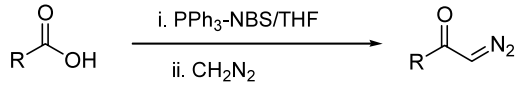
Novel synthesis of α-diazoketones from acyloxyphosphonium salts and diazomethane

Tetrahedron Letters 44 (2003) 4815

Erick Cuevas-Yañez,[a] Mario A. García,[a] Marco A. de la Mora,[a] Joseph M. Muchowski[b] and Raymundo Cruz-Almanza[a,*]

[a]*Instituto de Química, UNAM. Circuito Exterior, Ciudad Universitaria, Coyoacán 04510, Mexico, D.F.*
[b]*Chemistry, Roche Palo Alto, 3431 Hillview Avenue, Palo Alto, CA 94304-1320, USA*

A novel, simple and mild method to prepare α-diazoketones from carboxylic acids is presented. The procedure involves the reaction of carboxylic acids with triphenylphosphine/NBS and subsequent treatment with diazomethane.

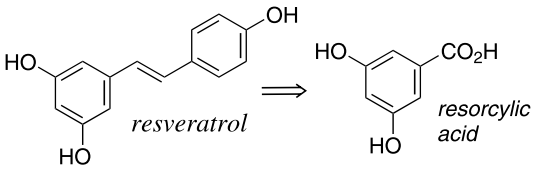


Synthesis of resveratrol using a direct decarbonylative Heck approach from resorcylic acid

Tetrahedron Letters 44 (2003) 4819

Merritt B. Andrus,* Jing Liu, Erik L. Meredith and Edward Nartey

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

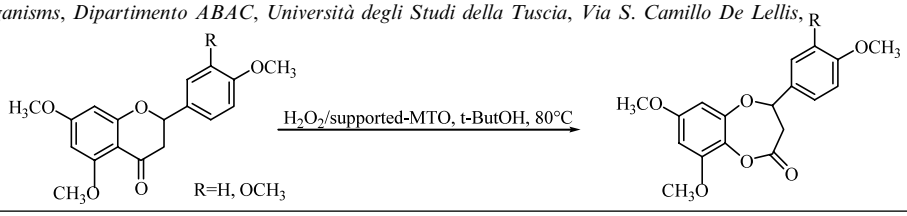


Conversion of naringenin and hesperetin by heterogeneous catalytic Baeyer–Villiger reaction into lactones exhibiting apoptotic activity

Tetrahedron Letters 44 (2003) 4823

Roberta Bernini,[a,*] Enrico Mincione,[a] Manuela Cortese,[a] Raffaele Saladino,[a] Giampiero Gualandi[b] and Maria Cristina Belfiore[b]

[a]*Organic Chemistry, Dipartimento ABAC, Università degli Studi della Tuscia, Via S. Camillo De Lellis, 01100 Viterbo, Italy*
[b]*Genetic of Microorganisms, Dipartimento ABAC, Università degli Studi della Tuscia, Via S. Camillo De Lellis, 01100 Viterbo, Italy*

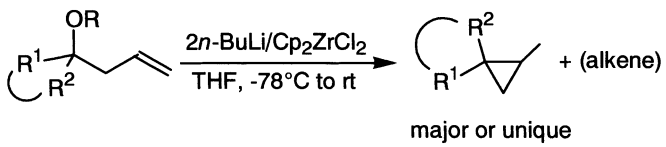


Zirconium-mediated conversion of homoallylic ethers into cyclopropane derivatives

Tetrahedron Letters 44 (2003) 4827

Vincent Gandon, Christophe Laroche and Jan Szymoniak*

Réactions Sélectives et Applications (UMR 6519), CNRS and Université de Reims, 51687 Reims Cedex 2, France

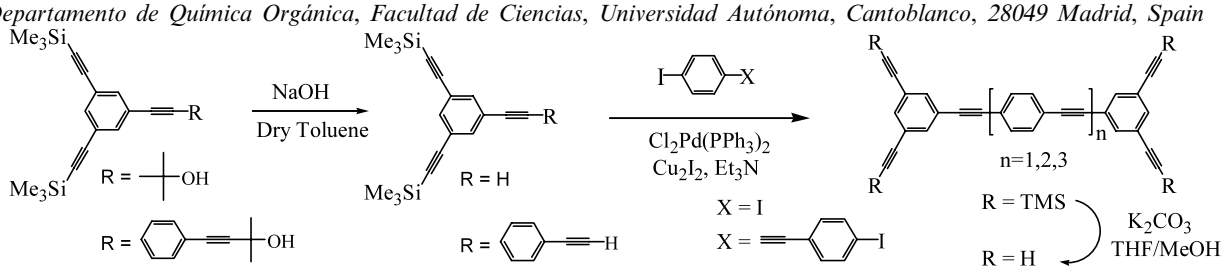


Synthesis of nanostructures based on 1,4- and 1,3,5-phenylethynyl units with π-extended conjugation. Carbon networks dendrimer base units

Tetrahedron Letters 44 (2003) 4831

J. Gonzalo Rodríguez* and J. Esquivias

Departamento de Química Orgánica, Facultad de Ciencias, Universidad Autónoma, Cantoblanco, 28049 Madrid, Spain

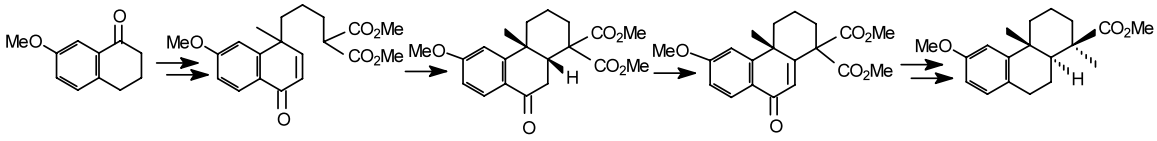


A stereocontrolled total synthesis of methyl (±)-*O*-methylpodocarpate

Tetrahedron Letters 44 (2003) 4835

Arnab Roy,[a] Tapas Paul,[a] Michael G. B. Drew[b] and Debabrata Mukherjee[a,*]

[a]*Department of Organic Chemistry, Indian Association for the Cultivation of Science, Calcutta 700 032, India*
[b]*Department of Chemistry, The University of Reading, Whiteknights, Reading RG6 6AD, UK*

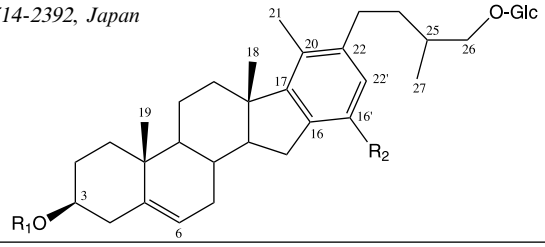


Homo-cholestane glycosides from *Solanum aethiopicum*

Tetrahedron Letters 44 (2003) 4839

Chie Tagawa,[a] Masafumi Okawa,[a] Tsuyoshi Ikeda,[a] Tatemi Yoshida[b] and Toshihiro Nohara[a,*]

[a]*Faculty of Pharmaceutical Sciences, Kumamoto University, 5-1 Oe-honmachi, Kumamoto 862-0973, Japan*
[b]*National Agriculture Research Organization, National Institute of Vegetables and Tea Science, 360 Kusao, Ano, Age-gun, Mie 514-2392, Japan*



Aethioside A (**1**) R_1=S_1 ; R_2=H

B (**2**) R_1=S_2 ; R_2=H

C (**3**) R_1=S_1 ; R_2=COOH

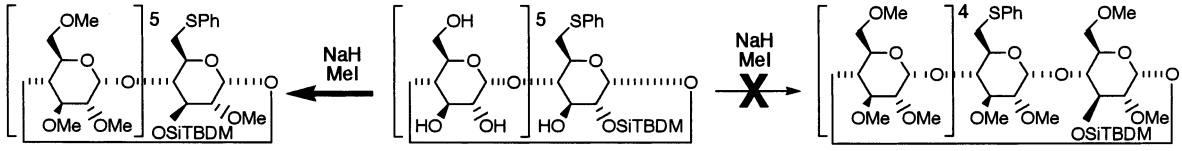
S_1 : Rha—(4)Glc—(2)Rha S_2 : Xyl—(3)Glc—(2)Rha

Mechanism of 2-*O*→3-*O* silyl migration in cyclomaltohexaose (α-cyclodextrin)

Tetrahedron Letters 44 (2003) 4843

Katsunori Teranishi* and Fumiko Ueno

Faculty of Bioresources, Mie University, 1515 Kamihama, Tsu, Mie 514-8507, Japan



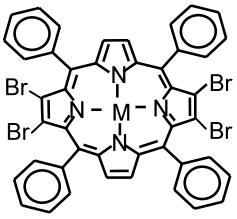
Tetrahedron Letters 44 (2003) 4849

An improved protocol for the synthesis of antipodal β-tetrabromotetraphenylporphyrin and the crystal structure of its Zn(II) complex

P. K. Kumar, P. Bhyrappa* and B. Varghese

Department of Chemistry, Indian Institute of Technology-Madras, Chennai 600 036, India

This report presents a simple improved procedure for the synthesis of β-tetrabromotetraphenylporphyrin and describes the interesting crystal structure of its Zn(II) complex.



M = 2H, Zn(II)

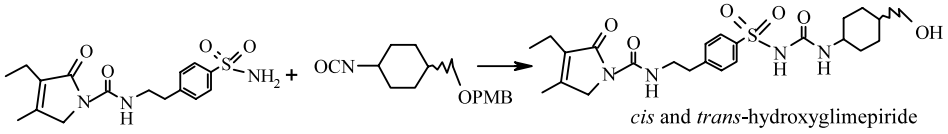
Tetrahedron Letters 44 (2003) 4853

Total synthesis of *cis* and *trans*-hydroxyglimepiride: active metabolite of glimepiride

Mukund K. Gurjar,[a,*] Ramesh A. Joshi,[a] Siddhartha R. Chaudhuri,[a] Shreerang V. Joshi,[b,*] Anup R. Barde,[b] Lalji K. Gediya,[b] Prasad V. Ranade,[b] Suresh M. Kadam[b] and Sanjay J. Naik[b]

[a]*National Chemical Laboratory, Pune 411008, India*

[b]*Chemical Process Research Laboratory, USV Ltd, Govandi, Mumbai 400 088, India*



cis and *trans*-hydroxyglimepiride

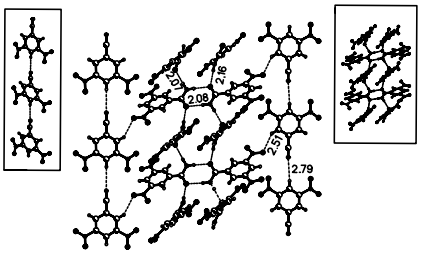
Tetrahedron Letters 44 (2003) 4857

A novel additive organic supramolecular assembly: molecular complex of 3,5-dinitrobenzamide and 3,5-dinitrobenzonitrile

V. R. Pedireddi,* J. PrakashaReddy and Kapildev K. Arora

Division of Organic Chemistry, National Chemical Laboratory, Pune 411 008, India

Co-crystallization of 3,5-dinitrobenzamide and 3,5-dinitrobenzonitrile forms an additive assembly, in which simple addition of the hydrogen bonded networks that exist in the native crystal structures of the constituent compounds takes place.

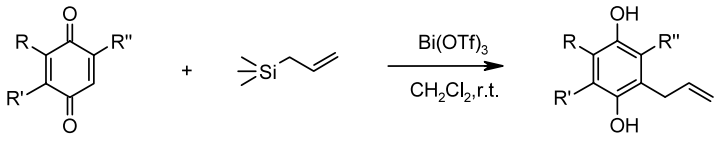


Tetrahedron Letters 44 (2003) 4861

$Bi(OTf)_3$-catalyzed allylation of quinones with allyltrimethylsilane

J. S. Yadav,* B. V. S. Reddy and T. Swamy

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



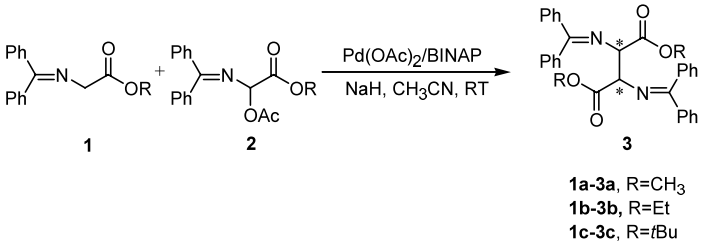
Synthesis of 3-aminoaspartic acid derivatives from glycine precursors

Tetrahedron Letters 44 (2003) 4865

Yu Chen and Andrei K. Yudin*

Davenport Research Laboratories, Department of Chemistry, University of Toronto, 80 St. George Street, Toronto, Ontatio, Canada M5S 3H6

3-Aminoaspartic acid derivatives have been synthesized in high chemical yields and moderate stereoselectivities through a palladium-catalyzed π-azaallylic substitution reaction.

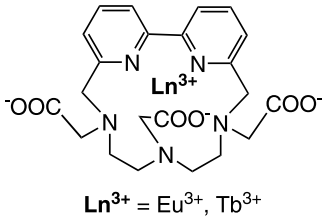


Improvement of stability and luminescence properties in water of Eu(III) and Tb(III) complexes photosensitized by a bipyridine antenna

Tetrahedron Letters 44 (2003) 4869

Jean Marc Couchet, Chantal Galaup, Pierre Tisnès and Claude Picard*

Laboratoire de Synthèse et Physicochimie de Molécules d'Intérêt Biologique, CNRS UMR 5068, Université Paul Sabatier, 118 route de Narbonne, 31062 Toulouse cedex 04, France

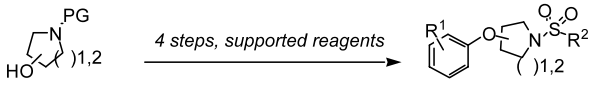


Convenient preparation of aryl ether derivatives using a sequence of functionalized polymers

Tetrahedron Letters 44 (2003) 4873

Mike E. Lizarzaburu and Stephen J. Shuttleworth*

Tularik Inc., 1120 Veterans Boulevard, South San Francisco, CA 94080, USA

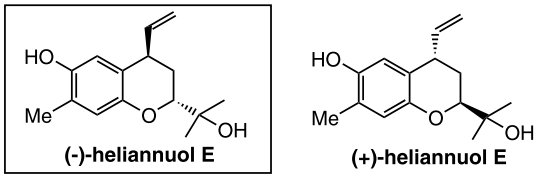


Enantioselective synthesis of heliannuol E; structural consideration of natural molecule

Tetrahedron Letters 44 (2003) 4877

Fuminao Doi, Takahisa Ogamino, Takeshi Sugai and Shigeru Nishiyama*

Department of Chemistry, Faculty of Science and Technology, Keio University, Hiyoshi 3-14-1, Kohoku-ku, Yokohama 223-8522, Japan

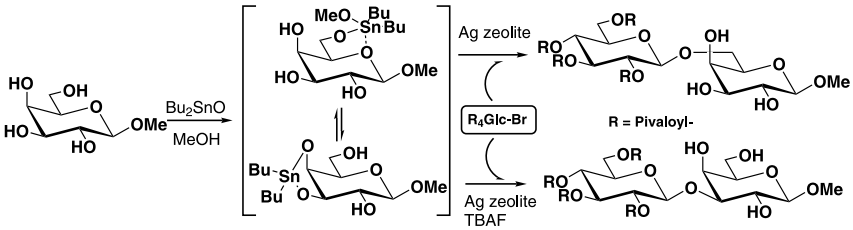


Tetrahedron Letters 44 (2003) 4881

Regioselectivity shift from β-(1→6)- to β-(1→3)-glycosylation of non-protected methyl β-D-galactopyranosides using the stannylene activation method

Eisuke Kaji,* Keigo Shibayama and Kazusada In

School of Pharmaceutical Sciences, Kitasato University, Shirokane 5-9-1, Minato-ku, Tokyo 108-8641, Japan

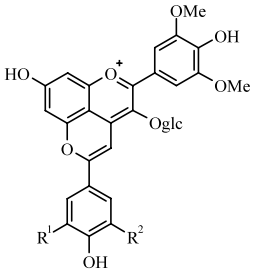


Tetrahedron Letters 44 (2003) 4887

Structures and colour properties of new red wine pigments

Anders E. Håkansson,[a,b] Kevin Pardon,[a,c] Yoji Hayasaka,[a,c] Maria de Sa[a,c] and Markus Herderich[a,c,*]

[a]*The Australian Wine Research Institute, PO Box 197, Glen Osmond SA 5064, Australia*
[b]*Department of Chemistry, Technical University of Denmark, Lyngby DK-2800, Denmark*
[c]*Cooperative Research Centre for Viticulture, PO Box 154, Glen Osmond, SA 5064, Australia*



Tetrahedron Letters 44 (2003) 4893

Pyridinium bromochromate: a new and efficient reagent for bromination of hydroxy aromatics

Shivaji B. Patwari, Mohammad A. Baseer, Yashwant B. Vibhute* and Sudhakar R. Bhusare*

P.G. Department of Chemistry, Yeshwant Mahavidyalaya, Nanded 431 602, India

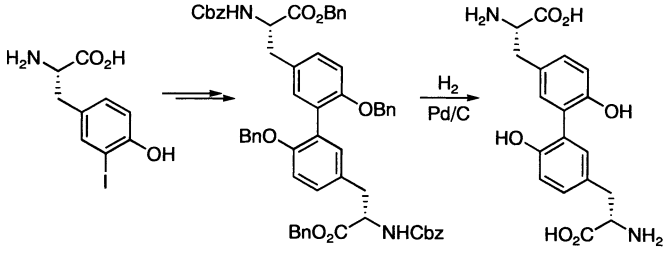
Pyridinium bromochromate (PBC) has been used as an efficient and selective nuclear brominating agent for bromination of various substituted hydroxy-acetophenones, aldehydes and phenols.

Tetrahedron Letters 44 (2003) 4895

A convenient preparation of dityrosine via Miyaura borylation–Suzuki coupling of iodotyrosine derivatives

Craig A. Hutton* and Ojia Skaff

School of Chemistry, The University of Sydney, Sydney, NSW 2006, Australia

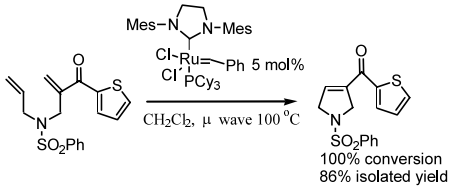


Tetrahedron Letters 44 (2003) 4899

Synthesis of Δ^3-pyrrolines and Δ^3-tetrahydropyridines via microwave-accelerated ring-closing metathesis

Ronald Grigg,[a,*] William Martin,[b] James Morris[a] and Visuvanthar Sridharan[a]

[a]*Molecular Innovation, Diversity and Automated Synthesis (MIDAS) Centre, School of Chemistry, Leeds University, Leeds LS2 9JT, UK*
[b]*Process Research and Development, GlaxoSmithKline, Stevenage SG1 2NY, UK*



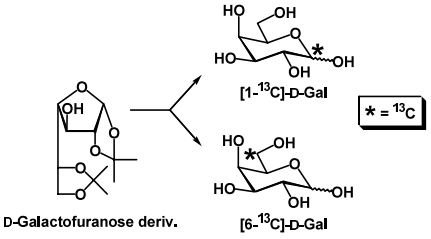
Ring-closing metathesis of sterically conjested electron-deficient double bonds takes place in 1 min using microwave irradiation with Grubbs' second-generation catalyst.

Tetrahedron Letters 44 (2003) 4903

Practical synthesis of [1-^{13}C]- and [6-^{13}C]-D-galactose

Ken-ichi Sato,* Shoji Akai, Mayumi Sakuma, Masaru Kojima and Ken-ju Suzuki

Laboratory of Organic Chemistry, Faculty of Engineering, Kanagawa University, 3-27-1, Rokkakubashi, Kanagawa-ku, Yokohama 221-8686, Japan



The chemical synthesis of ^{13}C-labeled D-galactose as useful molecular probes for studying the conformation of oligosaccharides attached to proteins was performed. The method for synthesizing the title labeled compounds was developed employing the corresponding 1-ene and 5-ene compounds derived from an 1,2:5,6-di-*O*-isopropylidene-α-D-galactofuranose.

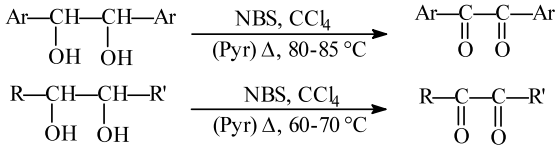
Tetrahedron Letters 44 (2003) 4909

A novel method of synthesis of 1,2-diketones from 1,2-diols using *N*-bromosuccinimide

Jitender M. Khurana* and Bhaskar M. Kandpal

Department of Chemistry, University of Delhi, Delhi 110007, India

A novel method for the synthesis of benzils and aliphatic 1,2-diketones of cyclic and open chain compounds from corresponding hydrobenzoins and 1,2-diols with NBS under reflux is reported.



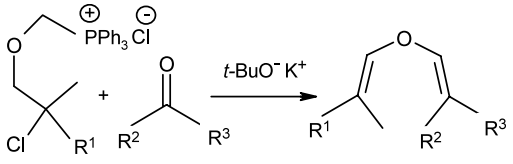
Tetrahedron Letters 44 (2003) 4913

A novel, short and efficient synthesis of divinyl ethers

Mukund G. Kulkarni,* Aniruddha K. Doke, Saryu I. Davawala and Ajit V. Doke

Department of Chemistry, University of Pune, Pune 411007, India

An efficient one-step synthesis of divinyl ethers from aldehydes and ketones using Wittig olefination is described.

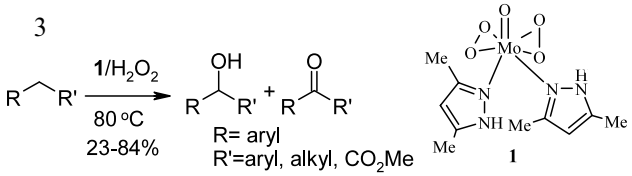


Tetrahedron Letters 44 (2003) 4915

Molybdenum(VI)-peroxo complex catalyzed oxidation of alkylbenzenes with hydrogen peroxide

Subhabrata Das, Tandra Bhowmick, T. Punniyamurthy,* Deepa Dey, Jayashree Nath and Mihir K. Chaudhuri*

Department of Chemistry, Indian Institute of Technology Guwahati, Guwahati 781039, India

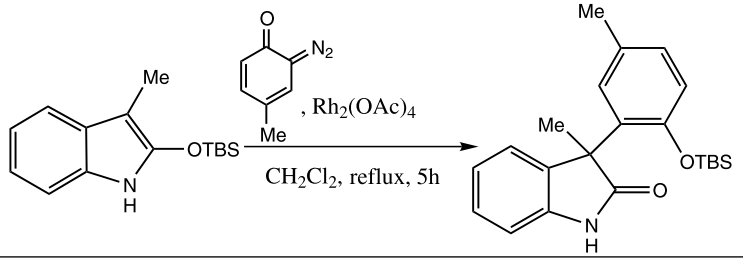


Tetrahedron Letters 44 (2003) 4919

Rhodium-catalyzed synthesis of a C(3) disubstituted oxindole: an approach to diazonamide A

Takayuki Sawada, Douglas E. Fuerst and John L. Wood*

Sterling Chemistry Laboratory, Department of Chemistry, Yale University, New Haven, CT 06520-8107, USA

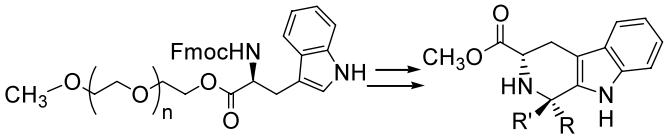


Tetrahedron Letters 44 (2003) 4923

Liquid-phase parallel synthesis of tetrahydro-β-carbolines

Wen-Ben Yeh, Mei-Jung Lin and Chung-Ming Sun*

Department of Chemistry, National Dong Hwa University, Hualien 974, Taiwan



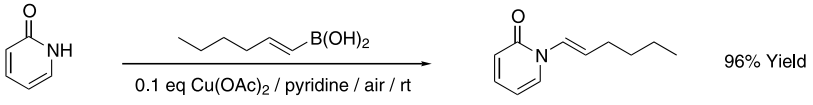
Tetrahedron Letters 44 (2003) 4927

Copper-promoted/catalyzed C–N and C–O bond cross-coupling with vinylboronic acid and its utilities

Patrick Y. S. Lam,* Guillaume Vincent, Damien Bonne and Charles G. Clark

Bristol-Myers Squibb Co., PO Box 5400, Princeton, NJ 08543-5400, USA

The mildest method of N-vinylation has been discovered. The synthetic utilities of the N- and O-vinylated products include protecting group, cyclopropanation and Grubbs' ring closure metathesis reactions.

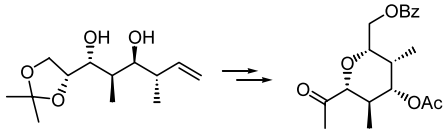


Tetrahedron Letters 44 (2003) 4933

Stereoselective synthesis of the C21–C27 fragment of the phorboxazoles

Bo Liu and Wei-Shan Zhou*

Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Road, Shanghai 200032, PR China



Tetrahedron Letters 44 (2003) 4937

Optimization of spiroimidazolidinone derivatives synthesis on solid phase using SynPhase™ Lanterns

Philippe Bedos, Lidia Feliu, Jean Martinez and Muriel Amblard*

Laboratoire des Amino acides Peptides et Protéines-UMR-CNRS 5810-15, Avenue Charles Flahault, BP 14491, 34093 Montpellier Cédex 5, France