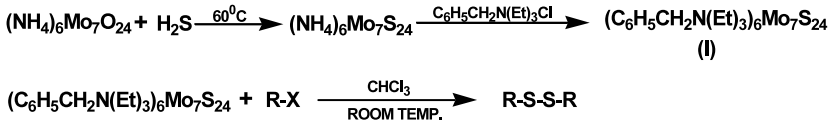
A new reagent for the efficient synthesis of disulfides from alkyl halides

Tetrahedron Letters 44 (2003) 887

Vivek Polshettiwar, Manisha Nivsarkar, Jyotiranjan Acharya and M. P. Kaushik*

Process Technology Development Division, Defence R & D Establishment, Jhansi Road, Gwalior 474002 (MP), India



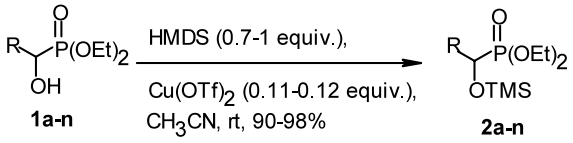
Copper triflate [Cu(OTf)$_2$] is an efficient and mild catalyst for the silylation of α-hydroxyphosphonates to α-trimethylsilyloxyphosphonates with HMDS at room temperature

Tetrahedron Letters 44 (2003) 891

Habib Firouzabadi,* Nasser Iranpoor,* Sara Sobhani, Soheila Ghassamipour and Zohreh Amoozgar

Department of Chemistry, Shiraz University, Shiraz 71454, Iran

A broad, adaptable, high yielding and convenient procedure for the fast conversion of various α-hydroxyphosphonates to α-trimethylsilyloxyphosphonates with HMDS catalyzed by copper triflate is described.



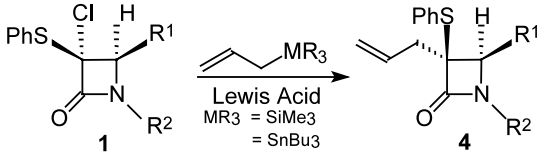
A facile Lewis acid-promoted allylation of azetidin-2-ones

Tetrahedron Letters 44 (2003) 895

S. S. Bari,* P. Venugopalan and Renu Arora

Department of Chemistry & Centre of Advanced Studies in Chemistry, Panjab University, Chandigarh 160014, India

The Lewis acid-catalyzed C-3 allylation of 3-phenylthio-azetidin-2-ones proceeds stereoselectively and in high yield.

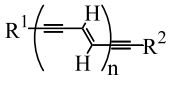


Synthesis of oligoenynes and oligomeric conjugated diacetylenes

Tetrahedron Letters 44 (2003) 899

Michael Polhuis, Cindy C. J. Hendrikx, Han Zuilhof* and Ernst J. R. Sudhölter*

Laboratory of Organic Chemistry, Wageningen University, Dreijenplein 8, 6703 HB, The Netherlands



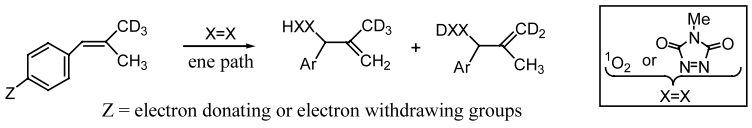
n = 1,2,3
R^1,R^2 = *t*-Butyl, *n*-Octyl, TMS

Tetrahedron Letters 44 (2003) 903

Electronic effects in the regioselectivity of the singlet oxygen and 4-methyl-1,2,4-triazoline-3,5-dione ene reactions with isobutenylarenes

Mariza N. Alberti, Georgios C. Vougioukalakis and Michael Orfanopoulos*

Department of Chemistry, University of Crete, 71409 Iraklion, Crete, Greece



Z = electron donating or electron withdrawing groups

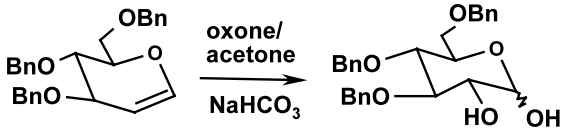
Tetrahedron Letters 44 (2003) 907

An efficient one step dihydroxylation of 1,2-glycals with oxone in acetone

Shikha Rani and Yashwant D. Vankar*

Department of Chemistry, Indian Institute of Technology Kanpur 208 016, India

A variety of glycals react with oxone in acetone to yield the corresponding 1,2-diols in fair to good yields.

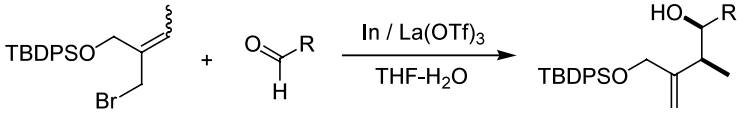


Tetrahedron Letters 44 (2003) 911

Indium-mediated allylation of carbonyl compounds with an allylic bromide in aqueous media: anomalous *syn*-diastereoselectivity regardless of allylic bromide geometry

Teck-Peng Loh,[a,*] Zheng Yin, Hong-Yan Song and Kee-Leng Tan

[a]*Department of Chemistry, National University of Singapore, 3 Science Drive 3, Singapore 117543, Singapore*



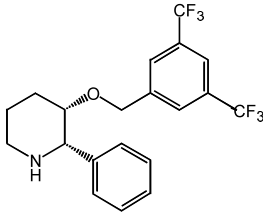
Tetrahedron Letters 44 (2003) 915

Stereoselective synthesis of L-733,060

G. Bhaskar and B. Venkateswara Rao*

Organic Division III, Indian Institute of Chemical Technology, Hyderabad 500 007, India

Enantioselective synthesis of L-733,060 was achieved using ring-closing metathesis.



1

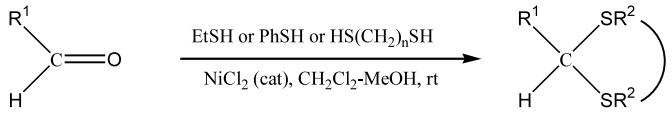
L-733,060

Tetrahedron Letters 44 (2003) 919

Nickel(II) chloride as an efficient and useful catalyst for chemoselective thioacetalization of aldehydes

Abu T. Khan,[a,*] Ejabul Mondal,[a] Priti R. Sahu[a] and Samimul Islam[b]

[a]*Department of Chemistry, Indian Institute of Technology, North Guwahati, Guwahati 781 039, India*
[b]*Department of Chemistry, Visva-Bharati, Santiniketan, West Bengal 731 235, India*

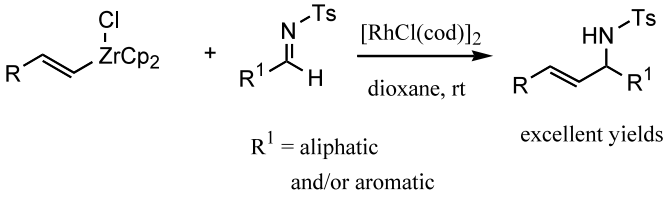


Tetrahedron Letters 44 (2003) 923

Rh(I)-catalyzed addition of alkenylzirconocene chlorides to aldimine derivatives

Akito Kakuuchi, Takeo Taguchi* and Yuji Hanzawa*

School of Pharmacy, Tokyo University of Pharmacy and Life Science, 1432-1 Horinouchi, Hachioji, Tokyo 192-0392, Japan

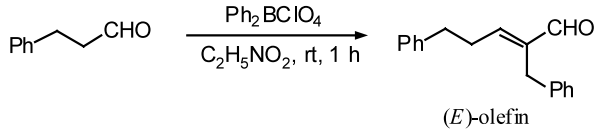


Tetrahedron Letters 44 (2003) 927

Diphenylboron perchlorate as an efficient catalyst for self- and cross-condensation reactions of aldehydes having α-active hydrogens

Syun-ichi Kiyooka,* Hiroshi Fujimoto, Masaaki Mishima, Shinjiro Kobayashi, Khabir Md. Uddin and Mizue Fujio

Institute of Fundamental Research for Organic Chemistry, Kyushu University, Higashi-ku, Fukuoka 812-8581, Japan

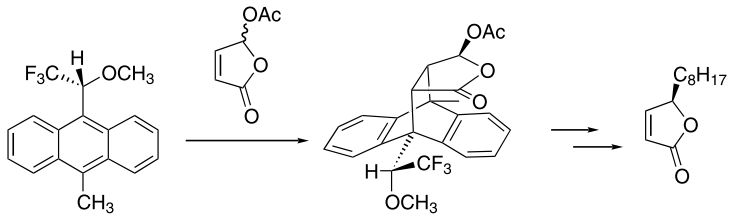


Tetrahedron Letters 44 (2003) 931

Cycloadditions of chiral anthracenes: effect of the trifluoromethyl group

Matthew S. Corbett, Xiang Liu, Amitav Sanyal and John K. Snyder*

Boston University, Department of Chemistry, Boston, MA 02215, USA



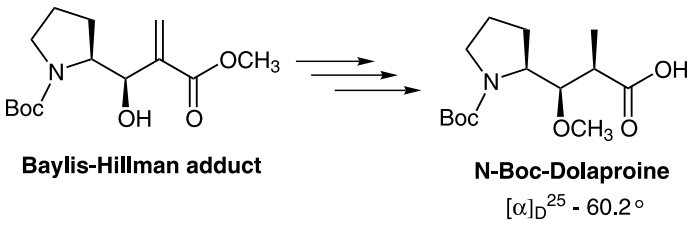
Tetrahedron Letters 44 (2003) 937

An easy and stereoselective synthesis of *N*-Boc-dolaproine via the Baylis–Hillman reaction

Wanda P. Almeida[a,b,*] and Fernando Coelho[c,*]

[a]*CREUPI, Espírito Santo do Pinhal, 13990-000-SP, Brazil*
[b]*Curso de Pós-Graduação em Biologia Celular e Estrutural, IB/Unicamp, PO Box 6109, 13084-971-Campinas-SP, Brazil*
[c]*DQO/IQ, UNICAMP, PO Box 6154, 13083-970-Campinas-SP, Brazil*

A simple and stereoselective approach for the total synthesis of *N*-Boc-dolaproine is described. The synthesis is based on the utilization of a Baylis–Hillman reaction and was accomplished in four steps with an overall yield of 27%.

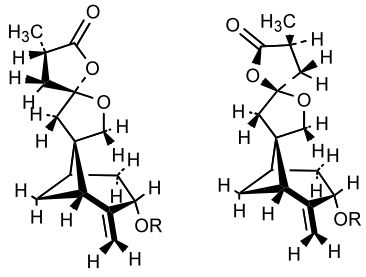


Tetrahedron Letters 44 (2003) 941

Absolute configuration of bioactive expansolides A and B from *Aspergillus fumigatus* Fresenius

Francisco A. Macías,[a,*] Rosa M. Varela,[a] Ana M. Simonet,[a] Horace G. Cutler,[b] Stephen J. Cutler[b] and Robert A. Hill[c]

[a]*Grupo de Alelopatía, Departamento de Química Orgánica, Universidad de Cádiz, Apdo. 40, Puerto Real (Cádiz), Spain*
[b]*Southern School of Pharmacy, Mercer University, 3001 Mercer University Drive, Atlanta, GA 30341-4155, USA*
[c]*HortResearch, Ruakura Research Centre, Ruakura, Hamilton, New Zealand*



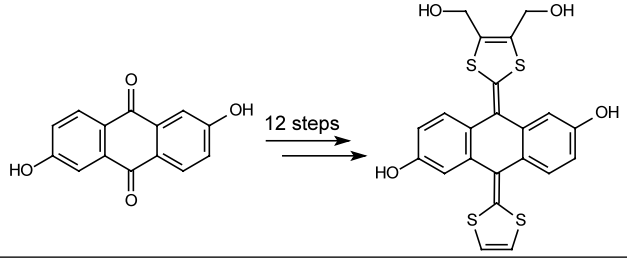
In addition to antafumicins A and B, and cytochalasin, the bioactive compounds expansolides A and B have been isolated from *Aspergillus fumigatus* Fresenius. Their absolute configuration has been established by using the modified Mosher's method. The bioactivity of all isolated compounds has been evaluated.

Tetrahedron Letters 44 (2003) 945

Synthesis of tetrahydroxy-π-extended tetrathiafulvalenes as new supramolecular redox building blocks

Marta C. Díaz, Beatriz Illescas and Nazario Martín*

Departamento de Química Orgánica, Facultad de Química, Universidad Complutense, E-28040 Madrid, Spain



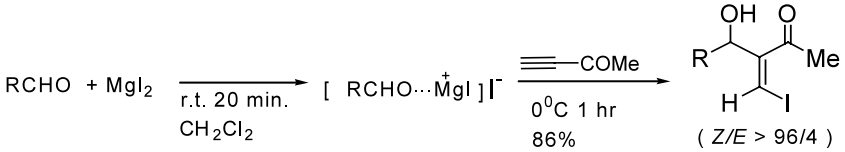
Tetrahedron Letters 44 (2003) 949

Stereoselective aldol coupling of α,β-acetylenic ketones promoted by MgI_2

Han-Xun Wei, Jiali Hu, David W. Purkiss and Paul W. Paré*

Department of Chemistry and Biochemistry, Texas Tech University, Lubbock, TX 79409, USA

A highly stereoselective synthesis of (*Z*)-β-iodovinyl ketone has been achieved with the tandem formation of C–C and C–I bonds in a three-component reaction. α,β-Acetylenic ketone is initially converted to an active β-iodo allenoate intermediate and then can be attacked by a variety of aldehydes to afford *Z*-selective Baylis–Hillman adducts in excellent yields.

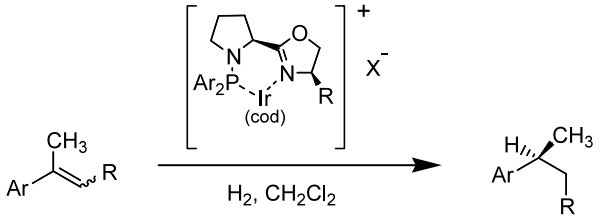


Tetrahedron Letters 44 (2003) 953

Asymmetric hydrogenation of aromatic olefins catalyzed by iridium complexes of proline derived phosphine–oxazoline ligands

Guopin Xu and Scott R. Gilbertson*

Department of Chemistry, Washington University, St. Louis, MO 63130, USA

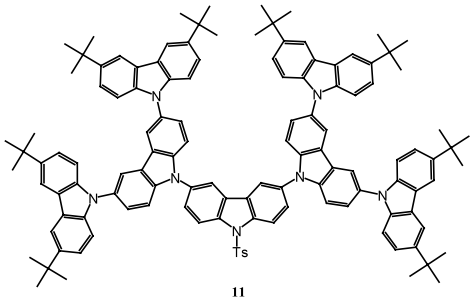


Tetrahedron Letters 44 (2003) 957

Synthesis of soluble oligocarbazole derivatives

Ahmed Hameurlaine and Wim Dehaen*

Laboratory of Organic Synthesis, Department of Chemistry, K. U. Leuven, Celestijnenlaan 200F, B-3001 Leuven, Belgium



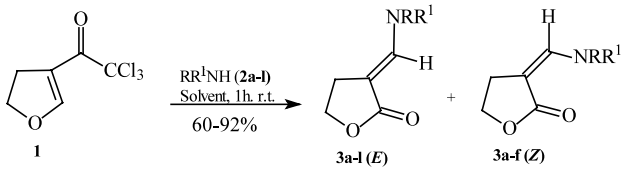
11

Tetrahedron Letters 44 (2003) 961

Convenient synthesis of 3-aminomethylenedihydrofuran-2-ones

Nilo Zanatta,* Rosemário Barichello, Mareni M. Pauletto, Helio G. Bonacorso and Marcos A. P. Martins

Núcleo de Química de Heterociclos (NUQUIMHE), Departamento de Química, Universidade Federal de Santa Maria, 97.105-900, Santa Maria, RS, Brazil



1 3a-l (*E*) 3a-f (*Z*)

Tetrahedron Letters 44 (2003) 965

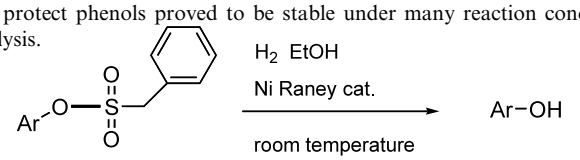
Benzylsulfonyl: a valuable protecting and deactivating group in phenol chemistry

Anne Briot,[a] Corinne Baehr,[b] Raymond Brouillard,[a] Alain Wagner[b,*] and Charles Mioskowski[b,*]

[a]*Laboratoire de Chimie des Polyphénols, UMR 7509 du CNRS, Institut Le Bel, Université Louis Pasteur, Faculté de Pharmacie, 74, route du Rhin, 67400 Illkirch, France*

[b]*Laboratoire de Synthèse Bioorganique, UMR 7514 du CNRS, Université Louis Pasteur, Faculté de Pharmacie, 74, route du Rhin, 67400 Illkirch, France*

The benzylsulfonyl (Bns) group used to protect phenols proved to be stable under many reaction conditions. The deprotection proceeds quantitatively using catalytic hydrogenolysis.



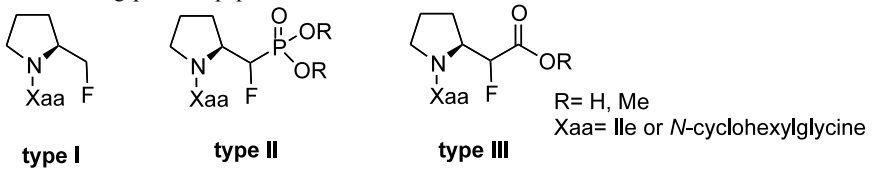
β-Fluorinated proline derivatives: potential transition state inhibitors for proline selective serine dipeptidases

Tetrahedron Letters 44 (2003) 969

Pieter Van der Veken, Kristel Senten, István Kertèsz, Achiel Haemers and Koen Augustyns*

Department of Medicinal Chemistry, University of Antwerp (UIA), Universiteitsplein 1, B-2610 Antwerp, Belgium

Three new types of β-fluorinated proline derivatives were synthesized as potential transition state inhibitors for proline selective serine dipeptidases. The fluorophosponate derived from protected proline was tested as a Wadsworth–Horner–Emmons reagent for the synthesis of fluoro-olefin-containing pseudodipeptides.



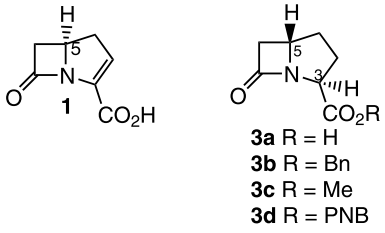
Convenient syntheses of (3*S*,5*S*)-carbapenam-3-carboxylates and their biosynthetic relevance

Tetrahedron Letters 44 (2003) 973

Barrie W. Bycroft,* Siri Ram Chhabra, Barrie Kellam and Paul Smith

School of Pharmaceutical Sciences, University of Nottingham, University Park, Nottingham NG7 2RD, UK

Facile syntheses of (3*S*,5*S*)-carbapenam-3-carboxylates **3b**–**d** are described and their biosynthetic relevance to the natural antibiotic carbapen-2-em-3-carboxylic acid **1** is discussed.

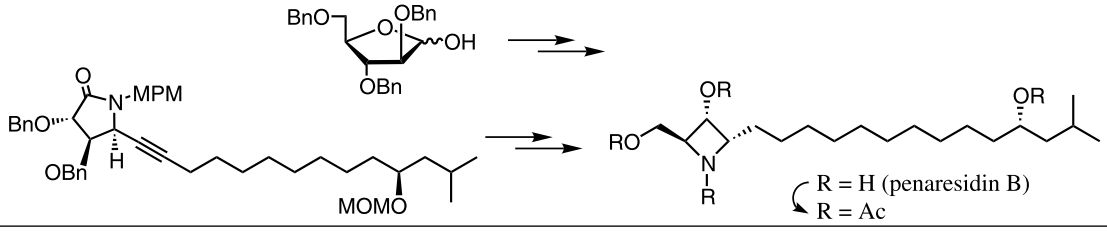


Novel and practical asymmetric synthesis of an azetidine alkaloid, penaresidin B

Tetrahedron Letters 44 (2003) 977

Hidemi Yoda,* Takuya Uemura and Kunihiko Takabe

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



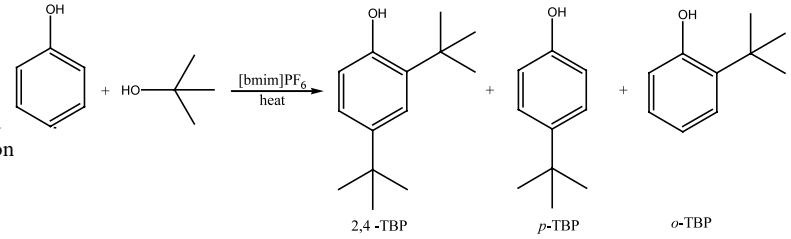
Selective alkylation of phenol with *tert*-butyl alcohol catalyzed by [bmim]PF_6

Tetrahedron Letters 44 (2003) 981

Hao-Yu Shen,* Zaher M. A. Judeh and Chi Bun Ching

Chemical and Process Engineering Centre, National University of Singapore, 10 Kent Ridge Crescent, Singapore 117576

Ionic liquid [bmim]PF_6 was used as a solvent for the alkylation of phenol with *tert*-butyl alcohol (TBA) and was found to catalyze this reaction with high conversion and good selectivity.

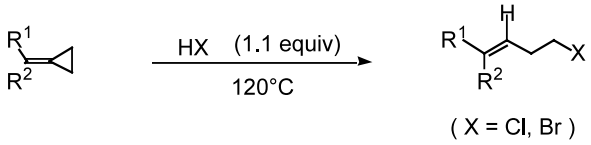


Tetrahedron Letters 44 (2003) 985

Addition of hydrogen halides to alkylidenecyclopropanes: a highly efficient and stereoselective method for the preparation of homoallylic halides

Amal I. Siriwardana, Itaru Nakamura and Yoshinori Yamamoto*

Department of Chemistry, Graduate School of Science, Tohoku University, Sendai 980-8578, Japan

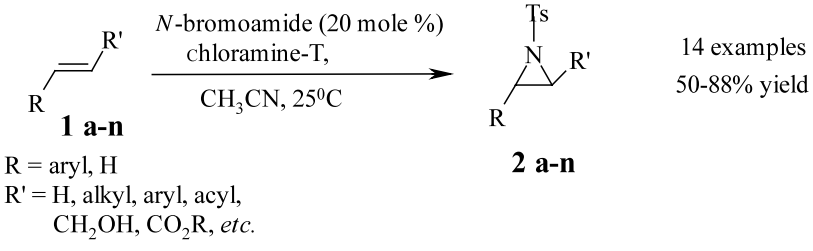


Tetrahedron Letters 44 (2003) 989

N-Bromoamides as versatile catalysts for aziridination of olefins using chloramine-T

Vinay V. Thakur and A. Sudalai*

Process Development Division, National Chemical Laboratory, Pashan Road, Pune 411 008, India



R = aryl, H
R' = H, alkyl, aryl, acyl, CH_2OH, CO_2R, *etc.*

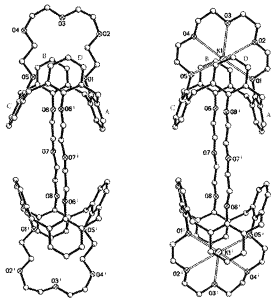
Tetrahedron Letters 44 (2003) 993

Complexation chemistry. Double- and multi-1,3-alternate-calixcrowns

Sung Kuk Kim,[a] Jacques Vicens,[b,*] Ki-Min Park,[c] Shim Sung Lee[c] and Jong Seung Kim[a,*]

[a]*Department of Chemistry, Konyang University, Nonsan 320-711, South Korea*
[b]*ECPM, 27, rue Becquerel, F-67087 Strasbourg, Cédex 2, France*
[c]*Department of Chemistry, Gyeongsang National University, Chinju 660-701, South Korea*

Metal ion complexation behavior in calix[4]crown multimers (*mono*, *di*, *trimer*) have been investigated through X-ray crystallography, two-phase extraction, and ^{1}H NMR measurement.



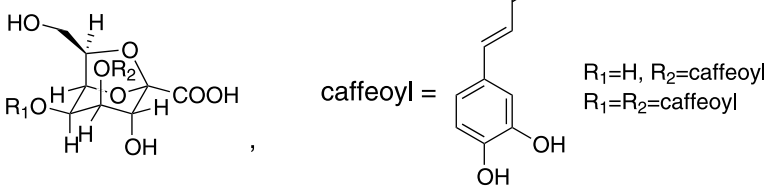
Tetrahedron Letters 44 (2003) 999

Novel octulosonic acid derivatives in the composite *Smallanthus sonchifolius*

Makiko Takenaka* and Hiroshi Ono

National Food Research Institute, 2-1-12 Kannondai, Tsukuba, Ibaraki 305-8642, Japan

Two novel octulosonic acid derivatives with a 6,8-dioxabicyclo[3.2.1]octane skeleton that are major water-soluble phenolic compounds were found in the roots of yacon (*Smallanthus sonchifolius*).

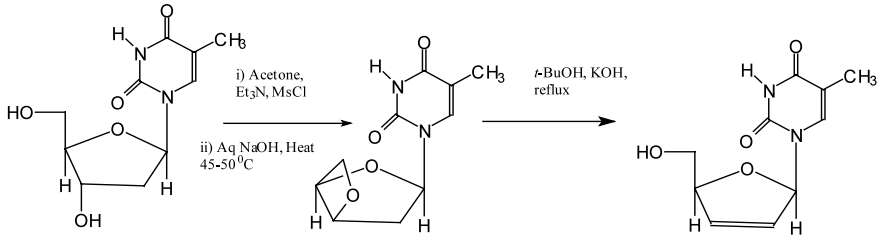


Tetrahedron Letters 44 (2003) 1003

Simple and efficient method for the synthesis of 2′,3′-didehydro-3′-deoxythymidine (d4T)

R. Paramashivappa, P. Phani Kumar, P. V. Subba Rao and A. Srinivasa Rao*

Vittal Mallya Scientific Research Foundation, PO Box # 406, K. R. Road, Bangalore 560 004, India

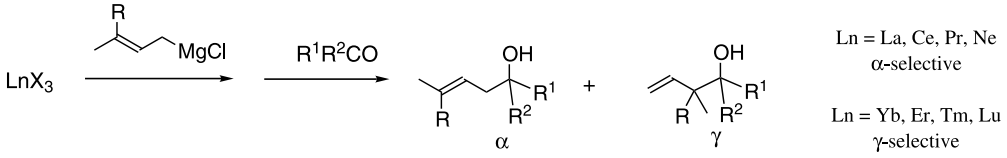


Tetrahedron Letters 44 (2003) 1007

Regioselective allylation reactions using crotyl Grignard reagent–$CeCl_3$ systems

Satoru Matsukawa,* Yohei Funabashi and Tsuneo Imamoto

Department of Chemistry, Faculty of Science, Chiba University, Inage-ku, Chiba 263-8522, Japan



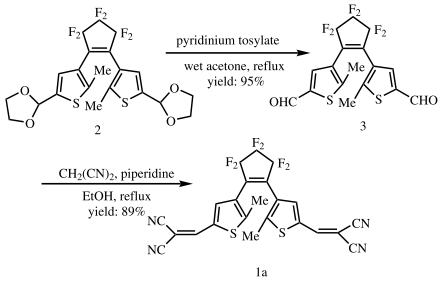
Tetrahedron Letters 44 (2003) 1011

The allomorphism of a photochromic diarylethene

Shou-Zhi Pu,[a] Fu-Shi Zhang,[a,*] Fan Sun,[a] Ru-Ji Wang,[a] Xin-Hong Zhou[a] and Shek-Kiu Chan[b]

[a]*Department of Chemistry, Tsinghua University, Beijing 100084, China*
[b]*Faculty of Science and Technology, University of Macau, Macau 3001, China*

The title compound was synthesized by the following steps: Firstly, compound **3** was prepared in 95% yield by hydrolyzing compound **2**. Then, a Knoevenagel condensation was used to transform compound **3** into the Symmetric compound **1a** in 89% yield by employing malonodinitrile.

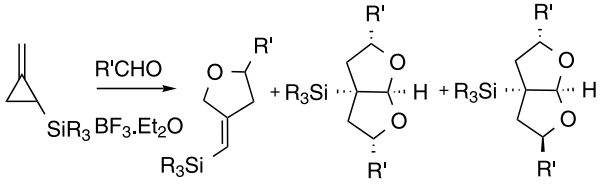


Tetrahedron Letters 44 (2003) 1015

Lewis acid-mediated addition of silylated methylenecyclopropane to aldehydes—synthesis of tetrahydrofuran derivatives

Lee Patient,[a] Malcolm B. Berry[b] and Jeremy D. Kilburn[a,*]

[a]*Department of Chemistry, University of Southampton, Southampton SO17 1BJ, UK*
[b]*GlaxoSmithKline, Medicines Research Centre, Gunnels Wood Road, Stevenage, Herts SG1 2NY, UK*

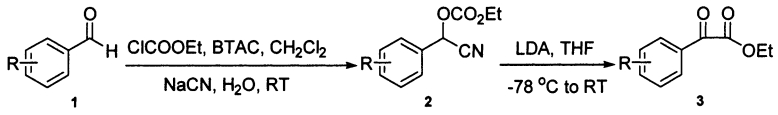


Tetrahedron Letters 44 (2003) 1019

Synthesis of aryl α-keto esters via the rearrangement of aryl cyanohydrin carbonate esters

Nopporn Thasana,[a,b] Vilailak Prachyawarakorn,[a,b] Sopchok Tontoolarug[b] and Somsak Ruchirawat[a,b,c,*]

[a]*Chulabhorn Research Institute, Vipavadee Rangsit Highway, Bangkok 10210, Thailand*
[b]*Department of Chemistry, Mahidol University, Rama 6 Road, Bangkok 10400, Thailand*
[c]*Programme on Research and Development of Synthetic Drugs, Institute of Science and Technology for Research and Development, Mahidol University, Salaya Campus, Thailand*



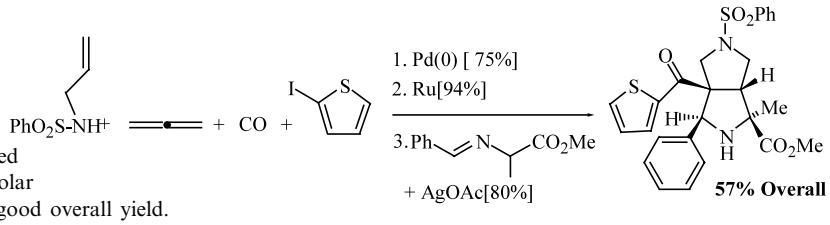
Tetrahedron Letters 44 (2003) 1023

Sequential Pd/Ru-catalysed allenylation/olefin metathesis/1,3-dipolar cycloaddition route to novel heterocycles

Ronald Grigg,[a,*] Anne Hodgson,[b] James Morris[a] and Visuvanathar Sridharan[a]

[a]*Molecular Innovation, Diversity and Automated Synthesis (MIDAS) Centre, School of Chemistry, Leeds University, LS2 9JT, UK*
[b]*Process R and D, GlaxoSmithKline, Dartford DA1 5HA, UK*

A four-component Pd(0)-catalysed cascade followed by ring-closing metathesis and subsequent 1,3-dipolar cycloaddition affords novel fused heterocycles in good overall yield.

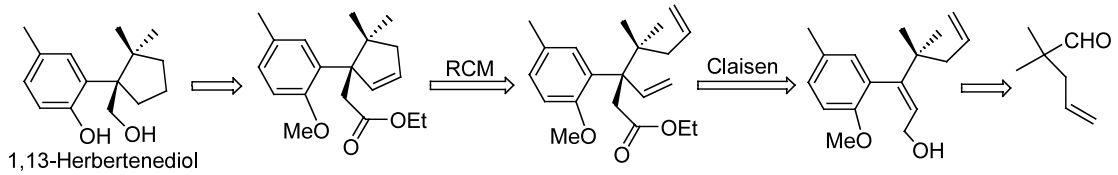


Tetrahedron Letters 44 (2003) 1027

Total synthesis of (±)-1,13-herbertenediol, (±)-α-herbertenol and (±)-β-herbertenol

A. Srikrishna* and G. Satyanarayana

Department of Organic Chemistry, Indian Institute of Science, Bangalore 560 012, India

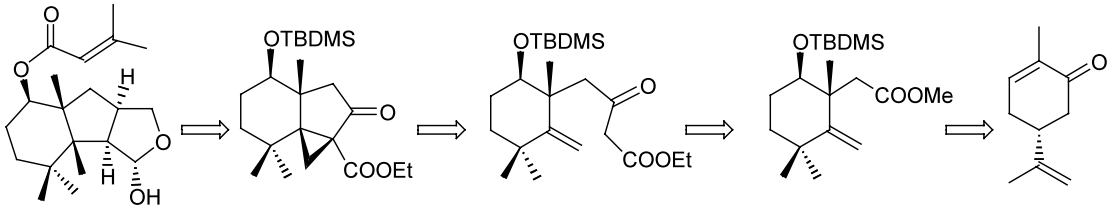


Tetrahedron Letters 44 (2003) 1031

Enantiospecific first total synthesis of (+)-*cis*,*anti*,*cis*-3-hydroxy-1,8,12,12-tetramethyl-4-oxatricyclo[6.4.0.0^{2,6}]dodecan-9-yl senecioate, the optical antipode of a natural thapsane isolated from *Thapsia villosa*

A. Srikrishna* and K. Anebouselvy

Department of Organic Chemistry, Indian Institute of Science, Bangalore 560 012, India

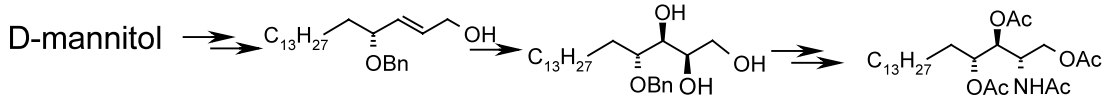


Tetrahedron Letters 44 (2003) 1035

Enantioselective synthesis of D-*ribo*-(2*S*,3*S*,4*R*)-C_{18}-phytosphingosine using double stereodifferentiation

S. Vasudeva Naidu and Pradeep Kumar*

Division of Organic Chemistry: Technology, National Chemical Laboratory, Pune-411008, India



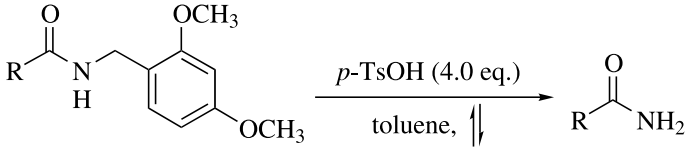
Tetrahedron Letters 44 (2003) 1039

Selective *N*-debenzylation of amides with *p*-TsOH

Ching-Yuh Chern,[a] Yu-Ping Huang[b] and Wai Ming Kan[b,*]

[a]*Department of Applied Chemistry, Chao Yang University of Technology, Taichung, Taiwan 413, ROC*
[b]*Department of Pharmacology, National Cheng Kung University, Tainan, Taiwan 701, ROC*

A new efficient method for the *N*-debenzylation of *N*-benzylamides is described using 4 equiv. of *p*-TsOH in refluxing toluene.



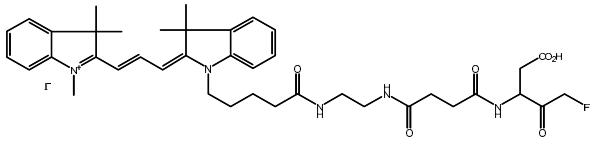
Tetrahedron Letters 44 (2003) 1043

Design and synthesis of an affinity probe that targets caspases in proteomic experiments

Ming-Lee Liau,[a] Resmi C. Panicker[a] and Shao Q. Yao[a,b,*]

[a]*Department of Chemistry, National University of Singapore, 3 Science Drive 3, Singapore 117543, Singapore*
[b]*Department of Biological Sciences, National University of Singapore, 3 Science Drive 3, Singapore 117543, Singapore*

A fluorescently-labeled affinity probe containing chemical reactivity specific towards caspases was developed. This probe, consisting of a reactive unit, a linker unit and a fluorescent unit, was synthesized in eight steps with an overall yield of ~10%. Preliminary assays showed that the probe exhibits strong preferential reactivity towards caspases over other enzymes.

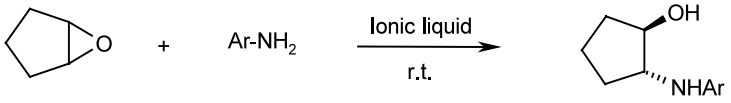


Tetrahedron Letters 44 (2003) 1047

[Bmim]BF_4 ionic liquid: a novel reaction medium for the synthesis of β-amino alcohols

J. S. Yadav,* B. V. S. Reddy, A. K. Basak and A. Venkat Narsaiah

Division of Organic Chemistry, Indian Institute of Chemical Technology, Hyderabad-500 007, India

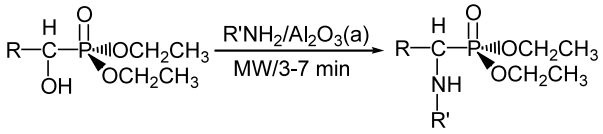


Tetrahedron Letters 44 (2003) 1051

A convenient synthesis of 1-aminophosphonates from 1-hydroxyphosphonates

Babak Kaboudin*

Department of Chemistry, Institute for Advanced Studies in Basic Sciences (IASBS), Gava Zang, Zanjan 45195-159, Iran



Tetrahedron Letters 44 (2003) 1055

Trifluoroacetophenone as nucleophilic trifluoromethylating reagent

Lukas Jablonski, Thierry Billard* and Bernard R. Langlois*

Laboratoire SERCOF (UMR CNRS 5622), Université Claude Bernard-Lyon 1, Bât. Chevreul, 43 Bd du 11 novembre 1918, 69622 Villeurbanne, France

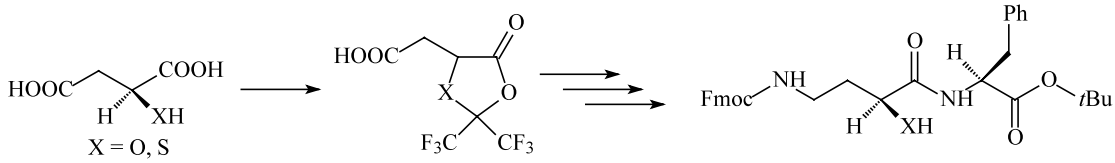
Trifluoroacetophenone can be used as nucleophilic trifluoromethylating reagent towards non-enolizable ketones by action of potassium *tert*-butoxide.

Tetrahedron Letters 44 (2003) 1059

New building blocks for peptide and depsipeptide synthesis: hexafluoroacetone protected L-homoisoserine and D,L-homoisocysteine derivatives

Gábor Radics,[a] Raul Pires,[a] Beate Koksch,[a] Salah M. El-Kousy[b] and Klaus Burger[a,*]

[a]*Department of Organic Chemistry, University of Leipzig, Johannisallee 29, D-04103 Leipzig, Germany*
[b]*Faculty of Science, Minufiya University, Shebin El-Kom, Egypt*



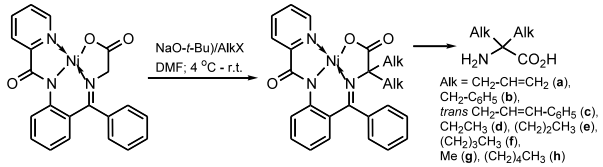
Tetrahedron Letters 44 (2003) 1063

Efficient, practical synthesis of symmetrically α,α-disubstituted α-amino acids

Trevor K. Ellis, Collin H. Martin, Hisanori Ueki and Vadim A. Soloshonok*

Department of Chemistry and Biochemistry, University of Oklahoma, Norman, OK 73019, USA

Ni(II)-complex derived from glycine Schiff base with 2-[*N*-(α-picolyl)amino]benzophen-one (PABP) was found to be an ideal equivalent of nucleophilic glycine in the reactions with various alkyl halides affording an efficient, generalized and practically useful method for preparing symmetrically α,α-disubstituted α-amino acids.



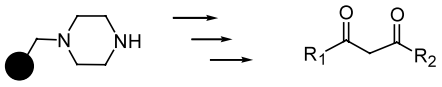
Solid-phase synthesis of traceless 1,3-diketones

Tetrahedron Letters 44 (2003) 1067

Kyung-Ho Park* and Linda J. Cox

DuPont, Central Research & Development, Chemical Science and Engineering, Experimental Station, PO Box 80328, Wilmington, DE 19880-0328, USA

A traceless synthesis of 1,3-diketones has been achieved through enamine methodology from solid-phase organic synthesis. Thus, piperazine served as a linker for this traceless cleavage of β-diketones from solid support.



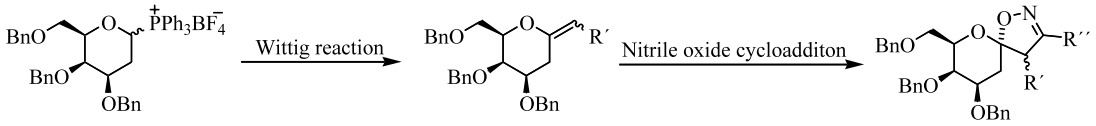
Nitrile oxide cycloadditions to olefinated sugars

Tetrahedron Letters 44 (2003) 1071

Pedro A. Colinas,[a] Volker Jäger,[b] Albrecht Lieberknecht[a,b,*] and Rodolfo D. Bravo[a,*]

[a]*Laboratorio de Estudio de Compuestos Orgánicos, Facultad de Ciencias Exactas, Universidad Nacional de La Plata, 47 y 115, 1900 La Plata, Argentina*
[b]*Institut für Organische Chemie der Universität Stuttgart, Pfaffenwaldring 55, D-70569 Stuttgart, Germany*

Carbohydrate derivatives with a spiro-isoxazoline moiety were prepared in good yields and excellent regio- and diastereoselectivity by a route involving Wittig olefination and 1,3-dipolar cycloaddition as key steps.

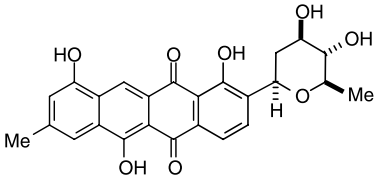


General entries to *C*-aryl glycosides. Formal synthesis of galtamycinone

Tetrahedron Letters 44 (2003) 1075

Beth Apsel, John A. Bender, Maya Escobar, David E. Kaelin, Jr., Omar D. Lopez and Stephen F. Martin*

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



Galtamycinone

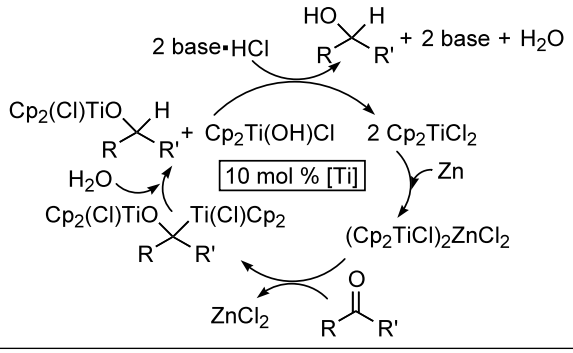
Titanocene-catalysed, selective reduction of ketones in aqueous media. A safe, mild, inexpensive procedure for the synthesis of secondary alcohols via radical chemistry

Tetrahedron Letters 44 (2003) 1079

Alejandro F. Barrero,[a] Antonio Rosales,[a] Juan M. Cuerva,[a] Andreas Gansäuer[b] and J. Enrique Oltra[a,*]

[a]*Universidad de Granada, Departamento de Química Orgánica, Facultad de Ciencias, E-18071 Granada, Spain*
[b]*Rheinische Friedrich-Wilhelms-Universität, Kekulé-Institut für Organische Chemie und Biochemie, Gerhard-Domagk-Str. 1, D-53121 Bonn, Germany*

Hypothetical catalytic cycle.

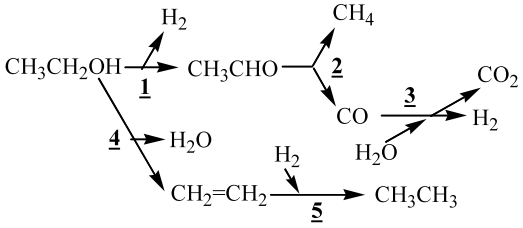


Hydrogen generation from ethanol in supercritical water without catalyst

Tetrahedron Letters 44 (2003) 1083

Toshihiko Arita,[a] Koichi Nakahara,[b] Kenzo Nagami[b] and Okitsugu Kajimoto[a,*]

[a]*Department of Chemistry, Graduate School of Science, Kyoto University, Kitashirakawa-Oiwakecho, Sakyo-Ku, Kyoto 606-8502, Japan*
[b]*Institute for Fundamental Research, Suntory Ltd, 1-1-1 Wakayamadai, Shimamoto-cho, Mishima-gun, Osaka 618-8503, Japan*

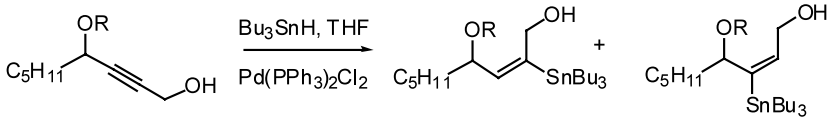


Directed Pd(0)-catalyzed hydrostannations of internal alkynes

Tetrahedron Letters 44 (2003) 1087

James A. Marshall* and Matthew P. Bourbeau

Department of Chemistry, University of Virginia, PO Box 400319, McCormick Road, Charlottesville, VA 22904, USA



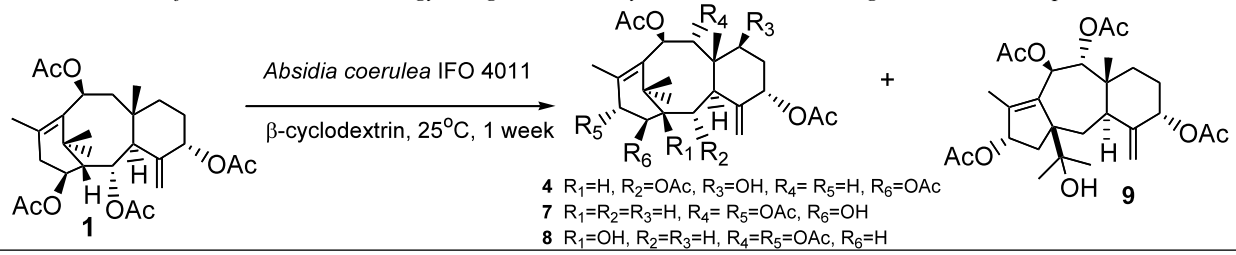
R = TBS, BOM; >20:1
R = Me, 6.3:1
R = OH, 2.9:1

Specific oxidation of C-14 oxygenated 4(20),11-taxadienes by microbial transformation

Tetrahedron Letters 44 (2003) 1091

Jungui Dai,[a] Shujun Zhang,[b] Jun-ichi Sakai,[a] Jiao Bai,[b] Yoshiki Oku[b] and Masayoshi Ando[a,*]

[a]*Department of Chemistry and Chemical Engineering, Niigata University, Ikarashi 2-8050, Niigata 950-2181, Japan*
[b]*Graduate School of Science and Technology, Niigata University, Ikarashi 2-8050, Niigata 950-2181, Japan*



4 R_1=H, R_2=OAc, R_3=OH, R_4= R_5=H, R_6=OAc
7 R_1=R_2=R_3=H, R_4= R_5=OAc, R_6=OH
8 R_1=OH, R_2=R_3=H, R_4=R_5=OAc, R_6=H

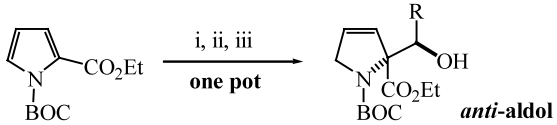
Diastereoselective reductive aldol reactions of Boc-protected electron deficient pyrroles

Tetrahedron Letters 44 (2003) 1095

Timothy J. Donohoe* and David House

Dyson Perrins Laboratory, South Parks Road, Oxford OX1 3QY, UK

An *anti*-selective reductive aldol reaction of a Boc-protected, 2-substituted pyrrole is reported. Reduction with LiDBB generates an exocyclic lithium enolate, but optimal stereoselectivity is obtained by transmetallation to magnesium with $MgBr_2 \cdot OEt_2$. The corresponding *syn*-aldols can easily be obtained (protected as carbamates) by subsequent inversion.



Reagents: i) LiDBB, BMEA, THF, -78°C, then $BrCH_2CH_2Br$;
ii) $MgBr_2 \bullet OEt_2$; iii) RCHO, then NH_4Cl

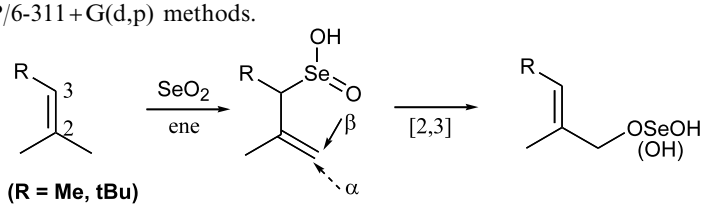
Ab initio studies of the allylic hydroxylation: DFT calculation on the reaction of 2-methyl-2-butene with selenium dioxide

Tetrahedron Letters 44 (2003) 1099

Choon Sup Ra[a] and Gyoosoon Park[b,*]

[a]*Department of Chemistry and Institute of Natural Science, Yeungnam University, Kyongsan 712-749, South Korea*
[b]*Department of Chemistry, Kookmin University, Seoul 136-702, South Korea*

The transition states for two major steps (an ene reaction and a [2,3]-sigmatropic rearrangement) of the title reaction have been investigated by B3LYP/6-311+G(d,p) methods.



Synthesis of bifunctional P-chiral hydroxy phosphinates; lipase-catalyzed stereoselective acylation of ethyl (1-hydroxyalkyl)phenylphosphinates

Tetrahedron Letters 44 (2003) 1103

Kosei Shioji,* Aya Tashiro, Sanae Shibata and Kentaro Okuma

Department of Chemistry, Faculty of Science, Fukuoka University, Jonan-ku, Fukuoka 814-0180, Japan