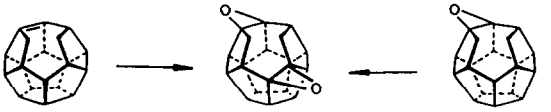
Tetrahedron Lett.28,3531(1987)

UNUSUAL COURSE OF THE CHROMATE OXIDATION OF SECODODECAHEDRENE AND ITS MONOEPOXIDE

Leo A. Paquette* and Tomoshige Kobayashi
Evans Chemical Laboratories, The Ohio State University, Columbus, Ohio 43210

Sodium chromate oxidation of secododecahedrene (1) and its epoxide (2) leads to the axially symmetric diepoxide (3).



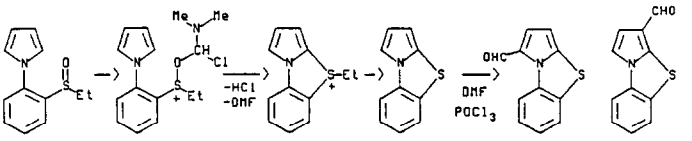
1 3 2

Tetrahedron Lett.28,3535(1987)

AN INTRAMOLECULAR PUMMERER REACTION INDUCED BY VILSMEIER REAGENT ($POCl_3$/DMF)

Dallas K. Bates*, Burnell A. Sell, and Joseph A. Picard
Dept. of Chemistry and Chemical Engineering, Michigan Technological University, Houghton, MI 49931

In a one pot sequence, treatment of 3a with $POCl_3$/DMF produces 1- and 3- pyrrolo[2,1-b]benzothiazole carbaldehydes (5 and 6) in 73% and 9% yields, respectively.



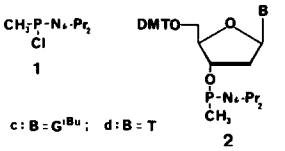
3a 9 10 4 5 + 6

Tetrahedron Lett.28,3539(1987)

OLIGODEOXYNUCLEOSIDE METHYLPHOSPHONATES: SYNTHESIS AND ENZYMIC DEGRADATION.

Sudhir Agrawal and John Goodchild, Worcester Foundation for Experimental Biology, 222 Maple Ave., Shrewsbury, MA 01545 USA.

Nucleotides 2a-d , made from 1 , were used for solid phase synthesis of oligodeoxynucleotides containing methylphosphonate linkages.



1

a: B = A^{Bz}; b: B = C^{Bz}; c: B = G^{iBu}; d: B = T

2

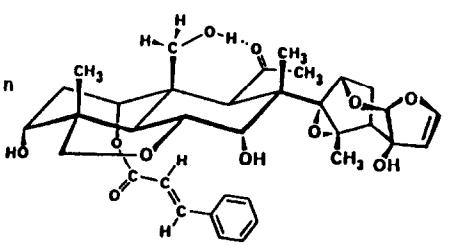
Tetrahedron Lett.28,3543(1987)

THE STRUCTURE OF 1-CINNAMOYLMELIANOLONE, A NEW INSECTICIDAL TETRANORTRITERPENOID, FROM MELIA AZEDARACH L. (MELIACEAE)

S. Mark Lee*, James A. Klocke and Manuel F. Balandrin

NPI, University of Utah Research Park
417 Wakara Way, Salt Lake City, Utah, 84108, U.S.A.

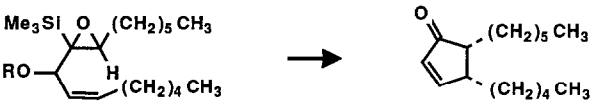
1-Cinnamoylmelianolone was isolated from the fruit of Melia azedarach L.



Tetrahedron Lett.28,3547(1987)

BIOMIMETIC SYNTHESIS OF A PRECLAVULONE A MODEL

E. J. Corey, Kurt Ritter, Miguel Yus and Carmen Nájera
Department of Chemistry, Harvard University, Cambridge, MA, 02138

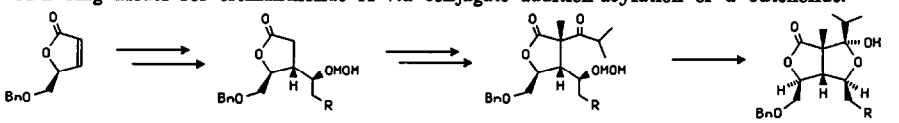


Tetrahedron Lett.28,3551(1987)

STUDIES DIRECTED TOWARD THE SYNTHESIS OF THE EREMANTHOLIDES 1. PREPARATION OF A RING A/B MODEL SYSTEM VIA A CONJUGATE ADDITION-ACYLATION PROTOCOL

Robert K. Boeckman Jr.,* Debra K. Heckendorn, and Richard L. Chinn
Department of Chemistry, University of Rochester, Rochester, New York 14627

Synthesis of an A/B ring model for eremantholide A *via* conjugate addition-acylation of a butenolide.

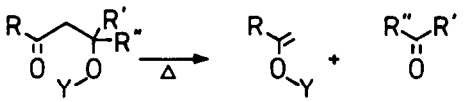


Tetrahedron Lett.28,3555(1987)

DEUTERIUM ISOTOPE EFFECTS IN THE THERMAL DECOMPOSITION OF β-HYDROXY KETONES AND β-HYDROXY ESTERS.

J. Quijano*, M.M. Rodríguez, M. del S. Yepes, L.H. Gallego, Universidad de Antioquia, Facultad de Ciencias Exactas y Naturales, Departamento de Química, Apartado Aéreo 1226, Medellín - Colombia.

The primary and secondary isotopic effects were determined.

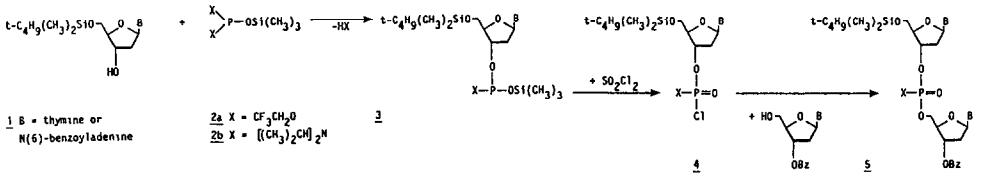


R=CH_3, C_2H_5O, CD_3; R', R"=CH_3, CD_3; Y=H,D

Tetrahedron Lett.28,3559(1987)

A NEW STRATEGY FOR DINUCLEOTIDE SYNTHESIS VIA PHOSPHITE ROUTE INVOLVING PHOSPHOROCHLORIDATES AS INTERMEDIATES

W.Dabkowski, F.Cramer, J.Michalski; Polish Acad. Sci., Łódź, and MPI Exp. Medicine, Göttingen



Tetrahedron Lett.28,3561(1987)

SYNTHESIS OF PHOSPHOROFLUORIDATES OF BIOLOGICAL INTEREST. REACTION OF PHOSPHOROAZOLIDES WITH BENZOYL FLUORIDE

W.Dabkowski, F.Cramer, J.Michalski; Polish Acad. Sci., Łódź, and MPI Exp. Medicine, Göttingen

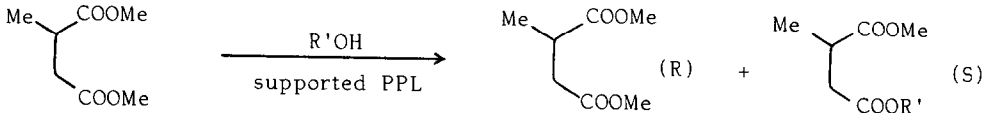
Phosphoroazolides, including nucleoside derivatives, can be converted smoothly into the corresponding phosphorofluoridates by reaction with benzoyl fluoride. From these compounds oligonucleotides containing → P-F instead of → P-OH can be prepared.

X = O or S
N = imidazole or triazole
R', R'' see Table 1

Tetrahedron Lett.28,3563(1987)

Selectivity in the transesterification of esters by supported enzymes.

E. Guibé-Jampel and G. Rousseau
Laboratoire des Carbocycles, Associé au CNRS, Bâtiment 420
Université de Paris-Sud, 91405 ORSAY (France)

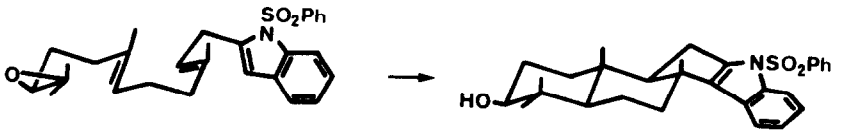


Reactions without solvent. Supports : florisil, alumina, silicagel. Yield : 90% ; ee > 90%.

Tetrahedron Lett.28,3565(1987)

N-BENZENE-SULFONYL-INDOLE AS TERMINATOR IN A BIOMIMETIC POLYENE CYCLIZATION : SYNTHESIS OF A PENTACYCLIC INDOLOSESQUITERPENE

Catherine Mirand, Michèle Döé de Maindreville, Dominique Cartier and Jean Lévy, UA/CNRS n°492, Université de Reims, Faculté de Pharmacie, 51 rue Cognacq-Jay, F 51096 Reims Cédex - France

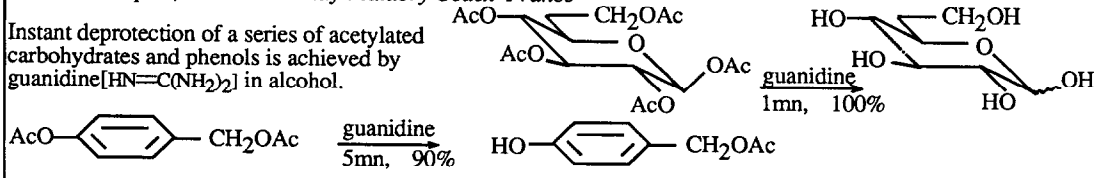


Tetrahedron Lett.28,3569(1987)

MILD, RAPID AND SELECTIVE DEPROTECTION OF ACETYLATED CARBOHYDRATES AND PHENOLS WITH GUANIDINE.

N. Kunesch*, C. Miet and J.E. Poisson
Laboratoire de Chimie des Substances Thérapeutiques Naturelles, CNRS UA 496, Centre d'Études Pharmaceutiques, 92296 Châtenay-Malabry Cedex France

Instant deprotection of a series of acetylated carbohydrates and phenols is achieved by guanidine[HN=C(NH2)2] in alcohol.

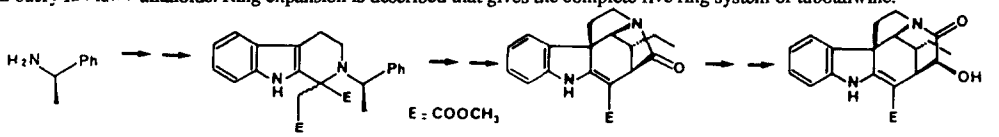


AN ENANTIOSELECTIVE ACCESS TO THE (-)-TUBOTAIWINE SKELETON

Tetrahedron Lett.28,3573(1987)

LEGSEIR Belgacem, Jacques HENIN, Georges MASSIOT AND Joseph VERCAUTEREN*
Laboratory of Pharmacognosy, Faculty of Pharmacy, U.A. n° 492 CNRS, 51, rue Cognacq-Jay 51096 REIMS CEDEX

An efficient induction of chirality is obtained when using α-phenylethylamine as chiral inducer to produce the skeleton of aniliosacrine indole alkaloids. Ring expansion is described that gives the complete five ring system of tubotaiwine.

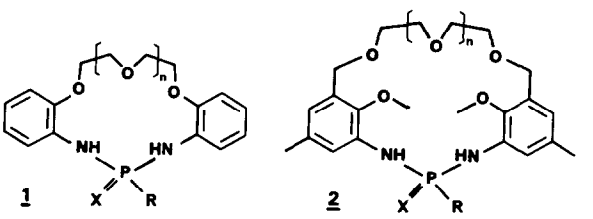


Tetrahedron Lett.28,3577(1987)

Synthesis of Novel Crown Derivatives Incorporating a Diaminophosphine Group in a Polyether Macrocycle.

Jean Pierre DUTASTA and Pascal SIMON
Laboratoire L.C.D.S.S., UA C.N.R.S. n° 332
Université Scientifique et Médicale de Grenoble
BP 68, F-38402 Saint Martin d'Heres - France

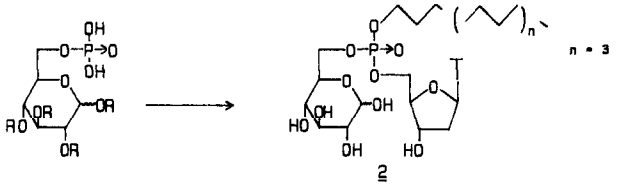
A highly efficient synthesis of **1** and **2** is reported (R = Ph, X = S, **1** n = 2,3, **2** n = 1,2). Compounds with X = O or R = $N(CH_3)_2$ have also been prepared.



Tetrahedron Lett.28,3581(1987)

Synthetic 6-glucosyl phospholipid as a drug transport system

F. Iglesias Guerra, J.-M. Neumann and T. Huynh-Dinh

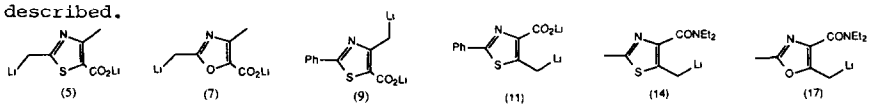


Tetrahedron Lett.28,3585(1987)

NEW METHODS FOR THE HOMOLOGATION OF THIAZOLES AND OZAZOLES BY REGIOSPECIFIC LITHIATIONS OF THIAZOLE AND OXAZOLE-CARBOXYLIC ACID DERIVATIVES

By Philip Cornwall, Colin P. Dell, and David W. Knight*, Department of Chemistry, University of Nottingham, University Park, Nottingham, NG7 2RD

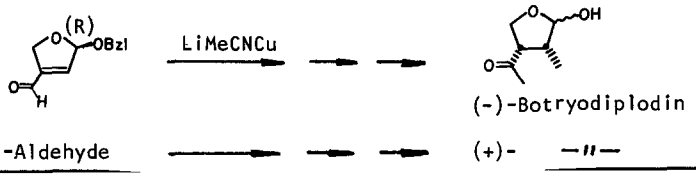
The generation and utility of anions (5),(7),(9),(11),(14) and (17) are described.



Tetrahedron Lett.28,3589(1987)

DIASTEREOSELECTIVE CONJUGATE ADDITION OF LITHIUM METHYLCYANOCUPRATE TO THE CHIRAL ISOPRENE UNITS 2-(R)- AND (S)-BENZYLOXY-2,5-DIHYDRO-4-FURANCARBOXALDEHYDE. TOTAL SYNTHESIS OF (-)- AND (+)-BOTRYODIPLODIN AND (+)- AND (-)-EPI-BOTRYODIPLODIN.

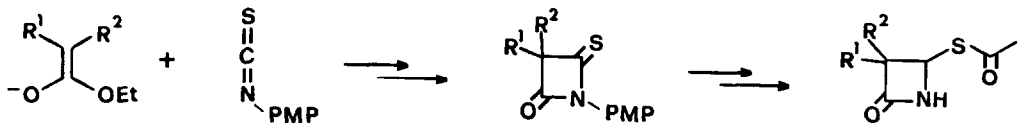
Nicola Rehnberg, Torbjörn Frejd and Göran Magnusson*, Organic Chemistry 2, Chemical Center, The Lund Institute of Technology, Box 124, S-22100 Lund, Sweden



Tetrahedron Lett.28,3593(1987)

A SYNTHETIC APPROACH TO 4-OXO AND 4-THIOXO AZETIDINONES FROM HETEROCUMULENES AND ESTER ENOLATES. A NOVEL SYNTHESIS OF 4-THIO-ACETOXY AZETIDIN-2-ONES.

G.Cainelli*, D.Giacomini, M.Panunzio*, G.Martelli, G.Spunta. Dipartimento Chimico "G. Ciamician" Università-C.N.R. Via Selmi, 2- I -40126 BOLOGNA ITALY.

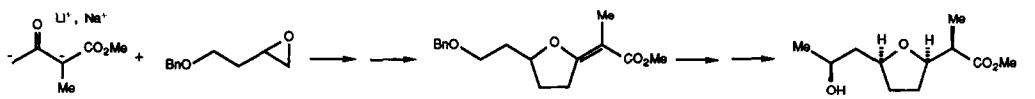


Tetrahedron Lett.28,3597(1987)

STEREOSELECTIVE SYNTHESIS OF (±)-METHYL NONACTATE AND (±)-METHYL 8-EPI NONACTATE.

Barry Lygo* and Norval O'Connor

Department of Chemistry and Applied Chemistry, University of Salford, Salford, M5 4WT, U.K.



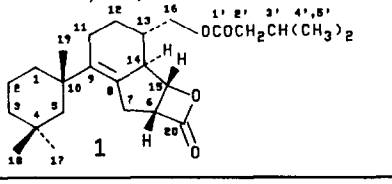
(±)-Methyl nonactate (1) and the corresponding 8-epi-isomer, both synthetic precursors to the antibiotic nonactin, have been synthesised. The key carbon-carbon bond-forming reaction involves condensation of a β-keto ester dianion with an epoxide, followed by dehydration, as illustrated above.

Tetrahedron Lett.28,3601(1987)

Spongiolactone, an unusual β-lactone isovalerate based on a new rearranged spongiane skeleton from Spongionella gracilis.

L. Mayol[a], V. Piccialli[b] and D. Sica[b]. a. Dipartimento di Chimica delle Sostanze Naturali, Università di Napoli, Via L. Rodinò, 22, I-80138 NAPOLI (Italy); b. Dipartimento di Chimica Organica e Biologica, Università di Napoli, Via Mezzocannone, 16, I-80134 NAPOLI (Italy).

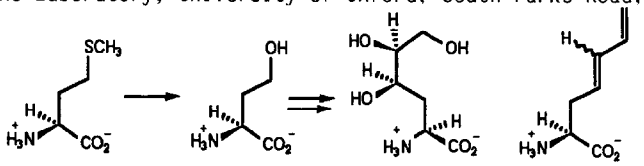
Spongiolactone (1) was isolated from the sponge Spongionella gracilis and its stereostructure elucidated on the basis of chemical and physicochemical evidence



USE OF L-ASPARTIC ACID β-SEMIALDEHYDE IN THE SYNTHESIS OF MORE COMPLEX NON PROTEIN AMINO ACIDS

Tetrahedron Lett.28,3605(1987)

Jack E. Baldwin,* and Anthony Flinn.
The Dyson Perrins Laboratory, University of Oxford, South Parks Road, Oxford OX1 3QY, U.K.

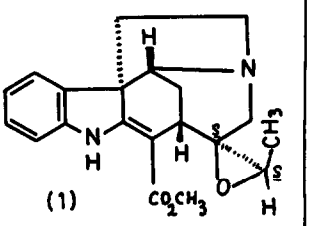


STRICTICINE - A NEW ALKALOID FROM THE LEAVES OF RHAZYA STRICTA

Tetrahedron Lett.28,3609(1987)

Atta-ur-Rahman*, Sajida Khanum and Talat Fatima,
H.E.J. Research Institute of Chemistry,
University of Karachi, Karachi-32, Pakistan.

A new alkaloid stricticine (1) has been isolated. The stereochemistry was elucidated with the help of ^{1}H-NMR (homodecoupling, COSY-45°, NOE difference) and ^{13}C-NMR (DEPT) spectra.

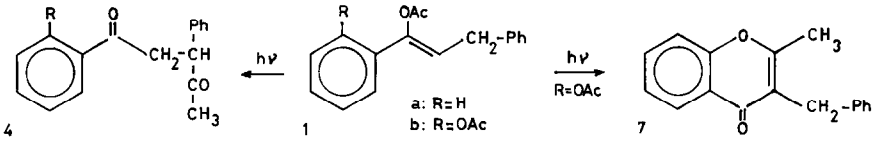


A NOVEL PHOTOCHEMICAL 1,4-ACYL MIGRATION IN ENOL ESTERS. THE PHOTOLYSIS OF ENOL ACETATES OF 3-PHENYLPROPIOPHENONES

Tetrahedron Lett.28,3613(1987)

M. Alvaro,[a] V. Baldoví,[a] H. García,[a] M.A. Miranda[b]* and J. Primo[a]
[a]Dep. Química, ETSII, UPV, 46071-Valencia; [b]Dep. Química Orgánica, Facultad de Farmacia, 46010-Valencia, SPAIN

Photolysis of **1a,b** gives **4a,b** by a homolytic carbonyl-oxygen bond cleavage, followed by 1,2-hydrogen shift and in cage recombination.

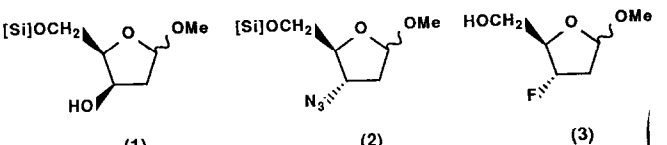


METHYL 5-O-TERT-BUTYLDIPHENYLSILYL-2-DEOXY-αß-D-THREO-PENTO-FURANOSIDE; AN APPROACH TO THE SYNTHESIS OF 3'-SUBSTITUTED-2',3'-DIDEOXY-NUCLEOSIDES INCLUDING 3'-AZIDO-3'-DEOXYTHYMIDINE AND OF 3'-SUBSTITUTED-2',3'-DIDEOXY-C-NUCLEOSIDES

Tetrahedron Lett.28,3615(1987)

George W. J. Fleet and Jong Chan Son,
Dyson Perrins Laboratory, Oxford University, South Parks Road, Oxford OX1 3QY UK

A short synthesis of methyl 5-O-tert-butyldiphenylsilyl-2-deoxy-αß-D-threo-pentofuranoside (1) is reported; the conversions of (1) into the azide (2) and the fluoride (3) are described.



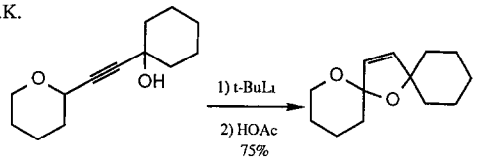
Tetrahedron Lett.28,3619(1987)

A SYNTHESIS OF 1,6-DIOXASPIRO[4.5]DEC-3-ENES

Richard Whitby and Philip Kocieński

Department of Chemistry, The University, Southampton, SO9 5NH, U.K.

Base-Catalysed rearrangement of a 2-alkynyl-tetrahydropyran generates an allenol ether intermediate which undergoes acid-catalysed cyclisation to the 1,6-dioxaspiro[4.5]dec-3-ene system.



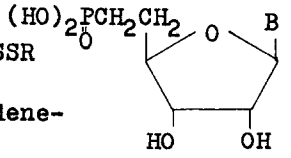
Tetrahedron Lett.28,3623(1987)

A NEW SCHEME FOR THE SYNTHESIS OF 5'-NUCLEOTIDE PHOSPHONATE ANALOGS

N.Sh.Padyukova, M.Ya.Karpeisky, L.I.Kolobushkina and S.N.Mikhailov

Institute of Molecular Biology the USSR Academy of Sciences, Moscow, USSR

5'-Nucleotide phosphonate analogs were prepared starting from 1,2-O-isopropylidene-5-deoxy-α-D-xylo-hexofuranose.



Tetrahedron Lett.28,3631(1987)

1,3-OXYGEN TO OXYGEN REARRANGEMENTS OF GROUP IV ESTERS

David J. Young and Michael J.T. Robinson*

The Dyson Perrins Laboratory, University of Oxford, South Parks Road, Oxford OX1 3QY, England

The 1,3-oxygen to oxygen rearrangements (**1a** ⇌ **1b**) of group IV esters of benzoic acid have been studied using ^{13}C and ^{18}O isotopic substitution. The free energies of activation for the intramolecular reactions fall from ~190 kJ mol^{-1} for **1** (R=CH_2Ph), to 76 for **1** (R=$SiMe_3$), 59 for **1** (R=$GeMe_3$), and <52 kJ mol^{-1} for **1** (R=$SnBu_3$).

1a $Ph^{13}C(^{18}OR)=^{16}O$ ⇌ $Ph^{13}C(=^{18}O)-^{16}OR$ **1b**