

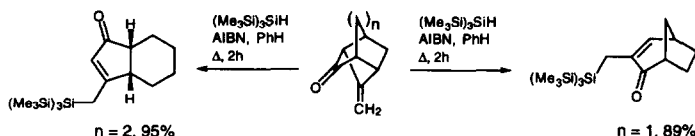
GRAPHICAL ABSTRACTS

Tetrahedron Letters, 1996, 37, 7867

UNEXPECTED FRAGMENTATIONS LEADING TO QUINANES AND HYDRINDANES MEDIATED BY A SILYL RADICAL

Claire Dufour, Seiji Iwasa, Agnes Fabré, and Viresh H. Rawal*

Department of Chemistry, The Ohio State University, Columbus, OH 43210, and
Department of Chemistry, University of Chicago, Chicago, IL 60637



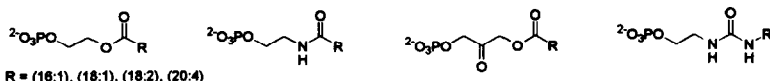
Tetrahedron Letters, 1996, 37, 7871

Facile Synthesis of Lysophospholipids Containing Unsaturated Fatty Acid Chains

Darrin W. Hopper, John G. Catalano and Timothy L. Macdonald*

Department of Chemistry, University of Virginia, Charlottesville, VA USA 22901

Methods are described for the efficient synthesis of unsaturated lysophosphatidic acid derivatives and mimics.



Tetrahedron Letters, 1996, 37, 7875

Novel Steroids from *Trichilia hirta* as Identified by Nanoprobe

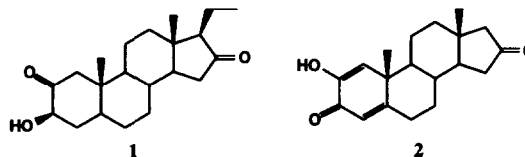
INADEQUATE 2D-NMR Spectroscopy. Denise C. Chauret, Tony Durst,*

and John T. Arnason, Departments of Chemistry and Biology, University of Ottawa, Ottawa, ON K1N 6N5 Canada.

Pablo Sanchez-Vindas, Lorena San Roman, and Luis Poveda, Facultad de Ciencias, Universidad Nacional, Heredia, Costa Rica

Paul A. Keifer, * Varian NMR Instruments, 3120 Hansen Way, Palo Alto, CA 94304-1030 USA

Two novel steroids (1 and 2) were isolated from *Trichilia hirta*. The carbon backbone of an 11 mg sample of 1 was determined by using a ^{13}C Nano•NMR™ probe to acquire 2D-INADEQUATE data and FRED™ analysis software to generate the structure.



Tetrahedron Letters, 1996, 37, 7879

ABSOLUTE CONFIGURATION OF PHORBOXAZOLES A AND B FROM THE MARINE SPONGE, *PHORBAS* SP. 2.

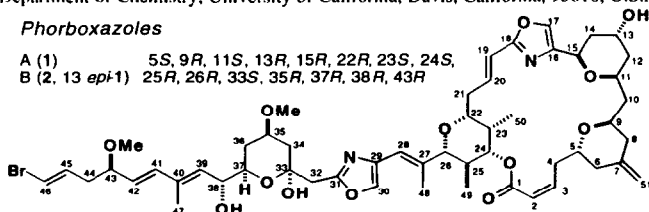
C43 AND COMPLETE STEREOCHEMISTRY Tadeusz F. Molinski

Department of Chemistry, University of California, Davis, California, 95616, U.S.A.

Phorboxazoles

A (1) 5S, 9R, 11S, 13R, 15R, 22R, 23S, 24S,

B (2, 13 *epi*-1) 25R, 26R, 33S, 35R, 37R, 38R, 43R



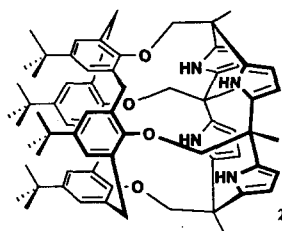
Elucidation of the absolute configuration of phorboxazole A (1) was completed by determination of 43 R.

SYNTHESIS OF A NEW CYLINDRICAL CALIX[4]ARENE-CALIX[4]PYRROLE PSEUDO DIMER

Tetrahedron Letters, 1996, 37, 7881

Philip A. Gale, Jonathan L. Sessler,* Vincent Lynch and Petra I. Sansom
Department of Chemistry and Biochemistry,
University of Texas at Austin, Austin, Texas 78712-1167, USA.

The synthesis of a new calixarene-capped calixpyrrole **2** has been achieved. The X-ray crystal structure of **2** has been elucidated and this together with NMR studies have revealed hydrogen bonding between the pyrrole NH groups and the oxygens at the lower rim of the calixarene.

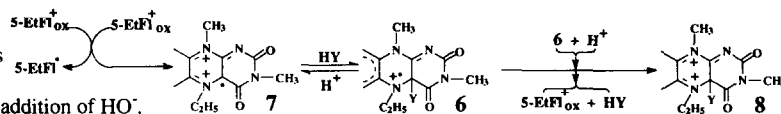


Inter-Flavin Electron Transfer in the Ground State in the Absence of External Electron Donors and Acceptors.

Tetrahedron Letters, 1996, 37, 7885

Humphrey I. X. Mager¹ and Shiao-Chun Tu,^{1,2} Departments of ¹Biochemical and Biophysical Sciences and ²Chemistry, University of Houston, Houston, TX 77204-5934, U.S.A.

Inter-flavin electron transfer of N5-alkylflavinium cations primarily leads to the flavosemiquinone and a super-oxidized flavin **7** followed by a rapid addition of HO[•], Cl[•] or Br[•]. A (second) inter-flavin electron transfer of the derived 4^a-flavin adduct radical **6** gives **8** and 5-EtFl⁺_{ox} and, consequently, an additional formation of the flavosemiquinone.

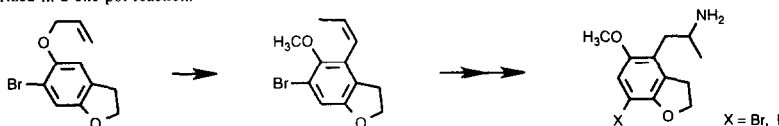


ONE-POT CLAISEN REARRANGEMENT/O-METHYLATION/ALKENE ISOMERIZATION IN THE SYNTHESIS OF *ORTHO*-METHOXYLATED PHENYLISOPROPYLAMINES

Tetrahedron Letters, 1996, 37, 7889

Steve R. Waldman, Aaron P. Monte[†], Ann Bracey, and David E. Nichols*
Department of Medicinal Chemistry and Molecular Pharmacology, School of Pharmacy, Purdue University, West Lafayette, IN 47907 and
[†]Department of Chemistry, University of Wisconsin - La Crosse, La Crosse, WI 54601

A potent serotonin agonist and its novel analog are synthesized using a method involving a Claisen rearrangement whose unstable phenolic product is methylated and isomerized in a one-pot reaction.

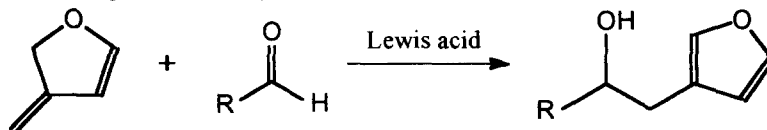


THE ENE REACTION OF 3-METHYLENE-2,3-DIHYDROFURAN WITH ALDEHYDES.

Tetrahedron Letters, 1996, 37, 7893

William H. Miles,* Christina L. Berreth and Christian A. Anderton, Department of Chemistry, Lafayette College, Easton, PA 18042

The Lewis acid-promoted ene reaction of 3-methylene-2,3-dihydrofuran with aldehydes gives 3-(2-alkanol)furans in good to excellent yield, in some cases with high stereoselectivity.

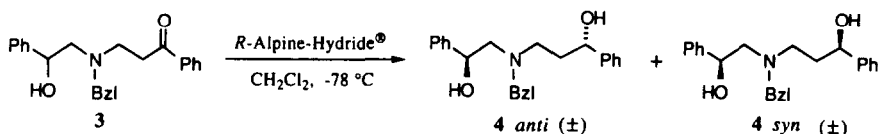


High 1,6 Diastereoselectivity in the Hydride Reduction of an Acyclic Ketone Substrate via Bicyclic Chelation Control

Tetrahedron Letters, 1996, 37, 7897

Han-Cheng Zhang, Bruce D. Harris, Cynthia A. Maryanoff, and Bruce E. Maryanoff*, The R. W. Johnson Pharmaceutical Research Institute, Spring House, Pennsylvania 19477 USA

Reduction of acyclic, ϵ -hydroxy ketone **3** with *R*-Alpine-Hydride® in methylene chloride provided a strong preponderance of the *anti* diastereomer of **4** (*anti:syn* = 12:1). This impressive 1,6 stereoselectivity is attributed to bicyclic chelation control in the hydride addition.



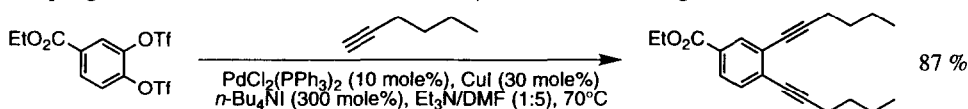
Iodide Acceleration in the Pd-Catalyzed Coupling of Aromatic 1,2-Ditriflates with Alkynes: Synthesis of Enediynes

Tetrahedron Letters, 1996, 37, 7901

Noel A. Powell and Scott D. Rychnovsky*

Department of Chemistry, University of California, Irvine, CA 92697-2025

Aromatic enediynes were prepared from aromatic 1,2-ditriflates and alkynes by a Pd-catalyzed coupling. Added iodide salts (300 mole% *n*-Bu₄NI or KI) led to a large rate enhancement.

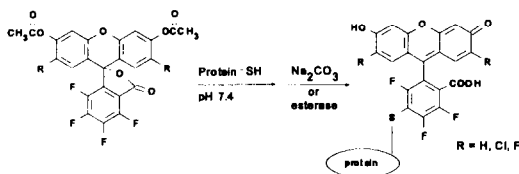


NOVEL DERIVATIZATION OF PROTEIN THIOLS WITH FLUORINATED FLUORESCEINS

Tetrahedron Letters, 1996, 37, 7905

Kyle. R. Gee*, Wei-Chuan Sun, Dieter H. Klaubert, Richard P. Haugland, Rosalyn H. Upson, Thomas H. Steinberg, Martin Poot; Molecular Probes, Inc., 4849 Pitchford Ave, Eugene, OR 97402

Fluorescein diacetate analogs **3a–3c** react selectively with protein sulfhydryl groups at neutral pH in aqueous solution, by substitution at the perfluorinated ring. The acetate moieties are cleaved off giving a fluorescent protein conjugate.



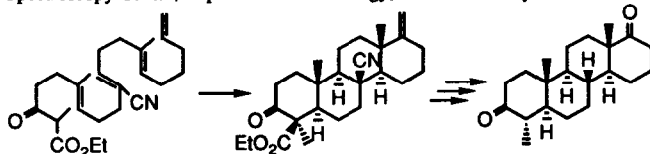
A Radical Prototype To Steroids: Synthesis Of d,l-5 α -D-Homoandrostane-4 α -Methyl-3,17 α -Dione

Tetrahedron Letters, 1996, 37, 7909

Phillip A. Zoretic,^{a*} Zhiyue Chen,^a Yongzheng Zhang,^a Anthony A. Ribeiro^b

^aDepartment of Chemistry, East Carolina University, Greenville, NC 27858

^bDuke NMR Spectroscopy Center, Department of Radiology, Duke University Medical Center, Durham, NC 27710

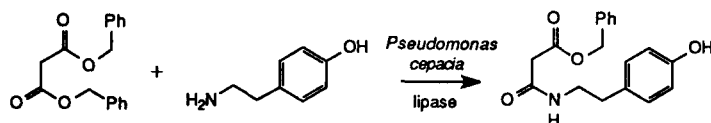


***Pseudomonas cepacia* Lipase Mediated Amidation of Benzyl Esters.**

Maciej Adamczyk and Jonathan Grote, Department of Organic Chemistry (9NM), Abbott Diagnostics Division, Abbott Laboratories, 100 Abbott Park Road, Abbott Park, IL 60064-3500

Tetrahedron Letters, 1996, 37, 7913

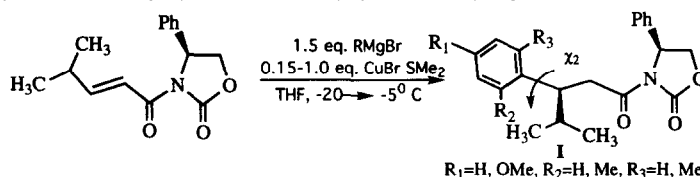
Pseudomonas cepacia lipase catalyzes the formation of amides from a variety of benzyl esters and different amines.

**Syntheses of Highly Constrained β -Aryl Isohexanoic Acid Derivatives Via Asymmetric Michael Addition.**

Subo Liao, Yinglin Han,† Wei Qiu, Michael Bruck and Victor J. Hruby *
Department of Chemistry, The University of Arizona, Tucson, Arizona 85721

Tetrahedron Letters, 1996, 37, 7917

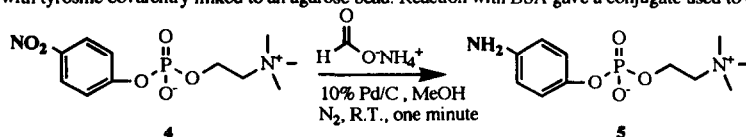
The asymmetric synthesis and X-ray crystal structure of highly constrained β -aryl hexanoic acids such as **1** is reported.

**FACILE REDUCTION IN THE SYNTHESIS OF PHOSPHORYLCHOLINE AFFINITY COLUMNS**

Lenore M. Martin, Department of Biomedical Sciences, College of Pharmacy, University of Rhode Island, Kingston, RI 02881

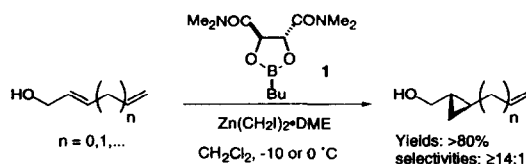
Tetrahedron Letters, 1996, 37, 7921

Phosphorylcholine-linked affinity columns were synthesized by reacting the diazonium salt generated from amine **5** with tyrosine covalently linked to an agarose bead. Reaction with BSA gave a conjugate used to coat ELISA plates.

**THE CHEMO- AND ENANTIOSELECTIVE CYCLOPROPANATION OF POLYENES: CHIRAL AUXILIARY VS CHIRAL REAGENT-BASED**

APPROACH. A. B. Charette,* H. Juteau, H. Lebel, D. Deschênes. Département de Chimie, Université de Montréal, Montréal, Québec, Canada, H3C 3J7.

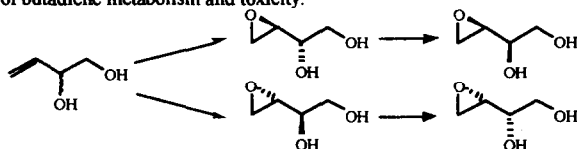
Tetrahedron Letters, 1996, 37, 7925



Synthetic Route to Optically-Pure Metabolites of Butadiene, and their Chiral GC Separation.

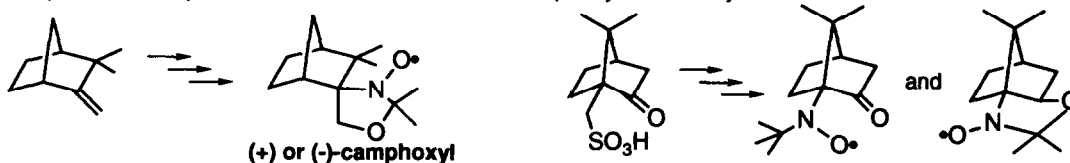
David J. Claffey and James A. Ruth*, School of Pharmacy, University of Colorado Health Sciences Center, Campus Box C-238, 4200 East Ninth Ave., Denver, Colorado 80262, USA.

The four possible stereoisomers of 3,4-epoxybutane-1,2-diol were stereospecifically synthesized in excellent yields as part of a study on the stereochemical aspects of butadiene metabolism and toxicity.

**Synthesis of Several Novel Optically Active Nitroxyl Radicals**

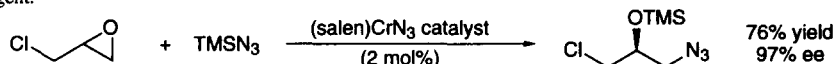
Rebecca Braslau,* Heiko Kuhn, Leland C. Burrill II, Kenneth Lanham and Chris J. Stenland, Department of Chemistry and Biochemistry, University of California, Santa Cruz, California 95064 USA

Camphene and camphorsulfonic acid are converted to novel optically active nitroxyl radicals.


Dynamic Kinetic Resolution of Epichlorohydrin via Enantioselective Catalytic Ring Opening with TMSN₃. Practical Synthesis of Aryl Oxazolidinone Antibacterial Agents

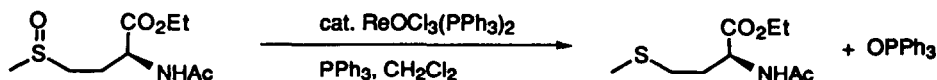
Scott E. Schaus and Eric N. Jacobsen*, Department of Chemistry and Chemical Biology, Harvard University, Cambridge, Massachusetts 02138

The dynamic kinetic resolution of (±)-epichlorohydrin has been achieved utilizing the asymmetric (salen)Cr(III)N₃ catalyzed epoxide ring opening with TMSN₃. The product was employed in the synthesis of U-100592, a promising new oxazolidinone antibacterial agent.

**RHENIUM CATALYZED SULFOXIDE REDUCTION.**

Jeffrey B. Arterburn*, and Marc C. Perry, Department of Chemistry and Biochemistry, New Mexico State University, Las Cruces, NM 88003 USA

Sulfoxides are catalytically reduced to sulfides with ReOCl₃(PPh₃)₂ (I) and triphenylphosphine.

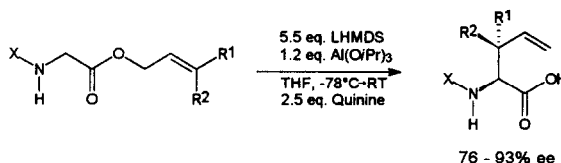


The Asymmetric Ester Enolate Claisen Rearrangement as a Suitable Method for the Synthesis of Sterically Highly Demanding Amino Acids

Achim Krebs and Uli Kazmaier

Organisch-Chemisches Institut der Universität, Im Neuenheimer Feld 270, D-69120 Heidelberg, Germany

Ester enolate Claisen rearrangement of highly substituted glycine allylic esters under the influence of chiral ligands gives rise to sterically demanding amino acids. The reaction yields amino acids with a β -quaternary carbon center in a highly diastereo- and enantioselective manner.

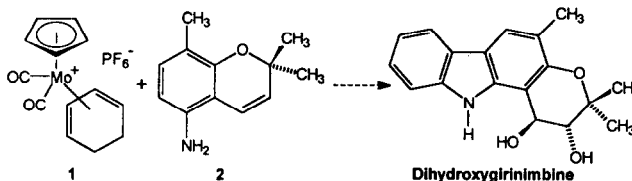


Transition Metal Complexes in Organic Synthesis – Part 33.

Molybdenum-Mediated Total Synthesis of Girinimbine, Murrayacine, and Dihydroxygirinimbine

Hans-Joachim Knölker* and Christoph Hofmann; Institut für Organische Chemie, Universität Karlsruhe, Richard-Willstätter-Allee, 76131 Karlsruhe, Germany

The consecutive C–C and C–N bond formation of the Mo complex **1** and the 2-aminochromene **2** provides in a highly convergent synthesis girinimbine, which is subsequently transformed to murrayacine and dihydroxygirinimbine.

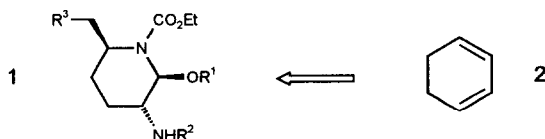


De novo Syntheses of Enantiopure Glycosyl Donors of

D-IL-Azapurpurosamine C Type - Enzymatic Asymmetrizations

Stefan Grabowski and Horst Prinzbach*

Chemisches Laboratorium der Universität Freiburg i. Br., Germany



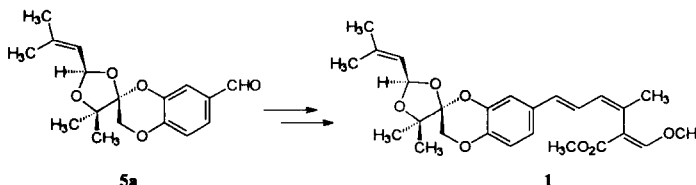
Glycosyl donors of type **1** are synthesized starting from known cycloadducts of 1,3-cyclohexadiene with azo dienophiles and by utilizing biocatalytic asymmetrizations as access to the pure antipodes.

Total Synthesis of (+)-Strobilurin E

G. Bertram, A. Scherer, W. Steglich*, W. Weber, T. Anke
Institut für Organische Chemie der LMU, Karlstr. 23, D-80333 München

LB Biotechnologie der Universität, Paul-Ehrlich-Str. 23, D-67663 Kaiserslautern

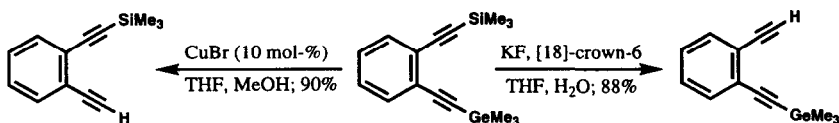
The spiroacetal aldehyde **5a** is the key building block in total syntheses of strobilurin E (**1**) and its stilbene analogue **11**.



ORTHOGONALLY PROTECTED DIALKYNES.

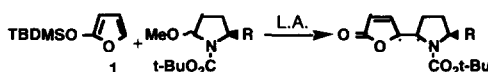
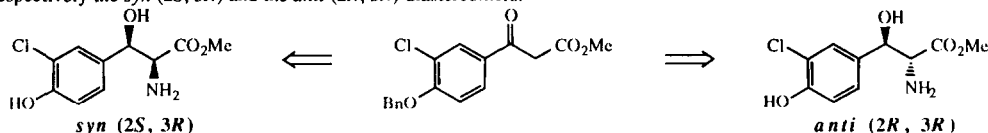
Alexander Ernst, Luca Gobbi and Andrea Vasella*

Laboratorium für Organische Chemie, Eidgenössische Technische Hochschule Zürich, ETH Zentrum, Universitätsstr. 16, CH-8092 Zürich, Switzerland.

C-SiMe₃/C-GeMe₃ protected dialkynes are selectively protodegermylated with CuBr in THF/MeOH or in aqueous acetone and selectively protodesilylated with KF/[18]-crown-6 in aqueous THF.**C-Glycosylation of Cyclic N-Acyliminium Ions with Trimethylsilyloxyfuran**

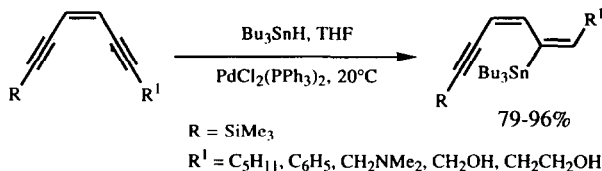
Marianne Pichon, Bruno Figadère*, André Cavé

Laboratoire de Pharmacognosie, associé au CNRS (BIOCIS), Université Paris-Sud, Faculté de Pharmacie, rue J. B. Clément, 92296 Châtenay-Malabry (France)

C-glycosylation of 2-methoxy-5-alkoxycarbonyl pyrrolidines with trimethylsilyloxyfuran allows us to obtain the corresponding pyrrolidines contiguous to a α,β -unsaturated butyrolactone. Further chemical transformations (e.g. oxidations, hydrogenation and opening of the lactone ring) could lead to naturally occurring bioactive 2,5-disubstituted pyrrolidines.**SYNTHESES OF SYN AND ANTI α -AMINO β -HYDROXY ACIDS OF VANCOMYCIN : (2S, 3R) AND (2R, 3R)***p*-CHLORO-3-HYDROXYTYROSINES. Anne GIRARD, Christine GRECK, Didier FERROUD and Jean Pierre GENET. Laboratoire de Synthèse Organique (U.A. 1381); Ecole Nationale Supérieure de Chimie de Paris; 11, rue Pierre et Marie Curie 75231 PARIS Cédex 05.Key steps involved the kinetic dynamic resolution of the β -ketoester and asymmetric hydrogenation followed by electrophilic amination to obtain respectively the *syn* (2S, 3R) and the *anti* (2R, 3R) diastereomers.**EXPEDITIOUS STEREO AND REGIOSELECTIVE SYNTHESIS OF STANNYLATED DIENYNES: VERSATILE PRECURSORS OF DIENEDIYNES RELATED TO NEOCARZINOSTATIN CHROMOPHORE**

Fabiola Ferri and Mouâd Alami*

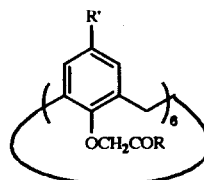
Ecole Normale Supérieure, Département de chimie associé au CNRS, 24 rue Lhomond, 75231 Paris Cedex 05, France



DRAMATIC EFFECTS OF *p*-DEALKYLATION ON THE BINDING ABILITIES OF *p*-*tert*-BUTYLCALIX[6]ARENES: NEW Cs^+ AND Sr^{2+} SELECTIVE RECEPTORS.

Stefano Fanni,^a Françoise Arnaud-Neu,^{a*} M. Anthony McKervey,^b Marie-José Schwing-Weill,^a and Khadija Ziat^a
^a Laboratoire de Chimie-Physique, URA 405 du CNRS, Université Louis Pasteur, ECPM, 1, rue Blaise Pascal, 67000 Strasbourg, France; ^b Department of Chemistry, Queen's University of Belfast, Belfast BT9 5AG, N-Ireland

Removal of the *para tert*-butyl substituent from *p*-*tert*-butylcalix[6]arene hexadiethylamide enhances remarkably the Cs^+ and Sr^{2+} selectivities with respect to Na^+ .

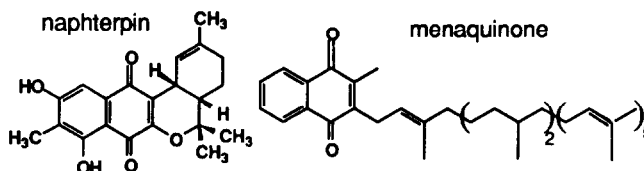


$\text{R} = \text{NEt}_2$, $\text{R}' = \text{Bu}^t$ or H

SIMULTANEOUS OPERATION OF THE MEVALONATE AND NON-MEVALONATE PATHWAYS IN THE BIOSYNTHESIS OF ISO-PENTENYL DIPHOSPHATE IN *STREPTOMYCES AERIOUVIFER*.

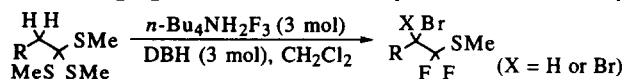
Haruo Seto*, Hiroyuki Watanabe and Kazuo Furihata *Institute of Molecular and Cellular Biosciences, *Division of Agriculture and Agricultural Life Sciences, The University of Tokyo, Bunkyo-ku, Tokyo 113, Japan

Labeling experiments using $[1,2\text{-}^{13}\text{C}_2]$ acetate and $[U\text{-}^{13}\text{C}_6]$ glucose on menaquinone and naphterpin produced by *Streptomyces aeriouvifer* proved simultaneous operation of the mevalonate and non-mevalonate pathways for the formation of isopentenyl diphosphate in this organism.

**DIFLUORINATION OF 2-SUBSTITUTED 1,1,1-TRIS(METHYLTHIO)ETHANES BY OXIDATIVE DESULFURIZATION-FLUORINATION. A NEW ROUTE TO PARTIALLY FLUORINATED OLEFINS**

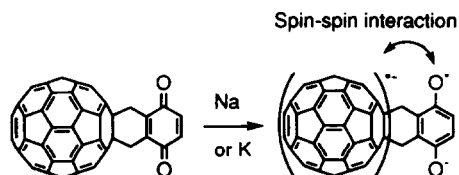
Satoru Furuta and Tamejiro Hiyama* Research Laboratory of Resources Utilization, Tokyo Institute of Technology, 4259 Nagatsuta, Midori-ku, Yokohama, Kanagawa 226, JAPAN

Oxidative desulfurization-fluorination of $\text{RCH}_2\text{C}(\text{SMe})_3$ using $n\text{-Bu}_4\text{NH}_2\text{F}_3$ and 1,3-dibromo-5,5-dimethylhydantoin gave $\text{RCHBrCF}_2\text{SMe}$ in good yields. The products were converted into difluorobromo olefins. Under similar conditions $\text{ArCH}_2\text{C}(\text{SMe})_3$ afforded $\text{ArCBr}_2\text{CF}_2\text{SMe}$. The mechanism of the partial difluorination accompanied by bromination is discussed.

**MONO- AND DIANION OF BENZOQUINONE-LINKED [60]FULLERENE**

Masahiko Iyoda,* Shigeru Sasaki, Fatema Sultana, Masato Yoshida, Yoshiyuki Kuwatani, and Shigeru Nagase
 Department of Chemistry, Faculty of Science, Tokyo Metropolitan University, Hachioji, Tokyo 192-03, Japan

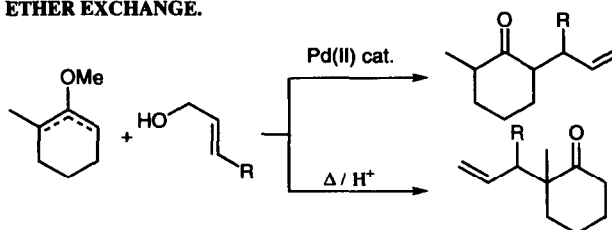
The EPR spectra of the dianion derived from the benzoquinone-linked [60]fullerene clearly show the spin-spin interaction between the semiquinone and C_{60} radical anions.



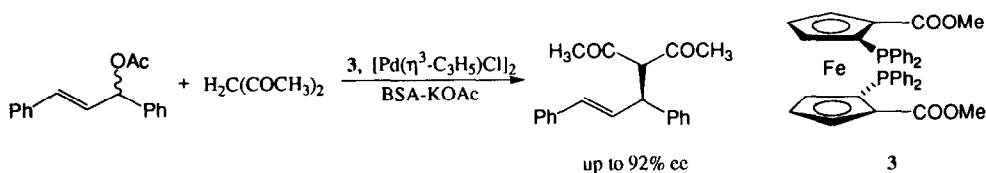
REGIOCHEMICAL CONTROL IN THE Pd(II)-CATALYZED CLAISEN REARRANGEMENT VIA *IN SITU* ENOL ETHER EXCHANGE.

Masaharu Sugiura and Takeshi Nakai*
Department of Chemical Technology,
Tokyo Institute of Technology,
Meguro-Ku, Tokyo 152, Japan.

The titled rearrangement is shown to exhibit the opposite regioselectivities to those of the conventional thermal counterparts.

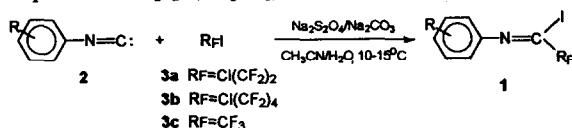
**NOVEL *C*₂-SYMMETRIC DIPHOSPHINE LIGAND WITH ONLY THE PLANAR CHIRALITY OF FERROCENE**

Wanbin Zhang, Toshiyuki Kida, Yohji Nakatsuji, and Isao Ikeda*
Department of Applied Chemistry, Faculty of Engineering, Osaka University, Suita, Osaka 565, Japan

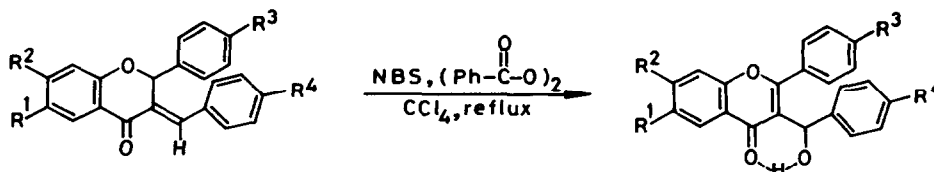
**A NEW APPROACH TO POLYFLUOROALKYL IMIDOYL IODIDE**

Hong-Bin Yu, Wei-Yuan Huang*, Shanghai Institute of Organic Chemistry,
Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai, 200032, China

Reaction of polyfluoroalkyl or trifluoromethyl iodide with N-aryl isocyanide lead to the title compounds in the presence of $\text{Na}_2\text{S}_2\text{O}_4/\text{Na}_2\text{CO}_3$.

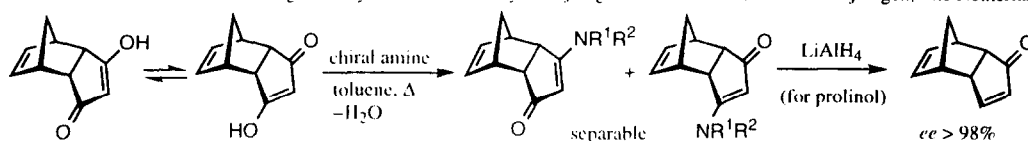
**A FACILE TRANSFORMATION OF *E*-3-BENZYLIDENE-FLAVANONES TO 3-(α -HYDROXYBENZYL)FLAVONES**

Mrinal G. Dhara, Surya K. De and Asok K. Mallik*
Department of Chemistry, Jadavpur University, Calcutta 700 032, INDIA



**ASYMMETRIC DESYMMETRIZATION OF A PSEUDO-MESO
ENDO-TRICYCLO[5.2.1.0^{2,6}]DECA-4,8-DIEN-3-ONE
BY CHIRAL AMINES**

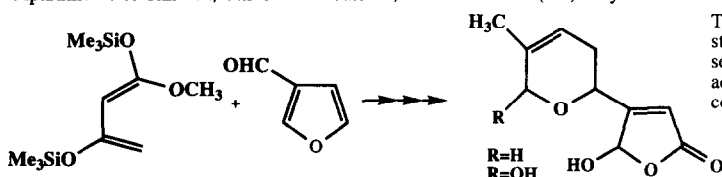
F.J.A.D. Bakkeren, N.G. Ramesh, D. de Groot, A.J.H. Klunder and B. Zwanenburg^{*}; Department of Organic Chemistry, NSR Center for Molecular Structure, Design and Synthesis, University of Nijmegen, Toernooiveld, 6525 ED Nijmegen, The Netherlands



**A New Approach to Pyranofuranones, Advanced Intermediates for the Synthesis
of Manoolide, Cacospongionolides and their Analogues**

A. Soriente, M. De Rosa, A. Scettri^{*}, G. Sodano^{*}

Dipartimento di Chimica, Università di Salerno, 84081 Baronissi (SA)-Italy



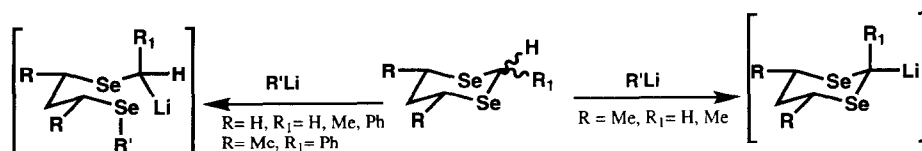
The pyranofuranone fragment, main structural feature of many bioactive sesterterpenes of marine origin, is accessible through a simple and convenient synthetic sequence.

REACTION OF 1,3-DISELENANES WITH ORGANOLITHIUMS

Alain Krief^{*} and Laurent Defrère

Departement of Chemistry, Facultés Universitaires Notre-Dame de la Paix, 61 rue de Bruxelles, B-5000, Namur (Belgium).

Hydrogen / metal or selenium / metal exchange efficiently and selectively takes place on reaction of 1,3-diselenanes with organolithiums. The nature of the two partners directs the reaction.

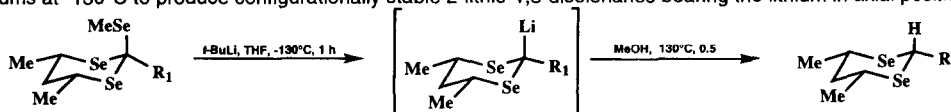


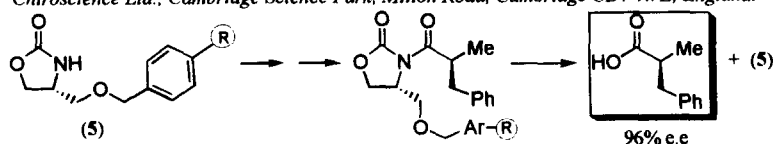
**SYNTHESIS OF 2-LITHIO-1,3-DISELENANES AND 2-LITHIO-1,3-DITHIANES BY Se/Li EXCHANGE : FIRST SUCCESSFUL TRAPPING
OF AXIALLY ORIENTED 2-LITHIO-1,3-DISELENANES**

Alain Krief^{*} and Laurent Defrère

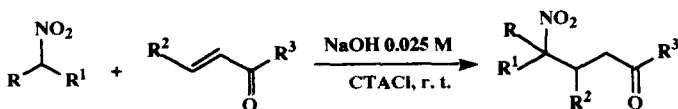
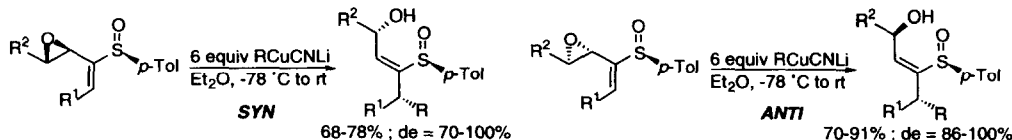
Departement of Chemistry, Facultés Universitaires Notre-Dame de la Paix, 61 rue de Bruxelles, B-5000, Namur (Belgium).

Conformationally rigid 2-methylseleno-1,3-diselenanes bearing the methylseleno moiety in axial position react with butyllithiums at -130°C to produce configurationally stable 2-lithio-1,3-diselenanes bearing the lithium in axial position.



Very Strong Binding and Mode of Complexation of Water Soluble Porphyrins with a Permethylated β -CyclodextrinTommaso Carofiglio^a, Roberto Fornasier^{b*},
Vittorio Lucchini^c, Cristiana Rosso^b, Umberto Tonellato^b^aDipartimento di Chimica Inorganica, Metallorganica ed Analitica, Università di Padova, Via Marzolo 1, 35100 Padova (Italy). ^bDipartimento di Chimica Organica, and Centro Meccanismi Reazioni Organiche del CNR, Università di Padova, Via Marzolo 1, 35100 Padova (Italy). ^cDipartimento di Scienze Ambientali Università di Venezia, Dorsoduro 2137, 30123 Venezia (Italy).Heptakis(2,3,6-tri-O-methyl)- β -cyclodextrin in a pH=7.0 aqueous solution binds mesotetrakis-(4-carboxyphenyl) porphyrin and its zinc complex to yield 2:1 complexes with global binding constants larger than $1 \times 10^{16} \text{ M}^{-2}$. The mode of binding, involving the inclusion of two opposite aryl groups in the cyclodextrin cavity, is clearly defined by a detailed NMR analysis.**PREPARATION AND FIRST APPLICATION OF A POLYMER-SUPPORTED "EVANS" OXAZOLIDINONE. Steven M. Allin^{**} and Stephen J. Shuttleworth^b**^aDepartment of Chemical and Biological Sciences, The University of Huddersfield, Queensgate, Huddersfield HD1 3DH, England;^bChiroscience Ltd., Cambridge Science Park, Milton Road, Cambridge CB4 4WE, England.

The first preparation of polymer-supported oxazolidinone (5) is reported; its use as a chiral auxiliary for solid phase asymmetric synthesis is demonstrated through the synthesis of (S)-2-methyl-3-phenylpropionic acid (e.e. 96%).

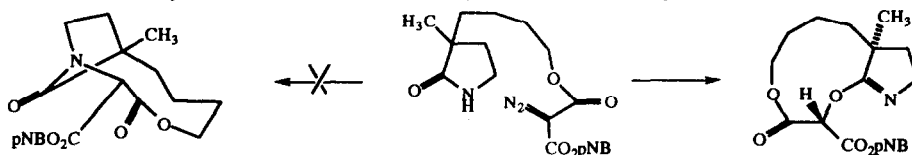
THE MICHAEL REACTION OF NITROALKANES WITH CONJUGATED ENONES IN AQUEOUS MEDIA.Roberto Ballini,^{*} and Giovanna Bosica
Dipartimento di Scienze Chimiche dell'Università,
Via S. Agostino 1, 62032 Camerino, Italy**SULFOXIDE-CONTROLLED $\text{S}_{\text{N}}2'$ DISPLACEMENTS BETWEEN CYANOCUPRATES AND EPOXY VINYL SULFOXIDES.**Joseph P. Marino,^{*a} Laura J. Anna,^a Roberto Fernández de la Pradilla,^{*b} María Victoria Martínez,^b Carlos Montero,^b Alma Viso,^c^aDepartment of Chemistry, The University of Michigan, Ann Arbor, Michigan 48109-1055, USA ^bInstituto de Química Orgánica, CSIC, Juan de la Cierva, 3, 28006 Madrid, Spain. ^cDepartamento de Química Orgánica I, Facultad de Química, Universidad Complutense, 28040 Madrid, Spain.

FORMATION OF A MEDIUM RING IMINO ETHER BY A DIAZO INSERTION REACTION

R. H. B. Galt,^a P. B. Hitchcock,^b S. J. McCarthy^b and D. W. Young^{b*}

^aZeneca Pharmaceuticals, Mereside, Alderley Park, Macclesfield, SK10 4TG

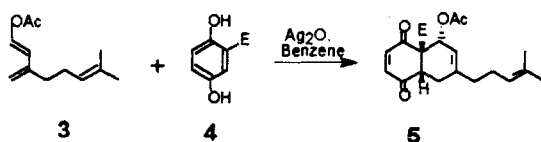
^bSchool of Chemistry and Molecular Sciences, University of Sussex, Falmer, Brighton, BN1 9QJ, U.K.



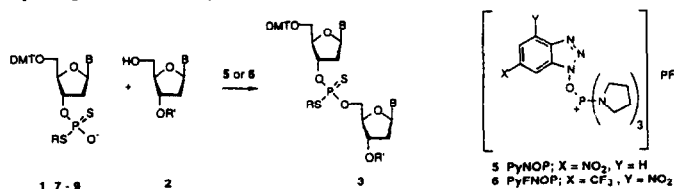
Diels-Alder Reaction of *in-situ* Generated *p*-Benzoquinones with Isoprenoidal Dienol Acetate Novel Synthesis of 2-Isoprenoidal Naphthalene-5,8-Quinols⁺

Archana Rani, Brijesh Kumar, Shivaji N. Suryawanshi^{*} and Dewan S. Bhakuni^{*}

Division of Medicinal Chemistry, Central Drug Research Institute, Lucknow 226001 India



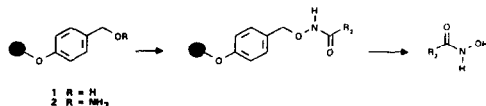
SOLID PHASE SYNTHESIS OF OLIGODEOXYNUCLEOSIDE PHOSPHORODITHIOATES USING A CHEMOSELECTIVE COUPLING REAGENT. Jan Kehler, Ask Püschl and Otto Dahl^{*}. Department of Chemistry, The H. C. Ørsted Institute, University of Copenhagen, Universitetsparken 5, DK-2100 Copenhagen, Denmark.



A METHOD FOR THE SYNTHESIS OF HYDROXAMIC ACIDS ON SOLID PHASE

Christopher D. Floyd, Christopher N. Lewis, Sanjay R. Patel and Mark Whittaker, British Biotech Pharmaceuticals Ltd, Watlington Rd, Oxford, OX4 5LY

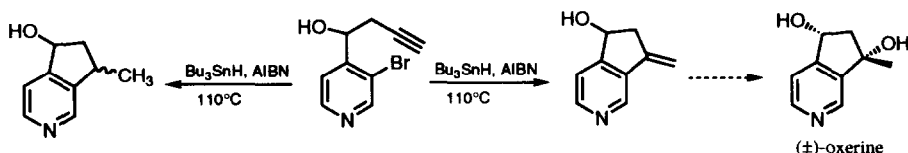
Wang Resin 1 has been converted to the *O*-hydroxylamine 2. This can be acylated and the product cleaved from the resin under acidic conditions to give hydroxamic acids.



PYRIDINE RADICALS IN SYNTHESIS: A FORMAL TOTAL SYNTHESIS OF (±)-OXERINE

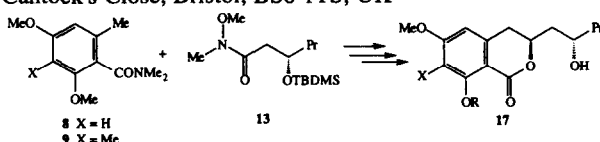
Keith Jones* and Andrea Fiumana

Department of Chemistry, King's College London, Strand, London WC2R 2LS, UK.



ENANTIOSELECTIVE SYNTHESIS OF FUSARENTIN METHYL ETHERS: INSECTICIDAL METABOLITES OF *Fusarium larvarum*

Carole McNicholas, Natural Products Chemistry Department, Xenova Ltd, 240 Bath Road, Slough, SL1 4EF, UK; Thomas J. Simpson* and Nicola J. Willett, School of Chemistry, University of Bristol, Cantock's Close, Bristol, BS8 1TS, UK

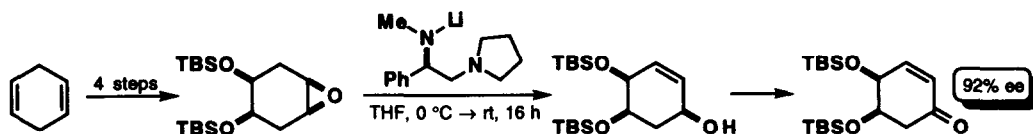


Acylation of the benzilic anions derived from the benzamides (8) and (9) with the Weinreb amide (13) followed by stereoselective reduction of the resulting ketones to the *anti*-1,3-diols and acid catalysed cyclisation gave the dihydroisocoumarins (17, X = H or Me).

CHIRAL BASE-MEDIATED REARRANGEMENT OF MESO-CYCLOHEXENE OXIDES TO ALLYLIC ALCOHOLS

Peter O'Brien* and Pierre Poumellec

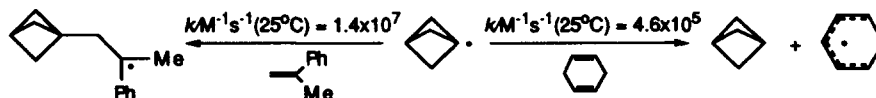
Department of Chemistry, University of York, Heslington, York YO1 5DD UK



BICYCLO[1.1.1]PENT-1-YL: A TERTIARY ALKYL RADICAL WITH ENHANCED REACTIVITY.

Jeffrey T. Banks and Keith U. Ingold, Steacie Institute for Molecular Sciences, National Research Council of Canada, Ottawa, Canada, K1A 0R6, Ernest W. Della, Department of Chemistry, Flinders University, Bedford Park, South Australia 5042 and John C. Walton*, University of St. Andrews, School of Chemistry, St. Andrews, Fife KY16 9ST, UK.

Rate constants for reactions of bicyclo[1.1.1]pent-1-yl radicals with α -methylstyrene and 1,4-cyclohexadiene were measured by laser flash photolysis.



**ONE- POT SYNTHESIS OF OPTICALLY PURE TRICYCLO-
[5. 3. 1. 0^{3,8}]UNDECANES INVOLVING A NOVEL
TRIPLE MICHAEL-DIECKMANN REACTION**

Soumen Maiti, Susmita Bhaduri, Basudeb Achari,
Asish K. Banerjee*, Indian institute of Chemical
Biology, Calcutta-700 032, India and Nirmalya P.
Nayak, Alok K. Mukherjee, Department of Physics,
Jadavpur University, Calcutta 700 032 India.

