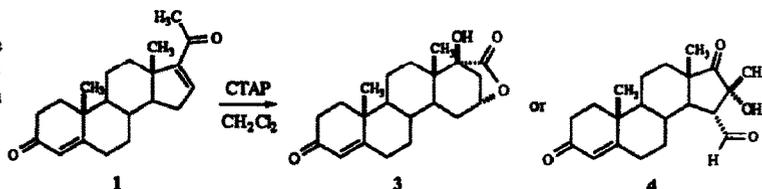




**NOVEL STEROIDS FROM CETYLTRIMETHYLAMMONIUM  
PERMANGANATE-INITIATED OXIDATIVE REARRANGEMENTS OF 16-DEHYDROPROGESTERONE.**

Philip R. Kym, Scott R. Wilson, William H. Gritton, and John A. Katzenellenbogen,\* Department of Chemistry, University of Illinois, Urbana, Illinois 61801

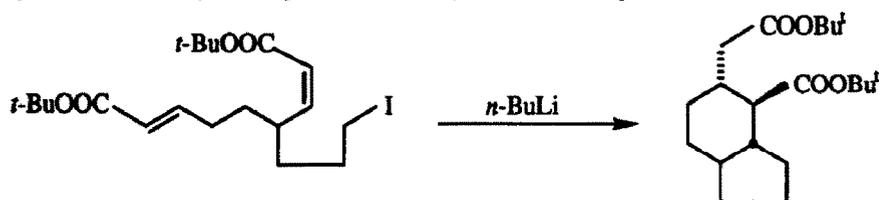
Cetyltrimethylammonium permanganate initiates an oxidative rearrangement of the D-ring of 16-dehydropregesterone to form the novel steroids 3 and 4.



**Stereoselective Construction of Functionalized Bicyclic  
Carbocycles Through Metal-Halogen Exchange-Initiated  
Sequential Conjugate Addition Reactions**

Manning P. Cooke, Jr.\* and D. Gopal

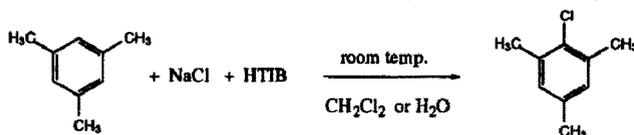
Department of Chemistry, Washington State University, Pullman, Washington 99164



**RING HALOGENATIONS OF POLYALKYLBENZENES BY IONIC HALIDES AND KOSER'S REAGENT**

Pakorn Bovonsombat, Elsa Djuardi and Edward Mc Nelis, Department of Chemistry, New York University, New York, New York 10003.

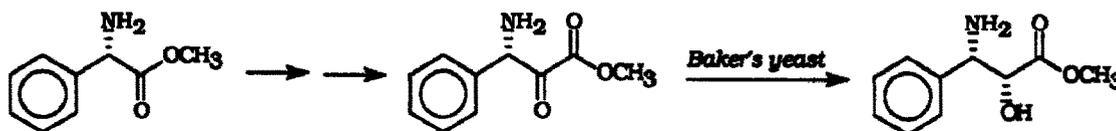
Ring halogenations of polyalkylbenzenes as indicated by the schematic chlorination have been carried out at room temperature with ionic halides and stoichiometric amounts of Koser's reagent. Solvents range from water to methylene chloride.



**APPLICATION OF YEAST-CATALYZED REDUCTIONS TO  
SYNTHESIS OF (2R,3S)-PHENYLISOSERINE.**

Jeff Kearns and Margaret M. Kayser\*, Department of Physical Sciences, University of New Brunswick, P.O. Box 5050, Saint John, New Brunswick E2L 4L5 CANADA

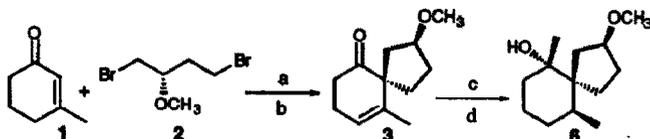
A simple synthesis of (2R,3S)-phenylisoserine, a precursor of the C-13 side chain of Taxol® (paclitaxel), is reported utilizing yeast-catalyzed reduction to generate a second chiral centre.



**Enantioselective synthesis of spiro[4.5]decanone with 2-(S)-methoxy-1,4-dibromobutane**

*Tetrahedron Letters*, 1994, 35, 2849

Juan Miguel Garro Galvez, Paul Angers and Perséphone Canonne\*  
Département de chimie, Université Laval, Ste-Foy, Québec, Canada. G1K 7P4

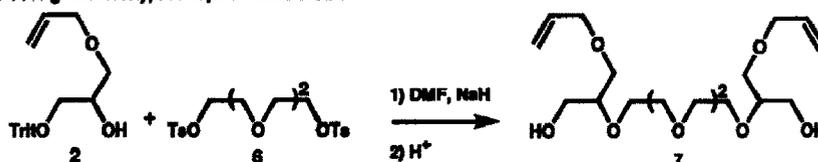


a) KH, HMPA / THF, -78°C to 50°C; b) TsOH / Benzene; c) Me<sub>2</sub>Ti(OiPr)<sub>2</sub>; d) H<sub>2</sub>, PtO<sub>2</sub> / AcOH

**TWO NEW METHODS TO FORM SUBSTITUTED OLIGOETHYLENE GLYCOLS**

*Tetrahedron Letters*, 1994, 35, 2853

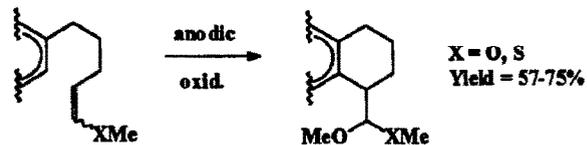
Krzysztof E. Krakowiak,<sup>a</sup> Jerald S. Bradshaw<sup>b,\*</sup> and Peter Huezthy<sup>b</sup>  
<sup>a</sup>TBC Advanced Technologies, Inc., 505 East 1860 South, Provo, UT 84006 U.S.A.  
<sup>b</sup>Department of Chemistry, Brigham Young University, Provo, UT 84602 U.S.A.



**INTRAMOLECULAR ANODIC OLEFIN COUPLING REACTIONS: INITIAL STUDIES CONCERNING THE USE OF ELECTRON-RICH ARYL RINGS.** Kevin D. Moeller\* and Dallas G. New, Department of Chemistry, Washington University, St. Louis, Missouri 63130.

*Tetrahedron Letters*, 1994, 35, 2857

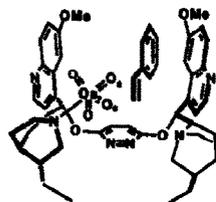
Intramolecular anodic olefin coupling reactions involving electron-rich aryl rings were shown to afford fused bicyclic ring skeletons. The reactions were compatible with the use of heteroaromatic rings.



**X-Ray Crystallographic Studies Provide Additional Evidence That An Enzyme-Like Binding Pocket Is Crucial To The Enantioselective Dihydroxylation of Olefins by OsO<sub>4</sub>-Bis-cinchona Alkaloid Complexes**

*Tetrahedron Letters*, 1994, 35, 2861

E. J. Corey,\* Mark C. Noe and Sepehr Sarshar  
Department of Chemistry, Harvard University  
Cambridge, Massachusetts 02138



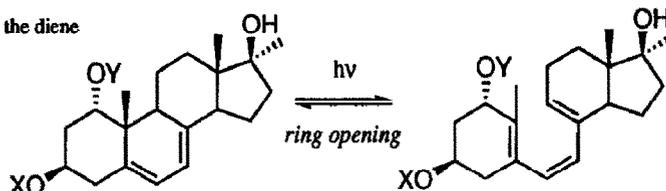
transition state for dihydroxylation

**EFFECTS OF TRIALKYLSILYL PROTECTING GROUPS ON THE PHOTOLYSIS OF 1 $\alpha$ -HYDROXY-PROVITAMIN D<sub>3</sub>**

*Tetrahedron Letters*, 1994, 35, 2865

Masami Okabe, Ruen-Chu Sun and Steven Wolff, Roche Research Center, Hoffmann-La Roche Inc., Nutley, New Jersey 07110 USA

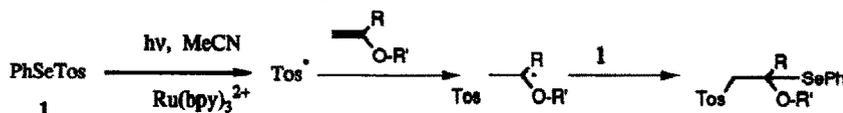
The quantum yield of the photolytic opening of the diene ring decreases with an increase in the size of the protecting group on the 1 $\alpha$ -hydroxy group.



**Ru(bpy)<sub>3</sub><sup>3+</sup>-Mediated Addition of Se-Phenyl p-Tolueneselenosulfonate to Electron Rich Olefins**

*Tetrahedron Letters*, 1994, 35, 2869

Derek H. R. Barton,\* Maria A. Criba, and Joseph Cs. Jaszberenyi,  
Department of Chemistry, Texas A&M University, College Station, Texas, 77843



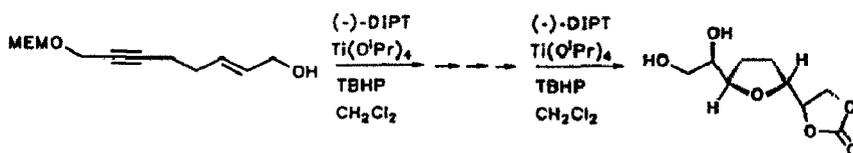
Catalytic amounts of Ru(bpy)<sub>3</sub><sup>2+</sup> can be used with visible light photolysis for the SET reaction of PhSeTos, leading to selenoethers in a further reaction with electron rich olefins in 80-95% yield.

**AN APPROACH TOWARDS 2,5-DISUBSTITUTED TETRAHYDROFURANS OF ANNONACEOUS ACETOGENINS. R. Hoppe, M. Flasche**

*Tetrahedron Letters*, 1994, 35, 2873

and H.-D. Scharf\*, Inst. f. Organische Chemie der RWTH Aachen, Prof. Pirllet-Str. 1, D-52056 Aachen (Germany)

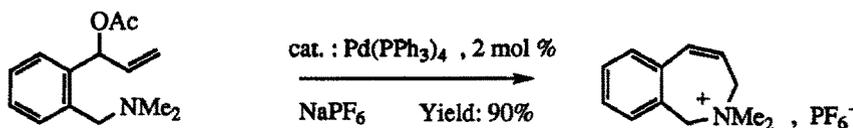
Synthesis of a 2,5-disubstituted tetrahydrofuran, part of naturally occurring Annonaceous acetogenins, using Sharpless AE.



**PD CATALYSED INTRAMOLECULAR COUPLING BETWEEN TERTIARY AMINES AND ALLYLIC GROUPS; SYNTHESIS OF 3-HYDRO-1H-2-BENZAZEPINIUM SALTS.**

*Tetrahedron Letters*, 1994, 35, 2877

M. Grellier<sup>a,b</sup>, M. Pfeffer<sup>a</sup>, G. van Koten<sup>b</sup>,  
a) U.L.P., 4 rue Blaise Pascal, F-67070, France.  
b) University of Utrecht, Padualaan 8, 3584 CH Utrecht, The Netherlands.

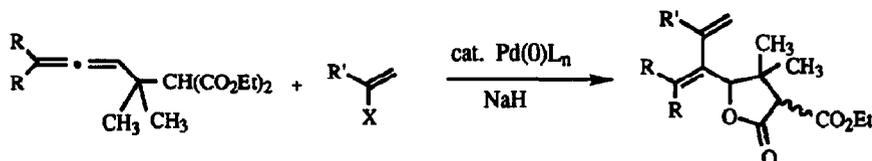


**PALLADIUM-CATALYSED ALKYLATIVE CYCLISATION OF 2,3-BUTADIENYLMALONATES TO  $\gamma$ -LACTONES.**

L. Besson, J. Bazin, J. Goré and B. Cazes \*

Laboratoire de Chimie Organique 1, Université Claude Bernard, ESCIL, 43 bd du 11 Novembre 1918, 69622 Villeurbanne, France.

*Tetrahedron Letters*, 1994, 35, 2881



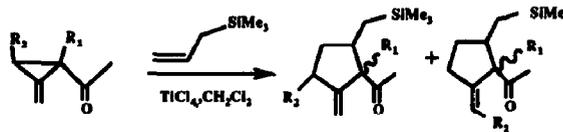
Unexpected palladium-catalyzed alkylative O-cyclisation to 4-dienyl  $\gamma$ -lactones from allenic malonates and vinyl halides.

**A NOVEL CYCLOPENTANE ANNULATION BY [3+2] CYCLOADDITION OF SUBSTITUTED METHYLENOCYCLOPROPYL KETONES WITH ALLYLTRIMETHYLSILANE.**

Honoré Monti\*, Denis Rizzotto, Gilbert Léandri. Laboratoire de Réactivité Organique Sélective, associé au CNRS, Faculté des Sciences de St-Jérôme, 13397 Marseille cedex 20 - France. Jean-Pierre Monti Laboratoire de Biophysique, 80037 Amiens - France.

*Tetrahedron Letters*, 1994, 35, 2885

A new [3+2] cycloaddition between allyltrimethylsilane and methylenecyclopropyl ketones, in which allyltrimethylsilane acts as the formal 1,2-partner, affords methylene or alkylidenecyclopentanes.

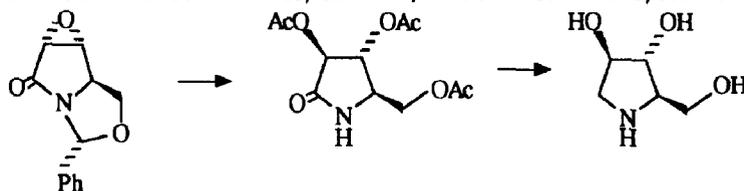


**A Short Diastereoselective Synthesis of the Natural (2R,3R,4R)-2-Hydroxymethyl-3,4-Dihydroxypyrrolidine**

Dominique Griffart-Brunet and Nicole Langlois\*

Institut de Chimie des Substances Naturelles, C.N.R.S., 91190 Gif-sur-Yvette, France

*Tetrahedron Letters*, 1994, 35, 2889



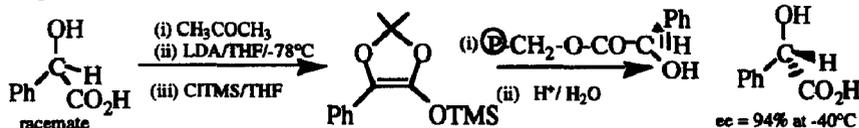
**A FIRST APPROACH TO ASYMMETRIC PROTONATION VIA A POLYMER SUPPORTED CHIRAL PROTON DONOR**

Florine Cavalier, Sylvie Gomez, Robert Jacquier and Jean Verducci

URA 468 Université Montpellier II, Place E. Bataillon, 34095 MONTPELLIER cedex 05 FRANCE

*Tetrahedron Letters*, 1994, 35, 2891

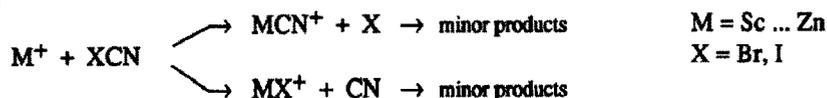
Asymmetric protonation of achiral silyl enol ethers is substantially improved by use of a polymer supported chiral proton donor and choice of the optimum temperature



**GAS-PHASE REACTIVITY OF TRANSITION METAL CATIONS WITH CYANOGEN  
RADICAL PRECURSORS**

Michel Sablier, Laure Capron, Hélène Mestdagh, Christian Rolando

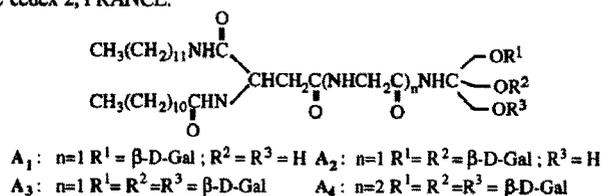
Ecole Normale Supérieure, Département de Chimie, associé au CNRS, 24 rue Lhomond, 75231 Paris cedex 05 - France



**SYNTHESIS OF DOUBLE-CHAIN GLYCOLIPIDS DERIVED  
FROM ASPARTIC ACID : PRELIMINARY INVESTIGATION  
OF THEIR COLLOIDAL BEHAVIOR.**

Ange Polidori<sup>a</sup>, Bernard Pucci<sup>a</sup>, Jean G. Riess<sup>b</sup>, Leila Zarif<sup>b</sup>, and André A. Pavia<sup>a\*</sup> Université d'Avignon, Laboratoire de Chimie Bioorganique, 33 Rue Louis Pasteur, 84000 Avignon, FRANCE. b) Université de Nice-Sophia Antipolis, Laboratoire de Chimie Moléculaire, associé au CNRS, Parc Valrose, 06108 Nice cedex 2, FRANCE.

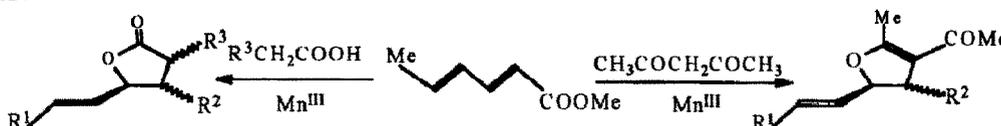
Double-tailed glycolipids derived from mono-, di- and tri-*O*-galactosyl tris-(hydroxymethyl) aminomethane and aspartic acid have been synthesized. Water dispersions of these amphiphiles showed the presence of either vesicles, helical structures or fibers depending on the glycolipid structure.



**REGIO- AND STEREOSELECTIVITY OF  $Mn^{III}$ -MEDIATED ADDITION  
OF ACETIC ACID, POTASSIUM METHYL MALONATE AND ACETYLACETONE ON METHYL SORBATE**

L. Lamarque, A. Méou and P. Brun\*. Laboratoire de Synthèse Organique Sélective, associé au CNRS, URA 1320, Faculté des Sciences de Luminy, 163 Avenue de Luminy, case 901, F-13288, Marseille Cedex 9, France.

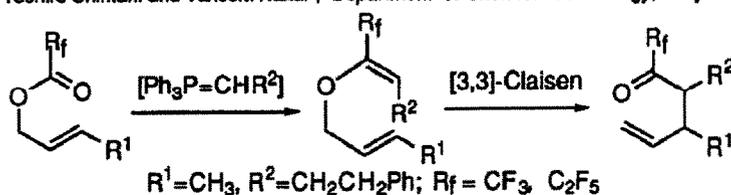
Regio- and stereoselectivity of  $Mn^{III}$ -induced addition of acetic acid, potassium methyl malonate and acetyl acetone on methyl sorbate are compared.



**CLAISEN REARRANGEMENT OF  $\alpha$ -(*F*-ALKYL)ENOL ETHERS PREPARED  
VIA WITTIG OLEFINATION OF ALLYL PERFLUOROALKANOATES**

Jean-Pierre Bégué\*, Danièle Bonnet-Delpon, Shen-Weng Wu, and Abderrahim M'Bida, CNRS-BIOCIS, Faculté de Pharmacie, 92296 Chatenay-Malabry, France

Toshiro Shintani and Takeshi Nakai\*, Department of Chemical Technology, Tokyo Institute of Technology, Meguro, Tokyo 152, Japan

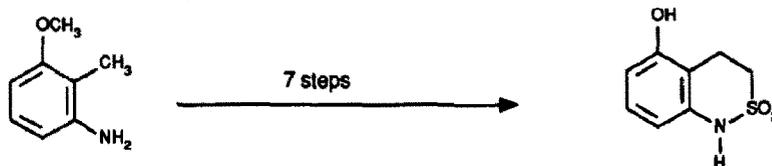


**A CONVENIENT SYNTHESIS OF 3,4-DIHYDRO-2,2-DIOXIDE-5-HYDROXY-2,1-BENZOTHAZINE**

*Tetrahedron Letters*, 1994, 35, 2911

Dominique BLONDET\*, Jean-Claude PASCAL  
Recherche Syntex France, 91310 Leuville sur Orge, France

Compound 1 has been successfully synthesized from 3-methoxy-2-methyl-aniline in 7 steps and 12% overall yield.



**Friedel-Crafts Alkylation Reactions of Benzene with Amide Bond Containing Compounds**

*Tetrahedron Letters*, 1994, 35, 2913

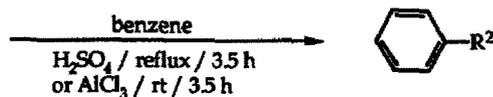
Kun Hoc Chung, Jae Nyoun Kim, and Bang K. Rya\*

Korea Research Institute of Chemical Technology, P. O. Box 9, Daedeog-Danji, Daejeon 305-606, Korea

$R^1NHCONH-R^2$  (1)

$R^1CONH-R^2$  (2)

$R^1SO_2NH-R^2$  (3)



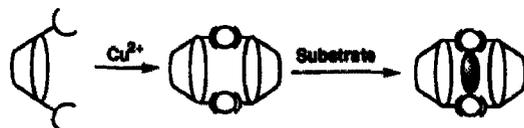
**Synthesis of and Amine Recognition with a Cu(II)-bridged Biscalix[4]arene**

*Tetrahedron Letters*, 1994, 35, 2915

Kiyoshi Fujimoto and Seiji Shinkai\*

Department of Organic Synthesis, Faculty of Engineering, Kyushu University, Fukuoka 812, Japan

Cu(II)-bridged biscalix[4]arene was synthesized and the cage-shaped compound recognized diamine substrates using a cavity composed of two Cu(II)-chelate complexes.



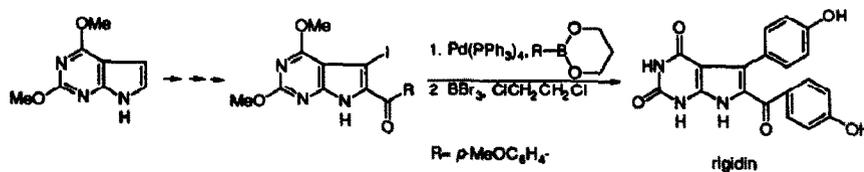
**TOTAL SYNTHESIS OF A MARINE ALKALOID, RIGIDIN**

*Tetrahedron Letters*, 1994, 35, 2919

Takao Sakamoto\*, Yoshinori Kondo, Shuichiroh Sato, and Hiroshi Yamanaka

Pharmaceutical Institute, Tohoku University

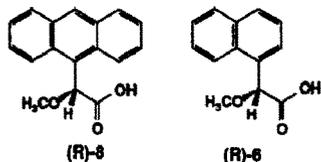
Aobayama, Aoba-ku, Sendai 980, Japan



**NEW CHIRALITY RECOGNIZING REAGENTS FOR THE DETERMINATION OF ABSOLUTE STEREOCHEMISTRY AND ENANTIOMERIC PURITY BY NMR.**

*Tetrahedron Letters*, 1994, 35, 2921

J. M. Seco, Sh. Latypov, E. Quiñoá and R. Riguera. \* Departamento de Química Orgánica, Facultad de Química, Universidad de Santiago. 15706 Santiago de Compostela, Spain.



A new generation of chiral derivatizing reagents (3-8) for determination of absolute stereochemistry by NMR is presented. These compounds afford much better stereo discrimination than the hitherto standard reagents MTPA and MPA.

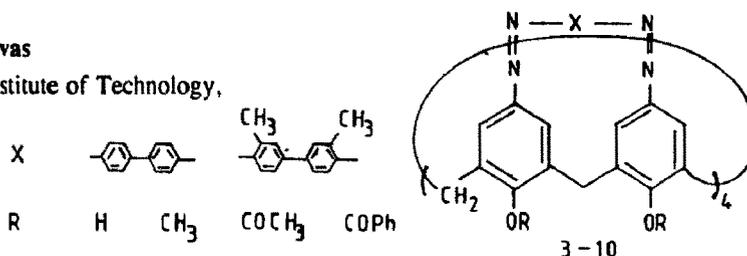
**SYNTHESIS OF NEW CHROMOGENIC CALIX(8)ARENES**

*Tetrahedron Letters*, 1994, 35, 2925

H. Mohindra Chawla\* and K. Srinivas

Department of Chemistry, Indian Institute of Technology, New Delhi 110016, India.

Synthesis of new chromogenic calix(8)arenes 3-10 is described

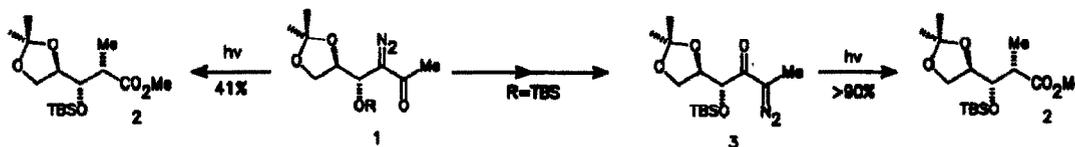


**β-OXY-α-DIAZO CARBONYL COMPOUNDS.II.**

**CONVERSION TO CHIRAL α-OXY-α'-DIAZO KETONES AND PHOTOCHEMICAL REACTION.**

Fidel J. López-Herrera and Francisco Sarabia-García

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Málaga. 29071 Málaga, Spain.

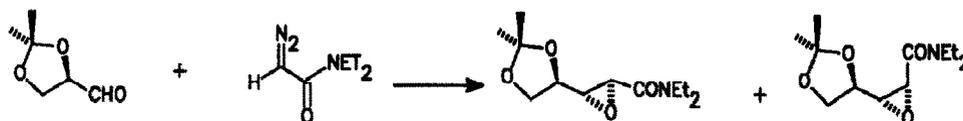


**STEREOSELECTIVE SYNTHESIS OF 2,3-EPOXY-AMIDES BY ALDOL-LIKE CONDENSATION OF 2,3-O-ISOPROPYLIDENE-D-GLYCERALDEHYDE WITH N,N-DIETHYL DIAZOACETAMIDE.**

*Tetrahedron Letters*, 1994, 35, 2933

Fidel J. López-Herrera ; Francisco Sarabia-García and María S. Pino González

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Málaga. 29071 Málaga, Spain.

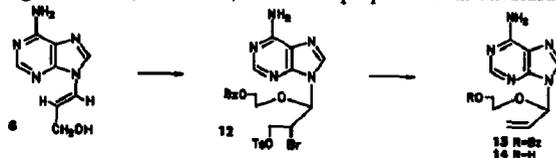


**SYNTHESIS OF NOVEL 3',4'-SECO ANALOGUES OF DIDEOXY NUCLEOSIDES AS POTENTIAL ANTIVIRAL AGENTS**

*Tetrahedron Letters*, 1994, 35, 2937

Milan Jokić and Vinko Škarić, Laboratory of Stereochemistry and Natural Products, Department of Organic Chemistry and Biochemistry, "Rudjer Bošković" Institute, 41001 Zagreb, P.O.B. 1016, Croatia

The 3',4'-seco analogues of d4A, 13 and 14, have been prepared from unsaturated 6 via 3',4'-seco compound 12.



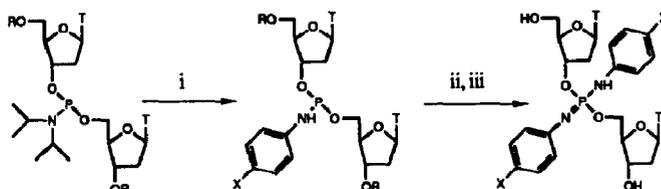
**SYNTHESIS OF DINUCLEOSIDE PHOSPHORAMIDIMIDATES**

*Tetrahedron Letters*, 1994, 35, 2941

Kirsten Bjergårde, Otto Dahl and Marvin H. Caruthers†\*

Institute of Chemistry, University of Copenhagen, Universitetsparken 5, DK-2100 Copenhagen, Denmark

†Department of Chemistry and Biochemistry, University of Colorado at Boulder, Boulder Colorado 80309-0215, USA



The synthesis of a series of nucleoside derivatives of phosphoramidimidic acid is described.

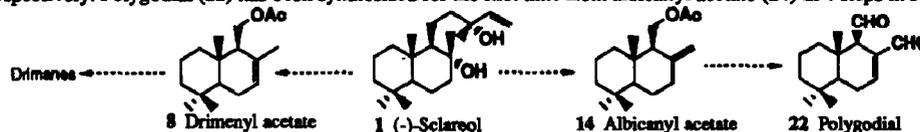
**SYNTHESIS OF BIOLOGICALLY ACTIVE DRIMANES FROM (-)-SCLAREOL**

*Tetrahedron Letters*, 1994, 35, 2945

Alejandro F. Barrero,\* Enrique J. Alvarez-Manzaneda, Joaquín Altarejos, Sofía Salido and José M. Ramos.

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Granada, 18071 Granada (Spain)

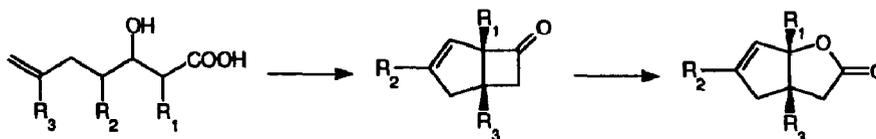
Drimenyl acetate (8) and albicanyl acetate (14) have been synthesized from (-)-sclareol (1), in 42% (4 steps) and 32% (5 steps) overall yields, respectively. Polygodial (22) has been synthesized for the first time from albicanyl acetate (14) in 4 steps in 50% overall yield.



**A NEW, EFFECTIVE ROUTE TO METHYL SUBSTITUTED 3,3a,4,6a-TETRAHYDRO-2H-CYCLOPENTA[b]FURAN-2-ONES.**

*Tetrahedron Letters*, 1994, 35, 2949

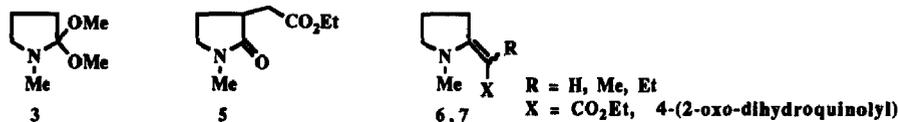
Emanuela Marotta, Paolo Righi, Goffredo Rosini\*  
Dipartimento di Chimica Organica "A. Mangini" dell'Università  
Viale Risorgimento 4, I-40136 Bologna (Italy)



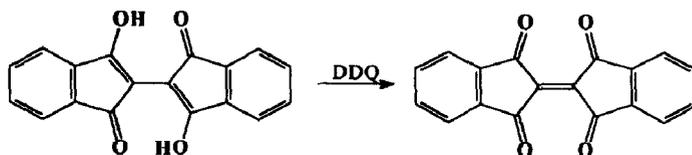
**LACTAM ACETALS: PART XXIV - REACTION WITH ACTIVATED HALOALKYL COMPOUNDS WITH AND WITHOUT ZINC**

Sanjay Jain, Rahul Jain, Jujhar Singh and Nitya Anand\*  
 Medicinal Chemistry Division, Central Drug Research Institute, Lucknow 226001, India.

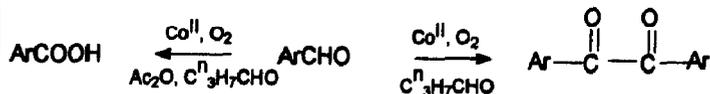
Lactam acetals (3) reacts with activated haloalkyl compounds to give 5; however, when the reaction was carried out in the presence of zinc (Reformatsky condition) 6 & 7 were formed, which are key intermediate in the synthesis of compounds of medicinal interest.

**A NEW STRONG ELECTRON ACCEPTOR. THE RESURRECTION OF 2,2'-BIINDANYLIDENE-1,3,1',3'-TETRAONE (BIT).**

Vladimir Khodorkovsky\*, Arkady Ellern and Ojars Neilands\*, Department of Chemistry, Ben-Gurion University of the Negev, Beer-Sheva, 84120, Israel; Department of Organic Chemistry, Riga Technical University, Riga, LV1685, Latvia

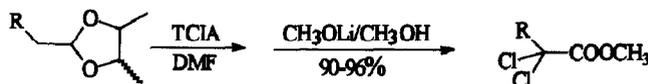
**COBALT CATALYSED SYNTHESIS OF 1,2-DIONES FROM AROMATIC ALDEHYDES IN THE PRESENCE OF n-BUTANAL**

T. Punniamurthy, Swinder Jeet Singh Kalra and Javed Iqbal\*  
 Department of Chemistry, Indian Institute of Technology, Kanpur 208 016, INDIA

**METHYL α,α-DICHLORO-ESTERS BY OXIDATION-CHLORINATION OF CYCLIC ACETALS WITH TRICHLOROISOCYANURIC ACID.**

Franco Bellesia, Monica Boni, Franco Ghelfi\* and Ugo M. Pagnoni  
 Dipartimento di Chimica dell' Università, via Campi 183, I-41100, Modena (Italy).

Methyl α-chloro- or α,α-dichloro-esters are obtained in excellent yields by oxidation-chlorination of 2-alkyl-4,5-dimethyl-1,3-dioxolanes with trichloroisocyanuric acid.

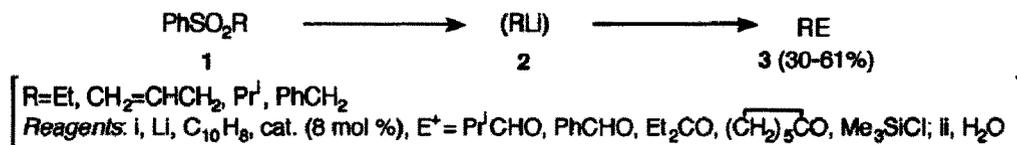


**NAPHTHALENE-CATALYSED REDUCTIVE  
DESULFONYLATION WITH LITHIUM:  
ALKYLLITHIUMS FROM ALKYL PHENYL SULFONES**

*Tetrahedron Letters*, 1994, 35, 2965

D. Guijarro and M. Yus\*

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, Apdo. 99, 03080 Alicante, Spain

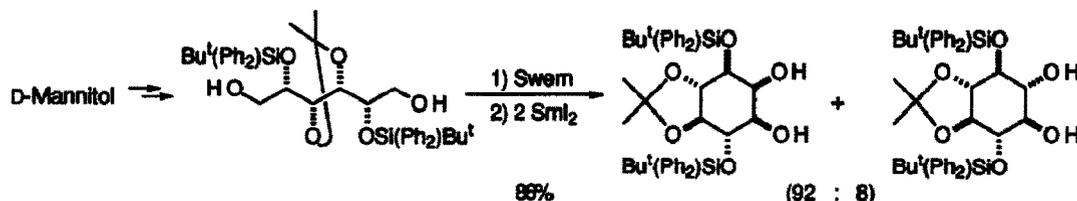


**A STEREOSELECTIVE ROUTE TO ENANTIOMERICALLY PURE**

*Tetrahedron Letters*, 1994, 35, 2969

**MYO-INOSITOL DERIVATIVES STARTING FROM D-MANNITOL.** Jose Luis Chiara\* and Manuel Martín-Lomas.

Instituto de Química Orgánica General, CSIC, Juan de la Cierva 3, E-28006 Madrid, Spain

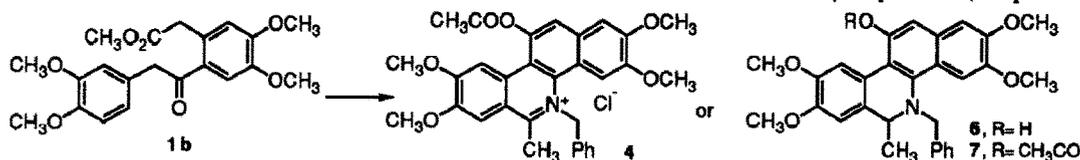


**A CONVENIENT APPROACH TO THE SYNTHESIS OF  
BENZO[*c*]PHENANTHRIDINES VIA INTRAMOLECULAR  
CYCLIZATION OF ENAMIDES**

*Tetrahedron Letters*, 1994, 35, 2973

Nuria Sotomayor, Esther Domínguez, and Esther Lete,\* Dep. Química Orgánica, F. Ciencias, Universidad País Vasco, Bilbao, Spain.

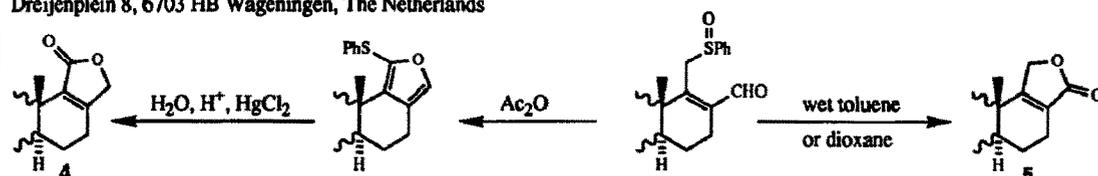
Planar 8,9-disubstituted benzo[*c*]phenanthridinium salts **4** are prepared by Bischler-Napieralski cyclization of naphthylamides (**2** steps from ketoester **1b**), while the dihydro derivatives **6** and **7** are formed via C-2' functionalized 3-arylisquinolines (4 steps from **1b**).



**A REGIOSELECTIVE ANNULATION OF BUTENOLIDES  
THE TOTAL SYNTHESIS OF (±)-CONFERTIFOLIN**

*Tetrahedron Letters*, 1994, 35, 2977

Ben J.M.Jansen, Catharina T.Bouwman, and Aede de Groot, Department of Organic Chemistry, Agricultural University, Dreijenplein 8, 6703 HB Wageningen, The Netherlands

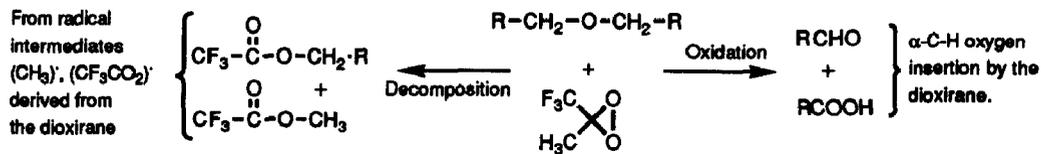


$\gamma$ -(Phenylsulfanyl)- $\alpha,\beta$ -unsaturated aldehydes give regioselectively butenolides of type **4** or **5** depending upon the conditions used.

**DECOMPOSITION OF DIOXIRANES INDUCED BY DIALKYL ETHERS**

Marta Ferrer, Francisco Sánchez-Baeza, Josefina Casas and Angel Messegueur \*

Dpt. of Biological Organic Chemistry, CID (CSIC). J. Girona, 18. 08034 Barcelona, Spain.



**Synthesis of N-Acylated Fulleropyrrolidines: New Materials for the Preparation of Langmuir-Blodgett Films Containing Fullerenes**

M. Maggini,<sup>a</sup> A. Karlsson,<sup>a</sup> L. Pasimeni,<sup>b</sup> G. Scorrano,<sup>a</sup> M. Prato\*,<sup>c</sup> and L. Valli<sup>d</sup>

<sup>a</sup> C.M.R.O., Dipartimento di Chimica Organica, Via Marzolo 1, 35131 Padova, Italy

<sup>b</sup> Dipartimento di Chimica Fisica, Università di Padova, Via Loredan 2, 35131 Padova, Italy

<sup>c</sup> Dipartimento di Scienze Farmaceutiche, Università di Trieste, Piazzale Europa 1, 34127 Trieste, Italy

<sup>d</sup> Dipartimento di Scienza dei Materiali, Università di Lecce, Via Arnesano 130, 73100 Lecce, Italy



New C<sub>60</sub> derivatives suitable for Langmuir-Blodgett film preparation have been synthesized.