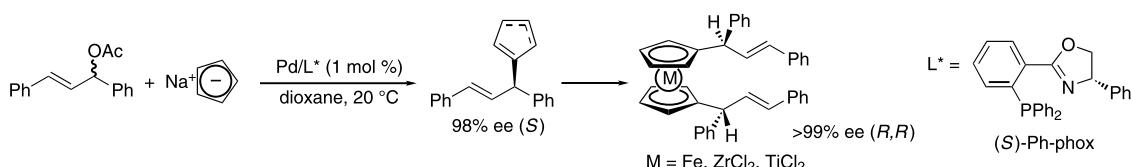


Palladium-catalyzed asymmetric allylic substitution with a cyclopentadienide: asymmetric synthesis of metallocenes

Tetrahedron: Asymmetry 14 (2003) 511

Toshimasa Suzuki, Motoi Kawatsura, Atsushi Okada and Tamio Hayashi*

Department of Chemistry, Graduate School of Science, Kyoto University, Sakyo, Kyoto 606-8502, Japan



An improved procedure for the asymmetric aldol reaction of the titanium enolate of an *N*₃-propionyl-3,4,5,6-tetrahydro-2*H*-1,3,4-oxadiazin-2-one

Tetrahedron: Asymmetry 14 (2003) 517

David M. Casper and Shawn R. Hitchcock*

Department of Chemistry, Illinois State University, Normal, IL 61790-4160, USA

An improved procedure for the asymmetric aldol reaction of the titanium enolate of an *N*₃-propionyl-3,4,5,6-tetrahydro-2*H*-1,3,4-oxadiazin-2-one.

