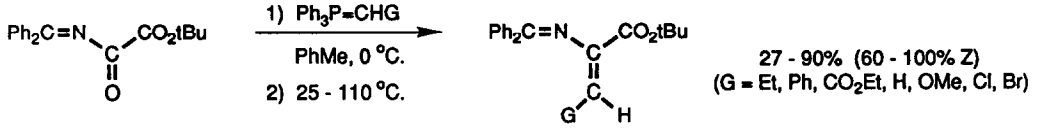
Tetrahedron Lett.31,157(1990)

PREPARATION AND WITTIG REACTIONS OF AN α-KETO AMINO ACID DERIVATIVE

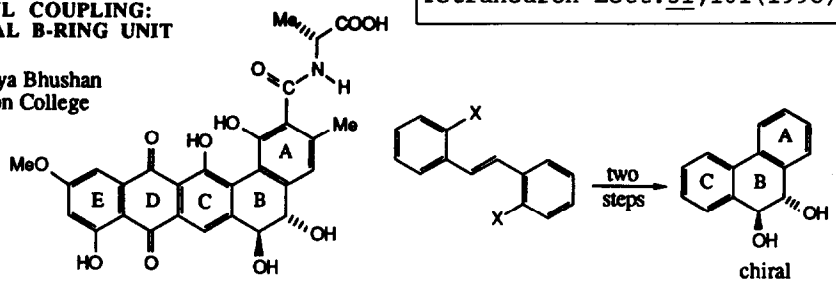
Martin J. O'Donnell, Ashok Arasappan, William J. Hornback and John C. Huffman
Department of Chemistry, Indiana University-Purdue University at Indianapolis, Indianapolis, IN 46205 USA
Molecular Structure Center, Department of Chemistry, Indiana University, Bloomington, IN 47405 USA



Tetrahedron Lett.31,161(1990)

INTRAMOLECULAR BIARYL COUPLING: SYNTHESIS OF THE CHIRAL B-RING UNIT OF PRADIMICINONE

T. Ross Kelly,* Qun Li and Vidya Bhushan
Department of Chemistry, Boston College
Chestnut Hill, MA 02167 USA

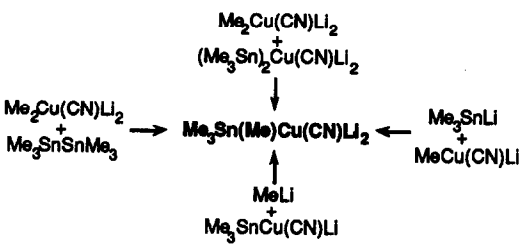


Tetrahedron Lett.31,165(1990)

FACILE FORMATION AND REACTION OF MIXED TRIMETHYLSTANNYL-METHYLCUPRATES

A.C. Oehlschlager, M.W. Hutzinger, R. Aksela, S. Sharma and S.M. Singh
Department of Chemistry, Simon Fraser University, Burnaby, B.C., V5A 1S6

$Me_3Sn(Me)Cu(CN)Li_2$ prepared by various routes selectively transfers trimethyl tin to organic substrates.

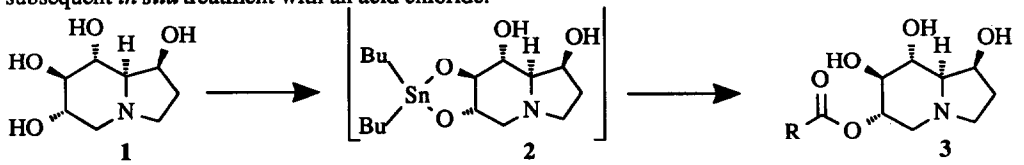


Tetrahedron Lett.31,169(1990)

A FACILE SELECTIVE ACYLATION OF CASTANOSPERMINE

Wayne K. Anderson*, Robert A. Coburn, Ariamala Gopalsamy and Trevor J. Howe
Department of Medicinal Chemistry, School of Pharmacy, State University of New York at Buffalo, Buffalo, New York 14260, USA

Selective 6-acylation of castanospermine can be achieved by the preparation of a dibutyl stannyl derivative and subsequent *in situ* treatment with an acid chloride.



Tetrahedron Lett.31,171(1990)

^{13}C-^{13}C COUPLING IN [1.1.1]PROPELLANE

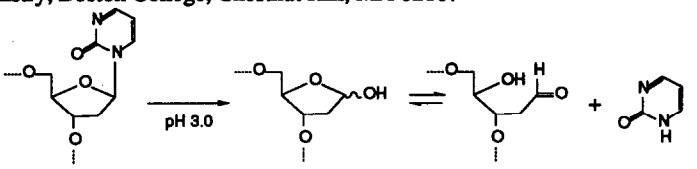
Ronald M. Jarret* and Leonarda Cusumano
Department of Chemistry, College of the Holy Cross,
Worcester, Massachusetts 01610

$$J_{C1-C2} = 9.9 \pm .1 \text{ Hz}$$

Tetrahedron Lett.31,175(1990)

MILD ACID HYDROLYSIS OF 2-PYRIMIDINONE-CONTAINING DNA FRAGMENTS GENERATES APURINIC/APYRIMIDINIC SITES

Joseph A. Iocono, Brian Gildea and Larry W. McLaughlin*
Department of Chemistry, Boston College, Chestnut Hill, MA 02167

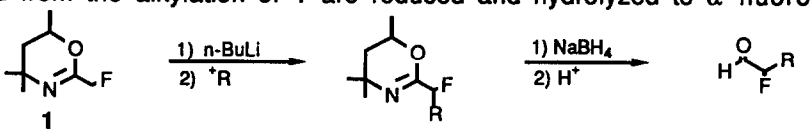


Tetrahedron Lett.31,179(1990)

2-FLUOROMETHYL-4,4,6-TRIMETHYL-1,3-OXAZINE AS A NEW REAGENT FOR THE PREPARATION OF α-FLUOROALDEHYDES

Timothy B. Patrick *, Sedigeh Hosseini, and Satinder Bains
Department of Chemistry, Southern Illinois University, Edwardsville, Illinois USA 62026

The synthesis and metalation of the title compound (1) are described. The products obtained from the alkylation of 1 are reduced and hydrolyzed to α-fluoroaldehydes.



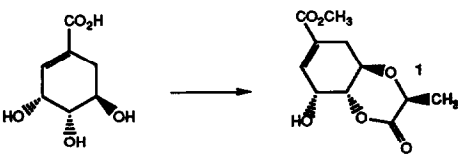
1

Tetrahedron Lett.31,183(1990)

ENANTIOSELECTIVE SYNTHESIS OF (-)-METHYL 5-LACTYLSHIKIMATE LACTONE

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

A short, enantioselective synthesis of the title natural product 1is described from (-)-shikimic acid

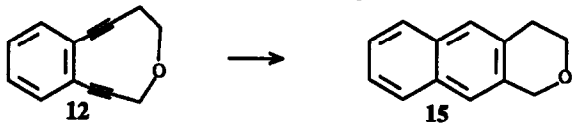


Tetrahedron Lett.31,185(1990)

THE SYNTHESIS OF A 10-MEMBERED BENZO-OXADIYNE RING

Rina Singh and George Just*
Department of Chemistry, McGill University,
Montreal, Quebec, Canada H3A 2K6

The title compound 12 undergoes Bergman rearrangement to 15 at 37 °C in CH_2Cl_2 with a half life of 52 h.



12 15

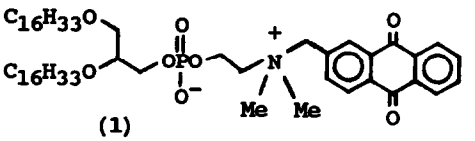
Tetrahedron Lett.31,189(1990)

SYNTHESIS AND PROPERTIES OF A PLASMALOGEN QUINONE

Charles R. Leidner*, Harold O'N. Simpson, Min D. Liu, Karie M. Horvath, Bruce Howell and Steven J. Dolina

Department of Chemistry, Purdue University, West Lafayette, IN 47907

The synthesis of the plasmalogen quinone (1) and its utilization in the preparation of redox-active, quinone-functionalized liposomes are presented.

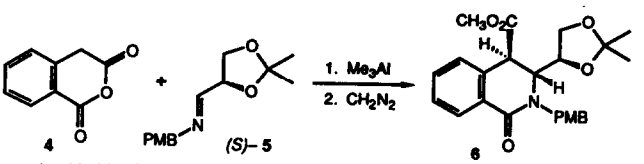


(1)

Tetrahedron Lett.31,193(1990)

CHELATION CONTROL IN THE ADDITION OF HOMOPHTHALIC ANHYDRIDE TO α-ALKOXY IMINES. PANCRATISTATIN MODEL STUDIES

Robin D. Clark* and Michel Souchet
Institute of Organic Chemistry
Syntex Corporation
Palo Alto, California 94304



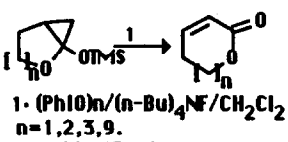
4 (S)-5 6

Compound 6 is formed with > 90% diastereoselectivity in the Lewis acid mediated cyclo-condensation of 4 and (S)-5

Tetrahedron Lett.31,197(1990)

CONVERSION OF LACTONES TO THE HIGHER HOMOLOGOUS α, β-UNSATURATED LACTONES VIA HYPERVALENT IODINE OXIDATION OF 1-TRIMETHYLSILYLOXY-2-OXA[n.1.0]CYCLOALKANES

R.M. Moriarty,* R.K. Vaid, T.E. Hopkins, B.K. Vaid and O. Prakash
Chemistry Department, University of Illinois at Chicago, IL 60680



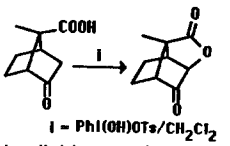
1· $(PhIO)_n/(n\text{-}Bu)_4NF/CH_2Cl_2$
n=1,2,3,9.

Hypervalent iodine oxidation of 1-trimethylsilyloxy-2-oxabicyclo[n.1.0]alkanes with $(PhIO)_n/(n\text{-}Bu)_4N.F$ in dichloromethane yielded directly ring homologated α, β-unsaturated lactones. Similarly, 1-trimethylsilyloxybicyclo[3.1.0]hexane yielded 2-cyclohexen-1-one.

Tetrahedron Lett.31,201(1990)

HYPERVALENT IODINE OXIDATION OF 5-KETOACIDS AND 4,6-DIKETO ACIDS WITH [HYDROXY(TOSYLOXY)IODO]BENZENE: SYNTHESIS OF KETO-γ-LACTONES AND DIKETO-δ-LACTONES

R.M. Moriarty,* R.K. Vaid, T.E. Hopkins, B.K. Vaid and O. Prakash†
Chemistry Department, University of Illinois at Chicago, Chicago, IL 60680



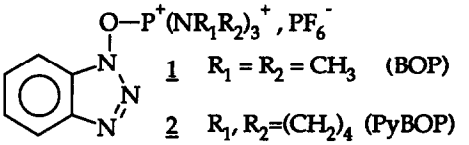
Hypervalent iodine oxidation of 5-ketoacids, using [hydroxy(tosyloxy)iodo]benzene in dichloromethane under refluxing conditions yielded keto-γ-lactones. Oxidation of 4,6-diketoacids with [hydroxy(tosyloxy)iodo] benzene at room temperature afforded the corresponding diketo-δ-lactones.

Tetrahedron Lett.31,205(1990)

PY BOP®: A NEW PEPTIDE COUPLING REAGENT DEVOID OF TOXIC BY-PRODUCT

J. Coste, D. Le-Nguyen and B. Castro
Centre CNRS-INSERM de Pharmacologie-Endocrinologie, Rue de la Cardonille, 34094 Montpellier France

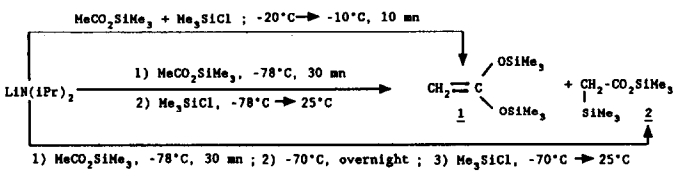
PyBOP®, an analog of BOP where dimethylamino groups are replaced with pyrrolidino is the only analog exhibiting equivalent properties in peptide bond formation. It can be used instead of BOP for the sake of safety.



Tetrahedron Lett.31,209(1990)

REINVESTIGATION OF THE REACTION OF LITHIUM TRIMETHYLSILYL ACETATE ENOLATE WITH CHLOROTRIMETHYLSILANE.

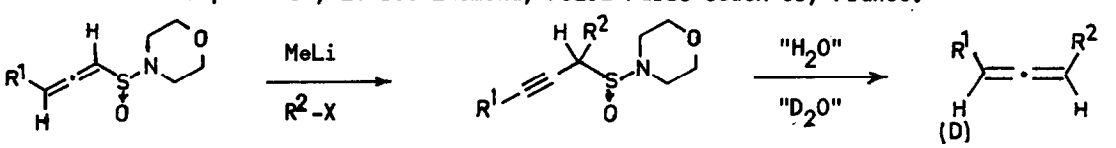
Moncef BELLASSOUED and Marcel GAUDEMAR
Université P. et M. Curie, Laboratoire de Synthèse Organométallique,4, Place Jussieu, 75252, PARIS Cedex 05 (France).



Tetrahedron Lett.31,213(1990)

UNUSUAL LITHIATION OF 4-(1',2'-ALKADIENESULPHINYL)-MORPHOLINES. PREPARATION OF SUBSTITUTED PROPARGYLIC SULPHINAMIDES AND THEIR HYDROLYTIC DESULPHINYLATION INTO THE CORRESPONDING ALLENES.

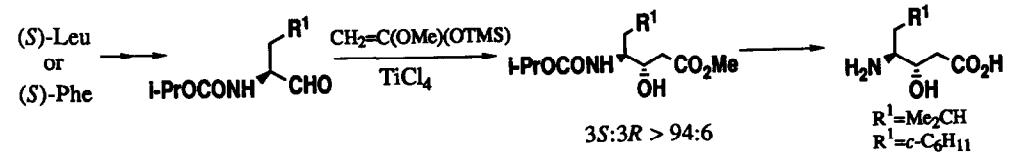
Jean-Bernard Baudin, Sylvestre A. Julia, Odile Ruel, Yuan Wang, Laboratoire de Chimie, Ecole Normale Supérieure, 24 rue Lhomond, 75231 Paris Cedex 05, France.



Tetrahedron Lett.31,217(1990)

AN EXPEDITIOUS SYNTHESIS OF (3*S*,4*S*)-STATINE AND (3*S*,4*S*)-CYCLOHEXYLSTATINE

Yoshiji Takemoto, Teruyo Matsumoto, Yoshio Ito, and Shiro Terashima*)
Sagami Chemical Research Center, 4-4-1 Nishi-Ohnuma, Sagamihara, Kanagawa 229, Japan

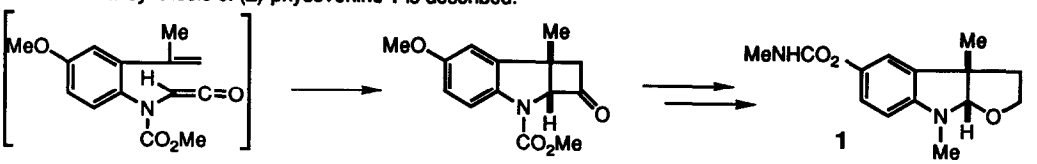


Tetrahedron Lett.31,219(1990)

NOVEL AND FACILE ROUTE TO (±)-PHYSOVENINE VIA INTRAMOLECULAR [2+2]CYCLOADDITION REACTION

Kozo Shishido,* Toshio Azuma, and Masayuki Shibuya
Faculty of Pharmaceutical Sciences, University of Tokushima, Sho-machi 1, Tokushima 770, Japan

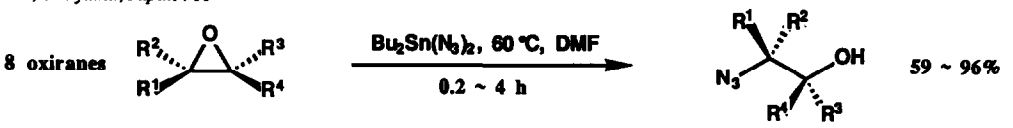
A formal total synthesis of (±)-physovenine **1** is described.



Tetrahedron Lett.31,221(1990)

EFFICIENT NUCLEOPHILIC OXIRANE RING CLEAVAGE WITH DIBUTYLTIN DIAZIDE

S. Saito, T. Nishikawa, Y. Yokoyama, and T. Moriwake
Department of Applied Chemistry, Faculty of Engineering, Okayama University, Tsushima, Okayama, Japan 700

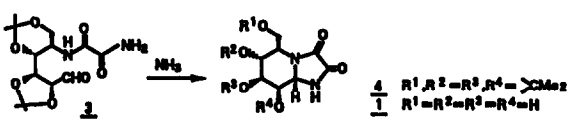


Tetrahedron Lett.31,225(1990)

SYNTHESIS OF KIFUNENSINE, AN IMMUNOMODULATING SUBSTANCE FROM MICROBIAL SOURCE

H.Kayakiri, C.Kasahara, T.Oku, and M.Hashimoto*
Exploratory Research Laboratories, Fujisawa Pharmaceutical Co., Ltd.
5-2-3 Tokodai, Tsukuba, Ibaraki 300-26, Japan

Kifunensine(1) has been synthesized via a double cyclization process (3→4) as the key step.

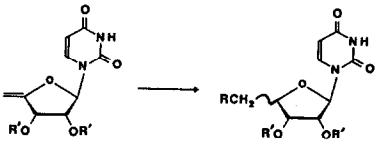


Tetrahedron Lett.31,227(1990)

ADDITION OF CARBON RADICALS TO 4',5'-UNSATURATED URACIL-NUCLEOSIDES BY THE USE OF ORGANOSELENIUM REAGENTS: A NEW STEREOSELECTIVE ENTRY TO C-C BOND FORMATION AT THE 5'-POSITION

Kazuhiro Haraguchi, Hiromichi Tanaka, and Tadashi Miyasaka* School of Pharmaceutical Sciences, Showa University, Shinagawa-ku, Tokyo 142, Japan

Addition of carbon radicals generated from PhSeR to 4',5'-unsaturated uracil-nucleosides has been investigated. This method was found to provide a highly efficient entry for C-C bond formation at the 5'-position. The stereochemistry can be controlled by protecting groups in the sugar portion.



Tetrahedron Lett.31,231(1990)

RHODIUM(I)-CATALYZED ASYMMETRIC HYDROBORATION OF ALKENES WITH 1,3,2-BENZODIOXABOROLE

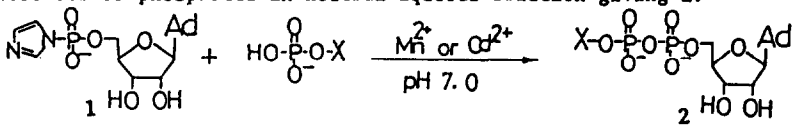
Makoto Sato, Norio Miyaura, and Akira Suzuki*
Department of Applied Chemistry, Faculty of Engineering, Hokkaido University, Sapporo 060, Japan.

Tetrahedron Lett.31,235(1990)

Facile Synthesis of Nucleotides Containing Polyphosphate by Mn(II) and Cd(II) Ion-Catalyzed Pyrophosphate Bond Formation in Aqueous Solution

Masamitsu Shimazu, Kazuo Shinozuka and Hiroaki Sawai*
Department of Chemistry, Faculty of Engineering, Gunma University, Kiryu, 376 Japan

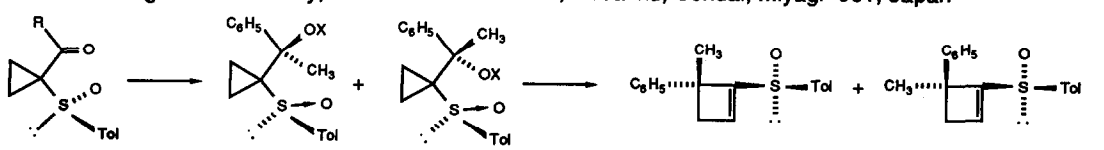
The Mn(II) and Cd(II) ion catalyzed the pyrophosphate bond formation from 1 and nucleotides or phosphates in neutral aqueous solution giving 2.



Tetrahedron Lett.31,239(1990)

STEREOSELECTIVE SYNTHESIS AND STEREOSPECIFIC ASYMMETRIC 1,2-REARRANGEMEMTS OF CHIRAL SULFINYLCYCLOPROPANE DERIVATIVES

Kunio Hiroi,* Takashi Anzai, Takenobu Ogata, and Maki Saito
Tohoku College of Pharmacy, 4-4-1 Komatsushima, Aoba-ku, Sendai, Miyagi 981, Japan



Tetrahedron Lett.31,243(1990)

N-METHOXYDIACETAMIDE: A NEW SELECTIVE ACETYLATING AGENT

Yasuo Kikugawa*, Kimiyo Mitsui, Takeshi Sakamoto, Masami Kawase, and Hiroshi Tamiya
Faculty of Pharmaceutical Sciences, Josai University, 1-1 Keyakidai, Sakado-shi, Saitama 350-02, Japan

N-Methoxydiacetamide (1) can selectively acetylate primary amines in the presence of alcohols or secondary amines in high yields.

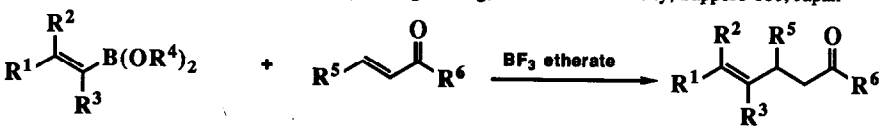
$(CH_3CO)_2N\text{-}OCH_3$

1

Tetrahedron Lett.31,247(1990)

BF_3 ETHERATE MEDIATED 1,4-ADDITION OF 1-ALKENYLDIALKOXYBORANES TO α,β-UNSATURATED KETONES. A STEREOSELECTIVE SYNTHESIS OF γ,δ-UNSATURATED KETONES

Shoji Hara, Satoshi Hyuga, Masataka Aoyama, Michihiko Sato, and Akira Suzuki*
Department of Applied Chemistry, Faculty of Engineering, Hokkaido University, Sapporo 060, Japan



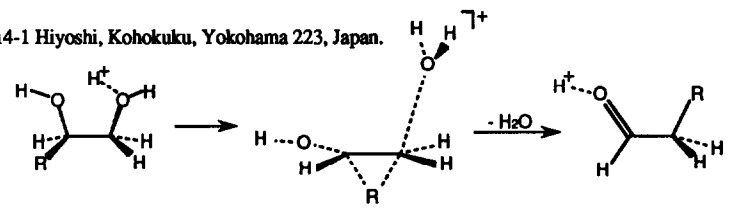
Tetrahedron Lett.31,251(1990)

THEORETICAL STUDY ON THE MIGRATORY APTITUDE IN PINACOL REARRANGEMENT

Kensuke Nakamura and Yoshihiro Osamura*
Department of Chemistry, Keio University, 3-14-1 Hiyoshi, Kohokuku, Yokohama 223, Japan.

The reason of high migratory aptitude of vinyl and cyclopropyl groups is examined by using *ab initio* molecular orbital method.

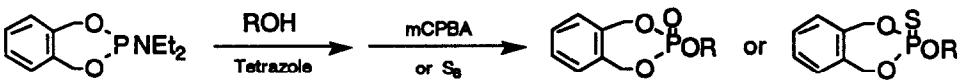
R = Me,  and 



Tetrahedron Lett.31,255(1990)

AN EFFICIENT PHOSPHORYLATION METHOD USING A NEW PHOSPHITYLATING AGENT, 2-DIETHYLAMINO-1,3,2-BENZODIOXAPHOSPHEPANE

Yutaka Watanabe, Yasunobu Komoda, Katsumi Ebisuya and Shoichiro Ozaki
Department of Resources Chemistry, Faculty of Engineering,Ehime University, Matsuyama 790, Japan

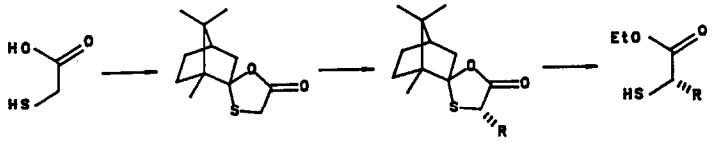


Phosphorylation of inositol derivatives has been accomplished efficiently by the present method.

Tetrahedron Lett.31,257(1990)

Synthesis of Optically Active α-Alkyl Thioglycolic Acid Derivatives

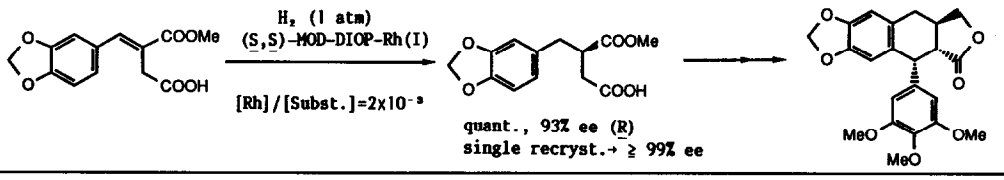
Hung-Hsin Liu,Erh-Ning Chen,Biing-Jiun Uang* and Sue-Lein Wang
Department of Chemistry,National Tsing Hua University
Hsin Chu,Taiwan 30043,Republic of China



Tetrahedron Lett.31,261(1990)

ASYMMETRIC TOTAL SYNTHESIS OF (-)-DEOXYPODOPHYLLOTOXIN

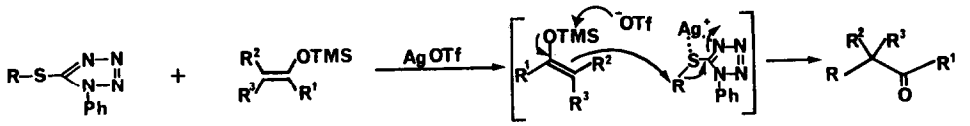
Toshiaki Morimoto, Mitsuo Chiba,† and Kazuo Achiwa*
School of Pharmaceutical Sciences, University of Shizuoka, 395 Yada, Shizuoka 422, Japan.
†Research Center, Toyotama Perfumery Co. Ltd., Kyodo Building (Showa), 1-3-8 Honcho, Nihonbashi, Chuo-ku, Tokyo 103, Japan.



Tetrahedron Lett.31,265(1990)

SILVER TRIFLATE-PROMOTED COUPLING REACTIONS OF BENZYLIC AND ALLYLIC SULFIDES WITH O-SILYLATED ENOLATES OF KETONES AND ESTERS, A SYNTHESIS OF (±)-AR-TURMERONE

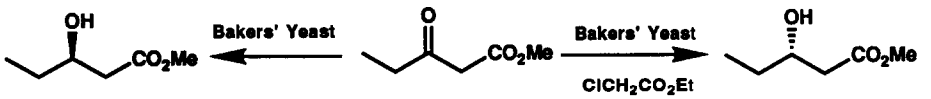
Kazuyoshi Takeda, Katsumi Torii, and Haruo Ogura*, School of Pharmaceutical Sciences, Kitasato University, Shirokane, Minato-ku, Tokyo 108, Japan



Tetrahedron Lett.31,267(1990)

A NOVEL METHOD TO SYNTHESIZE (L)-β-HYDROXYL ESTERS BY THE REDUCTION WITH BAKERS' YEAST

Kaoru NAKAMURA,* Yasushi KAWAI, and Atsuyoshi OHNO
Institute for Chemical Research, Kyoto University, Uji, Kyoto 611 Japan

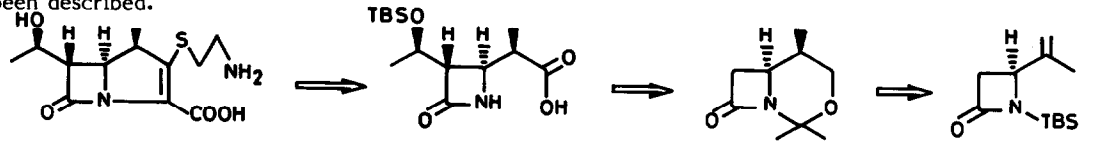


Tetrahedron Lett.31,271(1990)

STEREOCONTROLLED APPROACHES TO THE KEY INTERMEDIATE OF 1 β-METHYLTHIENAMYCIN

A.V. Rama Rao*, M.K. Gurjar, V.B. Khare, B. Ashok and M.N. Deshmukh
Indian Institute of Chemical Technology, Hyderabad 500 007, India.

Stereocontrolled approaches for the advanced intermediate (2) of 1 β-methylthienamycin have been described.

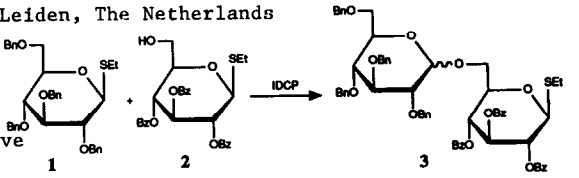


Tetrahedron Lett.31,275(1990)

AN EFFICIENT THIOGLYCOSIDE-MEDIATED FORMATION OF α-GLYCOSIDIC LINKAGES PROMOTED BY IODONIUM DICOLLIDINE PERCHLORATE

G.H. Veeneman and J.H. van Boom
Gorlaeus Laboratories, P.O. Box 9502, 2300 RA Leiden, The Netherlands

In-situ glycosidation of partially-benzoylated thioglycosides ("disarmed" acceptors;e.g., 2) with perbenzylated thioglycosides ("armed" donors;e.g., 1) could be performed highly chemospecifically, in the presence of IDCP, to give predominantly α-linked oligosaccharides (e.g., 3) in good yields.

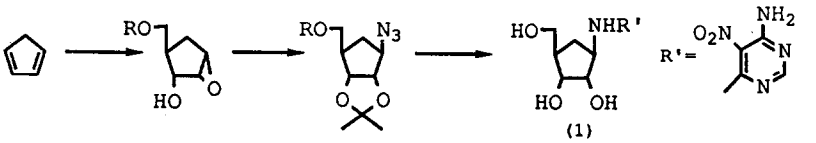


Tetrahedron Lett.31,279(1990)

SYNTHESIS OF CARBOCYCLIC CLITOCINE

Christopher F. Palmer, Keith P. Parry, and Stanley M. Roberts, Department of Chemistry, University of Exeter, Exeter, EX4 4QD, and ICI Agrochemicals, Jealott's Hill Research Station, Bracknell, Berks. UK. RG12 6EY.

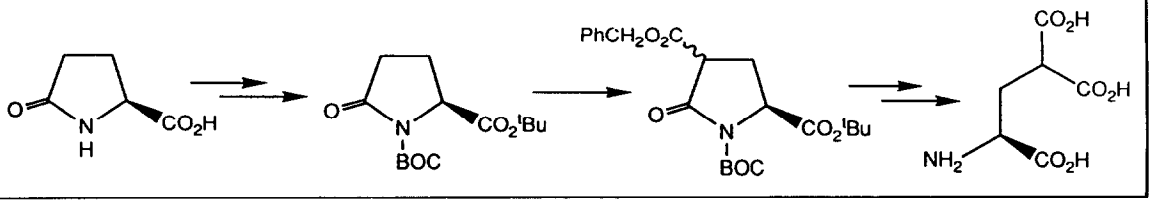
Carbocyclic clitocine (1) has been prepared from cyclopentadiene by an eleven-step synthesis.



Tetrahedron Lett.31,283(1990)

A NEW SYNTHETIC EQUIVALENT OF THE GLUTAMIC ACID γ-ANION AND ITS APPLICATION TO THE SYNTHESIS OF S-(+)-γ-CARBOXYGLUTAMIC ACID.

Michael R. Attwood, Maria G. Carr and Steven Jordan, Roche Products Limited, Welwyn Garden City, Herts. AL7 3AY.

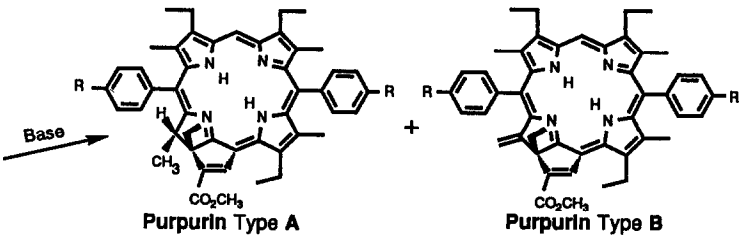


Tetrahedron Lett. 31, 285 (1990)

A SYNTHESIS OF PURPURIN DERIVATIVES SUBSTITUTED IN THE 6,16-meso POSITIONS.

M.J.Gunter and B.C. Robinson.
Department of Chemistry,
University of New England,
Armidale, 2351, Australia.

meso-[ß-(methoxycarbonyl)-vinyl]porphyrins



Purpurin Type A + Purpurin Type B