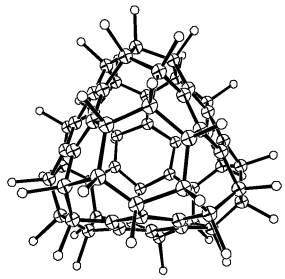
The structure of $C_{60}F_{36}$

Tetrahedron Letters 42 (2001) 7133

Andrei A. Gakh[a,*] and Albert A. Tuinman[b]

[a]*Chemical and Analytical Sciences Division, Oak Ridge National Laboratory, Oak Ridge, TN 37831-6197, USA*
[b]*Department of Chemistry, The University of Tennessee, Knoxville, TN 37996-1600, USA*



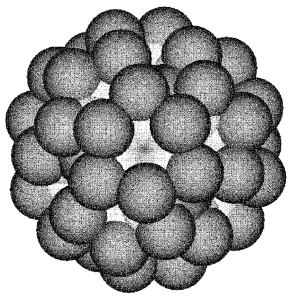
Detailed analyses of 1D and 2D ^{19}F NMR spectra confirm the theoretically predicted structure of the major most thermodynamically stable C_3 isomer of $C_{60}F_{36}$, which is distinctly tetrahedral in shape.

'Fluorine dance' on the fullerene surface

Tetrahedron Letters 42 (2001) 7137

Andrei A. Gakh[a,*] and Albert A. Tuinman[b]

[a]*Chemical and Analytical Sciences Division, Oak Ridge National Laboratory, Oak Ridge, TN 37831-6197, USA*
[b]*Department of Chemistry, the University of Tennessee, Knoxville, TN 37996-1600, USA*



A facile fluorine migration process ('fluorine dance') leads to the formation of the most thermodynamically stable isomers during the high temperature fluorination of [60]fullerene.

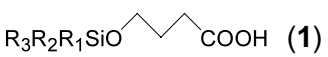
SOB as an alternate to BOB: findings from the preparation of injectable antifungal Sch 59884

Tetrahedron Letters 42 (2001) 7141

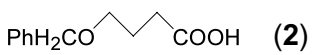
P. Renton, D. Gala* and G. M. Lee

Chemical Process Research & Development, Schering-Plough Research Institute, 1011 Morris Avenue, Union, NJ 07083, USA

The preparation and use of SOB (**1**) as an alternate to BOB (**2**) are reported.



(1)



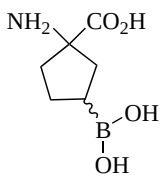
(2)

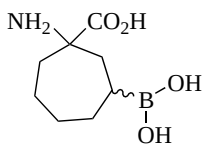
Synthesis of novel boron containing unnatural cyclic amino acids as potential therapeutic agents

Tetrahedron Letters 42 (2001) 7145

George W. Kabalka,* Bhaskar C. Das and Sasmita Das

Departments of Chemistry and Radiology, The University of Tennessee, Knoxville, TN 37996-1600, USA



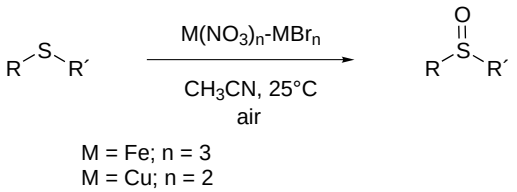


An efficient and selective aerobic oxidation of sulfides to sulfoxides catalyzed by $Fe(NO_3)_3$–$FeBr_3$

Tetrahedron Letters 42 (2001) 7147

Sandra E. Martín* and Laura I. Rossi

INFIQC, Departamento de Química Orgánica, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Ciudad Universitaria, 5000 Córdoba, Argentina



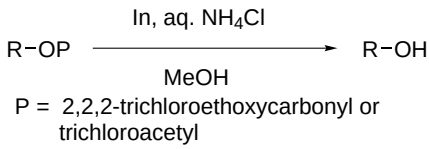
Indium-mediated chemoselective deprotection of trichloroethoxycarbonyl and trichloroacetyl groups

Tetrahedron Letters 42 (2001) 7153

Muralikrishna Valluri,[a] Tomoko Mineno,[a] Rama M. Hindupur[a] and Mitchell A. Avery[a,b,c,*]

[a]*Department of Medicinal Chemistry, School of Pharmacy, University of Mississippi, PO Box 1848, University, MS 38677-1848, USA*
[b]*Department of Chemistry, University of Mississippi, PO Box 1848, University, MS 38677-1848, USA*
[c]*National Center for National Products Research, University of Mississippi, PO Box 1848, University, MS 38677-1848,*

A new, mild, and chemoselective method for the deprotection of trichloroethoxycarbonyl and trichloroacetyl groups using indium metal is described.



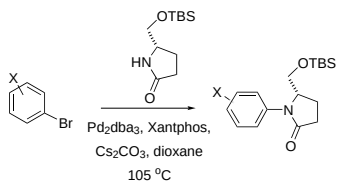
Synthesis of chiral *N*-aryl pyrrolidinones via a palladium-catalyzed cross-coupling reaction

Tetrahedron Letters 42 (2001) 7155

R. Greg Browning, Hossen Mahmud, Vivek Badarinarayana and Carl J. Lovely*

Department of Chemistry and Biochemistry, The University of Texas at Arlington, Arlington, TX 76019, USA

Non-racemic *N*-aryl lactams were prepared in an expedient fashion by the cross-coupling of an aryl bromide with a chiral lactam.

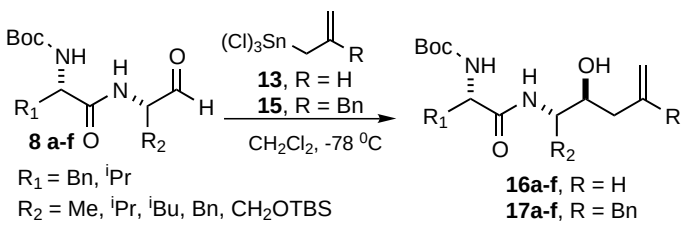


Allyltrichlorostannane additions to chiral dipeptide aldehydes

Tetrahedron Letters 42 (2001) 7159

Luiz C. Dias* and Edílson Ferreira

Instituto de Química-Universidade Estadual de Campinas/UNICAMP, CP 6154, CEP 13083-970, Campinas, SP, Brazil



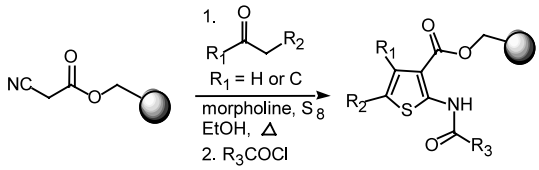
Synthesis of tetrasubstituted thiophenes on solid-support using the Gewald reaction

Tetrahedron Letters 42 (2001) 7181

Georgette M. Castanedo and Daniel P. Sutherlin*

Department of Bioorganic Chemistry, Genentech, Inc., One DNA Way, South San Francisco, CA 94080, USA

The Gewald reaction was performed on solid support. The scope and limitations of this reaction are discussed.

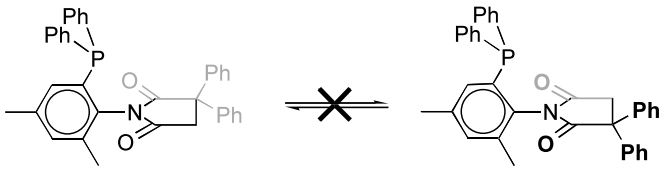


An axially chiral phosphine ligand based on restricted rotation in *N*-arylimides

Tetrahedron Letters 42 (2001) 7185

Yizhao Chen, Mark D. Smith and Ken D. Shimizu*

Department of Chemistry and Biochemistry, University of South Carolina, Columbia, SC 29208, USA



Improved acidolytic deprotection conditions for the Fmoc-based solid-phase synthesis of thioxo peptides

Tetrahedron Letters 42 (2001) 7189

Julia H. Miwa,* Laura A. Margarida and Ann E. Meyer

Department of Chemistry, Wellesley College, Wellesley, MA 02481, USA

Cleavage cocktails are compared to determine the extent of acidolytic cleavage of a synthetic thioxo peptide during deprotection.

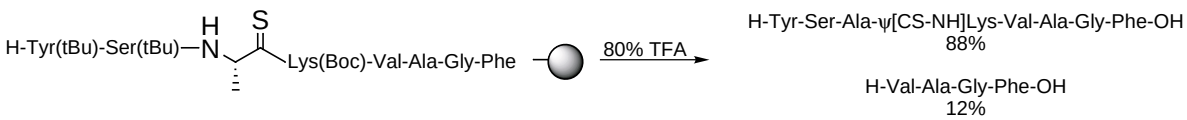


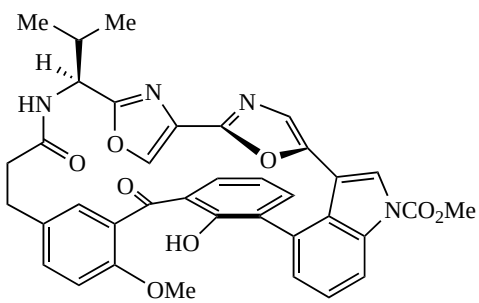
Photo-Fries rearrangement for the synthesis of the diazonamide macrocycle

Tetrahedron Letters 42 (2001) 7193

Philip Magnus* and Cyrille Lescop

Department of Chemistry and Biochemistry, University of Texas at Austin, Austin, TX 78712, USA

The macrolactam **1** was synthesized from its precursor benzoate ester by a high yielding photo-Fries rearrangement.



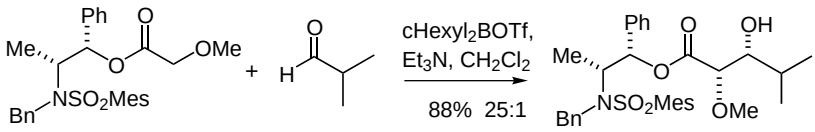
1

Tetrahedron Letters 42 (2001) 7197

Highly selective *syn* glycolate aldol reactions with boron enolates of Masamune norephedrine esters

Merritt B. Andrus,* B. B. V. Soma Sekhar, Timothy M. Turner and Erik L. Meredith

Brigham Young University, Department of Chemistry and Biochemistry, C100 BNSN, Provo, UT 84602-5700, USA

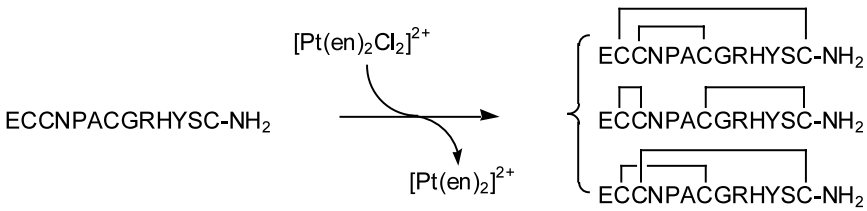


Tetrahedron Letters 42 (2001) 7203

Formation of multiple intramolecular disulfide bonds in peptides using the reagent *trans*-$[Pt(ethylenediamine)_2Cl_2]^{2+}$

Tiesheng Shi and Dallas L. Rabenstein*

Department of Chemistry, University of California, Riverside, CA 92521, USA

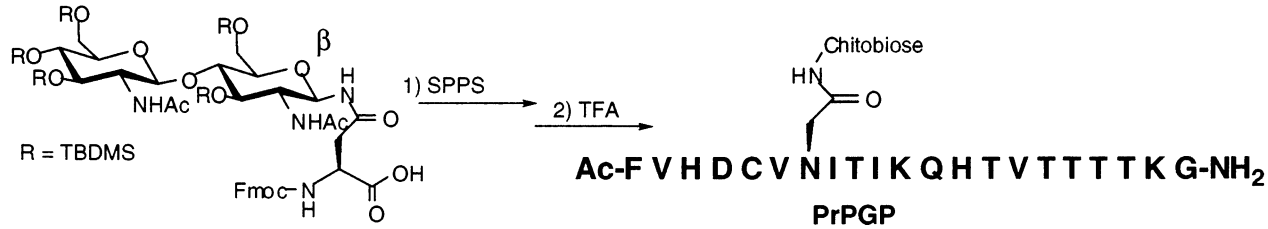


Tetrahedron Letters 42 (2001) 7207

Stereoselective synthesis of β-linked TBDMS-protected chitobiose-asparagine: a versatile building block for amyloidogenic glycopeptides

Carlos J. Bosques, Vincent W.-F. Tai and Barbara Imperiali*

Department of Chemistry, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, MA 02139, USA



Tetrahedron Letters 42 (2001) 7211

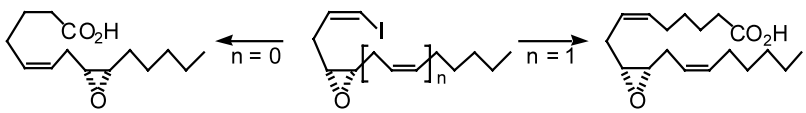
Stereospecific synthesis of EET metabolites via Suzuki–Miyaura coupling

J. R. Falck,[a,*] P. Srinagesh Kumar,[a] Y. Krishna Reddy,[a] Gang Zou[a] and Jorge H. Capdevila[b]

[a]*Departments of Biochemistry and Pharmacology, University of Texas Southwestern Medical Center, Dallas, TX 75390-9038, USA*

[b]*Departments of Medicine and Biochemistry, Vanderbilt University School of Medicine, Nashville, TN 37232, USA*

Bioactive, chain-shortened EET metabolites were prepared via Suzuki–Miyaura cross-couplings of *n*-alkylboronic acids with chiral vinyl iodides.



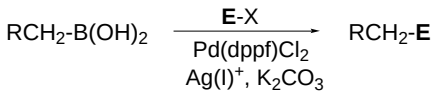
Ag(I)-promoted Suzuki–Miyaura cross-couplings of *n*-alkylboronic acids

Tetrahedron Letters 42 (2001) 7213

Gang Zou, Y. Krishna Reddy and J. R. Falck*

Departments of Biochemistry and Pharmacology, University of Texas Southwestern Medical Center, Dallas, TX 75390-9038, USA

Ag(I) salts significantly enhance palladium-catalyzed Suzuki–Miyaura cross-couplings of *n*-alkylboronic acids with a variety of aryl and alkenyl halides/triflates.

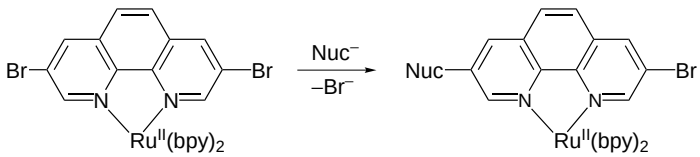


Lowering the symmetry of difunctionalized coordination compounds via nucleophilic aromatic substitutions

Tetrahedron Letters 42 (2001) 7217

Dennis J. Hurley and Yitzhak Tor*

Department of Chemistry and Biochemistry, University of California, San Diego, La Jolla, CA 92093-0358, USA



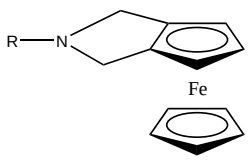
Unexpected synthesis of novel aza-[3]-ferrocenophanes

Tetrahedron Letters 42 (2001) 7221

Cheikh M. N'Diaye,[a] Lucien A. Maciejewski,[a] Jacques S. Brocard[a] and Christophe Biot[b,*]

[a]*Laboratoire de Catalyse, Groupe de Synthèse Organométallique, UPRESA 8010, Ecole Nationale Supérieure de Chimie de Lille, Bâtiment C7 Université des Sciences et Technologies, BP 108, 59652 Villeneuve d'Ascq Cedex, France*
[b]*UMR 8525 CNRS, Université de Lille II, Institut de Biologie et Institut Pasteur de Lille, 1 rue du Professeur Calmette, BP 447, 59021 Lille, France*

The reaction of primary amines with 1,2-ferrocenedicarboxaldehyde afforded new aza-[3]-1,2-ferrocenophanes.

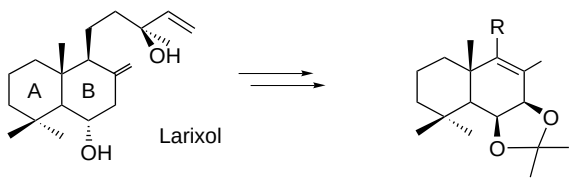


Synthesis of B-ring functionalised intermediates for the preparation of 1,9-dideoxy-forskolin derivatives

Tetrahedron Letters 42 (2001) 7225

Béatrice M. F. Lagnel,[a] Aede de Groot[b] and Christophe Morin[a,*]

[a]*Laboratoire d'Etudes Dynamiques et Structurales de la Sélectivité, associé au CNRS (UMR 5616), Université Joseph Fourier, BP 53, 38041 Grenoble, France*
[b]*Laboratory of Organic Chemistry, Wageningen University, Dreijenplein 8, 6703 HB Wageningen, The Netherlands*



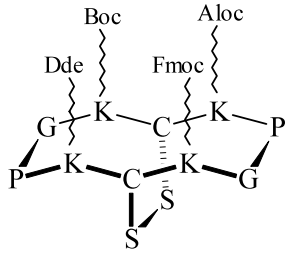
A useful bicyclic topological decapeptide template for solution-phase combinatorial synthesis of tetrapodal libraries

Tetrahedron Letters 42 (2001) 7261

Qingchai Xu,[a] Frans Borremans[a,*] and Bart Devreese[b]

[a]*Department of Organic Chemistry, University of Ghent, Krijgslaan 281, 9000 Ghent, Belgium*
[b]*Department of Biochemistry, University of Ghent, Ledeganckstraat 35, 9000 Ghent, Belgium*

The orthogonally protected bicyclic decapeptide template is successfully applied to the combinatorial synthesis *in solution* of a model library of 81 tetrapodal components.



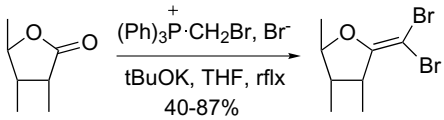
Facile dibromoolefination of lactones using bromomethylene-triphenylphosphorane

Tetrahedron Letters 42 (2001) 7265

Younès Lakhrissi, Claude Taillefumier, Françoise Chrétien and Yves Chapleur*

Groupe SUCRES, Unité Mixte de Recherche CNRS, Université Henri Poincaré Nancy 1, BP239 F-54506 Vandoeuvre Nancy, France

The reaction of **monobromo**methylenetriphenylphosphonium bromide and *t*BuOK with some sugar lactones afford the corresponding **dibromo** olefins in good to moderate yields. A tentative mechanism is proposed.



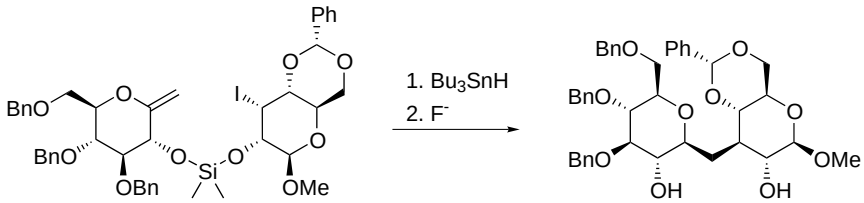
Selective radical synthesis of β-*C*-disaccharides

Tetrahedron Letters 42 (2001) 7269

Boris Vauzeilles and Pierre Sinaÿ*

Département de Chimie, UMR CNRS 8642, Ecole Normale Supérieure, 24 rue Lhomond, 75231 Paris Cedex 05, France

Several β-*C*-disaccharides have been selectively synthesized by intramolecular addition of a carbohydrate-derived radical onto an anomeric exomethylene group, followed by axial hydrogen addition.



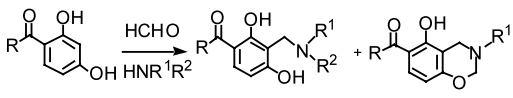
Regioselective Mannich reaction of phenolic compounds and its application to the synthesis of new chitosan derivatives

Tetrahedron Letters 42 (2001) 7273

Yoshihiko Omura,[b] Yoshitaka Taruno,[a] Yasuhiro Irisa,[a] Minoru Morimoto,[a] Hiroyuki Saimoto[a] and Yoshihiro Shigemasa[a,*]

[a]*Department of Materials Science, Faculty of Engineering, Tottori University, Koyama, Tottori 680-8552, Japan*
[b]*Omura Toryo Co. Ltd, 3-87 Chiyomi, Tottori 680-0911, Japan*

Various primary amines were reacted with resorcinols and HCHO to yield 2*H*-1,3-benzoxazine derivatives. Chitosan, a natural polyaminosaccharide, behaved similarly as a secondary amine to produce the acyclic side chain product.

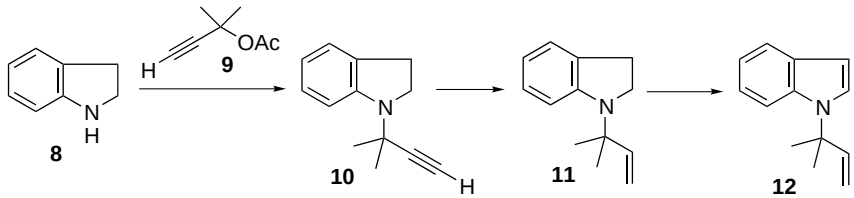


Synthetic studies of *N*-reverse prenylated indole. An efficient synthesis of antifungal indole alkaloids and *N*-reverse prenylated tryptophan

Tetrahedron Letters 42 (2001) 7277

Hideyuki Sugiyama, Fumiaki Yokokawa,* Toyohiko Aoyama and Takayuki Shioiri

Graduate School of Pharmaceutical Sciences, Nagoya City University, Tanabe-dori, Mizuho-ku, Nagoya 467-8603, Japan

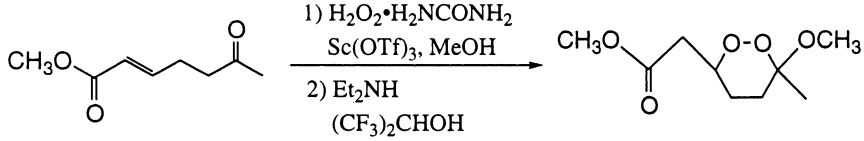


Facile construction of 6-carbomethoxymethyl-3-methoxy-1,2-dioxane, a core structure of spongean anti-malarial peroxides

Tetrahedron Letters 42 (2001) 7281

Nobutoshi Murakami,[a] Motoyuki Kawanishi,[a] Sawako Itagaki,[b] Toshihiro Horii[b] and Motomasa Kobayashi[a,*]

[a]*Graduate School of Pharmaceutical Sciences, Osaka University, 1-6 Yamada-oka, Suita, Osaka 565-0871, Japan*
[b]*Research Institute for Microbial Diseases, Osaka University, 3-1 Yamada-oka, Suita, Osaka 565-0871, Japan*



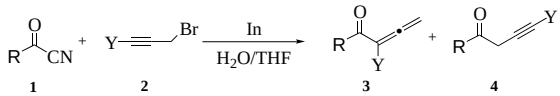
Indium-mediated highly regioselective reaction of prop-2-ynyl bromides with acyl cyanides in aqueous media: a convenient synthesis of allenic and propargylic ketones

Tetrahedron Letters 42 (2001) 7287

Byung-Woo Yoo,[a,*] Sung-Jae Lee,[a] Kwang-Hyun Choi,[a] Sam-Rok Keum,[a] Jae-Jung Ko,[a] Kyung-Il Choi[b] and Joong-Hyup Kim[b]

[a]*Department of Chemistry, Korea University, Chochiwon, Chungnam 339-700, South Korea*
[b]*Biochemicals Research Center, Korea Institute of Science and Technology, Cheongryang, Seoul 130-650, South Korea*

Indium-mediated reaction of acyl cyanides **1** with prop-2-ynyl bromides **2** in aqueous media occurs regioselectively to afford either allenic **3** or propargylic ketones **4** depending on the γ-substituent of the prop-2-ynyl bromide under the mild conditions.



1 **2** **3** **4**

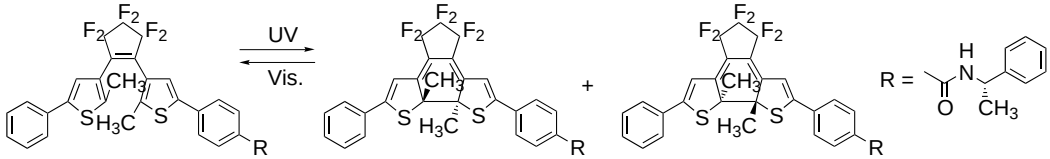
2a Y = H
2b Y = Me
2c Y = Ph

Diastereoselective cyclization of a diarylethene having a chiral *N*-phenylethylamide substituent in crystals

Tetrahedron Letters 42 (2001) 7291

Kenji Matsuda, Satoshi Yamamoto and Masahiro Irie*

Department of Chemistry and Biochemistry, Graduate School of Engineering, Kyushu University, and CREST, Japan Science and Technology Corporation, 6-10-1 Hakozaki, Higashi-ku, Fukuoka 812-8581, Japan



(*S*)-1a in the crystalline phase

(*S*,*R*,*R*)-1b 91%

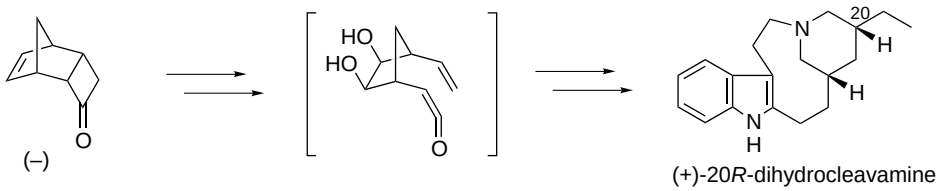
(*S*,*S*,*S*)-1b 9%

Tetrahedron Letters 42 (2001) 7311

A stereoselective synthesis of naturally occurring (+)-20*R*-dihydrocleavamine by photo-[2+2]-cycloreversion

Regina Mikie Kanada and Kunio Ogasawara*

Pharmaceutical Institute, Tohoku University, Aobayama, Sendai 980-8578, Japan

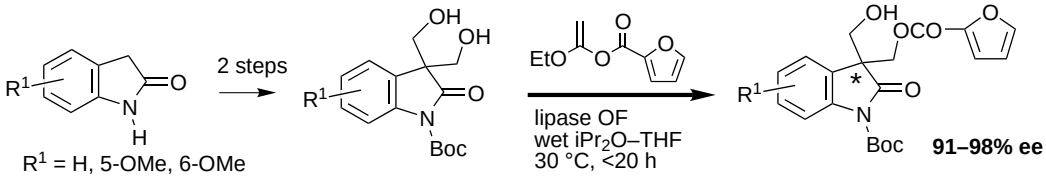


Tetrahedron Letters 42 (2001) 7315

Lipase-catalyzed enantioselective desymmetrization of prochiral 3,3-bis(hydroxymethyl)oxindoles

Shuji Akai, Toshiaki Tsujino, Tadaatsu Naka, Kouichi Tanimoto and Yasuyuki Kita*

Graduate School of Pharmaceutical Sciences, Osaka University 1-6, Yamadaoka, Suita, Osaka 565-0871, Japan



Tetrahedron Letters 42 (2001) 7319

Enzymic products of the 2,3-oxidosqualene analog having an ethyl residue at 10-position. First trapping of the trimethylcyclohexanone ring by lanosterol synthase

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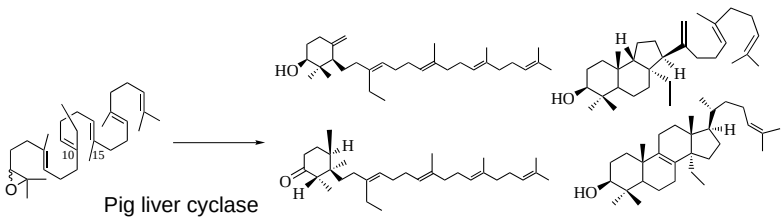

Tetrahedron Letters 42 (2001) 7325

1,4-Addition of chiral 2-propenylphosphonamide anions to α-substituted cyclopentenones: use in enantioselective syntheses of methyl dihydrojasmonates and methyl jasmonates

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The addition of chiral 2-propenylphosphonamide anions to α-substituted cyclopentenones afforded adducts in good yields and selectivities, which were subsequently ozonolysed leading to the synthesis of both enantiomers of methyl dihydrojasmonate and methyl jasmonate.