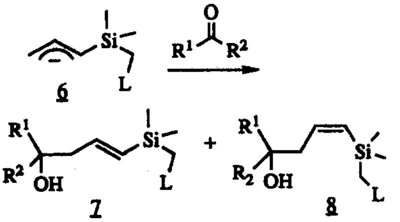
Tetrahedron Lett. **1992**, *33*, 7997

STEREOSELECTIVE REACTIONS OF α-SILYLALLYL ANIONS WITH CARBONYL COMPOUNDS.

T.H. Chan* and D. Labrecque
Dept. Chemistry, McGill University, Montreal, Quebec, Canada H3A-2K6.

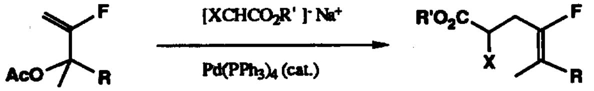
α-Silylallyl anions of the type 6 react with carbonyl compounds regioselectively at the γ-position, and stereoselectively to give the E- or the Z-isomer depending on the reaction conditions. Solvent and reaction temperature play a critical role in the control of stereoselectivity.



Tetrahedron Lett. **1992**, *33*, 8001

An Application of the Trost Reaction to the Stereoselective Synthesis of *trans*-Tetrasubstituted Fluoroalkenes.

Paul V. Fish, S. Pulla Reddy, Cheol H. Lee, and William S. Johnson.* Department of Chemistry, Stanford University, Stanford, California 94305, USA



60-83 %,
trans : *cis*
3-7 : 1

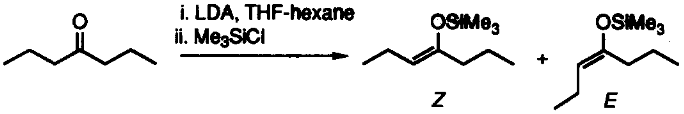
The coupling of β-fluoroallylic acetates with ester-enolates gave tetrasubstituted fluoroalkenes in good yield and with generally satisfactory *trans*-stereoselectivity.

Tetrahedron Lett. **1992**, *33*, 8005

The Stereochemistry of Enolate Formation in THF-Hexane Mixtures

Michael J. Munchhof and Clayton H. Heathcock*
Department of Chemistry,
University of California,
Berkeley, CA 94720

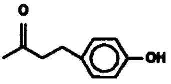
The *Z/E* ratio ranges from 1.5:1 in pure THF to 0.7:1 in 90% hexane.



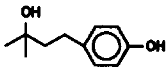
Tetrahedron Lett. **1992**, *33*, 8007

AN IMPROVED PREPARATION OF A TERTIARY ALCOHOL PROLINE LINKER AND ITS USE IN A SYNTHESIS OF MOSQUITO OOSTATIC HORMONE. Jan Kochansky* and R. M. Wagner, Insect Neurobiology and Hormone Laboratory and Livestock Insects Laboratory, USDA, ARS, Beltsville, MD 20705 USA

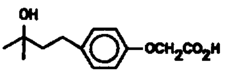
The reaction of MeMgBr with 1 to give 2 proceeds to completion only in THF. 2 was converted to linker 3 and used for a solid phase synthesis of Mosquito Oostatic Hormone (Tyr-Asp-Pro-Ala-(Pro)$_6$).



1



2



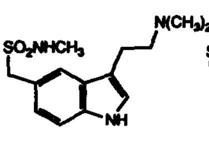
3

Tetrahedron Lett. **1992**, *33*, 8011

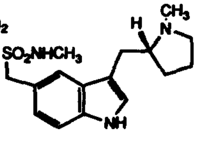
THE SYNTHESIS OF A CONFORMATIONALLY RESTRICTED ANALOG OF THE ANTI-MIGRAINE DRUG SUMATRIPTAN

John E. Macor,* David H. Blank, Ronald J. Post and Kevin Ryan
Department of Medicinal Chemistry, Central Research Division, Pfizer Inc, Groton, Connecticut 06340

The synthesis of 5-N-Methylaminosulfonylmethyl-3-(N-methylpyrrolidin-2-ylmethyl)indole (1), a conformationally restricted analog of the anti-migraine drug, sumatriptan, is described. To incorporate our novel C3 stereogenic replacement for the aminoethyl sidechain in sumatriptan, a convergent synthesis of the 3,5-disubstituted indole (1) was employed which utilized an intramolecular Heck reaction as the cornerstone reaction.



Sumatriptan



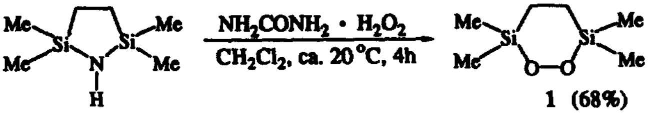
1

Tetrahedron Lett. **1992**, *33*, 8015

SYNTHESIS AND REACTIONS OF THE CYCLIC SILYL PEROXIDE 1,1,4,4-TETRAMETHYL-2,3-DIOXA-1,4-DISILACYCLOHEXANE

Waldemar Adam* and Rainer Albert
Institute of Organic Chemistry, University of Würzburg, Am Hubland,
D-8700 Würzburg, Germany

The first simple cyclic silyl peroxide 1 was prepared by classical synthetic methodology from its cyclic disilazane and the NH_2CONH_2 H_2O_2 complex.



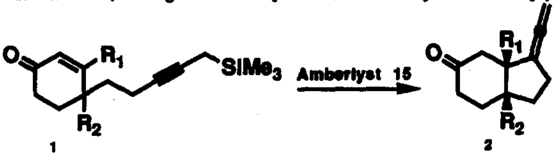
1 (68%)

Tetrahedron Lett. **1992**, *33*, 8017

Amberlyst 15-Catalyzed Cyclizations of Propargylic Silanes

Dieter Schinzer*, Jazid Kabbara, and Kerstin Ringe
Institut für Organische Chemie der Technischen Universität Braunschweig, Hagenring 30, W-3300 Braunschweig, Germany

A very efficient and simple route to bicyclic ketones using propargylic silanes is described. Amberlyst 15 is added to a reaction vessel, stirring at room temperature, and non-aqueous work-up yielded several bicyclic ketones.



1 2

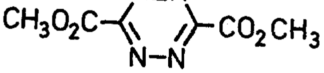
Tetrahedron Lett. **1992**, *33*, 8019

"Silylenolether als 2π-Komponenten in (4+2)-Cycloadditionen: Präparative und kinetische Ergebnisse"

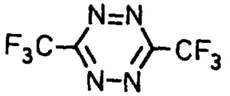
Thomas Hierstetter, Bruno Tischler und Jürgen Sauer,
Institut für Organische Chemie der Universität Regensburg, Universitätsstr. 31, W-8400 Regensburg, FRG

The reactivity of 16 open chain and cyclic silylenolethers was studied with 1 and 2 as electron poor dienes in inverse type DIELS-ALDER reactions.

1



2

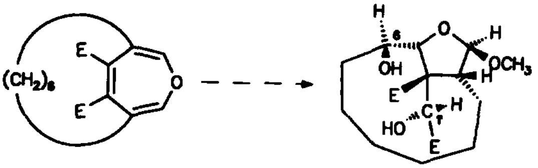


Tetrahedron Lett. **1992**, *33*, 8023

BRIDGED BRANCHED DEOXY METHYL FURANOSIDES FROM 3,6-HEXANOOXEPINES

Brigitta Popp, Norbert Sdunnus,
Frank Sönnichsen und Werner Tochtermann*,
Institut für Organische Chemie der Universität
Olshausenstr. 40, D-2300 Kiel 1, FRG
Eva-Maria Peters, Karl Peters und H.G. von Schnering
Max-Planck-Institut für Festkörperforschung
Heisenbergstr. 1, D-7000 Stuttgart 80, FRG

The synthesis of the title compounds is described.



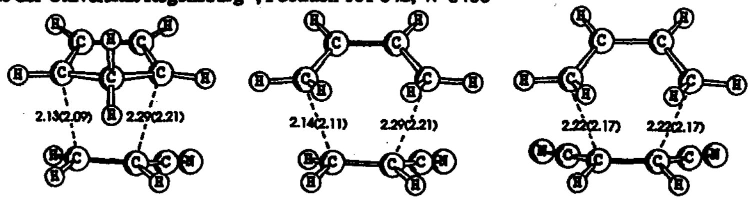
1 E = COOCH$_3$ 7

Tetrahedron Lett. **1992**, *33*, 8027

SOLVENT EFFECTS ON ENDO/EXO SELECTIVITIES IN (4 + 2) CYCLOADDITIONS OF CYANOETHYLENES.

T. Karcher[a)], W. Sicking[b)], J. Sauer[a)] and R. Sustmann*[b)]

Institut für Organische Chemie der Universität Essen[b)], Postfach 103 764, W-4300 Essen 1 and
Institut für Organische Chemie der Universität Regensburg[a)], Postfach 101 042, W-8400
Regensburg, Germany

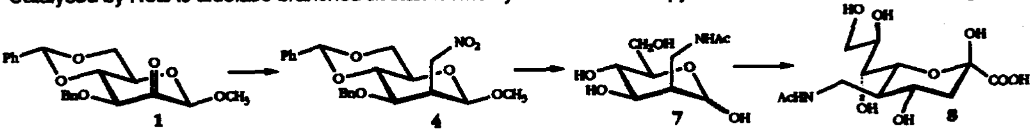


Tetrahedron Lett. **1992**, *33*, 8031

Synthesis of the C-5 Homologue of N-Acetylneuraminic Acid by Enzymatic Chain Elongation of 2-C-Acetamidomethyl-2-deoxy-D-mannose

Klaus Koppert and Reinhard Brossmer, Institut für Biochemie II, Universität Heidelberg, Im Neuenheimer Feld 328, 6900 Heidelberg, FRG

Addition of nitromethane to hexopyranosid-2-ulose 1 produces *via* intermediate nitroolefin stereoselectively 4. Catalysed by NeuAc aldolase branched acetamidomethyl mannose 7 and pyruvate afford sialic acid homologue 8.

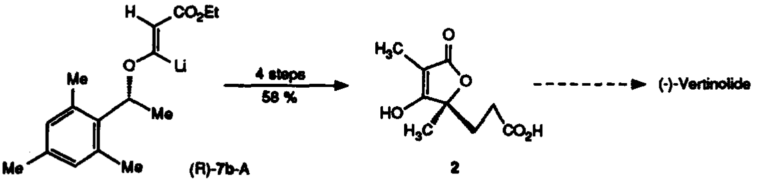


1 4 7 8

Tetrahedron Lett. **1992**, *33*, 8035

A Convenient Stereoselective Synthesis of a (-)-Vertinolide Precursor

Apurba Datta, Dinah Datta, and Richard R. Schmidt*
Fakultät für Chemie, Universität Konstanz, Postfach 5560, D-7750 Konstanz Germany



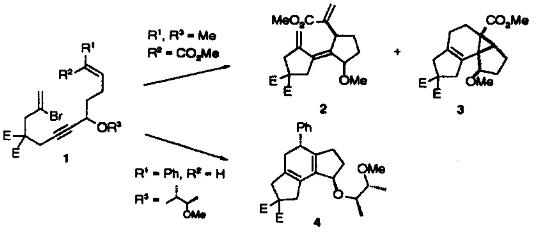
(R)-7b-A 2

Tetrahedron Lett. **1992**, *33*, 8039

PALLADIUM-CATALYZED POLYCYCLIZATIONS OF SUBSTITUTED DIENYNES: STEREOSELECTIVE ROUTES TO HIGHLY COMPLEX POLYCYCLES

Frank E. Meyer, Hans Henniges, and Armin de Meijere*
Institut für Organische Chemie, Universität Göttingen,
Tammannstraße 2, D-3400 Göttingen, FRG

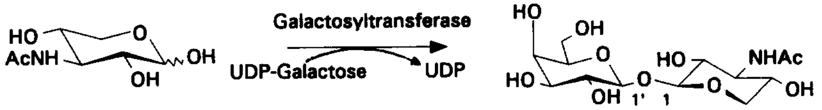
Dienynes of type 1 cyclize under palladium-catalysis to bicycle 2 and its *trans*-isomer. Under appropriate conditions, the latter gives 3 by intramolecular Diels-Alder reaction. With a different set of substituents, enantiopure 1 yields enantiopure tricycle 4.



Tetrahedron Lett. **1992**, *33*, 8043

Transfer of Galactose to the Anomeric Position of N-Acetyl Gentosamine by Galactosyltransferase from Bovine Milk

Y. Nishida, T. Wiemann and J. Thiem*
Department of Organic Chemistry, University of Hamburg, Martin-Luther-King-Platz 6, D-2000 Hamburg 13, Germany



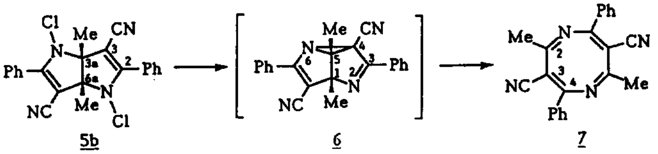
The disaccharide ßGal(1,1)ßXyl3NAc with a ß,ß-trehalose type was obtained in 25% employing UDP-Gal in a galactosyltransferase reaction.

Tetrahedron Lett. **1992**, *33*, 8047

2,6-Diaza-4,8-dicyanosemibullvalene. A short lived intermediate?

B. Düll, K. Müllen*, Max-Planck-Institut für Polymerforschung, Ackermannweg 10, D-6500 Mainz, Germany

Dehalogenation of 5b produces the unstable semibullvalene 6 which rapidly transformes into diazocine 7.

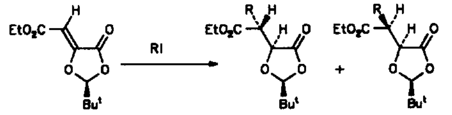


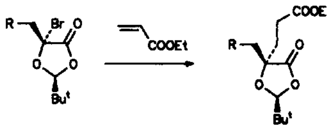
Tetrahedron Lett. **1992**, *33*, 8051

Asymmetric Radical Additions Using Chiral 1,3-Dioxolane-4-ones

Georg Kneer and Jochen Mattay*
Organisch-Chemisches Institut, Westfälische Wilhelms-Universität, Orléansring 23, D-(W)-4400 Münster, Germany

The addition of alkyl radicals to the chiral (c,d) olefin (2*S*)-2-*tert*-butyl-5-ethoxycarbonylmethylene-1,3-dioxolane-4-one with following hydrogen abstraction gave two diastereoisomers with high stereoselectivity. Additions of chiral radicals obtained from their bromides to ethyl acrylate show high 1,3-induction.



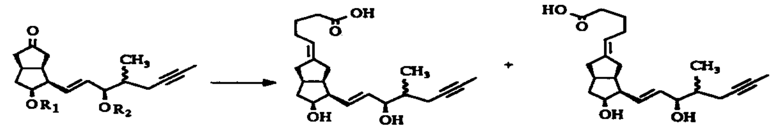


Tetrahedron Lett. **1992**, *33*, 8055

E- OR Z-SELECTIVE WITTIG REACTIONS IN THE SYNTHESIS OF THE CARBACYCLIN ILOPROST

Jürgen Westermann*, Michael Harre and Klaus Nickisch
Schering AG, Berlin and Bergkamen, D 1000 Berlin 65, Germany

Wittig reaction of ketones 3 generates the exocyclic 5,6 double bond of Iloprost in E/Z ratios between 35:65 and 90:10 depending on substituents and reaction conditions.

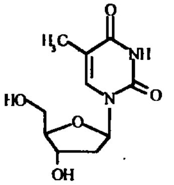


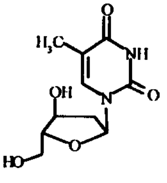
Tetrahedron Lett. **1992**, *33*, 8057

ANTIPARALLEL THYMINE-THYMINE DUPLEXES IN OLIGONUCLEOTIDES CONTAINING α- AND β-THYMIDINE.

Ulf Neidlein, Christian Leumann, Laboratorium für Organische Chemie, ETH-Zürich, CH-8092 Zürich.

Oligonucleotide-sequences (14 to 21 nucleotides in length) consisting only of α-thymidine, as well as alternating ($^{\alpha}$T-$^{\beta}$T)-sequences form antiparallel duplex-structures.


β-Thymidine (βT)

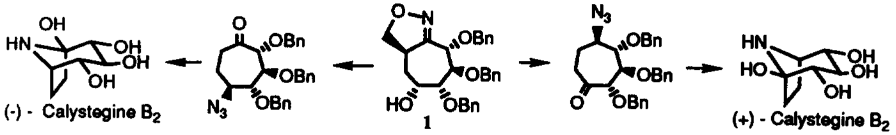

α-Thymidine ($^{\alpha}$T)

Tetrahedron Lett. **1992**, *33*, 8061

POLYHYDROXYLATED NORTROPANES STARTING FROM D-GLUCOSE: SYNTHESIS OF HOMOCHIRAL (+) AND (-)-CALYSTEGINES B_2

O. Duclos, M. Mondange, A. Duréault*, J.C. Depezay. Université René Descartes, Laboratoire de Chimie et Biochimie Pharmacologiques et Toxicologiques, associé au CNRS, 45 rue des Saints-Pères, 75270 Paris cedex 06, France

The cycloheptano-isoxazoline 1 is suitable for the synthesis of both (+) and (-)-calystegines B_2.



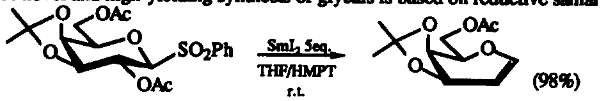
Tetrahedron Lett. **1992**, *33*, 8065

Reductive Elimination of Glycosyl Phenyl Sulfones by SmI_2-HMPA: A Convenient Synthesis of Substituted Pyranoid Glycals

Pierre de Pouilly, Alain Chénedé, Jean-Maurice Mallet and Pierre Sinaÿ*

Ecole Normale Supérieure, Laboratoire de Chimie, UA 1110,
24 Rue Lhomond, 75231 Paris Cedex 05, France

A novel and high-yielding synthesis of glycals is based on reductive samariation at the anomeric center.

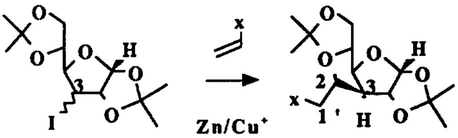


Tetrahedron Lett. **1992**, *33*, 8069

Zinc-Copper Couple Promoted C-Branching in the Carbohydrate Series

Pierre Blanchard, Adilson Da Silva, Jean-Louis Fourrey *, Antonio S. Machado and Malka Robert-Gero
Institut de Chimie des Substances Naturelles, C.N.R.S., 91198 Gif-sur-Yvette, France

Efficient C-branching at C-3 of glucose was accomplished by zinc/copper couple conjugate addition of its appropriate 3-iodo derivative to various activated olefins, presumably via a radical pathway.

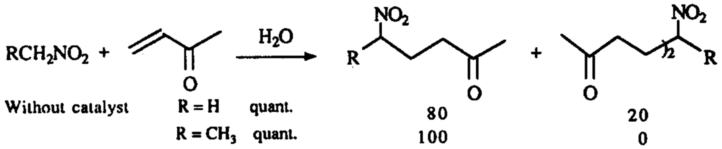


Tetrahedron Lett. **1992**, *33*, 8073

Water-promoted organic reactions.
Michael Addition of Nitroalkanes to Methylvinylketone under Neutral Conditions

André Lubineau and Jacques Augé*
Laboratoire de Chimie Organique Multifonctionnelle associé au CNRS, ICMO, Université de Paris-Sud, Bât 420, F-91405 ORSAY

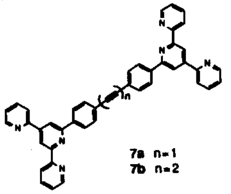
Water as solvent promotes the uncatalyzed Michael reaction of nitroalkanes with methylvinylketone; the rate is enhanced in sugar solutions.



Tetrahedron Lett. **1992**, *33*, 8075

SYNTHESIS AND PROPERTIES OF NOVEL DITOPIC POLYPYRIDINE LIGANDS BRIDGED BY ONE AND TWO ACETYLENIC BONDS

Vincent Grosshenny and Raymond Ziessel*
Ecole Européenne des Hautes Industries Chimiques de Strasbourg
Institut de Physique et de Chimie des Matériaux de Strasbourg
1, rue Blaise Pascal, 67008 Strasbourg Cedex, France



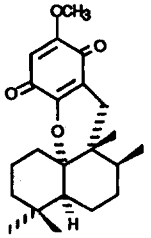
7a n=1
7b n=2

Tetrahedron Lett. **1992**, *33*, 8079

SMENOQUALONE, A NOVEL SESQUITERPENOID FROM THE MARINE SPONGE *SMENOSPONGIA SP.*

Marie-Lise Bourguet-Kondracki, Marie-Thérèse Martin and Michèle Guyot*, Muséum National d'Histoire Naturelle, Laboratoire de Chimie Appliquée aux Corps Organisés, associé au CNRS, 63 rue Buffon, 75231-PARIS Cedex 05, France.

Smenoqualone, a novel quinonic terpenoid with a rearranged drimane skeleton was isolated from a marine sponge Smenospongia sp. The stereostructure was determined by detailed analyses of ^{1}H and ^{13}C NMR spectra, ^{1}H-^{1}H COSY, ^{1}H-^{13}C correlations via HMQC, HMBC and NOE difference NMR experiments.

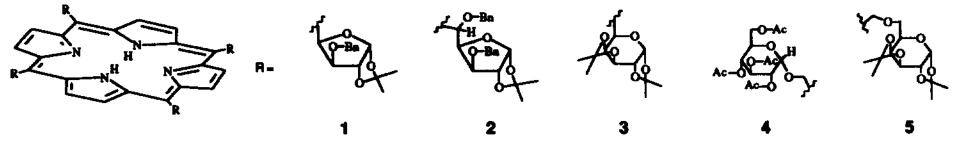


Tetrahedron Lett. **1992**, *33*, 8081

Synthesis of New *Meso*-Tetrakis (Glycosylated) Porphyrins.

Ph.Maillard, C.Huel and M.Momenteau*.
Institut Curie, Section de Biologie Laboratoire associé au CNRS et Unité INSERM, Bât 112,
Centre Universitaire, 91405 ORSAY, FRANCE

The synthesis of a new family of *meso*-tetrakis (glycosylated) porphyrins is reported. Unfortunately, the porphyrins 4 and 5 bearing glycosyloxymethylene substituents are unstable.

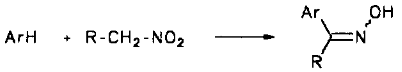


Tetrahedron Lett. **1992**, *33*, 8085

DIRECT CARBOHYDROXIMOYLATION OF AROMATICS WITH PRIMARY NITROALKANES IN TRIFLIC ACID (TFSA).

Jean-Marie Coustard, Jean-Claude Jacquesy*, Bruno Violeau.
Laboratoire de Chimie XII, Faculté des Sciences, Poitiers (France)

Primary nitroalkanes react with aromatics in TFSA at 70-80°C to yield arylated oximes in fair to excellent yields.



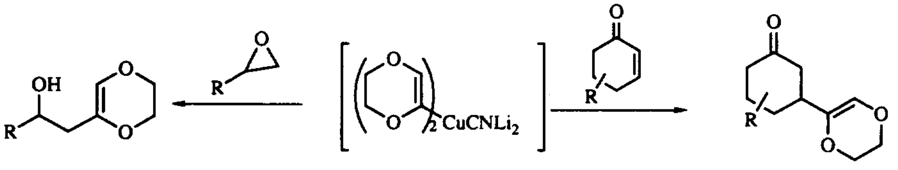
Ar = C_6H_5, $CH_3C_6H_4$, FC_6H_4, $CH_3OC_6H_4$, Naphtyl

R = H, CH_3, C_2H_5

Tetrahedron Lett. **1992**, *33*, 8087

Preparation and Reactivity of Lithium1,4-Dioxenyl Cuprates.

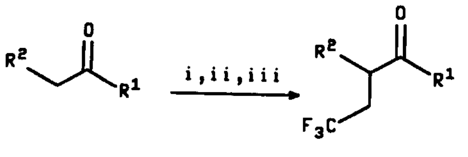
Valérie Blanchot-Courtois and Issam Hanna.*
Laboratoire de Synthèse Organique, Ecole Polytechnique, F-91128 Palaiseau, France.



Tetrahedron Lett. **1992**, *33*, 8091

Synthesis of γ γ γ-trifluorocarbonyl compounds

André J. LAURENT* and Stanislaw LESNIAK**
(*)Université Claude Bernard-Lyon I, Lab. de Chimie Organique 3, associé au CNRS, 43 Bd du 11 Novembre 1918
69622 Villeurbanne (France) (**)UNIV. LODZ, Institut of Chemistry, Narutowicza 68, 90-136 Lodz (Pologne)



i : $ClSiMe_3$; ii : CF_3CCl_3 ; iii : $HSnBu_3$.

Tetrahedron Lett. **1992**, *33*, 8093

TRACING BIOGENIC LINKS OF NATURAL ORGANIC SUBSTANCES AT THE MOLECULAR LEVEL WITH STABLE CARBON ISOTOPES : *n*-ALKANES AND *n*-ALKANOIC ACIDS FROM SEDIMENTS

Eric A. LICHTFOUSE* and James W. COLLISTER[#]

Université Pierre et Marie Curie, INRA, CNRS, 75252 Paris Cedex 05, France. [#]University of Bristol, England.

The $^{13}C/^{12}C$ compositions of *n*-alkanes and *n*-alkanoic acids from Eocene sediments are correlated.

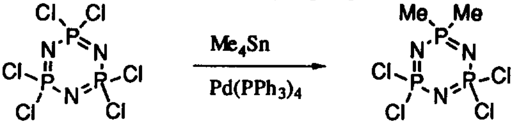
$$R\text{-}CO_2H \longrightarrow \quad \longrightarrow R\text{-}H$$

Tetrahedron Lett. **1992**, *33*, 8095

USE OF TIN DERIVATIVES FOR SELECTIVE ALLYLATION AND METHYLATION OF HALOGENOPHOSPHORUS COMPOUNDS

Hervé Rolland,[a] Philippe Potin,[b] Jean-Pierre Majoral[a] and Guy Bertrand.[b]
[a]Laboratoire de Chimie de Coordination du CNRS, 205, route de Narbonne, 31077 Toulouse Cédex (France)
[b]Groupement de Recherches de Lacq, ATOCHEM, BP 34, 64170 Artix (France)

Palladium(0) catalyzed gem-dimethylation of hexachlorocyclotriphosphazene with tetramethylstannane is described as well as the high yield monoallylation of halogenophosphorus or -boron compounds by allyltrialkylstannanes under photolytic conditions.



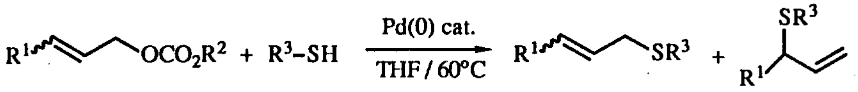
(90% yield)

Tetrahedron Lett. **1992**, *33*, 8099

SYNTHESIS OF ALLYL ARYL SULPHIDES BY PALLADIUM(0)-MEDIATED ALKYLATION OF THIOLS.

Catherine Goux, Paul Lhoste and Denis Sinou*, Laboratoire de Synthèse Asymétrique, associé au CNRS, Université Claude Bernard Lyon I, 43 Boulevard du 11 Novembre 1918, 69622 Villeurbanne Cédex, France.

Various allylic aryl sulphides are readily prepared in high yields by the palladium(0)-catalyzed *S*-alkylation of allylic carbonates by various aromatic thiols.

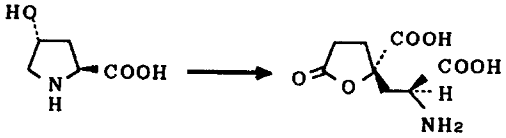


Tetrahedron Lett. **1992**, *33*, 8103

FIRST SYNTHESIS OF LYCOPERDIC ACID

Mamoru Kaname and Shigeyuki Yoshifuji *
School of Pharmacy, Hokuriku University,
Ho-3 Kanagawa-machi, Kanazawa, 920-11, Japan

Lycoperdic acid, (2S,2'S)-2-amino-3-(2'-carboxy-5'-oxo-2'-tetrahydrofuranyl)propanoic acid, was synthesized from *trans*-4-hydroxy-L-proline.



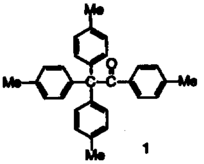
Tetrahedron Lett. **1992**, *33*, 8105

S_N1-Type Mechanism for the Carbon-Carbon Bond Cleavage of Tetrakis(4-methylphenyl)ethanone Cation Radical. A Laser Flash Photolysis Study

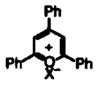
Ryoichi Akaba,* Masaki Kamata, Hirochika Sakuragi, and Katsumi Tokumaru

Department of Chemistry, Gunma College of Technology, Toriba-machi, Maebashi, Gunma 371, Department of Chemistry, Faculty of Education, Niigata University, Ikarashi, Niigata 950-21, and Department of Chemistry, University of Tsukuba, Tsukuba, Ibaraki 305, Japan

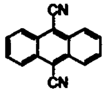
Mechanism of carbon-carbon bond cleavage of tetrakis(4-methylphenyl)-ethanone cation radicals generated by photoinduced electron transfer with TPP^+X^- and DCA as sensitizers is described.



1



TPP^+X^-



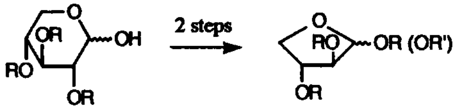
DCA

Tetrahedron Lett. **1992**, *33*, 8109

ONE-CARBON EXTRUSION FROM CARBOHYDRATES VIA C1-ALKOXY RADICAL FRAGMENTATION. AN EASY ACCESS TO ERYTHROSE AND THREOSE

Junji Inanaga,* Yuichi Sugimoto, Yasuo Yokoyama, and Takeshi Hanamoto
Institute for Molecular Science, Myodaiji, Okazaki 444, Japan

A mild and convenient method for the conversion of pyranose derivatives to the corresponding one-carbon reduced furanosides.

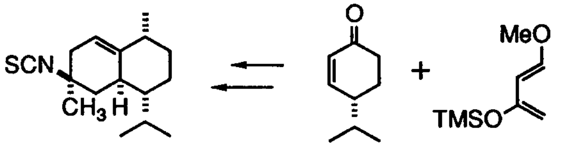


Tetrahedron Lett. **1992**, *33*, 8113

SYNTHESIS OF (±)-HALIPANICINE, A MARINE SESQUITERPENE ISOTHIOCYANATE ISOLATED FROM AN OKINAWAN MARINE SPONGE *HALICHONDRIA PANICEA*

Hideshi Nakamura,* Bin Ye, and Akio Murai
Department of Chemistry, Faculty of Science,
Hokkaido University, Sapporo 060, Japan

Halipanicine (1) was synthesized as a racemic form in 21 steps from cryptone and Danishefsky diene in 7.7% total yield, establishing the relative stereostructure of 1.



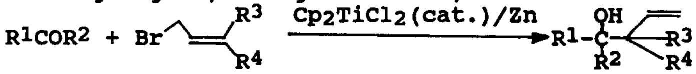
halipanicine (1)

(±)-cryptone

Tetrahedron Lett. **1992**, *33*, 8117

A Highly Efficient Addition of Allylic Bromide to Carbonyl Compounds Using Cp_2TiCl_2(cat.)/Zn System

Yu Ding* and Gang Zhao
Shanghai Institute of Organic Chemistry, Academia Sinica,
345 LingLing Lu, Shanghai 200032, China



Tetrahedron Lett. **1992,** *33,* 8119

LnCl$_3$(cat)/Zn Promoted Hydroperfluoroalkylation of α,β-Unsaturated Esters With Perfluoroalkyl Iodides

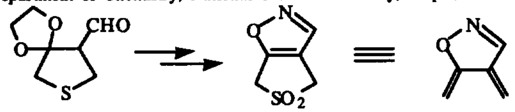
Yu Ding*, Gang Zhao and WeiYuan Huang
Shanghai Institute of Organic Chemistry, Academia Sinica,
345 LingLing Lu, Shanghai 200032, China.

$$R_fI + R_1CH{=}CR_2COOR_3 \xrightarrow[\text{THF, 50-76°C}]{\text{LnCl}_3\text{(cat.)/Zn}} R_fR_1CHCHR_2COOR_3$$

Tetrahedron Lett. **1992,** *33,* 8121

Synthesis of *o*-Dimethylene Isoxazole *via* Isoxazole-fused 3-Sulfolene

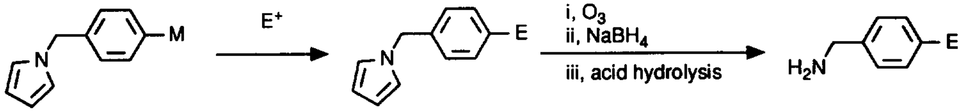
Ta-shue Chou*and Ruei-Chih Chang
Institute of Chemistry, Academia Sinica, Taipei, Taiwan
Department of Chemistry, National Taiwan University, Taipei, Taiwan, ROC



Tetrahedron Lett. **1992,** *33,* 8125

PROTECTION OF PRIMARY AMINO AS PYRROLE IN ORGANOMETALLIC REAGENTS

Anthony P. Davis* and Thomas J. Egan, Department of Chemistry, Trinity College, Dublin 2, Ireland



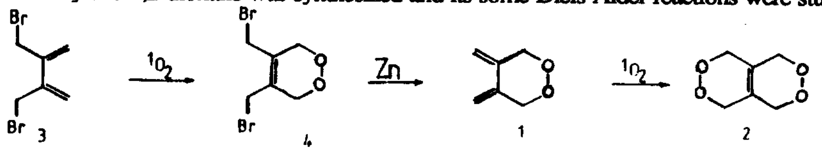
This form of protection suppresses both the acidity and basicity of R-NH$_2$, is compatible with strongly basic conditions, and can be removed with relative ease.

Tetrahedron Lett. **1992,** *33,* 8127

4,5-DIMETHYLENE-1,2-DIOXANE AND DERIVED DIELS-ALDER ADDUCTS.

Basri Atasoy*[a],Serdar Karaböcek[b],Gazi University,Ankara/TURKEY
a)Department of Sciences, Faculty of Education. b) Department of Chemistry, Faculty of Art and Sciences.

4,5 Dimethylene-1,2-dioxane was synthesized and its some Diels-Alder reactions were studied.

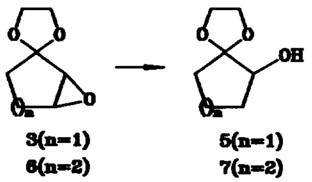


Tetrahedron Lett. **1992**, *33*, 8131

REGIOSELECTIVE REDUCTIONS OF 2,3-EPOXY ACETALS WITH LITHIUM ALUMINUM HYDRIDE: A REINVESTIGATION.

Helena M.C.Ferraz, Regina M. Sasahara and Pellegrino Losco
I.Q.USP - CP 20780 - S.Paulo-Brazil.

Treatment of 2,3-epoxy acetals 3 and 6 with lithium aluminum hydride gave the corresponding 2-hydroxy acetals 5 and 7 . The alcohol 5 was transformed in two steps into the 1,2-cyclopentanedione .

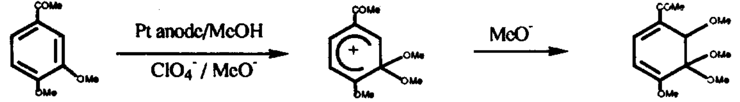


Tetrahedron Lett. **1992**, *33*, 8133

An Unusual Anodic Methoxylation: 3,4-dimethoxyacetophenone

Geoffrey E. Hawkes[a], Jane E. Hawkes[b], Francisco C.M. Comninos[c], Vera L. Pardini[c], and Hans Viertler[c]*. [a]Department of Chemistry, Queen Mary & Westfield College, Mile End Road, London E1 4NS, England; [b]Department of Chemistry, King's College, Strand, London WC1 2RS, England; [c]Instituto de Quimica, Universidade de Sao Paulo, C.P. 20780, 01498 Sao Paulo, Brazil.

The electrolysis of 3,4-dimethoxyacetophenone in methanol at a platinum anode gives a high yield of 1-acetyl-4,5,5,6-tetramethoxycyclohexa-1,3-diene, whose structure is proven by ^1H and ^{13}C NMR.



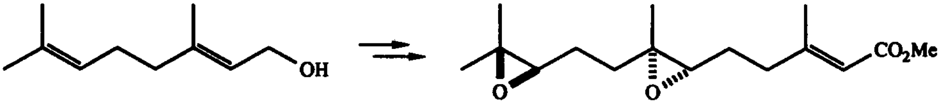
Tetrahedron Lett. **1992**, *33*, 8137

SYNTHESIS OF FOUR STEREOISOMERS OF THE HIGHER DIPTERAN JUVENILE HORMONE III BISEPOXIDE

Rodney W. Rickards* and Richard D. Thomas
Research School of Chemistry, Australian National University, G.P.O. Box 4, Canberra, A.C.T. 2601, AUSTRALIA

Four stereoisomers of JHB$_3$ are prepared from geraniol *via* Sharpless epoxidation

e.g.,

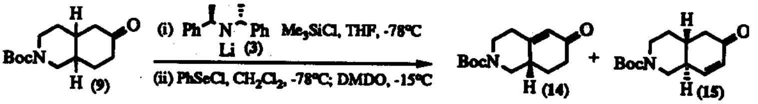


Tetrahedron Lett. **1992**, *33*, 8141

A NOVEL REGIODIVERGENT RESOLUTION REACTION MEDIATED BY A HOMOCHIRAL LITHIUM AMIDE BASE

Kimberley Bambridge and Nigel S. Simpkins*, Department of Chemistry, University of Nottingham, University Park, Nottingham, NG7 2RD, UK, and Barry P. Clark, Lilly Research Centre Ltd, Eli Lilly and Co., Erl Wood Manor, Windlesham, Surrey, GU20 6PH, UK.

Treatment of racemic *trans*-perhydroisoquinolone 9 with homochiral lithium amide base 3 allows access to unsaturated products 14 and 15 in 83% and 60% ee respectively.

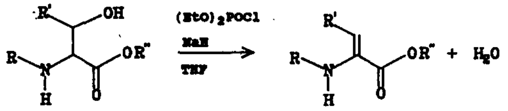


Tetrahedron Lett. **1992**, *33*, 8145

ONE-STEP STEREOSPECIFIC SYNTHESIS OF α,β-DEHYDROAMINOACIDS AND DEHYDROPEPTIDES

Federico Berti[a], Cynthia Ebert[b*], Lucia Gardossi[b]
[a]Dipartimento di Scienze Chimiche. [b]Dipartimento di Scienze Farmaceutiche. - Università di Trieste. piazzale Europa 1. 34127 Trieste. Italy.

Dehydroaminoacids and dehydropeptides were prepared by one-pot reaction. The reaction is stereospecific and proceeds without racemization.



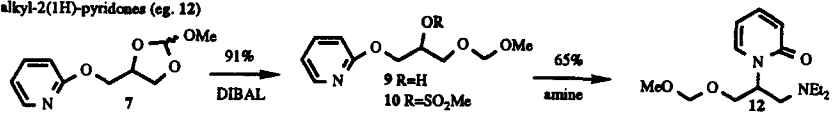
Substrates	Products	R	R'	R"
1	5	CBZ	H	CH_2Ph
2	6	CBZ	CH_3	CH_3
3	7	CBZ-Ala	H	CH_3
4	8	CBZ-Phe	CH_3	CH_3

Tetrahedron Lett. **1992**, *33*, 8149

THE PREPARATION OF N-ALKYL-2(1H)-PYRIDONES BY THE REACTION OF AMINES WITH A DERIVATIVE OF 3-(2-PYRIDYL)PROPANE-1,2-DIOL

Michael H. Block, ICI Pharmaceuticals, Mereside, Alderley Park, Macclesfield, Cheshire, SK10 4TG, England.

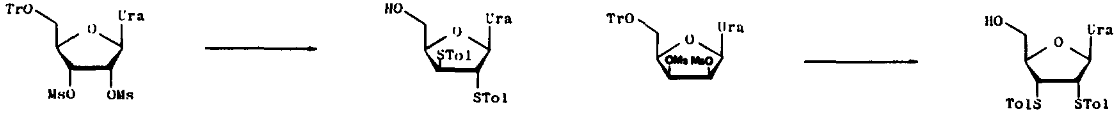
Reduction of the 2-pyridyl orthoester 7 with DIBAL gives exclusively 9 in excellent yield. Mesylation of 9 and reaction with amines gives N-alkyl-2(1H)-pyridones (eg. 12)



Tetrahedron Lett. **1992**, *33*, 8151

DERIVATIVES OF 2',3'-DITHIOURIDINE AND [1-β-D-(2,3-DITHIOXYLOFURANOSYL)]URACIL

Richard Johnson[a], Bhalchandra V. Joshi[a], Stephen Neidle[b], Colin B. Reese*[a], and Chris F. Snook[b]
[a]Department of Chemistry, King's College London, Strand, London, WC2R 2LS, England
[b]Institute of Cancer Research, Clifton Avenue, Sutton, Surrey, SM2 5PX, England

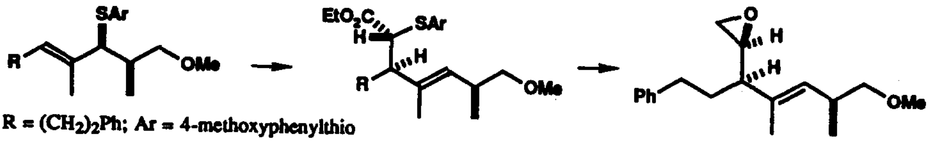


Ura = uracil-1-yl   Tol = 4-MeC_6H_4

Tetrahedron Lett. **1992**, *33*, 8155

STEREOSPECIFICITY AND STEREOSELECTIVITY IN THE [2,3] SIGMATROPIC REARRANGEMENT OF OPEN CHAIN SULPHONIUM YLIDES

Richard C. Hartley and Stuart Warren, University Chemical Laboratories, Lensfield Road, Cambridge, CB2 1EW
and Ian C. Richards, Schering Agrochemicals Ltd, Chesterford Park Research Station, Saffron Walden, Essex, CB10 1XL.



R = $(CH_2)_2Ph$; Ar = 4-methoxyphenylthio

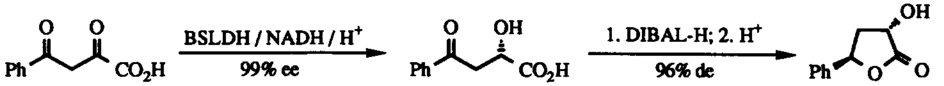
Tetrahedron Lett. **1992**, *33*, 8159

STEREOSELECTIVE ROUTES TO CHIRAL 2-HYDROXY-4-OXO ACIDS AND SUBSTITUTED 2-HYDROXYBUTYROLACTONES USING LACTATE DEHYDROGENASES

Guy Casy, School of Chemistry and Molecular Recognition Centre, University of Bristol, Cantock's Close, Bristol BS8 1TS, UK.

Sequential enzymatic and chemical reduction of 2,4-dioxo acids gives chiral 2-hydroxybutyrolactones.

e.g.



Tetrahedron Lett. **1992**, *33*, 8163

DEPROTECTION OF THIOACETALS AND 1,3-DITHIANES WITH DIMETHYLSULPHOXIDE

Ch. Srinivasa Rao, M.Chandrasekharam, H.Ila* and H.Junjappa*
Department of Chemistry, North-Eastern Hill University,
Shillong - 793 003, Meghalaya, India

A facile method for dethioacetalization of thioacetals and 1,3-dithianes on heating in DMSO under neutral conditions to afford the corresponding carbonyl compounds in good yields.