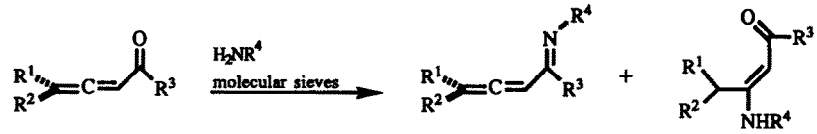
Tetrahedron Lett. **1993**, *34*, 5367

ADDITION OF PRIMARY AMINES TO CONJUGATED ALLENYL ALDEHYDES AND KETONES. Matthew S. Sigman and Bruce E. Eaton*,
Department of Chemistry, Washington State University, Pullman, Washington 99164 USA

Allenyl imines have been prepared by condensation of allenyl aldehydes with primary amines.

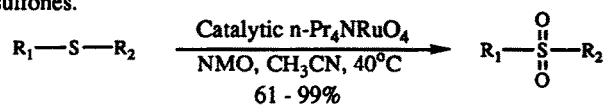


Tetrahedron Lett. **1993**, *34*, 5369

Chemoselective Catalytic Oxidation of Sulfides to Sulfones with Tetrapropylammonium Perruthenate (TPAP).

Kevin R. Guertin and Andrew S. Kende*
Department of Chemistry, University of Rochester, Rochester, N.Y., 14627.

Tetrapropylammonium perruthenate has been found to be an efficient and highly chemoselective catalyst for the oxidation of sulfides to sulfones.

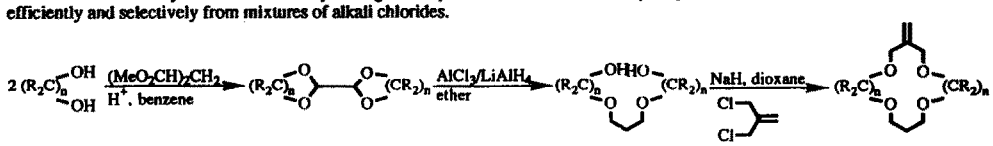


Tetrahedron Lett. **1993**, *34*, 5373

AN EFFICIENT SYNTHESIS OF LITHIUM-SELECTIVE EXTRACTANTS: TERTIARY-ALKYL-14-CROWN-4 ETHERS

Richard A. Sachleben*, Mathew C. Davis, James J. Bruce, Erik S. Ripple, Jon L. Driver and Bruce A. Moyer
Chemistry Division, Oak Ridge National Laboratory, PO Box 2008, Oak Ridge, Tennessee, USA 37831-6119

Crown ethers can be synthesized efficiently from geminally disubstituted diols; tertiary-alkyl-14-crown-4 ethers extract lithium efficiently and selectively from mixtures of alkali chlorides.



Tetrahedron Lett. **1993**, *34*, 5377

SYNTHESIS OF A NOVEL, TETRA-CROWNED MOLECULAR CLEFT AND STUDIES OF ITS SELECTIVITY IN ALKALI METAL ION COMPLEXATION

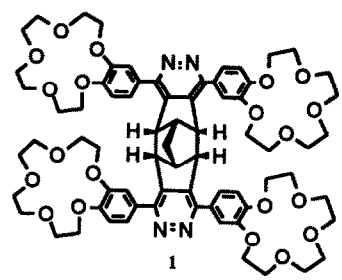
Alan P. Marchand*, G. Madhusudhan Reddy, and Florencio Zaragoza

Department of Chemistry, University of North Texas
Denton, Texas 76203-0068

Richard A. Bartsch* and Mark D. Eley

Department of Chemistry and Biochemistry, Texas Tech University
Lubbock, TX 79409-1061

A novel tetra-crowned cleft 1 has been synthesized, and its ability to extract and to transport alkali metal cations has been studied.



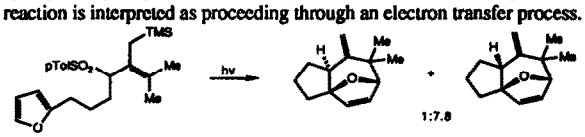
1

Tetrahedron Lett. **1993**, *34*, 5381

PHOTOCHEMICAL ACTIVATION OF TRIMETHYLSILYLMETHYL ALLYLIC SULFONES FOR INTRAMOLECULAR 4+3 CYCLOADDITION

Michael Harmata* and Barry F. Herron
Department of Chemistry, University of Missouri-Columbia, Columbia, Missouri 65211

Photolysis of selected trimethylsilylmethyl allylic sulfones results in the formation of 4+3 cycloadducts stereoselectively but in poor to moderate yield. The reaction is interpreted as proceeding through an electron transfer process.

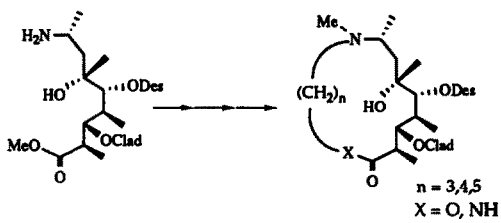


Tetrahedron Lett. **1993**, *34*, 5385

Chimeric Azalides with Simplified Western Portions

Sherman T. Waddell & Timothy A. Blizzard
Merck Research Laboratories, 50G-231
P. O. Box 2000, Rahway, NJ 07065

A number of chimeric azalides were prepared by attaching simplified western fragments to erythromycin-derived eastern fragments, followed by macrolactonization or macrolactamization of the fully glycosylated precursor.

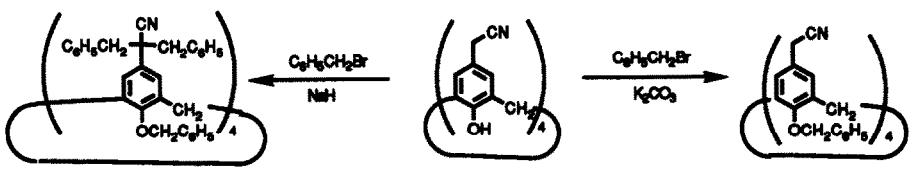


Tetrahedron Lett. **1993**, *34*, 5389

SYNTHESIS OF CALIX[4]ARENES CARRYING BULKY UPPER-RIM GROUPS.

Shiv Kumar Sharma and C. David Gutsche,*
Department of Chemistry, Texas Christian University, Fort Worth, TX 76129, USA

Base-induced reaction of *p*-cyanomethylcalix[4]arene with arylmethyl halides



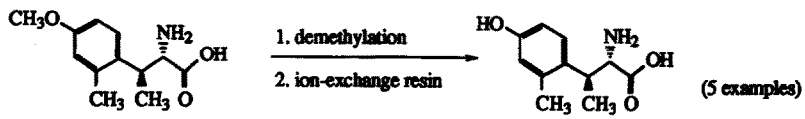
Tetrahedron Lett. **1993**, *34*, 5393

AN EFFICIENT PROCEDURE FOR THE DEMETHYLATION OF ARYL-METHYL ETHERS IN OPTICALLY PURE UNUSUAL AMINO ACIDS

Guigen Li, Dinesh Patel and Victor J. Hruby*, Department of Chemstry, University of Arizona, Tucson, AZ 85721, USA.

A convenient method was established for the demethylation of aromatic methyl ethers of special amino acids employing mild reaction conditions without racemization:

e.g.



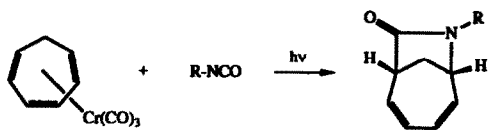
(5 examples)

Tetrahedron Lett. **1993**, *34*, 5397

HETEROCUMULENES AS 2π PARTNERS IN METAL-PROMOTED [6π+2π] CYCLOADDITION REACTIONS.

James H. Rigby*, Gulzar Ahmed and Mark D. Ferguson
Department of Chemistry, Wayne State University
Detroit, Michigan 48202 USA

Heterocumulenes participate as 2π addends in chromium(0) promoted [6π+2π] cycloaddition reactions.

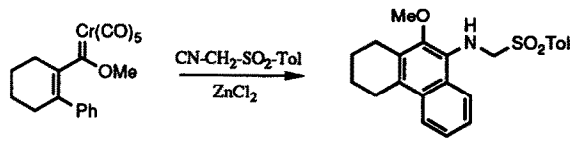


Tetrahedron Lett. **1993**, *34*, 5401

CHEMOSELECTIVITY IN THE ISONITRILE METATHESIS ROUTE TO AROMATIC AMINES

Craig A. Merlic* and Ellen E. Burns
Department of Chemistry and Biochemistry, University of California, Los Angeles, CA 90024-1569

Chemoselectivity and substituent effects in thermal aminobenzannulation reactions employing chromium dienylcarbene complexes and functionalized isonitriles are reported.

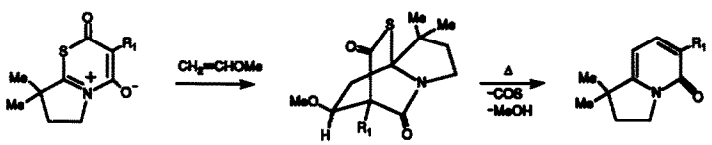


Tetrahedron Lett. **1993**, *34*, 5405

BIMOLECULAR 4+2-CYCLOADDITION REACTIONS OF CROSS CONJUGATED BETAINES WITH ELECTRON RICH π-SYSTEMS

Albert Padwa, Steven J. Coats and Mark A. Semones*
Department of Chemistry, Emory University, Atlanta, Georgia 30322

Bicyclic anhydro-2-oxo-4-hydroxy-1,3-thiazinium hydroxides undergo 1,4-dipolar cycloadditions with various electron rich π-systems to give 4+2-cycloadducts which, on further heating, extrude carbonyl sulfide producing substituted α-pyridones.

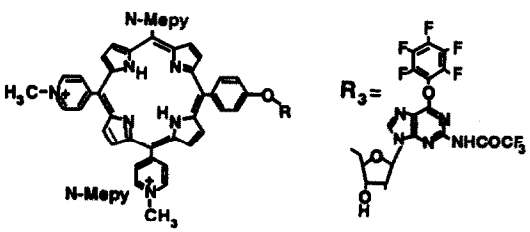


Tetrahedron Lett. **1993**, *34*, 5409

PORPHYRINYL-NUCLEOSIDES CONTAINING FLUORINATED NUCLEOBASES.

Leszek Czuchajowski*, Anna Palka, Matthew Morra and Vinay Wandrekar, Department of Chemistry, University of Idaho, Moscow, ID 83844.

Porphyrins were synthesized in which a meso-p-phenylene-O-bridge connects the porphine core with 5'C center of 5-fluorouridine (R_1), 5-CF_3-thymidine (R_2) or 2N-trifluoroacetamidato-6-O-pentafluorophenyl-2'-deoxyguanosine (R_3).

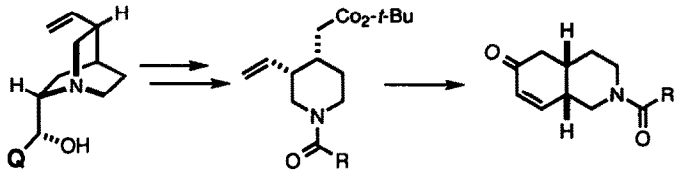


Tetrahedron Lett. **1993**, *34*, 5413

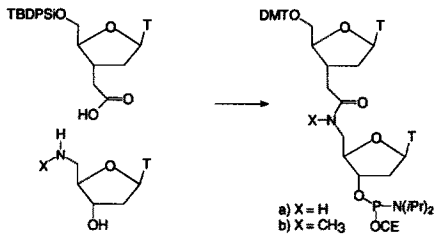
A NOVEL, STEREOSELECTIVE SYNTHESIS OF *cis*-4a(S), 8a(R)-DECA-HYDRO-6(2H)-ISOQUINOLONES FROM MEROQUINENE ESTERS.

M. J. Martinelli*, B. C. Peterson, V.V. Khau, D.R. Hutchison & K.A. Sullivan
Chemical Process Research & Development, Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, IN 46285

Intramolecular cyclization of *N*-acylated meroquinene *t*-butyl esters in cold H_2SO_4 afforded the *cis*-enones in excellent overall yield. Autoxidation of the *cinchona* alkaloids provided a variety of meroquinene esters.



Tetrahedron Lett. **1993**, *34*, 5417



SYNTHESIS AND HYBRIDIZATION PROPERTIES OF AMIDE-LINKED THYMIDINE DIMERS INCORPORATED INTO OLIGODEOXYNUCLEOTIDES

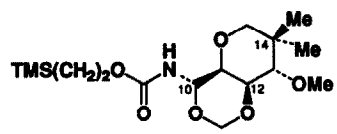
Irene Idziak, George Just*, Masad J. Damha and Paul Giannaris
Department of Chemistry, McGill University, Montreal, Quebec, Canada H3A 2K6

Tetrahedron Lett. **1993**, *34*, 5421

TOWARD THE SYNTHESIS OF MYCALAMIDES A, B AND ONNAMIDE A: A HIGHLY STEREOSELECTIVE SYNTHESIS OF THE TRIOXADECALIN RING SYSTEM

W. R. Roush* and T. G. Marron, Department of Chemistry
Indiana University, Bloomington, IN 47405

A highly diastereoselective synthesis of a mycalamide-onnamide model trioxadecalin ring system **5** is described.



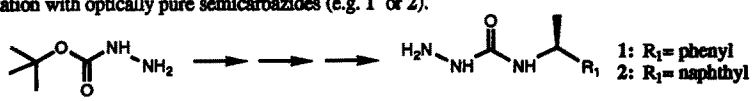
5

Tetrahedron Lett. **1993**, *34*, 5425

FACILE DETERMINATION OF THE OPTICAL PURITY OF α-N-BOC-AMINO ALDEHYDES.

John Reiner, Raymond Dagnino Jr., Erick Goldman, and Thomas R. Webb,* Corvas International, Department of Medicinal Chemistry, 3030 Science Park Rd., San Diego, California, 92121 USA

A facile ^{1}H NMR spectroscopic method is presented for the determination of the optical purity of α–N-Boc-amino-aldehydes, via derivatization with optically pure semicarbazides (e.g. **1** or **2**).

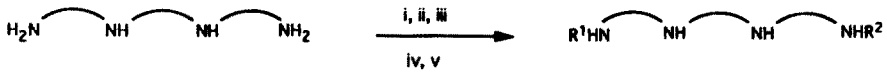


1: R_1 = phenyl
2: R_1 = naphthyl

Tetrahedron Lett. **1993**, *34*, 5429

One Pot Symmetrical and Dissymmetrical Regiospecific ω, ω'-Bis Mono N-Alkylation of Linear Tetraamines via their Chromium, Molybdenum or Tungsten Tricarbonyl Complexes

Nathalie Le Bris, Jean-Jacques Yaouanc, Jean-Claude Clément, Henri Handel and Hervé des Abbayes*
Laboratoire de Chimie, Electrochimie Moléculaire et Chimie Analytique, Associé au CNRS, N°322,
Faculté des Sciences et Techniques, 6 Avenue Le Gorgeu, BP 452, 29275 BREST CEDEX, FRANCE.



i : $M(CO)_6$; ii : $R^1CH{=}O$; iii : $R^2CH{=}O$, THF ; iv : $NaBH_4$; v : Deprotection

Tetrahedron Lett. **1993**, *34*, 5433

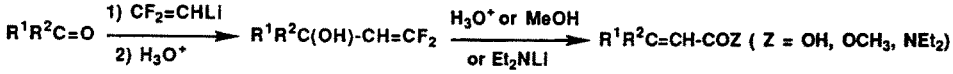
Straightforward Synthesis of α,ß-Unsaturated Acids and Derivatives

Frédérique Tellier[1]* and Raymond Sauvêtre[2]

1-INRA, Laboratoire des Médiateurs Chimiques, Domaine de Brouessy, 78114 Magny-les-Hameaux, France

2-Laboratoire de Chimie des Organoéléments, Université P. et M. Curie, 4 place Jussieu, 75252 Paris Cedex 05, France

C_2 vinylic homologation from carbonyl compounds leading to various α,ß-insaturated acids and derivatives.

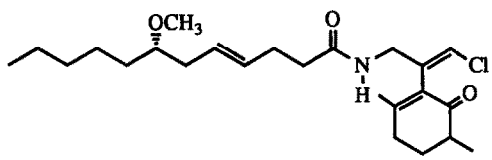


Tetrahedron Lett. **1993**, *34*, 5437

MALYNGAMIDE G : PROPOSITION DE STRUCTURE POUR UN NOUVEL AMIDE CHLORE D'UNE ALGUE BLEU-VERTE EPIPHYTE DE *Cystoseira crinita*.

Annie Praud, Robert Valls[#], Louis Piovetti* and Bernard Banaigs[$], Laboratoire R.C.M.O., Université de Toulon, F-83957 La Garde cedex, France; [#] Laboratoire A.V.B., Université d'Aix-Marseille III, F-13388 Marseille cedex 13, France; [$] Groupe E.M.M.I.B., Université de Perpignan, F-66860 Perpignan cedex, France.

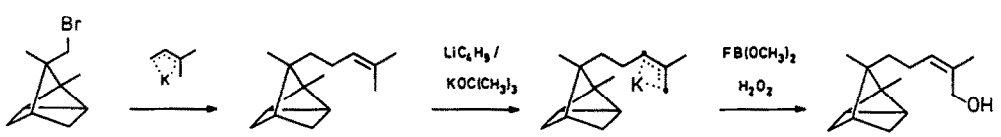
Isolement and structure elucidation of malyngamide G, a novel chlorine-containing 7(S)-methoxydodec-4(E)-enamide.



Tetrahedron Lett. **1993**, *34*, 5441

A Shortcut to α-Santalol

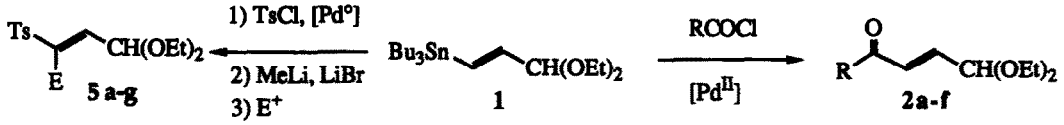
Manfred Schlosser * and Guo-fu Zhong
Institut de Chimie organique, Université de Lausanne, CH-1005 Lausanne, Switzerland



Tetrahedron Lett. **1993**, *34*, 5445

E- AND Z-β-FORMYLVINYL SYNTHONS FROM 1-TRIBUTYLSTANNYL-3,3-DIETHOXY-PROP-1-ENE *VIA* CROSS COUPLING WITH ACID CHLORIDES

Jean-Luc Parrain[a], Isabelle Beaudet[a], Alain Duchêne[b], Sandrine Watrelot[a] and Jean-Paul Quintard[a]*
a) Laboratoire de Synthèse Organique associé au CNRS, 2 rue de la Houssinière 44072 NANTES - Cedex 03 . (France).
b) Laboratoire de Synthèse et d'Etudes Physicochimiques Organiques, Parc de Grandmont, 37200 TOURS . (France).

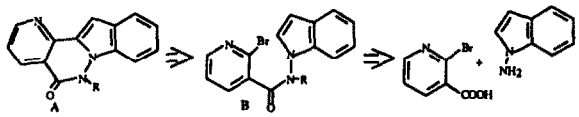


Tetrahedron Lett. **1993**, *34*, 5449

HECK REACTION TO A NEW HETEROCYCLIC SYSTEM: PYRIDO[2',3'-d']PYRIDAZINO[2,3-a]INDOLE

Patricia Melnyk, Jeannette Gasche and Claude Thal*
ICSN, CNRS, Avenue de la Terrasse 91198 Gif-sur-Yvette, France

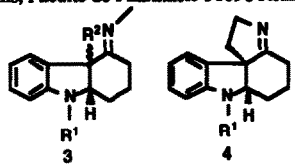
Starting from a judiciously substituted N-aminoindole B, the Heck reaction led to a new class of heterocyclic compounds pyrido[2',3'-d']pyridazino[2,3-a]indole A.



Tetrahedron Lett. **1993**, *34*, 5451

STEREOSELECTIVE PREPARATION OF TRI AND TETRACYCLIC AMINES AS POTENTIAL INTERMEDIATES IN *ASPIDOSPERMA* ALKALOID SYNTHESIS

Assia Azzouzi, Bertrand Perrin, Marie-Eve Sinibaldi, Jean-Claude Gramain Laboratoire de Chimie des Substances Naturelles, associé au CNRS, Université Blaise Pascal 63177 Aubière, France ; Catherine Lavaud Laboratoire de Pharmacognosie, associé au CNRS, Université de Reims, Faculté de Pharmacie 51096 Reims, France.

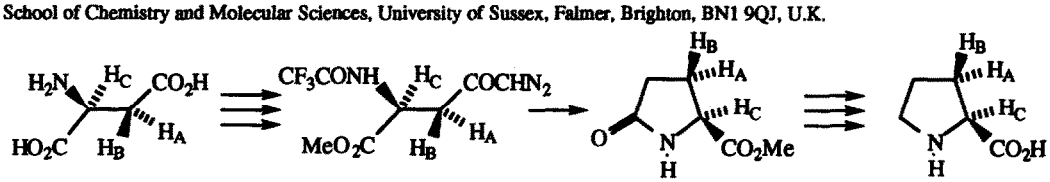


The stereoselectivity of the reduction of tri and tetracyclic imines 3 and 4 obtained from hexahydrocarbazolone is discussed.

Tetrahedron Lett. **1993**, *34*, 5455

SYNTHESIS OF (2S,3S)-[3-$^2H_1$]- AND (2S,3R)-[2,3-$^2H_2$]-PROLINE

Petra Dieterich and Douglas W. Young*
School of Chemistry and Molecular Sciences, University of Sussex, Falmer, Brighton, BN1 9QJ, U.K.



Tetrahedron Lett. **1993**, *34*, 5459

RUTHENIUM-CATALYZED ISOMERIZATION OF ALLYLIC ALCOHOLS TO SATURATED KETONES

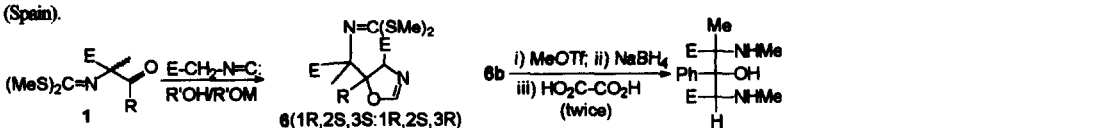
Jan-E. Bäckvall,* and Ulrika Andreasson, Department of Organic Chemistry, University of Uppsala, Box 531, S-751 21, Uppsala, Sweden

Efficient ruthenium-catalyzed isomerization of allylic alcohols to ketones was developed. The rate of the reaction was dramatically increased by the presence of base.

Tetrahedron Lett. **1993**, *34*, 5463

DIASTEREOSELECTIVE SYNTHESIS OF FUNCTIONALIZED 2,4-DIAMINO-3-HYDROXYGLUTARIC ACID DERIVATIVES OF POTENTIAL BIOLOGICAL INTEREST FROM GLYCINE DERIVATIVES

Carlos Alvarez-Ibarra, Carmen Dominguez-Fernández, Aurelio G. Csákÿ, Elena Martínez-Santos, Maria L. Quiroga, and Enrique Gutiérrez. Dpto. de Química Orgánica I y CAI de Difracción de Rayos X. Facultad de Química. Universidad Complutense. Ciudad Universitaria, s/n. 28040 Madrid (Spain).

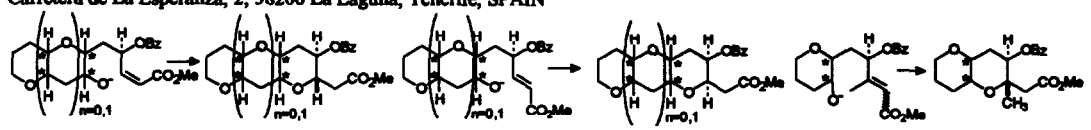


R: Me, Ph, 2-furyl; E: EtO_2C d.e.: **6a** (83:17); **6b** (90:10); **6c** (88:12) **12b** (as a mixture of the two monolactam derivatives)

Tetrahedron Lett. **1993**, *34*, 5467

Stereocontrolled Synthesis of Cyclic Ethers by Intramolecular Hetero-Michael Addition. 3. Enantiomeric Synthesis of Highly Functionalized and Fused Tetrahydropyrans

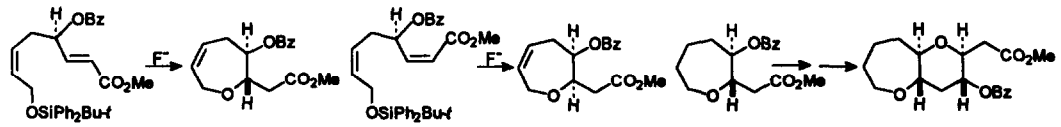
José M. Palazón, Marcos A. Soler, Miguel A. Ramírez and Victor S. Martín*
Centro de Productos Naturales Orgánicos "Antonio González", Instituto Universitario de Bio-Orgánica
Carretera de La Esperanza, 2, 38206 La Laguna, Tenerife, SPAIN



Tetrahedron Lett. **1993**, *34*, 5471

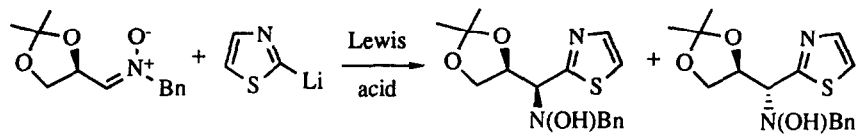
Stereocontrolled Synthesis of Cyclic Ethers by Intramolecular Hetero-Michael Addition. 4. Enantiomeric Synthesis of Substituted and Fused Oxepanes

Marcos A. Soler, José M. Palazón and Victor S. Martín*
Centro de Productos Naturales Orgánicos "Antonio González", Instituto Universitario de Bio-Orgánica
Carretera de La Esperanza, 2, 38206 La Laguna, Tenerife, SPAIN



STEREOCONTROLLED ADDITION OF 2-LITHIOTHIAZOLE TO THE NITRONE DERIVED FROM D-GLYCERALDEHYDE ACETONIDE. A REVISION AND EXTENSION. A. Dondoni,* S. Franco, F.L. Merchan, P. Merino,* T. Tejero, Dipartimento di Chimica, Università di Ferrara, Italy and Departamento de Quimica Organica, ICMA, Universidad de Zaragoza, CSIC, Spain.

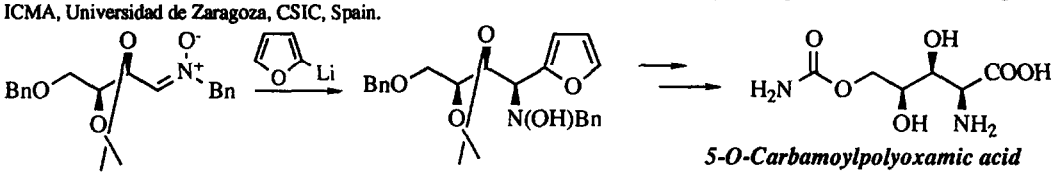
Tetrahedron Lett. **1993**, *34*, 5475



syn anti

STEREOCONTROL BY DIETHYLALUMINUM CHLORIDE IN THE ADDITION OF 2-LITHIOFURAN AND *N*-METHYL-2-LITHIOIMIDAZOLE TO α-ALKOXY NITRONES. TOTAL SYNTHESIS OF 5-O-CARBAMOYLPOLYOXAMIC ACID. A. Dondoni,* S. Franco, F. L. Merchan,P. Merino,* T. Tejero, Dipartimento di Chimica, Università di Ferrara, Italy and Departamento de Quimica Organica, ICMA, Universidad de Zaragoza, CSIC, Spain.

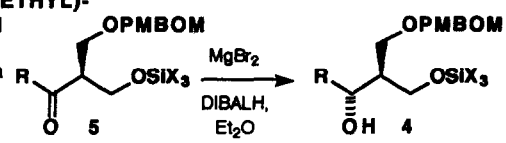
Tetrahedron Lett. **1993**, *34*, 5479



5-O-Carbamoylpolyoxamic acid

PROTECTING GROUP CONTROLLED DIASTEREOSELECTIVE REDUCTION OF DIPROTECTED α,α-*BIS*(HYDROXYMETHYL)-KETONES DERIVED FROM THYM*, USING THE DIBALH / $MgBr_2$ SYSTEM. Giuseppe Guanti,* Luca Banfi, Renata Riva, and M. Teresa Zannetti, Istituto di Chimica Organica , corso Europa 26, 16132 Genova (Italy).

Tetrahedron Lett. **1993**, *34*, 5483

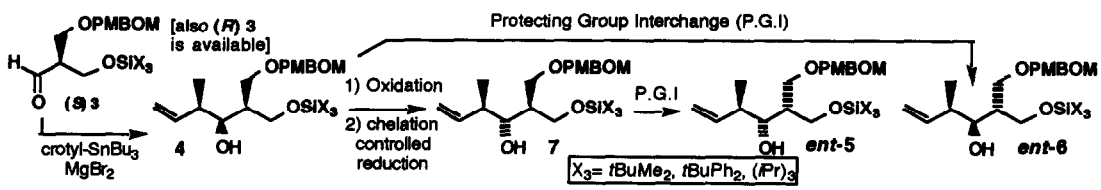


R= alkyl, allyl, aryl, alkenyl. X_3= *t*BuMe$_2$, *t*BuPh$_2$, (*i*Pr)$_3$
96 : 4 < Diast. ratios > 85 : 15

The reduction of diprotected α,α-*bis*(hydroxymethyl)ketones **5**, derived from the novel chiral building block *tris*(hydroxymethyl)-methane (THYM*), has been realized with good to excellent stereoselectivity through an appropriate choice of the two protecting groups and by using the DIBALH / $MgBr_2$·Et_2O.system.

ASYMMETRIC SYNTHESIS OF ALL 8 STEREOISOMERS OF α-METHYL HOMOALLYLIC ALCOHOLS DERIVED BY CROTYL ADDITION ONTO *BIS*(HYDROXYMETHYL)ACETALDEHYDES (BHYMA*). Giuseppe Guanti,* Luca Banfi, and M. Teresa Zannetti, Istituto di Chimica Organica , corso Europa 26, 16132 Genova (Italy).

Tetrahedron Lett. **1993**, *34*, 5487

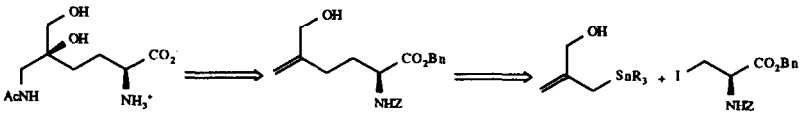


Tetrahedron Lett. **1993**, *34*, 5491

SYNTHESIS AND ASSIGNMENT OF THE RELATIVE STEREOCHEMISTRY OF A PUTATIVE BIOSYNTHETIC PRECURSOR OF TABTOXININE β-LACTAM

Jack E. Baldwin, Robin Fieldhouse and Andrew T. Russell
The Dyson Perrins Laboratory and the Oxford Centre for Molecular Sciences, South Parks Road, Oxford, OX1 3QY

The synthesis and assignment of the relative stereochemistry of a recently isolated amino acid is reported, utilising our $S_H2^{\cdot}$ coupling methodology.

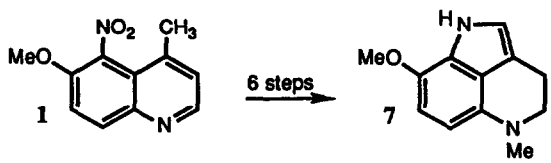


Tetrahedron Lett. **1993**, *34*, 5495

SYNTHESIS OF A 1,3,4,5-TETRAHYDROPYRROLO[4,3,2-*de*]QUINOLINE FROM A QUINOLINE

Lennart Venemalm,[a] Carlos Estévez,[b] Mercedes Alvarez,[b] and John A. Joule[a]*
(a, Chemistry Department, University of Manchester, Manchester M13 9PL, U. K.; b, Laboratorio de Química Orgánica, Facultad de Farmacia, Universidad Barcelona, 08028 Barcelona, Spain.)

6-Methoxy-4-methylquinoline has been converted into 8-methoxy-1,3,4,5-tetrahydropyrrolo[4,3,2-*de*]quinoline.

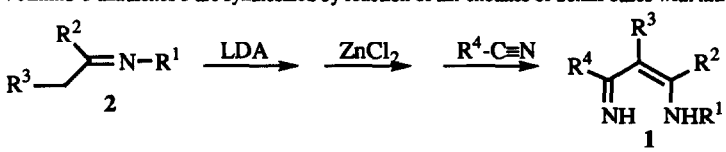


Tetrahedron Lett. **1993**, *34*, 5497

NEW SYNTHESIS OF 4-AMINO-1-AZADIENES BY ADDITION OF Zn-ENOLATES TO NITRILES.

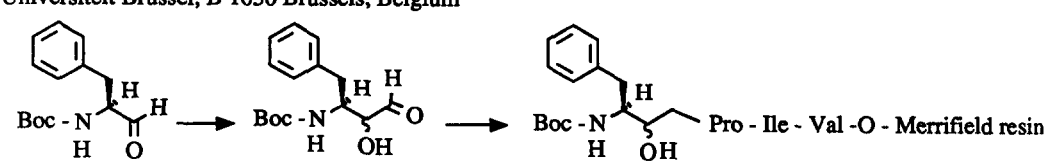
José Barluenga*, Carlos del Pozo Losada and Bernardo Olano
Departamento de Química Organometálica, Facultad de Química, Universidad de Oviedo, 33071 Oviedo, Spain.

4-Amino-1-azadienes **5** are synthesized by reaction of Zn-enolates of Schiff bases with nitriles.



Tetrahedron Lett. **1993**, *34*, 5499

A NEW METHOD FOR THE SOLID PHASE SYNTHESIS OF HYDROXYETHYLAMINE PEPTIDE BOND ISOSTERES : SYNTHESIS OF AN HIV-1 PROTEASE INHIBITOR AND OF A β-CASOMORPHIN-5 ANALOGUE. D. Tourwé*, J. Piron, P. Defreyn and G. Van Binst, Eenheid Organische Chemie, Vrije Universiteit Brussel, B 1050 Brussels, Belgium

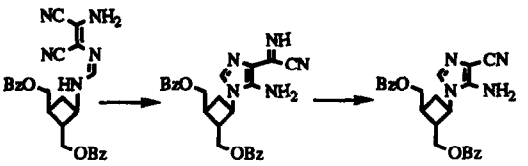


Tetrahedron Lett. **1993**, *34*, 5503

SYNTHESIS OF [1α,2β,3α]-5-AMINO-[2,3-BIS(BENZOYLOXY METHYL)CYCLOBUTYL] IMIDAZOLES : IMPORTANT PRECURSORS TO NEW ANTI-VIRAL PURINE NUCLEOSIDES

Brian L. Booth* and Paul R. Eastwood
UMIST, Manchester, England, M60 1QD

A simple synthesis of the carbocyclic imidazoles **2** and **3**, important intermediates for preparation of new anti-viral purine nucleosides, from the readily prepared formamidine **1** is reported.



1 **2** **3**