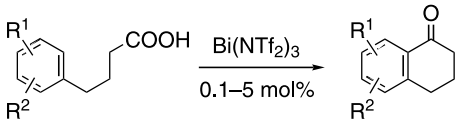
Synthesis of 1-tetralones by intramolecular Friedel–Crafts reaction of 4-arylbutyric acids using Lewis acid catalysts

Tetrahedron Letters 44 (2003) 4007

Dong-Mei Cui, Masato Kawamura, Shigeru Shimada,* Teruyuki Hayashi and Masato Tanaka

National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba Central 5, Tsukuba, Ibaraki 305-8565, Japan

Cyclization of 4-arylbutyric acids efficiently proceeded in the presence of Lewis acid catalysts such as $Bi(NTf_2)_3$ and $M(OTf)_3$ (M = Bi, Ga, In and rare-earth metals) to form 1-tetralones in high yields.

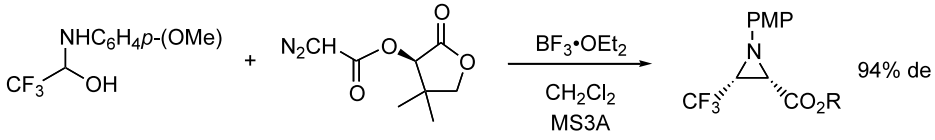


Stereoselective synthesis of CF_3-substituted aziridines by Lewis acid-mediated aziridination of aldimines with diazoacetates

Tetrahedron Letters 44 (2003) 4011

Takahiko Akiyama,* Satoshi Ogi and Kohei Fuchibe

Department of Chemistry, Faculty of Science, Gakushuin University, 1-5-1, Mejiro, Toshima-ku, Tokyo 171-8588, Japan

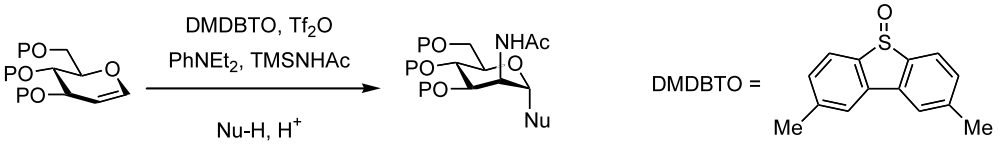


*C*2-Acetamidomannosylation. Synthesis of 2-*N*-acetylamino-2-deoxy-α-D-mannopyranosides with glucal donors

Tetrahedron Letters 44 (2003) 4015

Jing Liu, Valeria Di Bussolo and David Y. Gin*

Department of Chemistry, University of Illinois at Urbana-Champaign, Urbana, IL 61801, USA

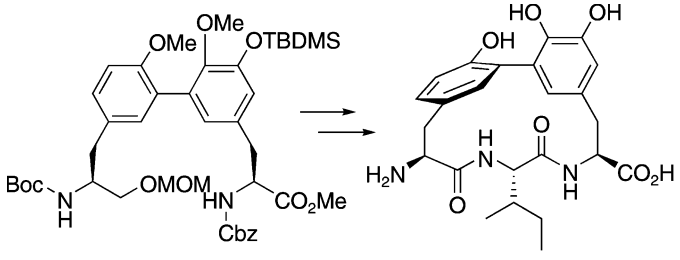


Synthesis of the (*S*,*S*,*S*)-diastereomer of the 15-membered biaryl ring system of RP 66453

Tetrahedron Letters 44 (2003) 4019

Paul J. Krenitsky and Dale L. Boger*

Department of Chemistry and The Skaggs Institute for Chemical Biology, The Scripps Research Institute, 10550 North Torrey Pines Road, San Diego, CA 92037, USA



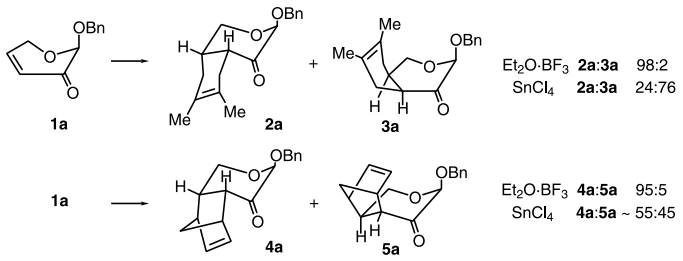
Tetrahedron Letters 44 (2003) 4023

Influence of Lewis acids on the facial selectivity in cycloadditions of sugar-derived dihydropyranones

Christian A. Iriarte Capaccio and Oscar Varela*

CIHIDECAR-CONICET, Departamento de Química Orgánica, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Ciudad Universitaria, Pabellón II, 1428 Buenos Aires, Argentina

The Lewis acid catalyst has a remarkable influence on the stereochemical course of Diels–Alder cycloadditions of sugar-derived 2-alkoxydihydropyranones.

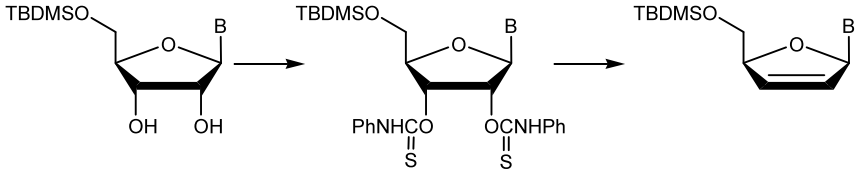


Tetrahedron Letters 44 (2003) 4027

Radical-based transformation of vicinal diols to olefins via thioxocarbamate derivatives: a simple approach to 2′,3′-didehydro-2′,3′-dideoxynucleosides

Makoto Oba, Mitsuteru Suyama, Atsushi Shimamura and Kozaburo Nishiyama*

Department of Material Science and Technology, Tokai University, 317 Nishino, Numazu, Shizuoka 410-0395, Japan



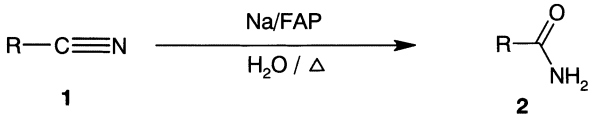
Tetrahedron Letters 44 (2003) 4031

Efficient hydration of nitriles to amides catalysed by sodium nitrate modified fluorapatite

Abderrahim Solhy,[a] Abdellatif Smahi,[a] Hanane El Badaoui,[a] Brahim Elaabar,[a] Abderrahim Amoukal,[a] Abdellatif Tikad,[a] Saïd Sebti[a,*] and D. J. Macquarrie[b]

[a]*Laboratoire de Chimie Organique Appliquée et Catalyse, Université Hassan II, Faculté des Sciences Ben M'Sik B.P. 7955, 20702 Casablanca, Morocco*

[b]*Department of Chemistry, University of York, Heslington, York YO10 5DD, UK*



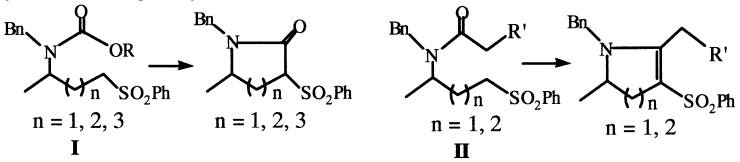
Tetrahedron Letters 44 (2003) 4035

Synthesis of lactams and other nitrogen heterocycles by intramolecular cyclizations of carbamates and acyl derivatives of aminosulfones

Nora M. Hernandez, Melina J. Sedano, Hollie K. Jacobs and Aravamudan S. Gopalan*

Department of Chemistry and Biochemistry, New Mexico State University, Las Cruces, NM 88003-8001, USA

The carbamate and *N*-acyl derivatives of aminosulfones of the type **I** and **II** underwent intramolecular cyclization with LHMDS to give lactams and substituted dihydropyrrolidines in good yields.



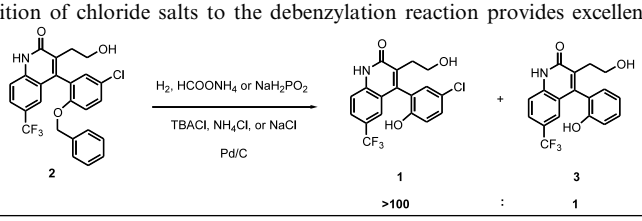
Tetrahedron Letters 44 (2003) 4041

Selective removal of a benzyl protecting group in the presence of an aryl chloride under gaseous and transfer hydrogenolysis conditions

Jun Li,* Steve Wang, Gerard A. Crispino, Karen Tenhuisen, Ambarish Singh and John A. Grosso

Process Research & Development, Pharmaceutical Research Institute, Bristol-Myers Squibb Co., PO Box 191, New Brunswick, NJ 08903-0191, USA

Selective removal of a benzyl protecting group in the presence of an aryl chloride using Pd/C under gaseous and transfer hydrogenolysis conditions is described. The addition of chloride salts to the debenzylation reaction provides excellent selectivity.

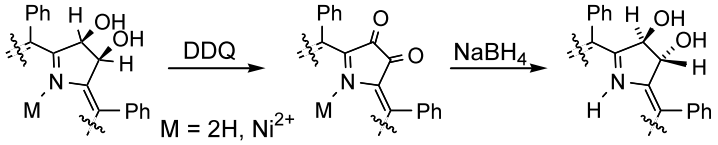


Tetrahedron Letters 44 (2003) 4045

Oxidation of *meso*-tetraphenyl-2,3-dihydroxychlorin: simplified synthesis of β,β′-dioxochlorins

Heather W. Daniell,[a] Suzanna C. Williams,[a] Hilary A. Jenkins[b] and Christian Brückner[a,*]

[a]*Department of Chemistry, University of Connecticut, Storrs, CT 06269-3060, USA*
[b]*X-Ray Diffraction Facility, Department of Chemistry, Saint Mary's University, Halifax, NS B3H 3C3, Canada*

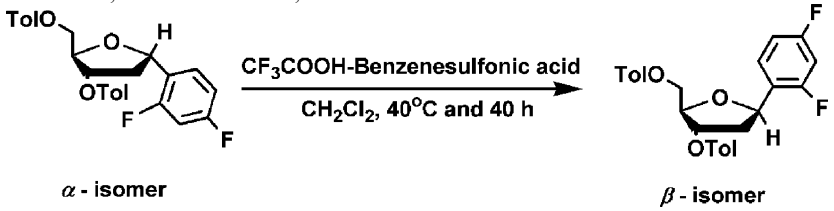


Tetrahedron Letters 44 (2003) 4051

Novel epimerization of aromatic *C*-nucleosides with electron-withdrawing substituents with trifluoroacetic acid–benzenesulfonic acid using mild conditions

Yu Lin Jiang and James T. Stivers*

Department of Pharmacology and Molecular Sciences, Johns Hopkins University School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205-2185, USA

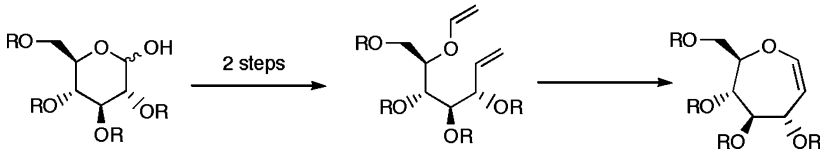


Tetrahedron Letters 44 (2003) 4057

Carbohydrate-based oxepines: ring expanded glycals for the synthesis of septanose saccharides

Mark W. Peczuh* and Nicole L. Snyder

Department of Chemistry, The University of Connecticut, 55 North Eagleville Road, Storrs, CT 06269-3060 USA

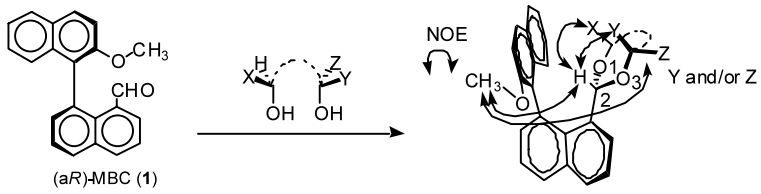


Tetrahedron Letters 44 (2003) 4063

NMR determination of the absolute configuration of chiral 1,2-and 1,3-diols

Hiroki Fukui, Yukiharu Fukushi* and Satoshi Tahara

Graduate School of Agriculture, Hokkaido University, Kita-Ku, 060-8589 Sapporo, Hokkaido, Japan

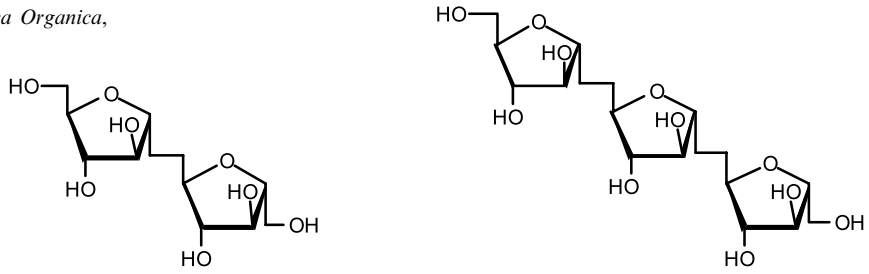


Tetrahedron Letters 44 (2003) 4067

A new synthetic approach to mycobacterial cell wall α-(1→5)-D-arabinofuranosyl *C*-oligosaccharides

Alessandro Dondoni* and Alberto Marra*

Dipartimento di Chimica, Laboratorio di Chimica Organica, Università di Ferrara, Via L. Borsari 46, I-44100 Ferrara, Italy



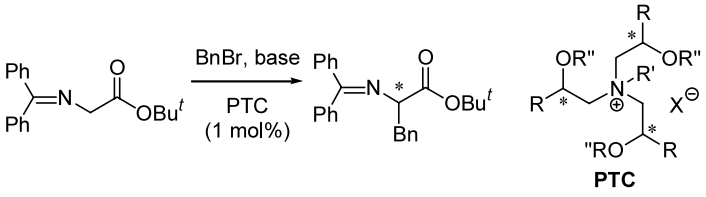
Tetrahedron Letters 44 (2003) 4073

Enantioselective alkylation using a new C_3 symmetric amine-based chiral phase-transfer catalyst

Nobuyuki Mase, Takahiro Ohno, Naoki Hoshikawa, Kazuhiro Ohishi, Hironao Morimoto, Hidemi Yoda and Kunihiko Takabe*

Department of Molecular Science, Faculty of Engineering, Shizuoka University, 3-5-1 Johoku, Hamamatsu 432-8561, Japan

Alkylation of Schiff base under mild phase-transfer conditions using the chiral PTC (1 mol%) provided the product with up to 58% enantiomeric excess.

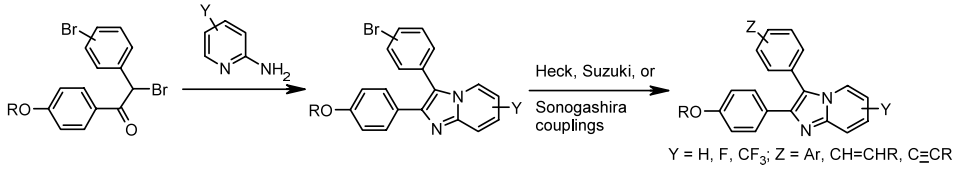


Tetrahedron Letters 44 (2003) 4077

New synthetic approaches to estrogen receptor modulators: imidazo[1,2-*a*]pyridines

Hari S. Patel, James A. Linn, David H. Drewry, Daniel A. Hillesheim, William J. Zuercher and William J. Hoekstra*

Discovery Research Chemistry, GlaxoSmithKline, Research Triangle Park, NC 27709-3398, USA

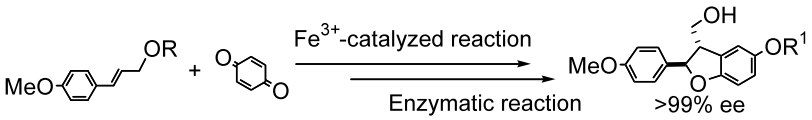


Tetrahedron Letters 44 (2003) 4081

Synthesis of optically active 2,3-dihydrobenzofuran derivatives through a combination strategy of iron(III)-catalyzed reaction and enzymatic reaction

Toshiyuki Itoh,* Kimio Kawai, Shuichi Hayase and Hiroyuki Ohara

Department of Materials Science, Faculty of Engineering, Tottori University, Tottori 680-8552, Japan

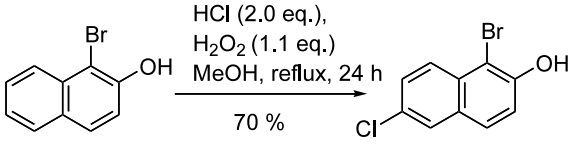


Tetrahedron Letters 44 (2003) 4085

Environmentally benign chlorination and bromination of aromatic amines, hydrocarbons and naphthols

Punita V. Vyas, Anjani K. Bhatt, Gadde Ramachandraiah and Ashutosh V. Bedekar*

Central Salt and Marine Chemicals Research Institute, G.B. Road, Bhavnagar 364002, India

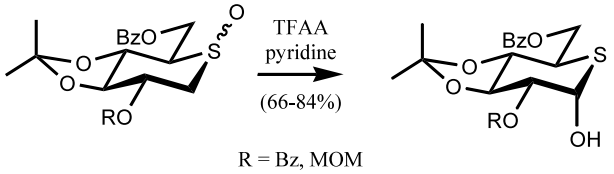


Tetrahedron Letters 44 (2003) 4089

Pummerer rearrangement of 1-deoxy-5-thioglucopyranose oxides; novel synthesis of 5-thioglucopyranose derivatives

Hiroko Matsuda,[a] Junji Fujita,[a] Yasuharu Morii,[a] Masaru Hashimoto,[a,*] Toshikatsu Okuno[a] and Kimiko Hashimoto[b]

[a]*Faculty of Agriculture and Life Science, Hirosaki University, 3 Bunkyo-Cho, Hirosaki, Aomori 036-8561, Japan*
[b]*Biochemical Resources Laboratory, Plant Science Center, RIKEN, 2-1, Hirosawa, Wako-shi, Saitama, 351-0198, Japan*



R = Bz, MOM

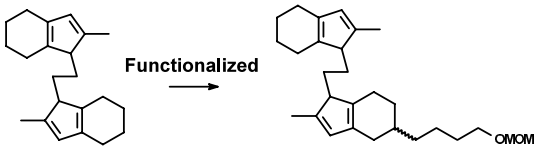
Tetrahedron Letters 44 (2003) 4095

Synthesis of a novel ethylene-bis(tetrahydroindenyl) ligand containing a functionalized four-carbon tether

Anthony P. Panarello and Johannes G. Khinast*

Department of Chemical and Biochemical Engineering, 98 Brett Road, Piscataway, NJ 08854, USA

Functionalized ethylene-bis(2-methyl-tetrahydroindenyl) ligand.



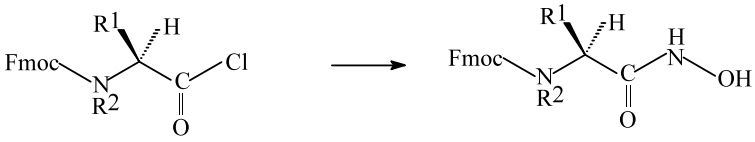
Tetrahedron Letters 44 (2003) 4099

Direct synthesis of Fmoc protected amino acid hydroxamates from acid chlorides mediated by magnesium oxide

Ganga-Ramu Vasanthakumar and Vommina V. Suresh Babu*

Department of Studies in Chemistry, Central College Campus, Dr. B. R. Ambedkar Veedhi, Bangalore University, Bangalore 560 001, India

A simple and efficient synthesis of Fmoc protected amino acid hydroxamates using Fmoc-amino acid chlorides and magnesium oxide is described.

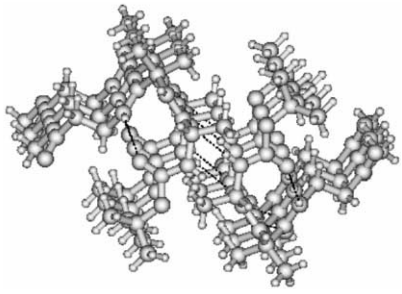


Tetrahedron Letters 44 (2003) 4103

A synthetic tripeptide as a novel organo-gelator: a structural investigation

Samir Kumar Maji,[a] Sudip Malik,[b] Michael G. B. Drew,[c] Arun K. Nandi[b,*] and Arindam Banerjee[a,*]

[a]*Department of Biological Chemistry, Indian Association for the Cultivation of Science, Jadavpur, Kolkata 700032, India*
[b]*Polymer Science Unit, Indian Association for the Cultivation of Science, Jadavpur, Kolkata 700032, India*
[c]*Department of Chemistry, The University of Reading, Whiteknights, Reading RG6 6AD, UK*

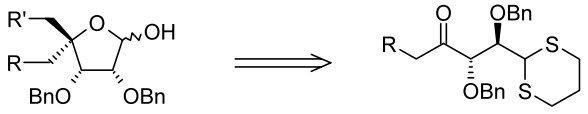


Tetrahedron Letters 44 (2003) 4109

Stereoselective synthesis of 4-*C*-methyl-2,3,5-tri-*O*-benzyl-D-ribofuranose and 4-*C*-methyl-2,3,5-tri-*O*-benzyl-L-lyxofuranose

Serge H. Boyer,* Bheemarao G. Ugarkar and Mark D. Erion

Chemistry Department, Metabasis Therapeutics, Inc., 9390 Towne Centre Dr., San Diego, CA 92121, USA



8a, R=OBn; R'=H
8b, R=H; R'=OBn

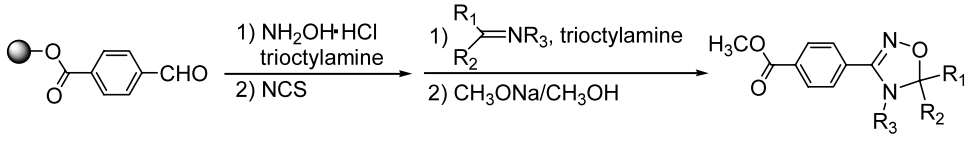
3a, R=OBn
3b, R=H

Tetrahedron Letters 44 (2003) 4113

Parallel synthesis of 4,5-dihydro-1,2,4-oxadiazoles using soluble polymer support

Xu-Feng Lin, Jian Zhang and Yan-Guang Wang*

Department of Chemistry, Zhejiang University, Hangzhou 310027, PR China

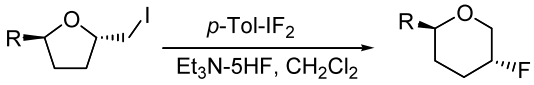


Tetrahedron Letters 44 (2003) 4117

Fluorinative ring-expansion of cyclic ethers using *p*-iodotoluene difluoride. Stereoselective synthesis of fluoro cyclic ethers

Tomotake Inagaki, Yutaka Nakamura, Masanori Sawaguchi, Norihiko Yoneda, Shinichi Ayuba and Shoji Hara*

Division of Molecular Chemistry, Graduate School of Engineering, Hokkaido University, Sapporo 060-8628, Japan

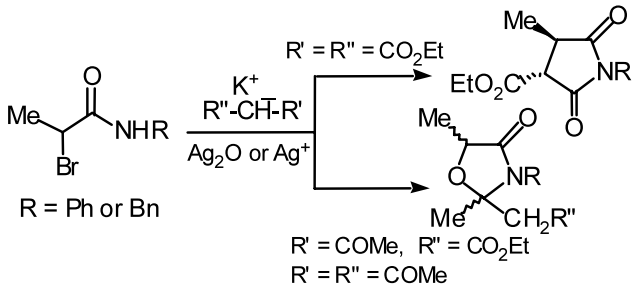


Tetrahedron Letters 44 (2003) 4121

Reactions of 2-bromopropanamides with conjugated bases of representative β-dicarbonyl compounds. Synthesis of 2,5-dioxopyrrolidines and oxazolidine-4-ones

Paolo Marchetti

Dipartimento di Scienze Farmaceutiche, Via Fossato di Mortara 19, I-44100 Ferrara, Italy



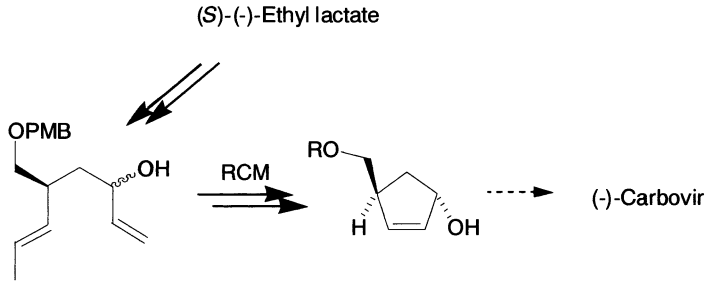
Tetrahedron Letters 44 (2003) 4125

Enantioselective synthesis of the carbocyclic moiety of (−)-carbovir

Emmanuel Roulland, Claude Monneret and Jean-Claude Florent*

UMR 176 CNRS-Institut Curie, Section Recherche, 26 rue d'Ulm, 75248 Paris Cedex 05, France

An application of the ring closure metathesis reaction (RCM) to the enantioselective construction of a cyclopentenol precursor of carbovir is described.

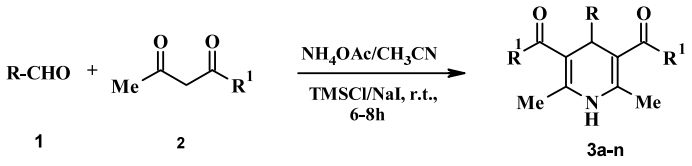


Tetrahedron Letters 44 (2003) 4129

A novel TMSI-mediated synthesis of Hantzsch 1,4-dihydropyridines at ambient temperature

Gowravaram Sabitha,* G. S. Kiran Kumar Reddy, Ch. Srinivas Reddy and J. S. Yadav

Organic Chemical Sciences, Indian Institute of Chemical Technology, Hyderabad 500 007, India

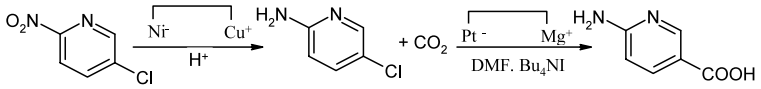


Tetrahedron Letters 44 (2003) 4133

Electroorganic synthesis of 6-aminonicotinic acid from 2-amino-5-chloropyridine

R. Ramesh Raju, S. Krishna Mohan and S. Jayarama Reddy*

Electrochemical Research Laboratories, Department of Chemistry, Sri Venkateswara University, Tirupati 517502, India



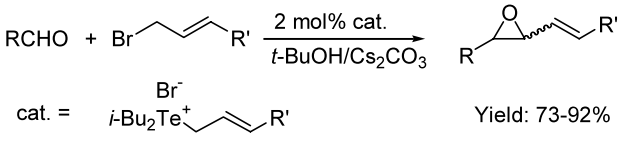
Tetrahedron Letters 44 (2003) 4137

An efficient catalytic ylide route to vinyl epoxides

Kai Li, Zheng-Zheng Huang and Yong Tang*

State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, 354 Fenglin Lu, Shanghai 200032, China

The ylide epoxidation of aldehydes catalyzed by telluronium salts provides a simple and extremely efficient route to vinyl epoxides in excellent yields.



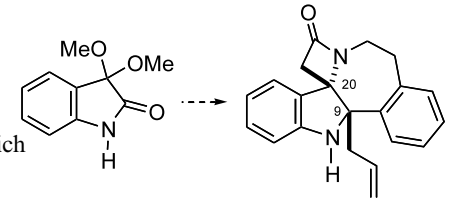
Tetrahedron Letters 44 (2003) 4141

Preliminary feasibility studies on total synthesis of the unusual marine bryozoan alkaloids chartellamide A and B

Joanne L. Pinder and Steven M. Weinreb*

Department of Chemistry, The Pennsylvania State University, University Park, PA 16802, USA

A strategy for synthesis of the chartellamide marine alkaloids has been tested in a model leading to the polycyclic ring system of the natural product, but which unfortunately does not provide the requisite C-9,20 relative stereochemistry.

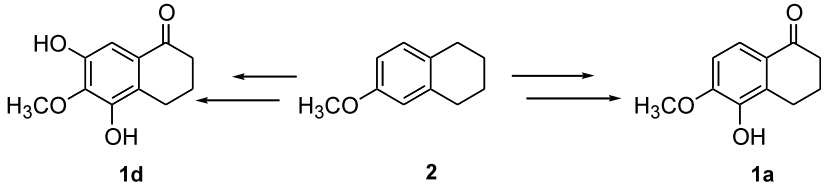


Tetrahedron Letters 44 (2003) 4145

Synthesis of methoxy and hydroxy containing tetralones: versatile intermediates for the preparation of biologically relevant molecules

Anjan Ghatak, James M. Dorsey, Charles M. Garner and Kevin G. Pinney*

Department of Chemistry and Biochemistry, and The Center for Drug Discovery, Baylor University, PO Box 97348, Waco, TX 76798-7348, USA

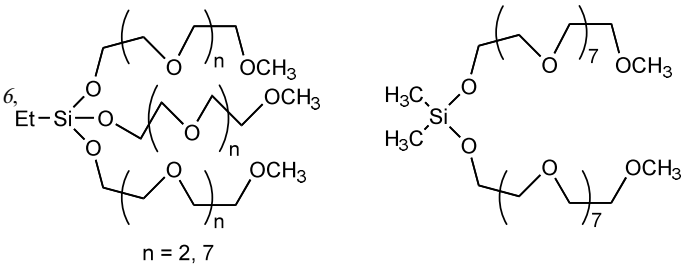


Tetrahedron Letters 44 (2003) 4149

Silicon polypodands: powerful metal cation complexing agents and solid–liquid phase-transfer catalysts of new generation

Angelamaria Maia,[a,*] Dario Landini,[a] Boguslawa Leska[b] and Grzegorz Schroeder[b]

[a]*Istituto di Scienze e Tecnologie Molecolari (ISTM) del CNR and Dipartimento di Chimica Organica e Industriale dell'Università, Via C. Golgi 19, I-20133 Milano, Italy*
[b]*Faculty of Chemistry, Adam Mickiewicz University, Grunwaldzka 6, 60-780 Poznan, Poland*



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Versatile solid-phase synthesis of secondary amines from alcohols. Development of an *N*-Boc-(*o*-nitrobenzene)sulfonamide linker

Miles S. Congreve,[a] Corinne Kay,[a,*] Jan J. Scicinski,[a] Steven V. Ley,[b] Geoffrey Williams,[c] Peter J. Murray,[c] Stephen C. McKeown[d] and Stephen P. Watson[d]

[a]*GlaxoSmithKline, Cambridge Chemistry Laboratory, Lensfield Road, Cambridge CB2 1EW, UK*
[b]*Department of Chemisty, Lensfield Road, Cambridge CB2 1EW, UK*
[c]*OSI Pharmaceuticals, Watlington Road, Cowley, Oxfordshire OX4 6LT, UK*
[d]*GlaxoSmithKline, Gunnels Wood Road, Stevenage, Hertfordshire SG1 2NY, UK*