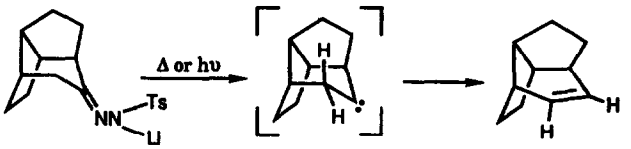
Tetrahedron Lett. **1993**, *34*, 1391

HYDROGEN REARRANGEMENTS IN CARBENES.
INHERENT H_{AX}/H_{EQ} MIGRATION RATIOS IN THERMAL AND PHOTIC BAMFORD-STEVENS REACTIONS

Alex Nickon, Alfred G. Stern, and Martin C. Ilao
Department of Chemistry, The Johns Hopkins University, Baltimore MD, 21218-2685

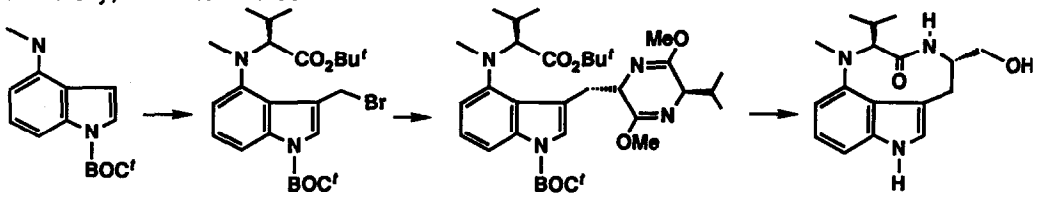
The inherent migration ratio H_{ax}/H_{eq} is ~1.7 in thermolysis and ~1.2 in photolysis. These experimental ratios are free of chair-boat ambiguity.



Tetrahedron Lett. **1993**, *34*, 1395

A SYNTHESIS OF (-)-INDOLACTAM V

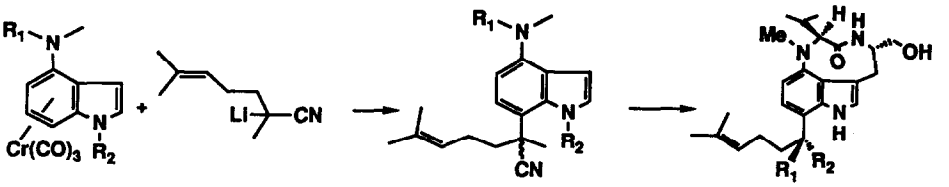
M. F. Semmelhack and Hakjune Rhee
Department of Chemistry, Princeton University, Princeton NJ 08544



Tetrahedron Lett. **1993**, *34*, 1399

FORMAL SYNTHESIS OF TELEOCIDIN A VIA INDOLE-$Cr(CO)_3$ COMPLEXES

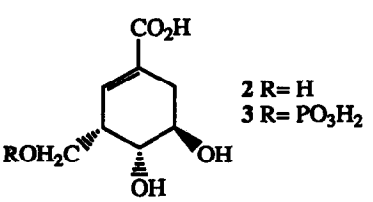
M. F. Semmelhack and Hakjune Rhee
Department of Chemistry, Princeton University, Princeton, NJ 08544



Tetrahedron Lett. **1993**, *34*, 1403

SYNTHESIS OF (-)-3-HOMOSHIKIMIC ACID AND (-)-3-HOMOSHIKIMATE-3-PHOSPHATE

Harold B. Wood, Jr. and Bruce Ganem*
Department of Chemistry, Baker Laboratory
Cornell University
Ithaca, New York 14853-1301 USA



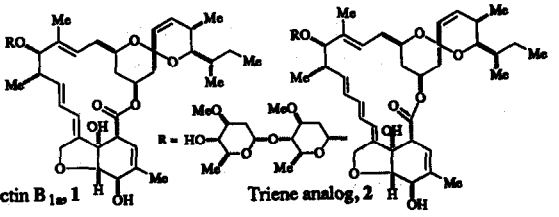
2 R= H
3 R= PO_3H_2

Tetrahedron Lett. **1993**, *34*, 1407

BIS-HOMO AVERMECTIN B_{1a} – A SEMI-SYNTHETIC ANALOG WITH A TRIENIC18-MEMBERED MACROCYCLIC RING

Stephen Hanessian*, Philippe Chemla and Yongxue Tu
Department of Chemistry, Université de Montréal, P.O. Box 6128, Station A, Montréal, P.Q. CANADA, H3C 3J7

An analog of avermectin B_{1a} in which the diene portion was homologated to a triene was synthesized from the natural product.

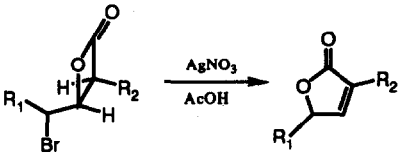


Tetrahedron Lett. **1993**, *34*, 1411

A NEW SYNTHESIS OF SUBSTITUTED BUTENOLIDES VIA CATION-INITIATED RING EXPANSION/ELIMINATION OF β-LACTONES

T. Howard Black* and Jianhua Huang, Department of Chemistry, Eastern Illinois University, Charleston, Illinois 61920

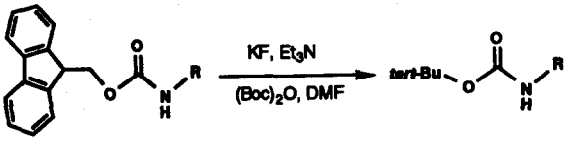
When treated with silver ion in refluxing acetic acid, γ-bromo-β-lactones, available via bromolactonization, undergo a ring elimination reaction to afford substituted butenolides.



Tetrahedron Lett. **1993**, *34*, 1413

One-Pot Conversion of Fluorenylmethyl Carbamates into *tert*-Butyl Carbamates

Wen-Ren Li, Jianjun Jiang, and Madeleine M. Joullié*
Department of Chemistry, University of Pennsylvania
Philadelphia, PA 19104-6323



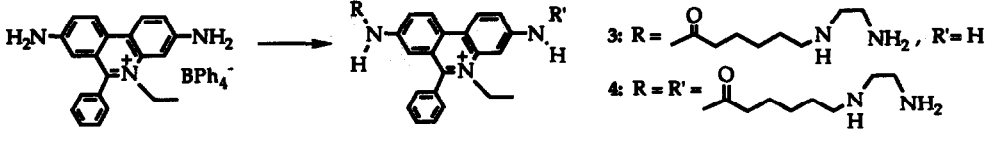
N-Fluorenylmethoxycarbonyl groups may be efficiently converted to the corresponding N-*tert*-butoxycarbonyl compound by potassium fluoride/Et_3N in the presence of Boc_2O.

Tetrahedron Lett. **1993**, *34*, 1415

SYNTHESIS OF POLYAMINO AMIDO DERIVATIVES OF ETHIDIUM

Michael V. Keck and Stephen J. Lippard*
Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA 02139

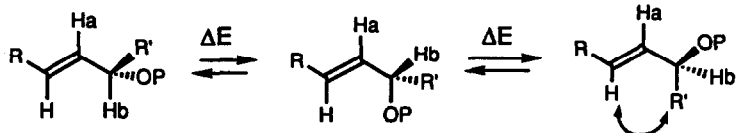
The tetraphenyl borate salt of ethidium was modified to produce to polyamino amido derivatives.



Tetrahedron Lett. **1993**, *34*, 1417

CONFORMATIONAL PREFERENCES OF C1-OXYGENATED ACYCLIC CHIRAL ALKENES: THE EFFECT OF VINYL AND ALLYL SUBSTITUENTS

Benjamin W. Gung*, Mark A. Wolf, Keith Ohm, and Andrew J. Peat
Department of Chemistry, Miami University, Oxford, Ohio 45056



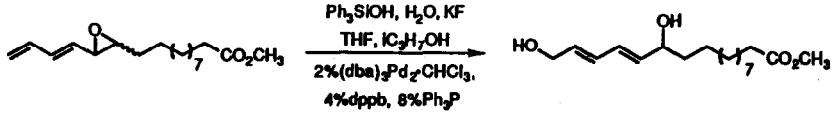
favored when R = alkyl | favored when R = CO_2R | not favored

Tetrahedron Lett. **1993**, *34*, 1421

Triphenylsilanol as a Water Surrogate for Regioselective Pd Catalyzed Allylations

Barry M. Trost, Nobuhiko Ito and Paul D. Greenspan
Department of Chemistry, Stanford University, Stanford, California 94305-5080

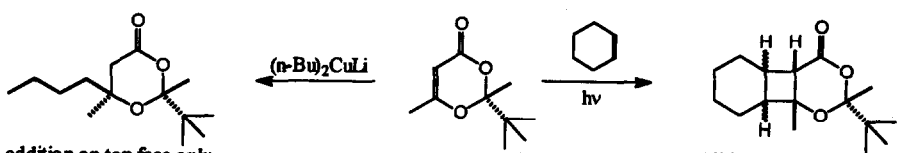
Triphenylsilanol participates in Pd catalyzed allylic alkylations of vinyl epoxides to give the product of distal attack with excellent regioselectivity in contrast to other oxygen nucleophiles. Ease of desilylation under the reaction conditions effects an equivalent of nucleophilic attack of water, a species which does not serve as an effective nucleophile in these reactions



Tetrahedron Lett. **1993**, *34*, 1425

ASYMMETRIC INDUCTION IN CUPRATE AND PHOTO-ADDITIONS TO 2-*t*-BUTYL-2,6-DIMETHYL-1,3-DIOXIN-4-ONE. ABSOLUTE BUT OPPOSITE FACE SELECTIVITIES.

G.L. Lange and M.G. Organ, Guelph-Waterloo Centre for Graduate Work in Chemistry, Department of Chemistry and Biochemistry, University of Guelph, Guelph, Ontario, N1G 2W1, Canada.

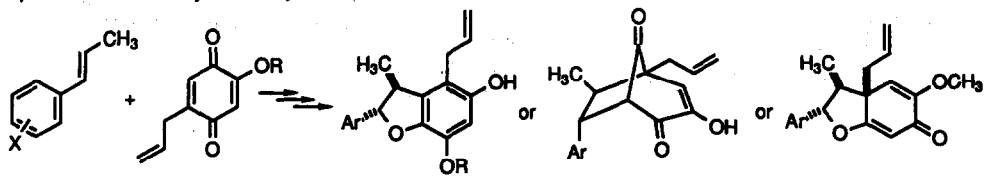


addition on top face only | addition on bottom face only

Tetrahedron Lett. **1993**, *34*, 1429

STEREOSELECTIVE SYNTHESES OF THREE DIFFERENT CLASSES OF NEOLIGNANS FROM THE SAME STARTING MATERIALS

Thomas A. Engler,* Dong (Donna) Wei and Michael A. Letavic
Department of Chemistry, University of Kansas, Lawrence, Kansas 66045

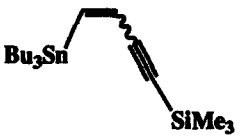


Tetrahedron Lett. **1993**, *34*, 1433

POLYENE CONSTRUCTIONS VIA PALLADIUM COUPLINGS OF ACTIVATED TRIFLATES WITH STANNYLATED ENYNES

Bruce H. Lipshutz* and Mouad Alami
Department of Chemistry,
University of California
Santa Barbara, CA 93106

Coupling reactions of E- and Z- forms of enyne i using a Pd(0) catalyst.

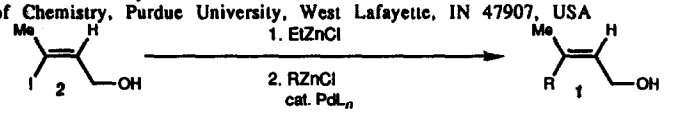


i

Tetrahedron Lett. **1993**, *34*, 1437

HIGHLY STEREOSELECTIVE AND GENERAL SYNTHESIS OF (Z)-3-METHYL-2-ALKEN-1-OLS VIA PALLADIUM-CATALYZED CROSS COUPLING OF (Z)-3-IODO-2-BUTEN-1-OL WITH ORGANOZINCS AND OTHER ORGANOMETALS

Ei-ichi Negishi*, Mehmet Ay, Yuri V. Gulevich, and Yumiki Noda
Department of Chemistry, Purdue University, West Lafayette, IN 47907, USA



R= *n*-alkyl, *i*-alkyl, benzyl, homoallyl, homopropargyl, homobenzyl, alkenyl, aryl, and alkynyl
The Pd-catalyzed reaction of O-protected derivatives of 2 with various organozincs in DMF provides a highly stereoselective, general, and high-yielding procedure for preparing 1.

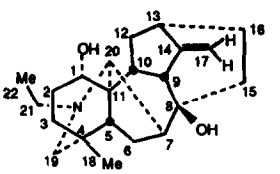
Tetrahedron Lett. **1993**, *34*, 1441

THE STRUCTURE OF AJABICINE, A NOVEL DITERPENOID ALKALOID FROM *DELPHINIUM AJACIS*

Balawant S. Joshi,*[a] Mohinder S. Puar,[b] Haridutt K. Desai,[a] Samir A. Ross,[a] Jing Lu,[a] and S. William Pelletier*[a]

[a]Institute for Natural Products Research and Department of Chemistry, The University of Georgia, Athens, GA 30602-2556, U.S.A; [b]Schering-Plough Research Institute, 60 Orange Street, Bloomfield, NJ 07003, U.S.A.

The structure of ajabicine, a novel diterpenoid alkaloid from *Delphinium ajacis*, has been established as 1. This is the first diterpenoid alkaloid bearing a C-14 exocyclic methylene group.



1 Ajabicine

Tetrahedron Lett. **1993**, *34*, 1445

DETECTION OF OLIGONUCLEOTIDE DUPLEX FORMS BY ION-SPRAY MASS SPECTROMETRY

Bruce Ganem,* Yu-Tsyr Li¶ and Jack D. Henion*¶
*Department of Chemistry, Baker Laboratory
¶Drug Testing and Toxicology, NYS College of Veterinary Medicine
Cornell University
Ithaca, New York 14853 USA

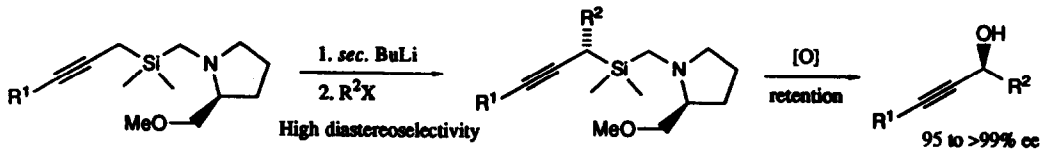
5'-dCCCCGGGG-3'
3'-dGGGGCCCC-5'

Base-paired forms of double-stranded oligoucleotides have been detected by ion-spray mass spectrometry for the first time.

Tetrahedron Lett. **1993**, *34*, 1449

HIGHLY ENANTIOSELECTIVE SYNTHESIS OF PROPARGYL ALCOHOLS

R.C.Hartley, S.Lamothe, and T.H.Chan*
Depatment of Chemistry, McGill University, Montréal, P.Q., Canada, H3A 2K6.

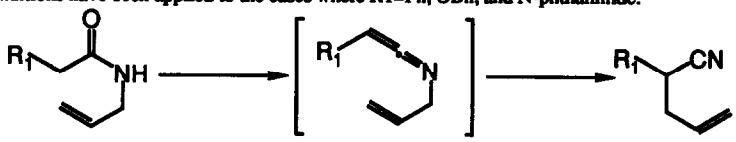


Tetrahedron Lett. **1993**, *34*, 1453

AN EXTREMELY MILD 3-AZA-CLAISEN REACTION. 2. NEW CONDITIONS AND THE REARRANGEMENT OF α-HETEROATOM SUBSTITUTED AMIDES.

M. A. Walters,* A. B. Hoem, H. R. Arcand, A. D. Hegeman, and C. S. McDonough
Dartmouth College, 6128 Burke Laboratory, Department of Chemistry, Hanover, NH 03755-3564

Several new and potentially useful reaction conditions for the 3-aza-Claisen rearrangement of N-allyl amides have been developed. These conditions have been applied to the cases where R1=Ph, OBn, and N-phthalimide.



Tetrahedron Lett. **1993**, *34*, 1457

Synthesis Of C_2-Symmetric HIV-Protease Inhibitors With Sulfur-Containing Central Units.

Andrew Spaltenstein*[a], Johann J. Leban[a], and Eric S. Furfine[b], *Divisions of a) Organic Chemistry and b) Experimental Therapy* Burroughs Wellcome Co, 3030 Cornwallis Rd., Research Triangle Park, NC 27709 USA

Tetrahedron Lett. **1993**, *34*, 1461

REACTION OF LITHIUM ALKYNOLATES WITH ACID CHLORIDES: A CONVENTIONAL APPROACH TO THE PREPARATION OF YNOL ESTERS

Viktor V. Zhdankin*, Peter J. Stang*, Chemistry Department, University of Utah, Salt Lake City, Utah 84112 USA

R = Me, *n*-Bu, *t*-Bu, Ph

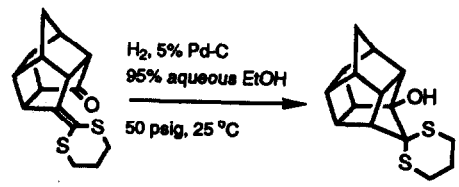
Tetrahedron Lett. **1993**, *34*, 1463

Synthesis of Substituted Hexacyclo[5.4.1.$0^{2,6}$.$0^{3,10}$.$0^{5,9}$.$0^{8,11}$]dodecanes. A Novel Method for Bridging Across the 8,11-Positions of Pentacyclo[5.4.0.$0^{2,6}$.$0^{3,10}$.$0^{5,9}$]undecane-8,11-dione and Related Diketones

Alan P. Marchand* and Dayananda Rajapaksa

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

A novel method for reductive cyclization of 1,4-dione mono(ketene dithioacetals) which possess spatially proximate reaction centers is described.

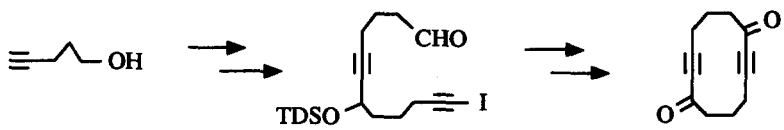


Tetrahedron Lett. **1993**, *34*, 1467

SYNTHESIS OF CYCLODODECA-2,8-DIYNE-1,7-DIONE

Bernhard Bodenmann and Reinhart Keese*

Institut für organische Chemie, Universität Bern, Freiestrasse 3, CH-3012 Bern, Switzerland

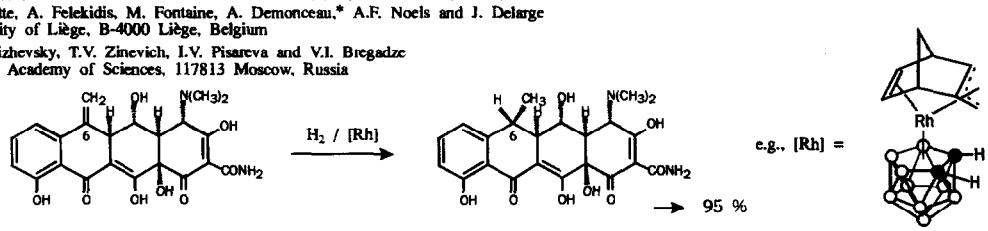


Tetrahedron Lett. **1993**, *34*, 1471

STEREOSELECTIVE HYDROGENATION OF METHACYCLINE TO DOXYCYCLINE CATALYSED BY RHODIUM-CARBORANE COMPLEXES

B. Pirotte, A. Felekidis, M. Fontaine, A. Demonceau,* A.F. Noels and J. Delarge
University of Liège, B-4000 Liège, Belgium

I.T. Chizhevsky, T.V. Zinevich, I.V. Pisareva and V.I. Bregadze
Russian Academy of Sciences, 117813 Moscow, Russia

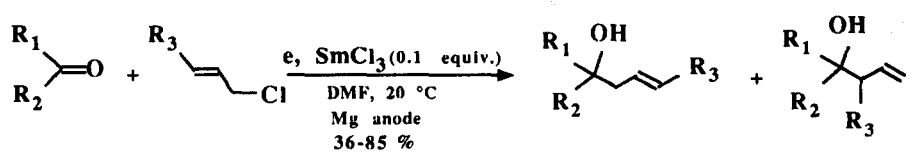


Tetrahedron Lett. **1993**, *34*, 1475

$SmCl_3$-CATALYZED ELECTROCHEMICAL REDUCTIVE ALLYLATION OF KETONES

H. Hebri, E. Duñach*, J. Périchon

Laboratoire d' Electrochimie, Catalyse et Synthèse Organique, C.N.R.S., 2, rue H. Dunant, 94320 Thiais, France

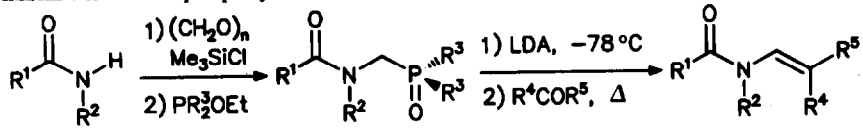


Tetrahedron Lett. **1993**, *34*, 1479

A Convenient Synthesis of Enamides and Dienamides by Horner-Wittig and Wadsworth-Emmons Reactions

Axel Couture,* Eric Deniau and Pierre Grandclaudon
Laboratoire de Chimie Organique Physique associé au CNRS, Université des Sciences et Technologies de Lille, 59655 Villeneuve d'Ascq, France

Various enamides and dienamides has been efficiently prepared by reacting suitable aldehydes and ketones with the lithium derivatives of phosphorylated carboxamides.

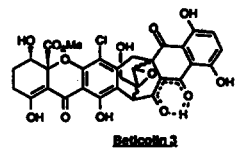


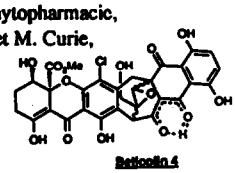
Tetrahedron Lett. **1993**, *34*, 1483

THE YELLOW TOXINS PRODUCED BY *CERCOSPORA BETICOLA*, PART II : ISOLATION AND STRUCTURE OF BETICOLINS 3 AND 4.

M.-L. Milat[1], J.-P. Blein[1], Jacques Einhorn[2], J.-C. Tabet[3], P.-H. Ducrot[4] and J.-Y. Lallemand[4].
[1]Lab. de Phytopharmacie, INRA, BV1540, F-21034 Dijon Cedex; [2]Lab. de Phytopharmacie, INRA, F-78026 Versailles Cedex; [3]Lab. de Chimie structurale, Université P. et M. Curie, F-75005 Paris Cedex;[4]Lab. de Synthèse Organique de l'Ecole Polytechnique, F-91128 Palaiseau Cedex, France.

The isolation and the structures of beticolins 3 and 4 are described ; they are shown to be hydroxy derivatives of beticolins 1 and 2 respectively.


Beticolin 3

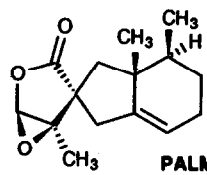

Beticolin 4

Tetrahedron Lett. **1993**, *34*, 1487

Stereoselective Bakkane Synthesis: (±)-Palmosalide C

Benoît Hartmann, Jean-Pierre Deprés, and Andrew E. Greene*
Université Joseph Fourier, LEDSS, BP 53X, 38041 Grenoble Cedex, France, and
Marco E. Freire de Lima, Universidade Federal do Rio de Janeiro, Inst. de Quimica, RJ, 21.944 Brazil

Palmosalide C, a spiro β,γ-epoxy-γ-butyrolactone sesquiterpene from the soft coral *Coelogorgia palmosa*, has been stereoselectively prepared in racemic form from 1, 6-dimethylcyclohexene.



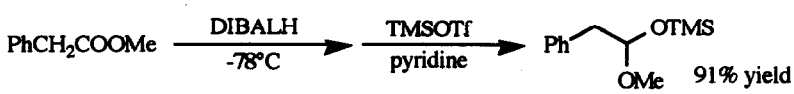
PALMOSALIDE C

Tetrahedron Lett. **1993**, *34*, 1491

First General Synthesis of Monosilyl Acetals. Trimethylsilyl Trapping of the Intermediate in DIBALH Reduction of Carboxylic Acid Esters using Trimethylsilyl Trifluoromethanesulfonate

Syun-ichi Kiyooka,* Masashi Shirouchi, and Yuichi Kaneko
Department of Chemistry, Kochi University, Akebono-cho, Kochi 780, Japan

The intermediate generated by the DIBALH reduction of carboxylic acid esters reacts with trimethylsilyl trifluoromethanesulfonate (TMSOTf) in the presence of pyridine to afford the corresponding monosilyl acetals in good yields.

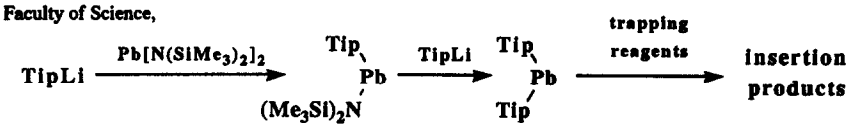


91% yield

Tetrahedron Lett. **1993**, *34*, 1495

Formation and Reactions of a Kinetically Stabilized Diarylplumbylene

Kazusato Shibata, Norihiro Tokitoh, and Renji Okazaki*
Department of Chemistry, Faculty of Science,
The University of Tokyo,
Hongo, Tokyo 113, Japan



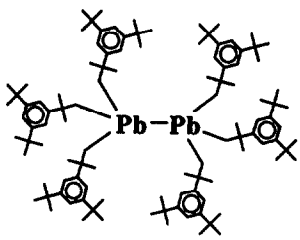
Reaction of TipLi (Tip = 2,4,6-triisopropylphenyl) with Pb(II) electrophiles resulted in the formation of a plumbylene which was trapped by MeI, $(PhS)_2$, $(PhSe)_2$ to give insertion products.

Tetrahedron Lett. **1993**, *34*, 1499

X-ray Structural Analysis of Hexakis[2-(3,5-di-*t*-butylphenyl)-2-methylpropyl]diplumbane

Kazusato Shibata, Norihiro Tokitoh, and Renji Okazaki*
Department of Chemistry, Faculty of Science,
The University of Tokyo,
Hongo, Tokyo 113, Japan

Pb-Pb = 2.9448(6) Å

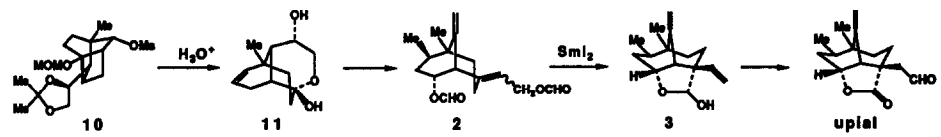


X-ray structural analysis has shown that the titled sterically congested diplumbane has the longest Pb-Pb distance ever reported.

Tetrahedron Lett. **1993**, *34*, 1501

TOTAL SYNTHESIS OF UPIAL

Hiroto Nagaoka,[a]* Kimiyuki Shibuya[b] and Yasuji Yamada[a]*
[a]Tokyo College of Pharmacy, Horinouchi, Hachioji, Tokyo 192-03, Japan
[b]Tokyo Research Laboratories Kowa Co. Ltd., 2-17-43 Noguchi-cho, Higashimurayama, Tokyo 189, Japan

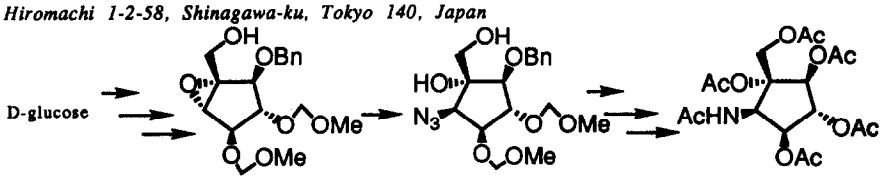


Highly stereocontrolled synthesis of marine sesquiterpene upial was achieved from D-mannitol via fragmentation reaction of tricyclic compound 10 and SmI_2-induced cyclization of diformate 2.

Tetrahedron Lett. **1993**, *34*, 1505

SYNTHESIS AND ABSOLUTE CONFIGURATION OF TREHAZOLIN AMINOCYCLITOL MOIETY

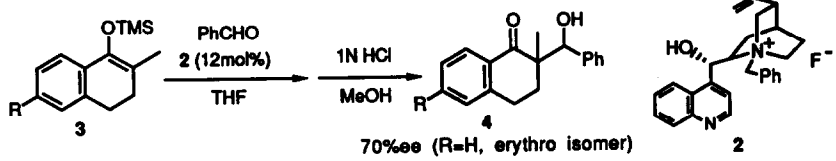
Yoshiyuki Kobayashi, Hideki Miyazaki, Masao Shiozaki*
New Lead Research Laboratories, Sankyo Co., Ltd.
Hiromachi 1-2-58, Shinagawa-ku, Tokyo 140, Japan



Tetrahedron Lett. **1993**, *34*, 1507

Chiral Quarternary Ammonium Fluoride
A New Reagent for Catalytic Asymmetric Aldol Reaction

Akira Ando, Toshiro Miura, Toshiaki Tatematsu, and Takayuki Shioiri*
Faculty of Pharmaceutical Sciences, Nagoya City University, Tanae-dori, Mizuho-ku, Nagoya 467, JAPAN

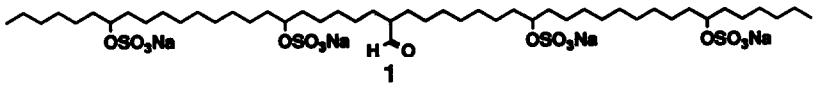


Tetrahedron Lett. **1993**, *34*, 1511

Toxadocial A: A Novel Thrombin Inhibitor from the Marine Sponge *Toxadocia cylindrica*

Youichi Nakao, Shigeki Matsunaga, and Nobuhiro Fusetani*
Laboratory of Marine Biochemistry, Faculty of Agriculture, The University of Tokyo, Bunkyo-ku, Tokyo, 113, Japan

Abstract. A unique thrombin inhibitor, named toxadocial A (1) has been isolated from the marine sponge *Toxadocia cylindrica*, and its structure was determined by spectroscopic and chemical methods to be a per-sulfated 7, 17, 31, 41-tetrahydroxyheptatetracontane-23-carbaldehyde.



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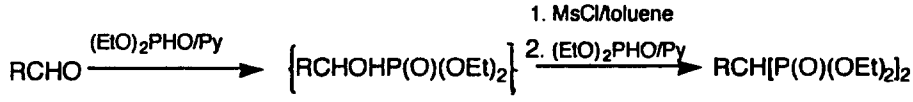
Tetrahedron Lett. **1993**, *34*, 1515

Studies on Organophosphorus Compounds 68.
A New and Facile Synthetic Approach to Alkylidenebisphosphonates.

Chaozhong Li and Chengye Yuan*, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai 200032, China.

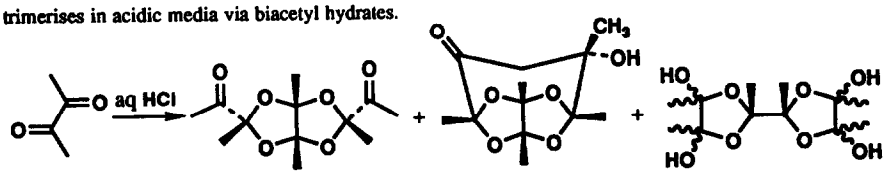


Tetrahedron Lett. **1993**, *34*, 1517

On the Formation of Biacetyl Trimers in Acidic Media

Kai Baldenius, P Dallman and John Hudec*, Department of Chemistry.
The University, Southampton, SO9 5NH

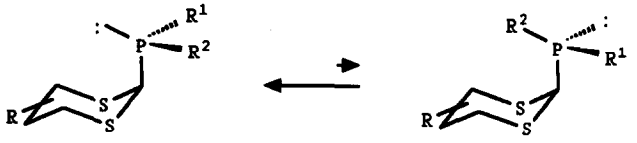
Biactyl trimerises in acidic media via biacetyl hydrates.



Tetrahedron Lett. **1993**, *34*, 1521

LACK OF MANIFESTATION OF THE *EXO*-ANOMERIC EFFECT IN S-C-P(:) SYSTEM

Piotr P. Graczyk and Marian Mikołajczyk
Centre of Molecular and Macromolecular Studies, P.A.S.
Lodz 90-363, Sienkiewicza 112, POLAND

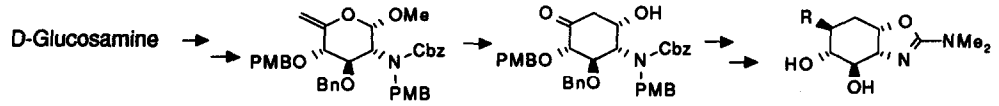


R^1, R^2=Ph, Me

Tetrahedron Lett. **1993**, *34*, 1525

THE SYNTHESIS OF PSEUDO-SUGARS RELATED TO ALLOSAMIZOLINE. David F. Corbett, David K. Dean,* and Stephen R. Robinson, SmithKline Beecham Pharmaceuticals, Great Burgh, Yew Tree Bottom Road, Epsom, Surrey KT18 5XQ, UK.

Bicyclic pseudo-sugars **4** and **5** were synthesised from *D*-glucosamine utilizing a Ferrier rearrangement as a key step.



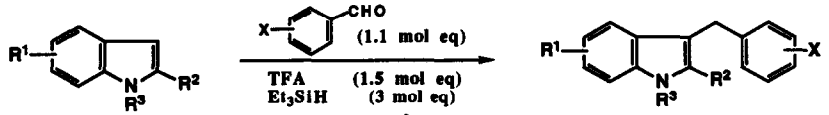
4 R = CH_2OH, **5** R = OH

Tetrahedron Lett. **1993**, *34*, 1529

A MILD AND SELECTIVE C-3 REDUCTIVE ALKYLATION OF INDOLES

Julie E. Appleton, Kevin N. Dack, Andrew D. Green and John Steele*
Discovery Chemistry Department, Pfizer Central Research, Sandwich, Kent CT13 9NJ

The TFA-Et_3SiH mediated reaction of indoles with aromatic aldehydes generates good yields of the C-3 reductive alkylation products.



$R^2 \neq H$ R^3=H or alkyl

(31-83%)