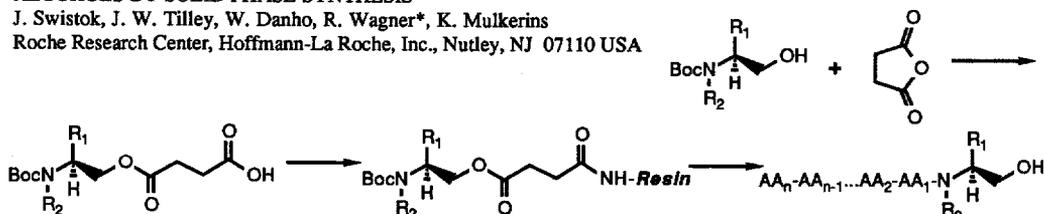


GRAPHICAL ABSTRACTS

Tetrahedron Lett. 30, 5045 (1989)

A CONVENIENT PREPARATION OF C-TERMINAL PEPTIDE ALCOHOLS BY SOLID PHASE SYNTHESIS

J. Swistok, J. W. Tilley, W. Danho, R. Wagner*, K. Mulkerins
Roche Research Center, Hoffmann-La Roche, Inc., Nutley, NJ 07110 USA

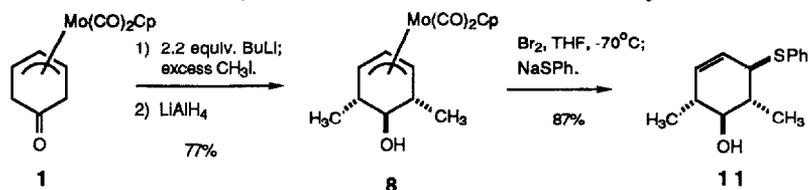


Tetrahedron Lett. 30, 5049 (1989)

MULTIPLE STEREOCONTROL USING ORGANOTRANSITION METAL TEMPLATES: ALKYLATION OF ENOLATES.

Anthony J. Pearson* and Reza Mortezaei

Department of Chemistry, Case Western Reserve University, Cleveland, Ohio 44106, U.S.A.

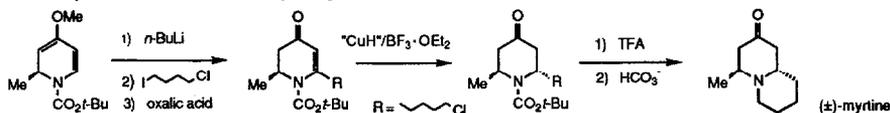


Tetrahedron Lett. 30, 5053 (1989)

PREPARATION OF 1-(*TERT*-BUTOXYCARBONYL)-2,6-DIALKYL-2,3-DIHYDRO-4-PYRIDONES. A STEREOCONTROLLED SYNTHESIS OF (±)-MYRTINE

Daniel L. Comins* and Donald H. LaMunyon

Department of Chemistry, North Carolina State University, Raleigh, NC 27695-8204 and Department of Chemistry and Biochemistry, Utah State University, Logan, UT 84322-0300



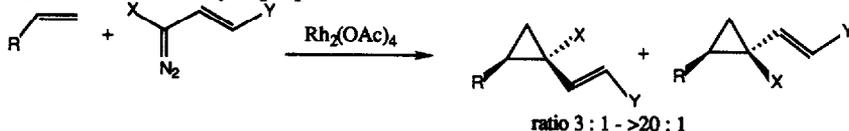
Tetrahedron Lett. 30, 5057 (1989)

STEREOSELECTIVE CYCLOPROPANATIONS WITH VINYL CARBENOID

Huw M. L. Davies*, T. Jeffrey Clark and Linda A. Church,

Department of Chemistry, Wake Forest University, Winston-Salem, North Carolina 27109, USA

Rhodium(II) acetate catalyzed decomposition of vinyl diazomethanes in the presence of alkenes results in highly stereoselective cyclopropanations.

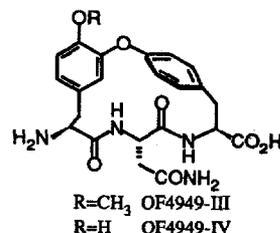


**TOTAL SYNTHESIS OF OF4949-III AND OF4949-IV:
UNUSUAL EFFECTS OF REMOTE SUBSTITUENTS ON
THE RATE OF MACROCYCLIZATION REACTIONS.**

Dale L. Boger* and Daniel Yohannes
Departments of Chemistry and Medicinal Chemistry
Purdue University, West Lafayette, Indiana 47907

Summary: The total syntheses of OF4949-III and OF4949-IV are detailed and a study of the unusual effects remote substituents may have on the rate of the key macrocyclization reaction leading to 17-membered cyclic tripeptides incorporating a diaryl ether linked meta- and paracyclophane structural subunit is described.

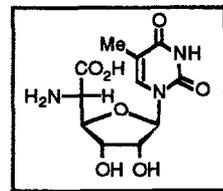
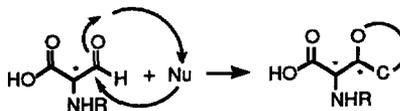
Tetrahedron Lett 30,5061(1989)



**GLYCOSYL α -AMINOACIDS VIA STEREOCONTROLLED BUILDUP
OF A PENALDIC ACID EQUIVALENT. AN ASYMMETRIC SYNTHESIS
OF THYMINE POLYOXIN C.**

Philip Garner* and Jung Min Park
Department of Chemistry, Case Western Reserve University, Cleveland, OH 44106-2699

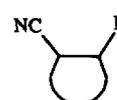
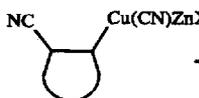
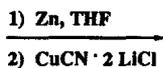
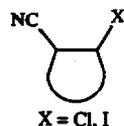
A new strategy for assembly of glycosyl α -aminoacids via the stereocontrolled buildup of a serine derived penaldic acid equivalent is illustrated by the asymmetric synthesis of thymine polyoxin C.



Tetrahedron Lett. 30,5065 (1989)

**Synthesis and Reactivity of Open-Chain and Cyclic
2-Cyano Zinc and Copper Organometallics.**

Tahir N. Majid, Ming Chang P. Yeh and Paul Knochel*
Department of Chemistry, University of Michigan, Ann Arbor, MI 48109

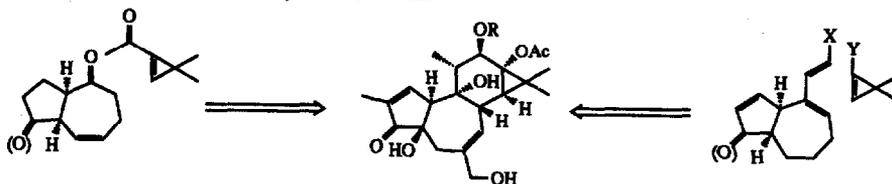


E = enones, allylic halides, 3-iodocyclohexenone, benzoyl chloride

Tetrahedron Lett. 30 5069 (1989)

**STUDIES ON THE STEREOSELECTIVE CONSTRUCTION OF
THE TIGLIANE RING SYSTEM**

James H. Rigby*, Paul Ch. Kierkus and David Head
Department of Chemistry, Wayne State University, Detroit, MI 48202



Tetrahedron Lett. 30 5073 (1989)

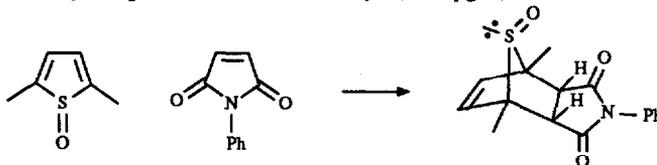
Tetrahedron Lett. 30, 5077 (1989)

π -FACIAL DIASTERESELECTIVITY IN DIELS-ALDER REACTIONS OF 2,5-DIMETHYLTHIOPHENE OXIDE

Arvin M. Naperstkov, John B. Macaulay, Michael J. Newlands and Alex G. Fallis*

The Ottawa-Carleton Chemistry Institute, Dept. of Chemistry, Univ. of Ottawa, Ottawa, Ont., Canada K1N 6N5

Cycloadditions with 2,5-dimethylthiophene oxide afford the *syn* (to oxygen) adduct exclusively.

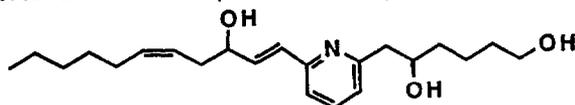


Tetrahedron Lett. 30, 5081 (1989)

ASYMMETRIC SYNTHESIS OF THE DIASTEREOISOMERS OF THE LEUKOTRIENE B₄ ANTAGONIST, U-75302.

Carmen E. Burgos, Eldon G. Nidy and Roy A. Johnson

Pharmaceutical Research and Development, The Upjohn Company, Kalamazoo, MI 49001



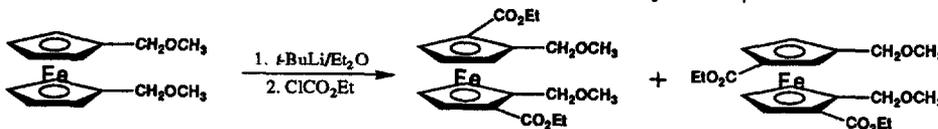
An asymmetric synthesis of the four diastereoisomers of the above structure is described.

Tetrahedron Lett. 30, 5085 (1989)

Stereochemistry of Directed Lithiation of 1,1'-Bis(methoxymethyl)ferrocene

Russell C. Petter* & Craig I. Milberg, Dept. of Chemistry, University of Pittsburgh, Pittsburgh, PA 15260

1,1'-Bis(methoxymethyl)ferrocene undergoes stereoselective directed dilithiation in the presence of *t*-butyllithium. Evidence is presented to establish the stereochemistry of the products.



Tetrahedron Lett. 30, 5089 (1989)

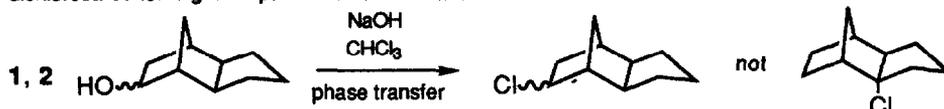
ON THE REACTION OF ALCOHOLS WITH HALOCARBENES. ARE CARBOCATIONS INTERMEDIATES?

Igor R. Likhovork,† Maitland Jones, Jr.,† Alexander G. Yurchenko,† and Pavel A Krasutsky*

† Department of Chemistry, Princeton University, Princeton, New Jersey, 08544, USA

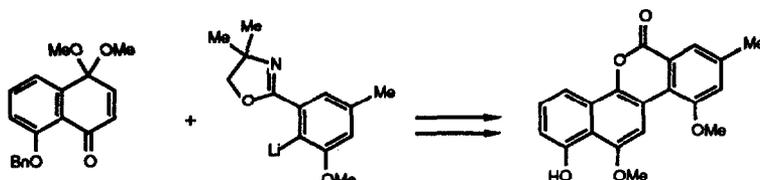
* Department of Chemical Engineering, Kiev Polytechnic Institute, 252056, Kiev, USSR

There is no evidence for hydride shift in the reactions of the epimeric alcohols 1 and 2 with dichlorocarbene. Tight ion pairs and not free cations must be involved.



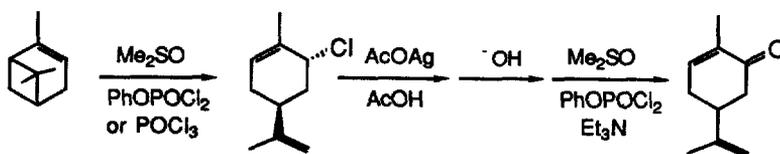
A NEW SYNTHESIS OF DEFUCOGLIVOCARCIN M

Tetrahedron Lett. 30, 5093 (1989)

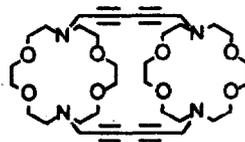
David J. Hart* and Gregory H. Merriman
Department of Chemistry, The Ohio State University, 120 W. 18th Ave., Columbus, Ohio 43210FACILE FRAGMENTATION OF PINENES USING DIMETHYL
SULFOXIDE ACTIVATED BY PHENYL DICHLOROPHOSPHATE OR
PHOSPHORUS OXYCHLORIDE. EFFICIENT CONVERSION OF α -PINENE TO CARVONE

Hsing-Jang Liu* and James M. Nyangulu

Department of Chemistry, The University of Alberta, Edmonton, Alberta, Canada T6G 2G2



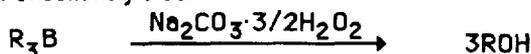
Tetrahedron Lett. 30, 5097 (1989)

Graphical abstract required for *Tetrahedron Letters*:**Cistulynes: Proton NMR and Single-Crystal X-Ray Evidence
for Structure and Cation Encapsulation in a Rigid,
Molecular Channel Model System**Akio Nakano, Yi Li, Philippe Geoffroy, Minsook Kim, Jerry L. Atwood,* Simon Bott,* H. Zhang,* Luis
Echegoyen,* and George W. Gokel*
Departments of Chemistry, University of Miami, Coral Gables, FL 33124 and *University of Alabama,
University, AL 35486 U.S.A.The novel, tetra-acetylenic, macrotricyclic molecular
receptor shown at the right is reported.

Tetrahedron Lett. 30, 5099 (1989)

**SODIUM PERCARBONATE: A CONVENIENT
REAGENT FOR EFFICIENTLY OXIDIZING
ORGANOBORANES**

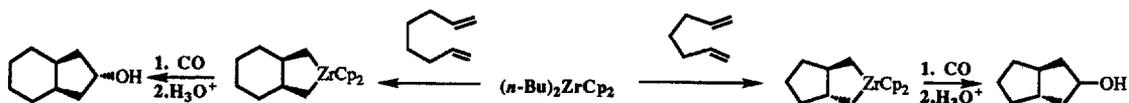
Tetrahedron Lett 30, 5103 (1989)

George W. Kabalka*, Prakash P. Wadgaonkar, and Timothy M. Shoup
Departments of Chemistry and Radiology, University of Tennessee, Knoxville, TN 37996.Sodium percarbonate, a readily available, inexpensive and easy to handle reagent, efficiently
oxidizes organoboranes in excellent yields.

Tetrahedron Lett. 30, 5105 (1989)

**ZIRCONOCENE-PROMOTED STEREOSELECTIVE
BICYCLIZATION OF 1,6- AND 1,7-DIENES TO PRODUCE
TRANS-ZIRCONABICYCLO[3.3.0]OCTANES AND CIS-ZIRCONABICYCLO[4.3.0]NONANES.**

Christophe J. Rousset, Douglas R. Swanson, Frédéric Lamaty, and Ei-ichi Negishi
Department of Chemistry, Purdue University, W. Lafayette, Indiana 47907, U.S.A.

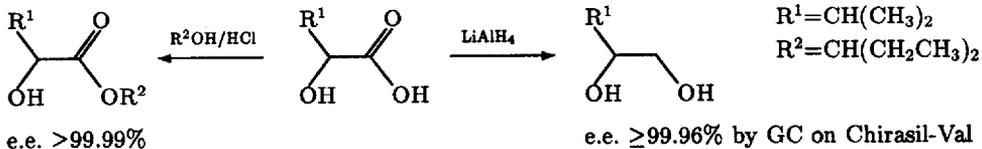


Tetrahedron Lett. 30, 5109 (1989)

ACCURATE DETERMINATION OF THE INTRINSIC RACEMIZATION IN CHIRAL SYNTHESIS VIA ENANTIOMER RESOLUTION OF UNDERVATIZED VICINAL DIOLS

B. Koppenhoefer, *U. Trettin, R. Figura and B. Lin

Inst. für Organische Chemie, Auf der Morgenstelle 18, D-7400 Tübingen, F.R.G.



Tetrahedron Lett. 30, 5111 (1989)

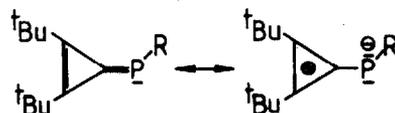
**PHOSPATRIAFULVENES - PHOSPHAALKENES WITH INVERSE
ELECTRON DENSITY**

Eberhard P. O. Fuchs^a, Heinrich Heydt^a, Manfred Regitz^{*,a}, Wolfgang Schoeller^b and Thilo Busch^b

^a Department of Chemistry, University of Kaiserslautern, D-6750 Kaiserslautern, FRG

^b Faculty of Chemistry, University of Bielefeld, D-4800 Bielefeld, FRG

Condensation of di-tert-butylcyclopropenone with lithium silylphosphides yields phosphatriafulvenes, the first all carbon substituted phosphalkenes with inverse electron densities. Ab initio calculations, NMR data and chemical reactions are in harmony with the concept.

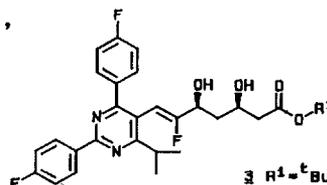


Tetrahedron Lett. 30, 5115 (1989)

ENANTIOSELECTIVE SYNTHESIS OF A NEW FLUORO-SUBSTITUTED HMG-COA REDUCTASE INHIBITOR

E. Baader, W. Bartmann, G. Beck, P. Below, A. Bergmann, H. Jendralla, K. Keßeler, G. Wess
Hoechst AG, Pharma Forschung, Postfach 80 03 20, D-6230 Frankfurt a.M. 80

The synthesis of a new fluoro-substituted 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitor **3** via addition of the chiral enolate **12** to fluoro aldehyde **8Z** is described.

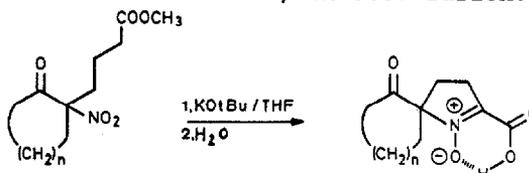


Tetrahedron Lett 30,5119 (1989)

FORMATION OF NITRONES FROM TERTIARY NITROALKANES

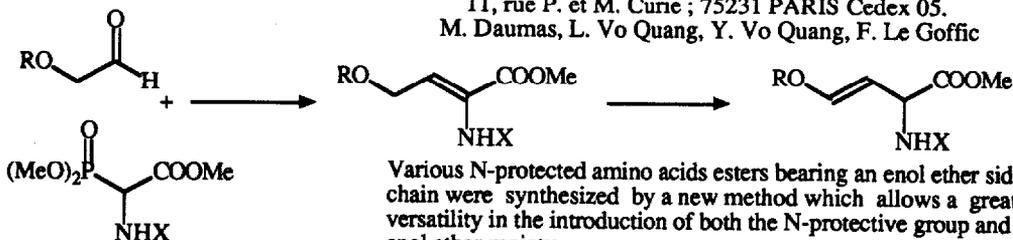
Walter Huggenberg and Manfred Hesse*, Organisch-chemisches Institut, Universität Zürich, Winterthurerstrasse 190, CH-8057 Zürich.

In the presence of KOtBu/THF the nitroesters 5 - 8 cyclize to the nitrones 9 - 12.



Tetrahedron Lett. 30,5121 (1989)

Laboratoire de Bioorganique et Biotechnologies, U. A. CNRS 1389
11, rue P. et M. Curie ; 75231 PARIS Cedex 05.
M. Daumas, L. Vo Quang, Y. Vo Quang, F. Le Goffic



Various N-protected amino acids esters bearing an enol ether side chain were synthesized by a new method which allows a great versatility in the introduction of both the N-protective group and the enol ether moiety.

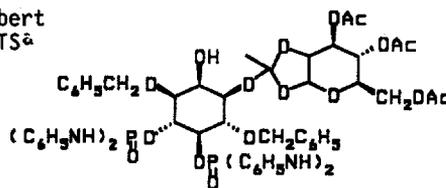
Tetrahedron Lett. 30,5125 (1989)

TOTAL SYNTHESIS OF CHIRAL *sn*-myo-INOSITOL-1,4,5-TRISPHOSPHATE AND ITS ENANTIOMER.

Alexander E. STEPANOV^a, Olga B. RUNOVA^a, Gilbert SCHLEWER^b, Bernard SPIESS^c and Vitaly I. SHVETS^a

^a Institute of Fine Chemical Technology, Department of Biotechnology, MOSCOU USSR, ^b Centre de Neurochimie du CNRS, Département de Pharmacochimie Moléculaire, STRASBOURG, FRANCE, ^c Université Louis Pasteur de Strasbourg, Faculté de Pharmacie, Laboratoire de Chimie Analytique, ILLKIRCH, FRANCE.

sn-myo-Inositol-1,4,5-trisphosphate (Ins(1,4,5)P₃) and its enantiomers are prepared by synthesis of suitably protected *myo*-inositols, separation of enantiomers via the formation of D-mannose diastereomeric derivatives and selective phosphorylations.



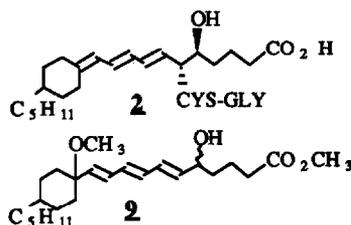
SUBSTITUTED CYCLOHEXANE AS CONFORMATIONALLY-RESTRICTED ANALOGUES OF THE PEPTIDO-LEUKOTRIENES

J.P. VIDAL, R. ESCALE, G. NIEL, E. RECHENCQ, J.P. GIRARD, J.C. ROSSI.

Université de Montpellier I, Laboratoire de Chimie des Médiateurs et Physicochimie des interactions biologiques associé au C.N.R.S., Faculté de Pharmacie, 15 Avenue Charles Flahault, F-34060 MONTPELLIER.

A new class of potential leukotriene analogues is synthesized which attempts to restrict the conformationally mobile lipophilic chain.

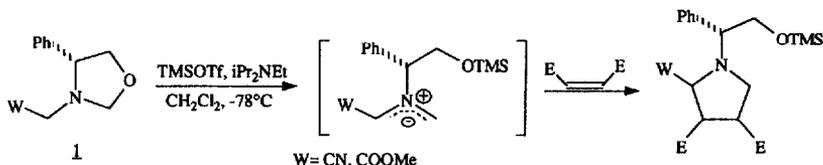
Tetrahedron Lett 30,5129 (1989)



Tetrahedron Lett. 30, 5133 (1989)

Asymmetric Synthesis XVII. Facile Generation of a Chiral Azomethine Ylide via the CN(R, S) Method.

Jacques Rouden, Jacques Royer and Henri-Philippe Husson
 Institut de Chimie des Substances Naturelles du CNRS - 91198 Gif sur Yvette Cedex France



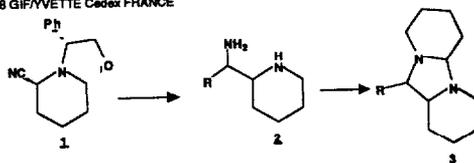
Synthon **1** gives, in very mild conditions, a chiral azomethine ylide which undergoes 1,3-dipolar cycloaddition reactions with activated olefins, leading to optically active functionalized pyrrolizidines

Tetrahedron Lett. 30, 5137 (1989)

Asymmetric Synthesis XVIII. Preparation of Chiral 1,2-diamines via the CN (R,S) Method. Application to the Synthesis of an Analogue of Tetraoperline

Jiaping ZHU, Jean-Charles Quirion, Henri-Philippe Husson
 Institut de Chimie des Substances Naturelles du CNRS 91198 GIF/YVETTE Cedex FRANCE

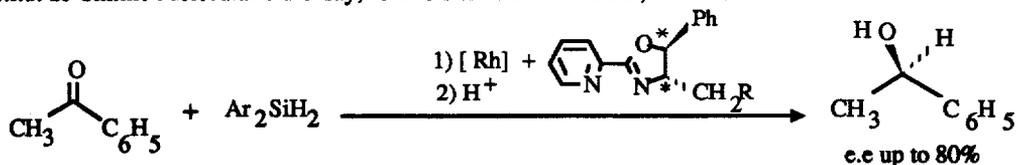
A method for the preparation of chiral 1,2-diamines **2** from synthon **1** and its application to an analogue of tetraoperline are presented.



Tetrahedron Lett. 30, 5141 (1989)

ENANTIOSELECTIVE HYDROSILYLATION OF ACETOPHENONE WITH RHODIUM/OXAZOLINES CATALYSTS

G. Balavoine*, J.C. Clinet* and L. Lellouche
 Institut de Chimie Moléculaire d'Orsay, Université de PARIS-SUD, F-91405 ORSAY

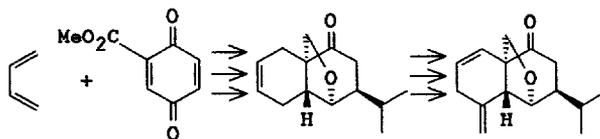


Tetrahedron Lett. 30, 5145 (1989)

SYNTHETIC CONFIRMATION OF THE STRUCTURE OF THE REARRANGEMENT PRODUCT OF PERIPLANONE-A

Kenji Mori* and Yasuhiro Igarashi
 Department of Agricultural Chemistry, The University of Tokyo,
 Yayoi 1-1-1, Bunkyo-ku, Tokyo 113, Japan

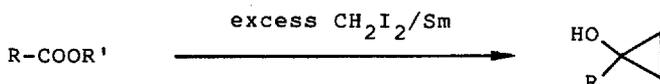
The structure of the stable rearrangement product of Persoons's periplanone-A was confirmed by the first synthesis of its racemate.



TANDEM ONE-CARBON HOMOLOGATION OF ESTERS
TO CYCLOPROPANOLS

Tetrahedron Lett. 30, 5149 (1989)

Tsuneo Imamoto,* Yasuo Kamiya, Toshihiko Hatajima, and Harumi Takahashi
Department of Chemistry, Faculty of Science,
Chiba University, Yayoi-cho, Chiba 260, Japan



ORGANIC SYNTHESIS USING HALOBORATION REACTION XIII. A NEW
SYNTHESIS OF (E)- α,β -UNSATURATED ESTERS BY THE HIGHLY
CHEMOSELECTIVE REACTION OF B-IODO-9-BBN/ETHOXYETHYNE ADDUCT WITH ALDEHYDES
Yoshitaka Satoh, Takao Tayano, Shoji Hara, and Akira Suzuki*
Department of Applied Chemistry, Faculty of Engineering,
Hokkaido University, Sapporo 060, Japan

Tetrahedron Lett. 30, 5153 (1989)



SYNTHESIS OF *THREO*-3-ARYL-2,3-DIHYDROXYPROPANOIC
ACID DERIVATIVES WITH HIGH OPTICAL PURITY

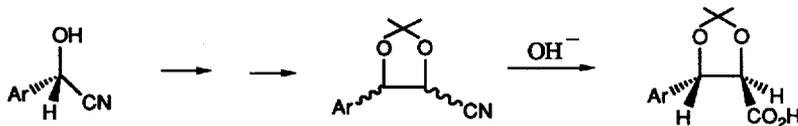
Tetrahedron Lett. 30, 5157 (1989)

Barry R. Matthews, Helen Gountzos, W. Roy Jackson* and Keith G. Watson,†

*Department of Chemistry, Monash University, Clayton, Victoria 3168, Australia.

†ICI Operations Australia Ltd., Research Laboratories, Newsom Street, Ascot Vale, Victoria 3032, Australia.

Threo-3-Aryl-2,3-dihydroxypropanoic acids of high optical purity can be obtained from cyanohydrins of arylaldehydes by a route which involves a novel base-catalysed equilibration/hydrolysis of dioxolane nitriles.



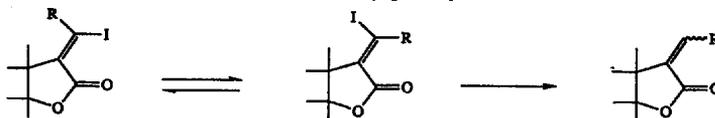
DE-IODINATION AND ISOMERISATION OF IODOALKYLIDENE LACTONES

Tetrahedron Lett. 30, 5159 (1989)

Gerald Haaima, Anne Routledge and Rex T. Weavers*

Department of Chemistry, University of Otago, Box 56, Dunedin, NEW ZEALAND

(*E*)-Iodoalkylidene lactones (derived from alkenes and R-C \equiv C-COOH) may be either isomerised to (*E*)/(*Z*)-mixtures or dehalogenated by photolytic treatment.

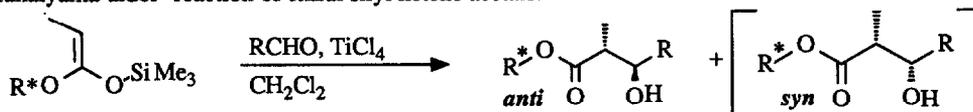


Tetrahedron Lett. 30, 5163 (1989)

**AUXILIARY STRUCTURE AND ASYMMETRIC INDUCTION
IN THE "MUKAIYAMA-ALDOL" REACTIONS OF CHIRAL SILYL KETENE ACETALS.**

Cesare Gennari*, Francesco Molinari, PierGiorgio Cozzi, Ambrogio Oliva. Dip. Chimica Org. e Ind. Università, Centro CNR Sost. Org. Nat., via Venezian 21, 20133 Milano, Italy.

A variety of chiral auxiliaries R*OH were prepared and tested for levels of asymmetric induction control in the "Mukaiyama-aldol" reaction of chiral silyl ketene acetals.

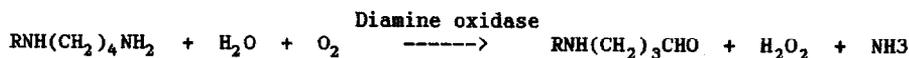


Tetrahedron Lett. 30 5167 (1989)

OXIDATION OF N-ALKYLPUTRESCINES BY DIAMINE OXIDASES

A. Cooper, A.M. Equi, S.K. Ner, A.B. Watson and D.J. Robins

Department of Chemistry, University of Glasgow, Glasgow G12 8QQ, Scotland.



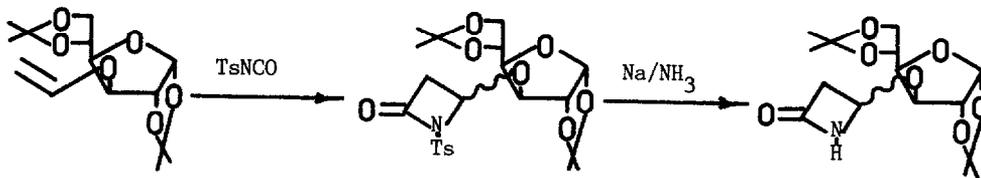
Substrate reactivity improves in the order R=Pr < R=Et < R=Me < R=H, despite a previous report. K_M and V_{max} parameters determined for pea seedling and pig kidney enzymes.

Tetrahedron Lett. 30 5171 (1989)

SYNTHESIS OF β -LACTAMS FROM SUGAR VINYL ETHERS AND ISOCYANATES

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DICHLORO QUINONES AS DIENOPHILES: SYNTHESIS OF ALIZARIN DERIVATIVES

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Dichloro cycloadducts (1) and their bicyclic analogues react with nucleophiles (Nu⁻) to give 1,2-disubstitution of the newly formed ring.

