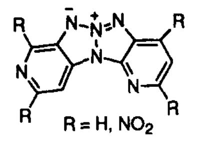
# GRAPHICAL ABSTRACTS

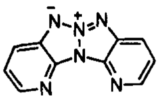
*Tetrahedron Letters*, **1997**, *38*, 8607

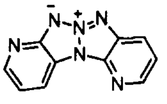
## SYNTHESIS OF NEW DIPYRIDOTETRAAZAPENTALENES.

**Devan Balachari and Mark L. Trudell*,**
**Department of Chemistry, University of New Orleans, New Orleans, LA 70148**

**Four new dipyridotetraazapentalenes were synthesized from triazolopyridines in good yields.**







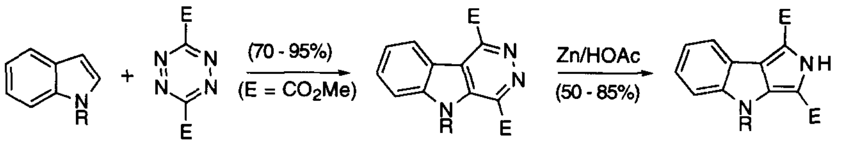
---

*Tetrahedron Letters*, **1997**, *38*, 8611

## A FACILE PREPARATION OF PYRROLO[3,4-b]INDOLES.

Kevin Daly, Rana Nomak and John K. Snyder*, Dept. of Chemistry, Boston University, 590 Commonwealth Ave., Boston, MA 02215

Reductive ring contraction of dimethyl 5*H*-pyridazino[4,5-b]indole-1,4-dicarboxylate produced dimethyl 2,4-dihydropyrrolo[3,4-b]indole-1,3-dicarboxylate.

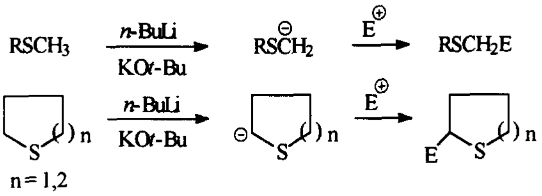


---

*Tetrahedron Letters*, **1997**, *38*, 8615

## DIRECT DEPROTONATION OF ALIPHATIC SULFIDES.

Yunqi Liu and Richard S. Glass,* Department of Chemistry,
The University of Arizona, Tucson, AZ 85721 USA



$R = CH_3, CH_3(CH_2)_9, (CH_3)_2CHCH_2$

$E^{\oplus} = Me_3Sn, (c\text{-}C_6H_{11})_3Sn, (i\text{-}Pr)_3Si$

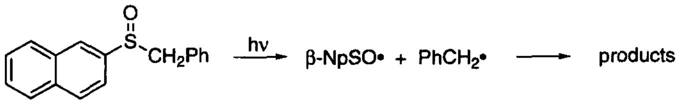
---

*Tetrahedron Letters*, **1997**, *38*, 8619

## PHOTOCHEMISTRY OF BENZYL β-NAPHTHYL SULFOXIDE AND CHARACTERIZATION OF THE β-NAPHTHYLSULFINYL RADICAL

Yushen Guo, Alexandre P. Darmanyan, and William S. Jenks. Department of Chemistry, Iowa State University, Ames, IA 50011-3111

Steady state photolysis and flash photolysis study of β-NpSO• and its reaction with nitroxides

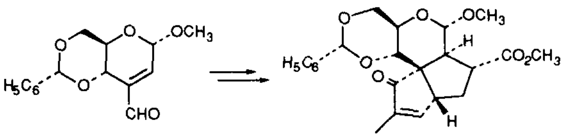


*Tetrahedron Letters*, **1997**, *38*, 8623

## ENANTIOSPECIFIC APPROACH TO A QUINANE SKELETON RELATED TO PENTALENOLACTONES

Silvina C. Pellegrinet and Rolando A. Spanevello*
Instituto de Química Orgánica de Síntesis. CONICET - U.N.R.- Casilla de Correo 991. 2000 Rosario. Argentina.

A novel and general approach has been delineated for the enantiomerically pure synthesis of the angularly fused tricyclic system of the pentalenolactone family of compounds.



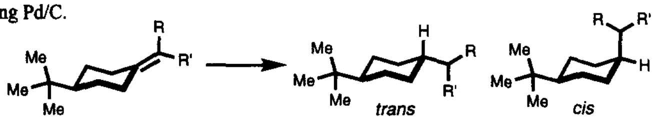
---

*Tetrahedron Letters*, **1997**, *38*, 8627

## Diastereoselectivity in the Heterogeneous Hydrogenation Reactions of Phosphorous Substituted Olefins

Bret E. Huff,* Vien V. Khau, Michael E. LeTourneau, Michael J. Martinelli,*
Naresh K. Nayyar, and Barry C. Peterson
*Lilly Research Laboratories, A Division of Eli Lilly and Company, Indianapolis, Indiana 46285-4813*

Phosphorous substituted methylenecyclohexane olefins show enhanced diastereoselectivity in heterogeneous hydrogenation reactions using Pd/C.



---

*Tetrahedron Letters*, **1997**, *38*, 8631

## A Simplified Synthesis of (±)-1,2-Diphenyl-1,2-diaminoethane (1) from Benzaldehyde and Ammonia. Revision of the Structures of the Long-Known Intermediates "Hydrobenzamide" and "Amarine"

E. J. Corey* and Florian N. M. Kühnle
Department of Chemistry and Chemical Biology, Harvard University, Cambridge, Massachusetts 02138


$C_6H_5CHO + NH_3 \xrightarrow{\text{4 steps}} (\pm)$ $C_6H_5$ $C_6H_5$ $H_2N$ $NH_2$

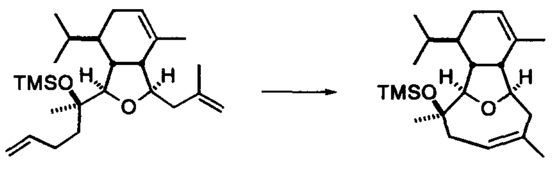
---

*Tetrahedron Letters*, **1997**, *38*, 8635

## AN UNEXPECTED PRODUCT ARISING FROM METAL ALKYLIDENE MEDIATED RING-CLOSING METATHESIS.

Daisy Joe and Larry E. Overman,*
Department of Chemistry, 516 Physical Sciences 1, University of California, Irvine, CA 92697-2025 USA

Ring-closing diene metathesis of a siloxytriene surprisingly afforded a siloxytricycle in which the newly formed ring is one carbon unit smaller than expected.

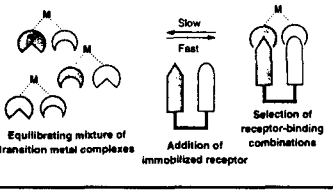


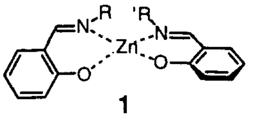
*Tetrahedron Letters*, **1997**, *38*, 8639

### Generation of Novel DNA-Binding Compounds by Selection and Amplification from Self-Assembled Combinatorial Libraries

Bryan Klekota, Mark H. Hammond, and Benjamin L. Miller*
Department of Chemistry, University of Rochester, Rochester, New York 14627

A general method for the selection and amplification of compounds from self-assembled libraries is demonstrated using bis(salicylaldiminato) zinc complexes (1) and a DNA-affinity reagent.





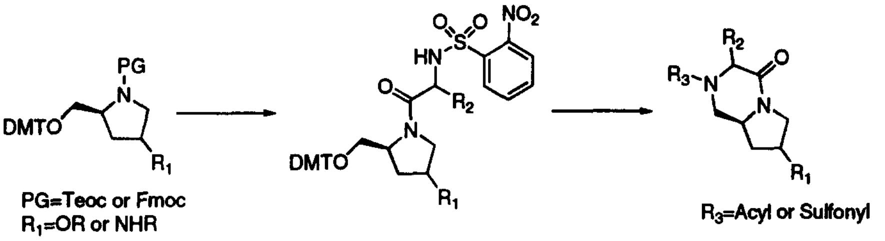
1

---

*Tetrahedron Letters*, **1997**, *38*, 8643

### THE SOLID PHASE SYNTHESIS OF TRISUBSTITUTED 1,4-DIAZABICYCLO[4.3.0]NONAN-2-ONE SCAFFOLDS: ON BEAD MONITORING OF HETEROCYCLE FORMING REACTIONS USING $^{15}$N NMR.

Eric E. Swayze, Isis Pharmaceuticals, 2292 Faraday Av., Carlsbad, CA 92008



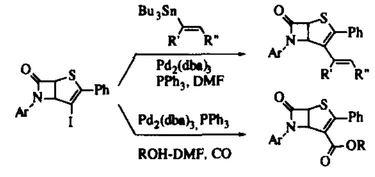
---

*Tetrahedron Letters*, **1997**, *38*, 8647

### PALLADIUM-PROMOTED DERIVATIZATIONS OF NOVEL C-FUSED PENEM RING SYSTEMS

Monika I. Konaklieva, Hongchang Shi, and Edward Turos*, Department of Chemistry, University of South Florida, Tampa, FL 33620-5250

Palladium-catalyzed coupling reactions and carboxylations have been utilized to prepare derivatives of C-fused penem-type ring systems.

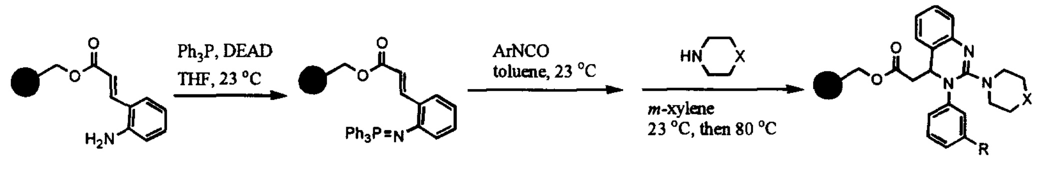


---

*Tetrahedron Letters*, **1997**, *38*, 8651

### Solid-Phase Synthesis of 3,4-Dihydroquinazoline

Fengjiang Wang* and James R. Hauske
Department of Drug Discovery, Sepracor Inc., 111 Locke Drive, Marlborough, MA 01752, USA



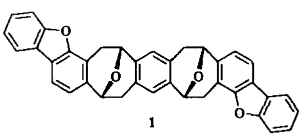
R = H, CH$_3$, or F; X = CH$_2$, O, or S

*Tetrahedron Letters*, **1997**, *38*, 8655

## THE DETERMINATION OF THE ABSOLUTE CONFIGURATION OF A CHIRAL MOLECULAR TWEEZER USING CD SPECTROSCOPY

Joerg Fleischhauer[†], Michael Harmata[††]*, Mehmet Kahraman[††], Axel Koslowski[†] and Christopher J. Welch[§]
[†]Lehr- und Forschungsbebiet, Theoretische Chemie, Institut für Organische Chemie, RWTH Aachen, Germany; [††]Department of Chemistry, University of Missouri-Columbia, Columbia MO 65211; [§]REGIS Technologies, Inc., 8210 Austin Avenue, P.O. Box 519, Morton Grove, Illinois 60053 USA

The configuration of molecular tweezer **1** is assigned based on the comparison of a calculated and experimentally-determined CD spectrum.



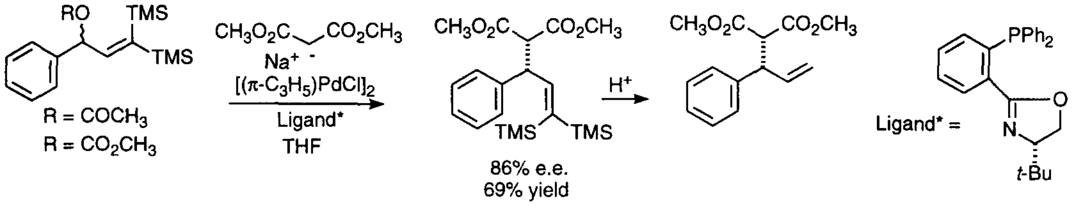
1

---

*Tetrahedron Letters*, **1997**, *38*, 8659

## The Palladium Catalyzed Allylic Alkylation of Bis(trimethylsilyl) Substituted Propenyl Acetates or Carbonates in the Presence of Chiral Ligands

Donna L. Romero* and Edward L. Fritzen, Medicinal Chemistry Research, Pharmacia and Upjohn Co., Kalamazoo, MI 49001



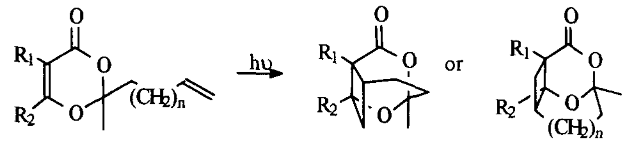
---

*Tetrahedron Letters*, **1997**, *38*, 8663

## REGIOCHEMISTRY OF INTRAMOLECULAR PHOTOCYCLOADDITION OF 1,3-DIOXIN-4-ONES TETHERED THROUGH THE KETAL CARBON.

Cheryl L. Muller,* Jason R. Bever, Mark S. Dordel, Moiz M. Kitabwalla, Theresa M. Reineke, Justin B. Sausker, Troy R. Seehafer, Yu Li, and Jerry P. Jasinski, Department of Chemistry, University of Wisconsin-Eau Claire, Eau Claire, Wisconsin 54702 and Department of Chemistry, Keene State College, Keene, New Hampshire 03435.

The regiochemistry of photocycloaddition of some 1,3-dioxin-4-ones varies with the length of the tether.



---

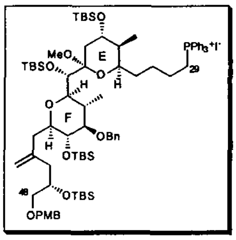
*Tetrahedron Letters*, **1997**, *38*, 8667

## SPONGISTATIN SYNTHETIC STUDIES. 1. CONSTRUCTION OF THE C(29-48) SUBTARGET

Amos B. Smith, III,* Linghang Zhuang, Christopher S. Brook, Armen M. Boldi, Mark D. McBriar, William H. Moser, Noriaki Murase, Kiyoshi Nakayama, Patrick R. Verhoest, and Qiyan Lin

*Department of Chemistry, Laboratory for Research on the Structure of Matter, and Monell Chemical Senses Center, University of Pennsylvania, Philadelphia, PA 19104, U.S.A.*

In this Letter, the first in a series of three, we outline our overall strategy and describe the assembly of a C(29-48) EF-ring advanced intermediate for the total synthesis of spongistatins, rare and structurally unique polyether macrolides with unprecedented antitumor activity.



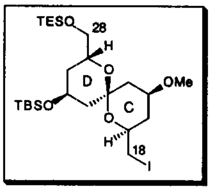
*Tetrahedron Letters*, **1997**, *38*, 8671

## SPONGISTATIN SYNTHETIC STUDIES. 2. ASSEMBLY OF THE C(18-28) SPIROKETAL

Amos B. Smith, III,* Linghang Zhuang, Christopher S. Brook, Qiyan Lin, William H. Moser, Robert E. Lee Trout, and Armen M. Boldi

*Department of Chemistry, Laboratory for Research on the Structure of Matter, and Monell Chemical Senses Center, University of Pennsylvania, Philadelphia, PA 19104, U.S.A.*

The C(18-28) CD-ring spiroketal subunit of the spongistatins, marine polyether macrolides with unprecedented antitumor activity, has been generated via a highly convergent and completely stereocontrolled sequence. Key operations include a one-flask dithiane bisalkylation and a metal-assisted spiroketal equilibration.



---

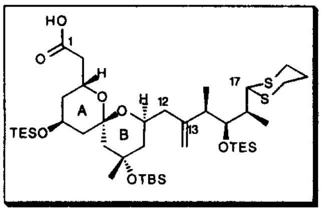
*Tetrahedron Letters*, **1997**, *38*, 8675

## SPONGISTATIN SYNTHETIC STUDIES. 3. CONSTRUCTION OF THE C(1-17) SPIROKETAL

Amos B. Smith, III,* Qiyan Lin, Kiyoshi Nakayama, Armen M. Boldi, Christopher S. Brook, Mark D. McBriar, William H. Moser, Masao Sobukawa, and Linghang Zhuang

*Department of Chemistry, Laboratory for Research on the Structure of Matter, and Monell Chemical Senses Center, University of Pennsylvania, Philadelphia, PA 19104, U.S.A.*

A convergent synthesis of the C(1-17) AB-ring spiroketal moiety of the spongistatins, exceedingly scarce and highly antimitotic polyether macrolides, has been achieved via a one-flask dithiane bisalkylation, stereocontrolled spiroketalization, and Julia sulfone coupling/methylenation.

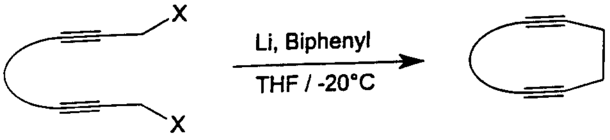


---

*Tetrahedron Letters*, **1997**, *38*, 8679

## A Convenient Synthesis of Ethano-Bridged Cyclic Diynes – Preparation of 1,1,2,2-Tetramethyl-1,2-disila-cycloocta-3,7-diyne.

Gebhard Haberhauer, Rolf Roers, Rolf Gleiter*, Organisch Chemisches Institut der Universität Heidelberg, Im Neuenheimer Feld 270, D-69120 Heidelberg, Germany



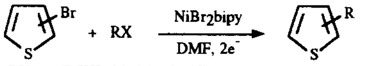
---

*Tetrahedron Letters*, **1997**, *38*, 8683

## NICKEL-CATALYSED ELECTROCHEMICAL COUPLING OF 2- AND 3-BROMOTHIOPHENE WITH ALKYL AND ALKENYL HALIDES.

Muriel Durandetti,* Jacques Périchon, Jean-Yves Nédélec, Laboratoire d'Electrochimie, Catalyse et Synthèse Organique, UMR 28 CNRS, 2, rue Henri-Dunant 94320 Thiais (France)

The electrochemical reduction of 2- or 3-bromothiophene and alkyl or alkenyl halides in the presence of $NiBr_2$-2,2'-bipyridine complex as catalyst affords the coupling products in good yields.



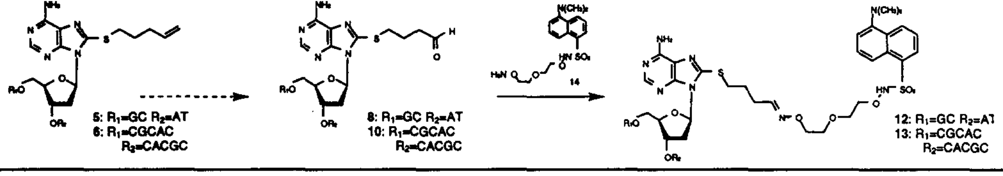
RX = $ClCHR'CO_2Me$, $ClCHR'COMe$, $ClCHR'CN$, $PhCH_2Cl$, vinylX

*Tetrahedron Letters*, **1997**, *38*, 8687

## THE OXYAMINO-ALDEHYDE COUPLING REACTION: AN EFFICIENT METHOD FOR THE DERIVATIZATION OF OLIGONUCLEOTIDES

Emmanuelle Trévisiol, Annabelle Renard, Eric Defrancq* and Jean Lhomme*
Chimie Bioorganique, L.E.D.S.S., Associé au CNRS, Université Joseph Fourier, BP 53, 38041 Grenoble Cedex 9, France.

Oligonucleotides containing an aldehydic function at any preselected position in the sequence have been prepared using post-synthetic oxidation of an alkene as the key reaction. These were efficiently coupled to a reporter molecule tethered to an oxyamino linker.

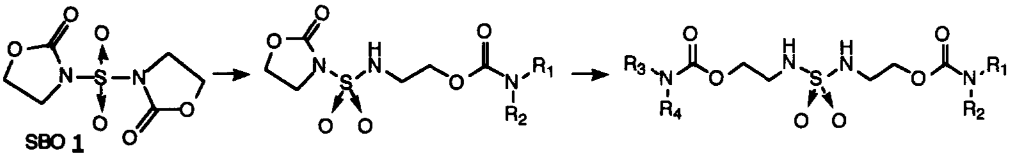


---

*Tetrahedron Letters*, **1997**, *38*, 8691

## **Sulfonyl *Bis-N*-Oxazolidinone (SBO): A New Versatile Dielectrophile with Sequential Reactivity**

G. Dewynter, M. Abdaoui, L. Toupet, and J-L.Montero
*Lab. Chimie Biomoléculaire. Université Montpellier-II.* and *G.M.C.M-UMR 6626 Université Rennes 1. France.*



SBO 1
X-ray structure

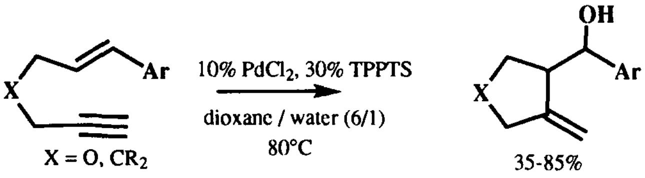
five examples of symmetric and unsymmetric derivatives

---

*Tetrahedron Letters*, **1997**, *38*, 8695

## CARBOHYDROXYPALLADATION REACTIONS IN AQUEOUS MEDIUM : AN EFFICIENT ROUTE TO 3-(1-HYDROXYARYL) TETRAHYDROFURANS

J.-C Galland, M. Savignac, J.-P. Genêt*, Laboratoire de Synthèse Organique, E.N.S.C.P., 11 rue P. et M. Curie, 75231 Paris Cedex 05, France

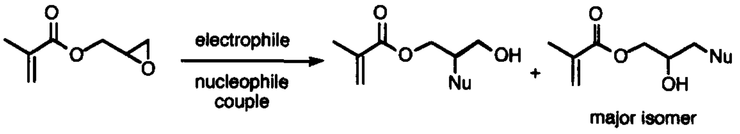


---

*Tetrahedron Letters*, **1997**, *38*, 8699

## SELECTIVE RING-OPENING OF ω-EPOXYALKYL (METH)ACRYLATES. AN EFFICIENT ACCESS OF BIFUNCTIONAL MONOMERS.

A. Olszewski-Ortar, Ph. Gros and Y. Fort*
Laboratoire de Chimie Organique I,Faculté des Sciences, U.H.P. - Nancy-I, BP 239, F-54506 Vandoeuvre-les-Nancy, France.



major isomer

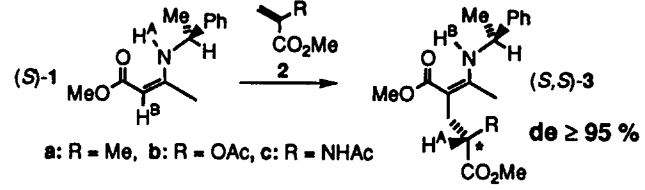
Nu = SCN, OH, OMe

*Tetrahedron Letters*, **1997**, *38*, 8703

## Efficient Access to Virtually Enantiopure α-Dialkyl-, α-Acetoxy-, and α-Acetamido esters

C. Cavé, Y. Le Porhiel-Castellon, V. Daley, C. Riche, A. Chiaroni, J. d'Angelo
Faculté de Pharmacie, 92296 Châtenay-Malabry; Institut de Chimie des Substances Naturelles, CNRS, 91198 Gif-sur-Yvette, France.

Michael addition of enaminoester (*S*)-1 to α-substituted acrylates 2 led to adducts (*S,S*)- 3.



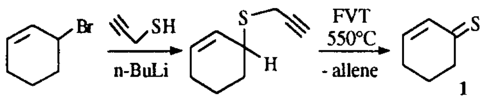
---

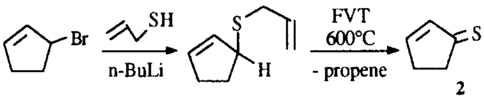
*Tetrahedron Letters*, **1997**, *38*, 8707

## GENERATION BY RETRO-ENE REACTION OF CYCLOHEX-2-ENETHIONE AND CYCLOPENT-2-ENETHIONE

Emmanuelle Briard, Jocelyne Levillain* and Jean-Louis Ripoll,* LCMT (associé au CNRS), ISMRA, 14050 Caen, France; Yves Dat, CERMN, Faculté de Pharmacie, Université de Caen, 14032 Caen, France.

The reactive cycloalkenethiones 1 and 2 have been synthesized in two steps from the corresponding cycloalkenyl bromides.





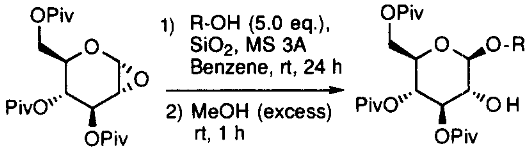
---

*Tetrahedron Letters*, **1997**, *38*, 8709

## SILICA GEL-CATALYZED β-*O*-GLUCOSYLATION OF ALCOHOLS WITH 1,2-ANHYDRO-3,4,6-TRI-*O*-PIVALOYL-α-D-GLUCOPYRANOSE.

Yoh-ichi Matsushita,* Kazuhiro Sugamoto, Yoshio Kita, and Takanao Matsui,
Faculty of Engineering, Miyazaki University, Gakuen-Kibanadai-Nishi, Miyazaki 889-21, Japan

1,2-Anhydro-3,4,6-tri-*O*-pivaloyl-α-D-glucopyranose was allowed to react with alcohols in the presence of silica gel, to afford β-*O*-glucosides. Several natural glucosides were synthesized by the present reaction.



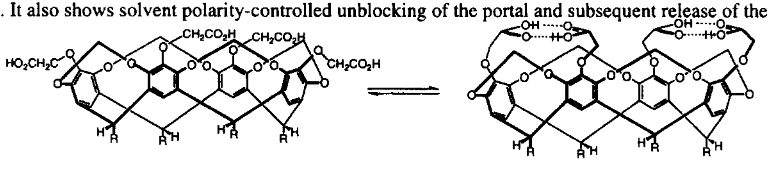
---

*Tetrahedron Letters*, **1997**, *38*, 8713

## Li$^+$ SELECTIVE ENCAPSULATION THROUGH THE INTRAMOLECULAR HYDROGEN BONDING GATE

Sang Bok Lee, Sungu Hwang, Doo Soo Chung and Jong-In Hong*
Department of Chemistry, Seoul National University, Seoul 151-742, Korea

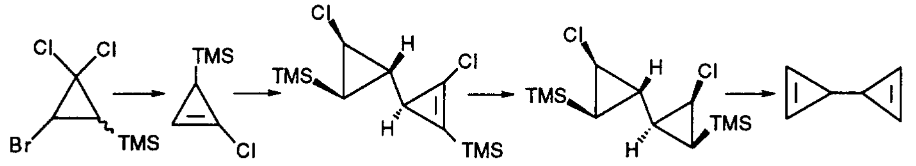
A new molecular container assembly for the selective encapsulation of Li$^+$ through intramolecular hydrogen bonding gate is described. It also shows solvent polarity-controlled unblocking of the portal and subsequent release of the guest.



*Tetrahedron Letters*, **1997**, *38*, 8717

## 1-CHLORO-3-TRIMETHYLSILYLCYCLOPROPENE--A NEW SYNTHESIS OF 3,3'-BICYCLOPROPENYL.

Gon-Ann Lee,* Chi-Sheng Chen, Department of Chemistry, Fu Jen Catholic Univeristy, Hsinchuang, Taipei, 24205, Taiwan, ROC



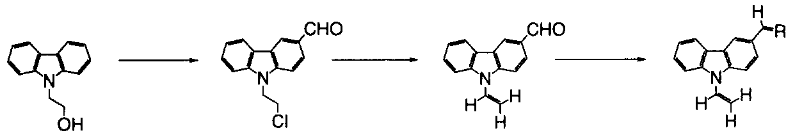
---

*Tetrahedron Letters*, **1997**, *38*, 8721

## SYNTHESIS OF *N*-VINYLCARBAZOLE DERIVATIVES WITH ACCEPTOR GROUPS.

Yadong Zhang, Hirofumi Hokari, Tatsuo Wada, Yuming Shang, Seth R. Marder and Hiroyuki Sasabe, Core Research for Evolutional Science and Technology (CREST), JST, Biopolymer Physics, Frontier Research Program, The Institute of Physical and Chemical Research (RIKEN), 2-1 Hirosawa, Wako Saitama 351-01, Japan. The Backman Institute, California Institute of Technology, Pasadena, CA 91125, USA

*N*-Vinylcarbazoles with various acceptor groups have been synthesized starting from 3-formyl-*N*-(2-chloroethyl)carbazole in two steps.



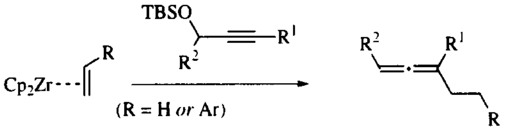
---

*Tetrahedron Letters*, **1997**, *38*, 8723

## ALLENE FORMATION BY THE REACTION OF OLEFINS WITH PROPARGYL SILYL ETHERS MEDIATED BY ZIRCONOCENE COMPLEX.

Tamotsu Takahashi,* Ryuichiro Hara, Shouquan Huo, Yasuyuki Ura, Mathew P. Leese, Noriyuki Suzuki, Catalysis Research Center and Graduate School of Pharmaceutical Sciences, Hokkaido University, Sapporo 060, Japan

Zirconocene-olefin complexes reacted with propargyl silyl ethers to give allenic compounds.

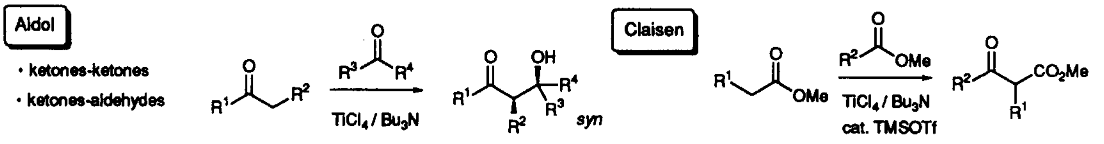


---

*Tetrahedron Letters*, **1997**, *38*, 8727

## TiCl$_4$/Bu$_3$N/(CATALYTIC TMSOTf): EFFICIENT AGENT FOR DIRECT ALDOL ADDITION AND CLAISEN CONDENSATION

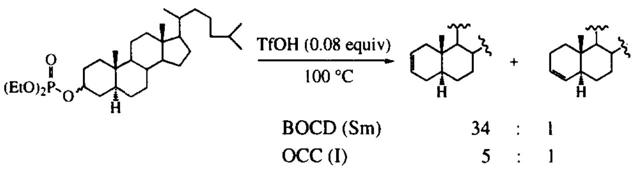
**Yoshihiro Toshida, Ryoji Hayashi, Hiromasa Sumihara, and Yoo Tanabe***
*School of Science, Kwansei Gakuin University, 1-1-155 Uegahara, Nishinomiya, Hyogo 662, Japan*



*Tetrahedron Letters*, **1997**, *38*, 8731

### Liquid Crystal Control of Regio- and Diastereoselectivity in the Acid-Catalyzed Elimination of Alkyl Phosphates to Alkenes

Kenji Fukunaga, Hisao Kansui, Tomoko Taniguchi, and Takehisa Kunieda*
Faculty of Pharmaceutical Sciences, Kumamoto University, 5-1 Oe-honmachi, Kumamoto 862, Japan



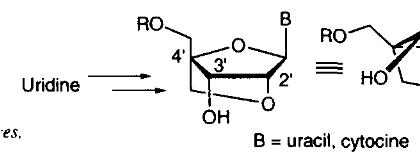
The titled reactions proceed smoothly with remarkably high regioselectivity in the smectic solvent (BOCD), as illustrated in this typical example, in contrast to the isotropic reactions, which give poorer selectivity.

---

*Tetrahedron Letters*, **1997**, *38*, 8735

### SNTHESIS OF 2'-*O*,4'-*C*-METHYLENEURIDINE AND -CYTIDINE. NOVEL BICYCLIC NUCLEOSIDES HAVING A FIXED $C_{3'}$-*endo* SUGAR PUCKERING

Satoshi Obika,[a] Daishu Nanbu,[a] Yoshiyuki Hari,[a] Ken-ichiro Morio,[a]
Yasuko In,[b] Toshimasa Ishida,[b] and Takeshi Imanishi*,[a]
*Faculty of Pharmaceutical Sciences, Osaka University, 1-6 Yamadaoka, Suita, Osaka 565, Japan*[a] *and Osaka University of Pharmaceutical Sciences, 4-20-1 Nasahara, Takatsuki, Osaka 569-11, Japan*[b]



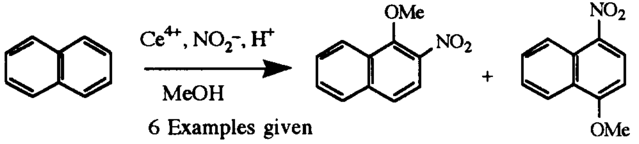
Typical $C_{3'}$-*endo* nucleoside analogs, 2'-*O*,4'-*C*-methyleneuridine and -cytidine, were synthesized from uridine *via* regioselective C-O bond cleavage of a 2',3'-*O*-benzylidene derivative as a crucial step.

---

*Tetrahedron Letters*, **1997**, *38*, 8739

### SYNTHESIS OF 1-ALKOXY-4-NITRONAPHTHALENES IN A NOVEL NITRATION OF NAPHTHALENE

John M. Mellor and Rachel Parkes
Department of Chemistry, The University, Southampton SO17 1BJ
and Ross W. Millar
Bldg A11, DRA Fort Halstead, Sevenoaks, Kent TN14 7BP



6 Examples given

---

*Tetrahedron Letters*, **1997**, *38*, 8743

### A GENERAL SYNTHESIS OF ISOTHIOCYANATES FROM DITHIOCARBAMATES USING CLAYCOP

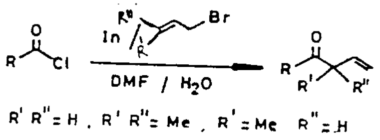
Harshadas M. Meshram,* Dale Srinivas and J.S. Yadav
Organic Chemistry Division-1, Indian Institute of Chemical Technology, Hyderabad-500 007, India

*Tetrahedron Letters*, **1997**, *38*, 8745

## INDIUM IN ORGANIC SYNTHESIS : CONVENIENT SYNTHESIS OF β,γ–UNSATURATED KETONES

J.S. Yadav*, Dale Srinivas, Gondi Sudershan Reddy and Konuru Hima Bindu
Indian Institute of Chemical Technology, Hyderabad-500 007, India.

A mild and efficient method for the preparation of β,γ unsaturated ketones with indium in D.M.F. is described.



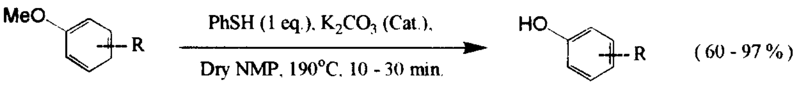
---

*Tetrahedron Letters*, **1997**, *38*, 8749

## CHEMOSELECTIVE ARYL ALKYL ETHER CLEAVAGE BY THIOPHENOLATE ANION THROUGH ITS *IN SITU* GENERATION IN CATALYTIC AMOUNT.

Mrinal K. Nayak and Asit K. Chakraborti, Department of Chemistry, The University of Burdwan, Burdwan 713 104, India. Department of Medicinal Chemistry, National Institute of Pharmaceutical Education and Research, Sector 67, S. A. S. Nagar 160 062, India.

Chemoselective aryl alkyl ether cleavage under virtually neutral condition in high yields.

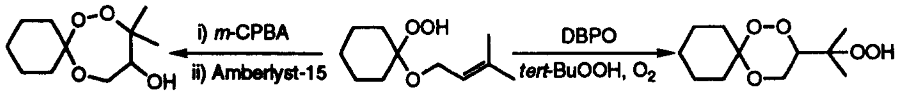


---

*Tetrahedron Letters*, **1997**, *38*, 8753

## NEW METHODS FOR THE SYNTHESIS OF OXY- FUNCTIONALIZED 1,2,4-TRIOXANES AND 1,2,4- TRIOXEPANES FROM UNSATURATED HYDROPEROXY ACETALS

**Yoshihiro Ushigoe,[a] Araki Masuyama,[a] Masatomo Nojima*[a] and Kevin J. McCullough[b]**
**[a] Department of Materials Chemistry, Faculty of Engineering, Osaka University, Suita, Osaka 565, Japan.**
**[b]Department of Chemistry, Heriot-Watt University, Edinburgh, EH14 4AS, Scotland, UK**



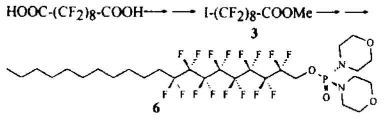
---

*Tetrahedron Letters*, **1997**, *38*, 8757

## THE PREPARATION OF METHYL 9-IODO-PERFLUORONONANOATE: AN ACCESS TO REVERSE FLUORINATED AMPHIPHILES.

Z. Szlávik, A. Csámpai, M. P. Krafft[†], J. G. Riess*[§], and J. Rábai*
Department of Organic Chemistry, Eötvös University, P.O. Box 32, H-1518 Budapest 112, Hungary; [†]Unité de Chimie Moléculaire, URA 426 au CNRS, Faculté des Sciences, Université de Nice-Sophia Antipolis, 06108 Nice Cédex 02, France; [§]Medical Centre, University of California at San Diego, 225 Dickinson St., San Diego CA-92102-1990.

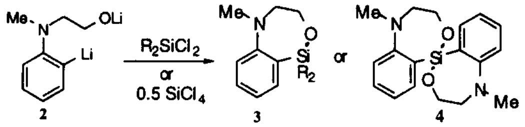
The ω-functionalized *F*-alkyl iodide **3** was synthesized. It allows the synthesis of molecules containing perfluoralkyl segments in a central position. The preparation of the new "reverse" *F*-amphiphile **6** is also reported.



*Tetrahedron Letters*, **1997**, *38*, 8761

**A REMARKABLE TENDENCY OF *o*-LITHIO-*N*-(2-LITHIOOXYETHYL)-*N*-METHYL-ANILINE TO FORM HETEROCYCLIC DERIVATIVES BY ITS REACTION WITH DICHLORO-DIALKYLSILANES OR SILICON TETRACHLORIDE. SYNTHESIS OF 2,5,1-BENZOXAZASILEPINES AND OF THE SILASPIRO ANALOGUE.** Ioannis D. Kostas and Constantinos G. Screttas*, National Hellenic Research Foundation Institute of Organic and Pharmaceutical Chemistry, Vas. Constantinou 48, 116 35 Athens, Greece
Catherine P. Raptopoulou and Aris Terzis, Institute of Materials Science, NCSR "Democritos", 153 10 Aghia Paraskevi Attikis, Greece

Reaction of **2** with $R_2SiCl_2$ (R = Me, Et, Ph) or $SiCl_4$ led to seven-membered heterocyclic compounds **3** and **4**.



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

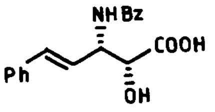
---

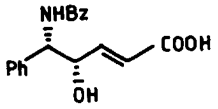
*Tetrahedron Letters*, **1997**, *38*, 8765

**FIRST AND STEREOFLEXIBLE SYNTHESIS OF VINYLOGOUS TAXOL SIDE CHAINS.**

J.S. Yadav*, S. Chandrasekhar and Pradip K. Sasmal
Indian Institute of Chemical Technology, Hyderabad-500 007, India

The first and practical synthesis of 3′ and 1′ vinylogous Taxol side chains is reported.





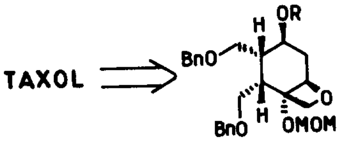
---

*Tetrahedron Letters*, **1997**, *38*, 8769

**A NEW ENTRY TO THE STEREOCONTROLLED SYNTHESIS OF CD RINGS OF TAXOL**

J.S. Yadav* and Pradip K. Sasmal
Indian Institute of Chemical Technology, Hyderabad-500 007, India

Facile and stereocontrolled synthesis of highly functionalized CD ring derivatives of Taxol is reported

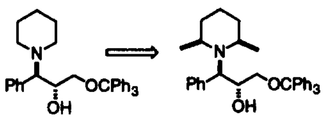


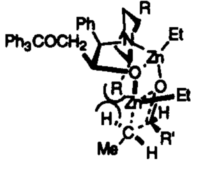
---

*Tetrahedron Letters*, **1997**, *38*, 8773

**COMPUTER ASSISTED, MECHANISM DIRECTED DESIGN OF A NEW LIGAND FOR THE HIGHLY ENANTIOSELECTIVE CATALYTIC ADDITION OF DIETHYLZINC TO ALDEHYDES.**

Anton Vidal-Ferran, Albert Moyano, Miquel A. Pericàs* and Antoni Riera. *Unitat de Recerca en Síntesi Asimètrica, Departament de Química Orgànica, Universitat de Barcelona, C/ Martí i Franquès, 1-11. 08028-Barcelona, Spain*





**Enhanced Enantioselectivity in the Addition of $Et_2Zn$ to Aldehydes through Selective Destabilization of *Re* Attack**