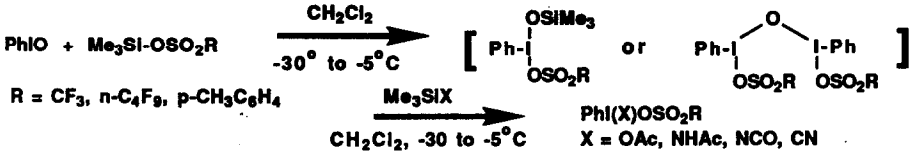
Tetrahedron Lett. **1990**, *31*, 4821

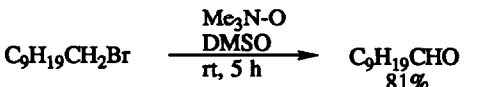
A GENERAL APPROACH TO UNSYMMETRICAL TRICOORDINATE IODINANES: SINGLE STEP PREPARATION OF MIXED IODOSOBENZENE SULFONATES PhI(X)OSO_2R, VIA REACTION OF IODOSOBENZENE WITH Me_3SiX. Viktor V. Zhdankin, Charles M. Crittell, Peter J. Stang*, Chemistry Department, University of Utah, Salt Lake City, Utah 84112 USA, and Nikolai S. Zefirov, Chemistry Department, Moscow State University, Moscow 119899 USSR



Tetrahedron Lett. **1990**, *31*, 4825

READY OXIDATION OF HALIDES TO ALDEHYDES USING TRIMETHYLAMINE N-OXIDE IN DIMETHYLSULFOXIDE

Alexander G. Godfrey and Bruce Ganem*
Department of Chemistry, Baker Laboratory
Cornell University
Ithaca, New York 14853 USA



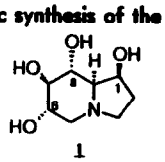
7 examples: 47-95%

Tetrahedron Lett. **1990**, *31*, 4827

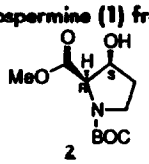
A CHEMOENZYMATIC SYNTHESIS OF (+)-CASTANOSPERMINE

Rajeev Bhide, Reza Mortezaei, A. Scilimati and Charles J. Sih*
School of Pharmacy, University of Wisconsin, Madison, WI 53706 U.S.A.

A chemoenzymatic synthesis of the (+)-castanospermine (1) from the chiral building block, 2, is described.



1

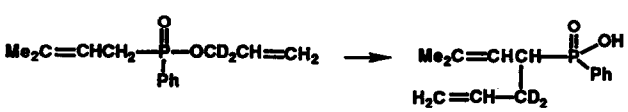


2

Tetrahedron Lett. **1990**, *31*, 4831

CARBON-CARBON BOND FORMATION BY O → C REARRANGEMENT OF ALLYLIDENEOXYPHOSPHORANES

Biswanath De
Cardiovascular Division, Abbott Laboratories
Abbott Park, AP-10, Illinois, 60064
E. J. Corey
Department of Chemistry, Harvard University
Cambridge, Massachusetts, 02138

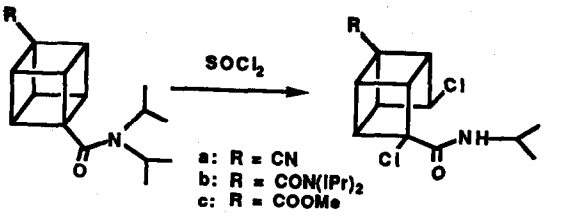


Tetrahedron Lett. **1990**, *31*, 4835

NOVEL REACTION OF AMIDOCUBANES WITH THIONYL CHLORIDE; SECOCUBANES

A. Bashir-Hashemi[a]*, P. R. Dave[a], H. L. Ammon[b], T. Axenrod[c]

a) GEO-CENTERS, INC. at ARDEC, NJ 07849
b) University of Maryland, MD 20742
c) CCNY, NY 10031

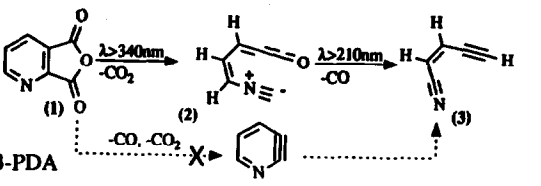


Tetrahedron Lett. **1990**, *31*, 4837

MATRIX INFRARED STUDY OF THE PHOTOLYSIS PRODUCTS OF 2,3-PYRIDINE DICARBOXYLIC ANHYDRIDE (2,3-PDA): A SEARCH FOR 2,3-DIDEHYDROPYRIDINE (2,3-DHP)

H. H. Nam and G. E. Leroi*
Department of Chemistry, Michigan State University, East Lansing, MI 48824, U. S. A.

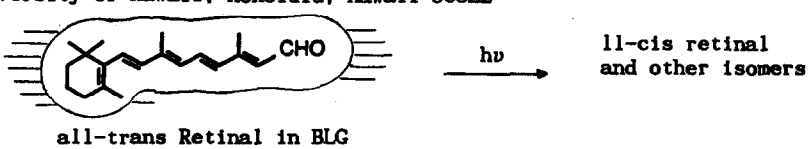
The matrix IR spectra of the photolysis products from 2,3-PDA show that 2,3-DHP is not involved in the formation of β-ethynylacrylonitrile.



Tetrahedron Lett. **1990**, *31*, 4841

β-LACTOGLOBULIN DIRECTED PHOTOISOMERIZATION OF RETINAL AND RELATED COMPOUNDS

Xiao-yuan Li, Alfred E. Asato and R. S. H. Liu*
Department of Chemistry, 2545 The Mall, University of Hawaii, Honolulu, Hawaii 96822



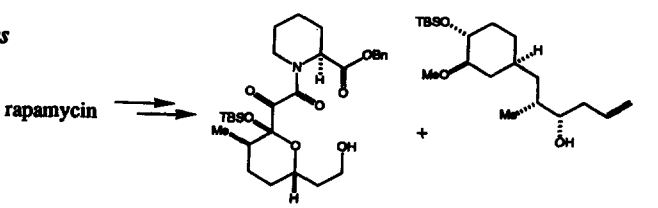
all-trans Retinal in BLG

Tetrahedron Lett. **1990**, *31*, 4845

DEGRADATIVE STUDIES ON THE TRICARBONYL CONTAINING MACROLIDE RAPAMYCIN

Mark T. Goulet and Joshua Boger*
Merck Sharp and Dohme Research Laboratories
P.O. Box 2000, Rahway, New Jersey 07065

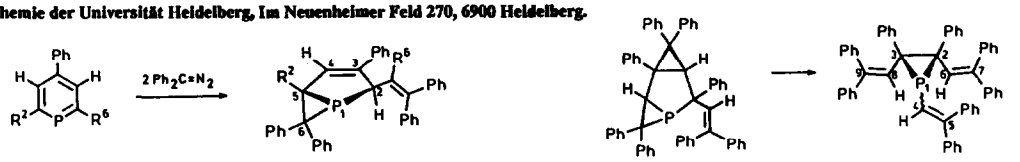
The degradation of rapamycin has produced fragments that should have utility in the semi-synthesis of materials related to the immunosuppressant FK-506.



Tetrahedron Lett. **1990**, *31*, 4849

ZUR UMSETZUNG VON λ^3-PHOSPHININEN MIT DIPHENYLCARBEN AUS DIPHENYLDIAZOMETHAN

G. Märkl und K. Hohenwarter, Institut für Organische Chemie der Universität Regensburg, Universitätsstr. 31, D-8400 Regensburg; M.L. Ziegler und B. Nuber, Institut für Anorganische Chemie der Universität Heidelberg, Im Neuenheimer Feld 270, 6900 Heidelberg.

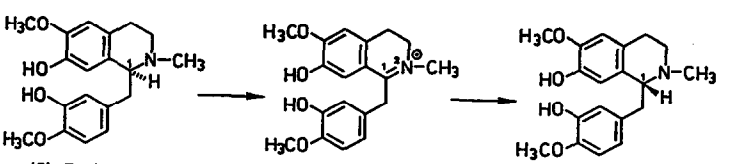


Tetrahedron Lett. **1990**, *31*, 4853

FATE OF C-1 HYDROGEN DURING THE INCORPORATION OF (S)- AND (R)-RETICULINE INTO THE OPIUM ALKALOID THEBAINE

S. Loeffler, R. Stadler and M.H. Zenk

Lehrstuhl für Pharmazeutische Biologie, Universität München, Karlstr. 29, D-8000 München 2, West Germany

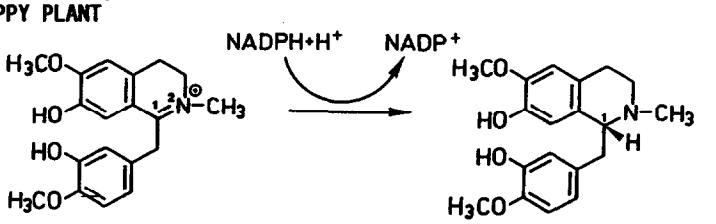


Tetrahedron Lett. **1990**, *31*, 4855

ENZYMIC FORMATION OF (R)-RETICULINE FROM 1,2-DEHYDRORETICULINE IN THE OPIUM POPPY PLANT

W. De-Eknamkul and M.H. Zenk

Lehrstuhl für Pharmazeutische Biologie, Universität München, Karlstr. 29, D-8000 München 2, West Germany



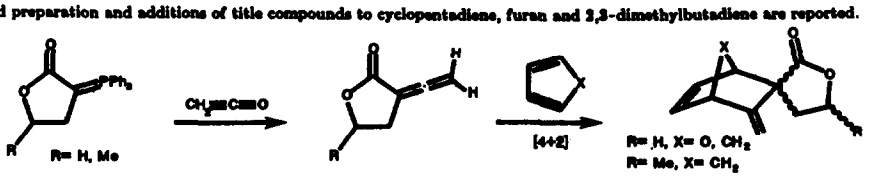
Tetrahedron Lett. **1990**, *31*, 4859

DIELS-ALDER REACTIONS OF α-VINYLIDENE-γ-BUTYROLACTONES.

Frédéric FOTIADU, Albert ARCHAVLIS and Gérard BUONO*

Ecole Supérieure de Chimie de Marseille, URA 1410 du CNRS, Av. Escadrille Normandie Niemen; 13397 MARSEILLE CEDEX 13, France.

Improved preparation and additions of title compounds to cyclopentadiene, furan and 2,3-dimethylbutadiene are reported.



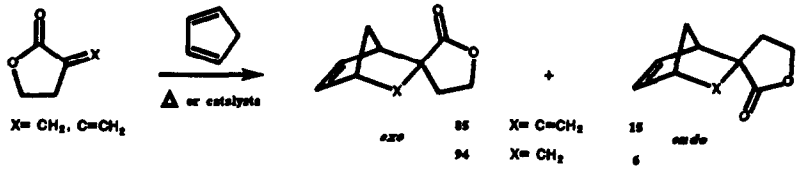
Tetrahedron Lett. **1990**, *31*, 4863

HIGH EXOSELECTIVITY IN DIELS-ALDER ADDITIONS OF α-VINYLIDENE AND α-METHYLENE-γ-BUTYROLACTONES TO CYCLOPENTADIENE.

Frédéric FOTIADU, Françoise MICHEL and Gérard BUONO*

Ecole Supérieure de Chimie de Marseille, URA 1410 du CNRS, Av. Escadrille Normandie Niemen; 13397 MARSEILLE CEDEX 13, France.

Exoselectivity in thermal as well as catalytic reactions is reported for the first time. Exoselectivity seems general for rigid cisoid dienophiles.



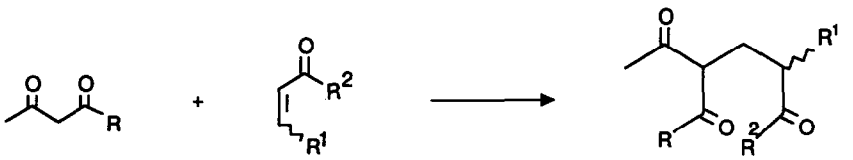
Tetrahedron Lett. **1990**, *31*, 4867

DUAL CATALYSIS OF THE MICHAEL REACTION

Pierre Laszlo*, Marie-Thérèse Montaufier, and S. Lalatiana Randriamahefa

Laboratoire de chimie fine, biomimétique et aux interfaces, Ecole Polytechnique, 91128 Palaiseau cedex, France.

The Michael reaction, with conjugate bases of β-diketones as donors and with α,β-unsaturated ketones as acceptors, is efficiently catalyzed by a combination of clay-supported nickel bromide and ferric chloride.

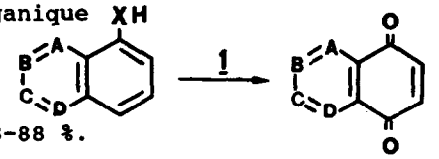


Tetrahedron Lett. **1990**, *31*, 4871

SYNTHESIS OF QUINONES BY USING BIS(TRIFLUOROACETOXY)-IODOBENZENE.

R.BARRET, M.DAUDON. Laboratoire de Chimie Organique
Faculté de Pharmacie, 8 avenue Rockefeller,
F-69373 Lyon Cedex 08 FRANCE

Bis(trifluoroacetoxy)iodobenzene oxidizes phenols and amines into quinones ; yield : 58-88 %.

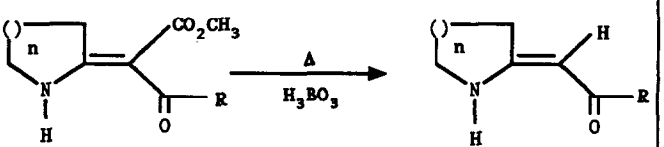


Tetrahedron Lett. **1990**, *31*, 4873

DECARBOXYLATION OF CYCLIC β-ENAMINOKETOESTERS WITH BORIC ACID

Philippe DELBECQ, Jean Pierre CELERIER and Gérard LHOMMET
Laboratoire de Chimie des Hétérocycles and U.R.A. 455
Université Pierre et Marie Curie, 4 Place Jussieu
75252 PARIS cedex. France

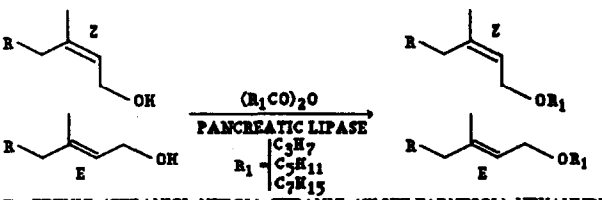
Cyclic β-enaminoketoesters prepared by condensation between β ketoesters and lactim ethers are decarboxylated without deacetylation by thermolysis in presence of boric acid to lead stereospecifically to cyclic β-enaminones



Tetrahedron Lett. **1990**, *31*, 4875

STEREOSELECTIVE LIPASE-CATALYSED ACYLATION OF TERPENIC ALLYLIC ALCOHOLS BY FATTY ACID ANHYDRIDES.

Jean-Dominique Fourneron*, Mélissa Chiche and Gérard Piéroni.



Crude pancreatic lipase preferentially catalyses the acylation of the E isomer of terpenic alcohols. The selectivity is better for geraniol than for farnesol and phytol. R_1 has no effect on the selectivity except for the monoterpenic substrates.

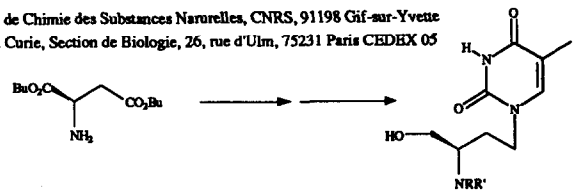
R = PRENYL (GERANIOL-NEROL); GERANYL (6E,2EZ-FARNESOL); HEXAHYDROFARNESYL (2EZ-PHYTOL)

Tetrahedron Lett. **1990**, *31*, 4879

SYNTHESIS OF 1-(3-R-AMINO-4-HYDROXYBUTYL)THYMINE ACYCLONUCLEOSIDE ANALOGS AS POTENTIAL ANTI-AIDS DRUGS

A. Genevois-Borella[1], J.-C. Florent[2], C. Monneret[2], D. S. Grierson[1]**

1. Institut de Chimie des Substances Naturelles, CNRS, 91198 Gif-sur-Yvette
2. Institut Curie, Section de Biologie, 26, rue d'Ulm, 75231 Paris CEDEX 05



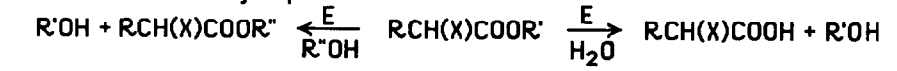
A series of 1-(3-R-amino-4-hydroxybutyl)thymine acyclonucleoside analogs have been prepared from the di-n-butyl ester of R-(-)-aspartic acid.

Tetrahedron Lett. **1990**, *31*, 4883

SPECIFIC ESTERASE ACTIVITY OF SUBTILISIN TOWARD ESTERS OF α-HALOACIDS

M. Pugnière, C. San Juan and A. Previero*
Unité 58 de l'INSERM 60, rue de Navacelles 34090 Montpellier France

Esters of α-haloacids behave as specific substrates for subtilisin which catalyses their hydrolysis in water as well as their transesterification within organic solvents. The reaction is not sterically dependent.

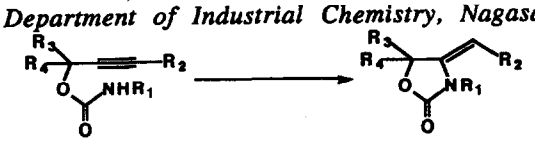


E = subtilisin R, R', R" = alkyl radicals X = halogen

Tetrahedron Lett. **1990**, *31*, 4887

Convenient Synthesis of Densely Functionalized N-Substituted 4-Methylene-2-oxazolidinone

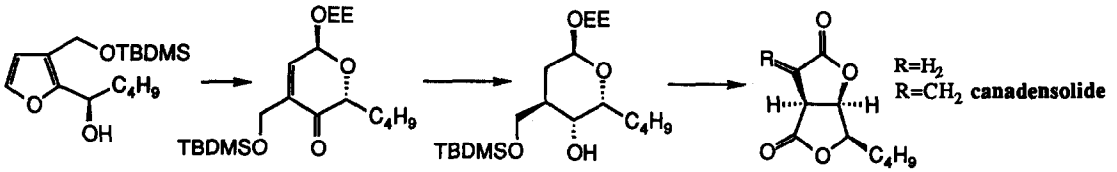
M. Kimura, S. Kure, Z. Yoshida, S. Tanaka, K. Fugami, and Y. Tamaru*
Department of Industrial Chemistry, Nagasaki University, Nagasaki 852, Japan



Tetrahedron Lett. **1990**, *31*, 4891

ENANTIOSELECTIVE SYNTHESIS OF BISLACTONE STRUCTURE : A FORMAL SYNTHESIS OF (-)-CANADENSOLIDE

Toshio Honda,* Yuji Kobayashi, and Masayoshi Tsubuki
Institute of Medicinal Chemistry, Hoshi University, Ebara 2-4-41, Shinagawa-ku , Tokyo 142, Japan

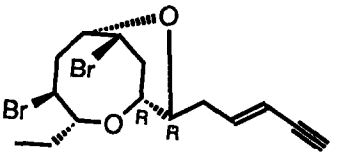


Tetrahedron Lett. **1990**, *31*, 4895

STRUCTURE ELUCIDATION OF LAUREOXANYNE, A NEW NONISOPRENOID C_{15} ENYNE, USING LACTOPEROXIDASE

A. Fukuzawa,* Mya Aye, M. Nakamura, † M. Tamura, † and A. Murai*
Department of Chemistry, Faculty of Science, †Biophysics Division, Research Institute of Applied Electricity, Hokkaido University, Sapporo 060, Japan

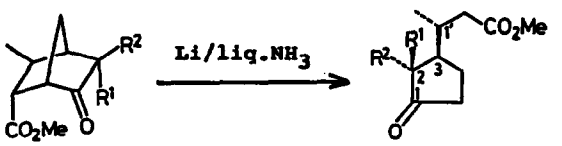
The enzymatic structure elucidation of a bicyclic natural bromo-ether, laureoxanyne, is described.



Tetrahedron Lett. **1990**, *31*, 4899

SYNTHESIS OF VITAMIN D_3 D RING SYNTHONS BY REDUCTIVE CLEAVAGE OF NORBORNAN-6-ONE-2-CARBOXYLATES

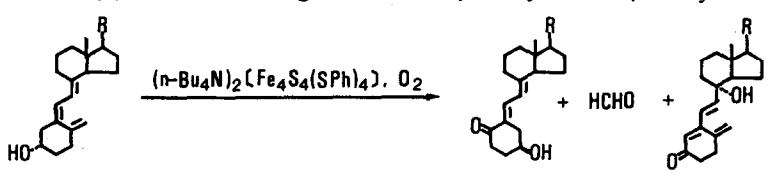
Isao Shimizu*, Naoto Matsuda, Yasuo Noguchi, Yoshiro Zako, and Kazuo Nagasawa
Department of Applied Chemistry, School of Science and Engineering, Waseda University, Ookubo, 3-4-1, Shinjuku-ku, Tokyo 169, Japan



Tetrahedron Lett. **1990**, *31*, 4903

BIOMIMETIC OXIDATION OF VITAMIN D BY IRON-SULFUR MODEL CLUSTER AND DIOXYGEN SYSTEM

Keiko Yamamoto, Yuko Imae, and Sachiko Yamada*
Institute for Medical and Dental Engineering, Tokyo Medical and Dental University, 2-3-10 Surugadai Kanda, Chiyoda-ku, Tokyo 101, Japan

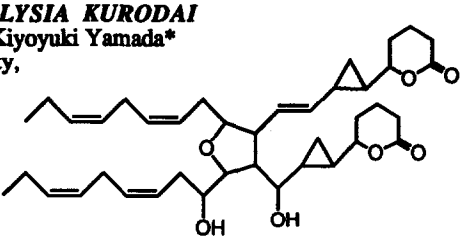


Tetrahedron Lett. **1990**, *31*, 4907

APLYDILACTONE, A NOVEL FATTY ACID METABOLITE FROM THE MARINE MOLLUSC *APLYSIA KURODAI*

Makoto Ojika, Yoshifumi Yoshida, Yoshisuke Nakayama, and Kiyoyuki Yamada*
Department of Chemistry, Faculty of Science, Nagoya University,
Chikusa, Nagoya 464, Japan

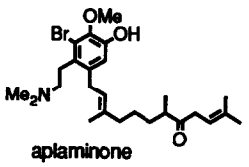
Aplydilactone, a new dimeric fatty acid metabolite having a phospholipase A_2 activating activity was isolated from the marine mollusc *Aplysia kurodai* and its planar structure was elucidated.



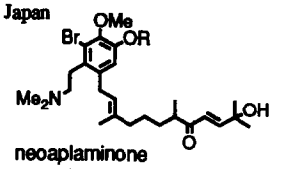
Tetrahedron Lett. **1990**, *31*, 4911

THREE NEW CYTOTOXIC ALKALOIDS, APLAMINONE, NEOAPLAMINONE, AND NEOAPLAMINONE SULFATE FROM THE MARINE MOLLUSC *APLYSIA KURODAI*

Hideo Kigoshi, Yoshifumi Imamura, Kohji Yoshikawa, and Kiyoyuki Yamada*
Department of Chemistry, Faculty of Science, Nagoya University, Chikusa, Nagoya 464, Japan



aplaminone

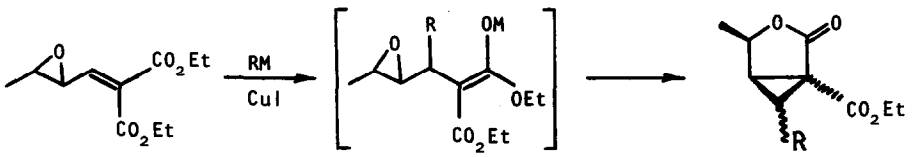


R = H, neoaplaminone
R = SO_3H, neoaplaminone sulfate

Tetrahedron Lett. **1990**, *31*, 4915

REACTIONS OF ORGANO-MAGNESIUM AND ORGANO-LITHIUM COMPOUNDS WITH DIETHYL (2,3-EPOXYBUTYLIDENE)MALONATE. A SIMPLE SYNTHESIS OF CYCLOPROPANE CARBOXYLATES

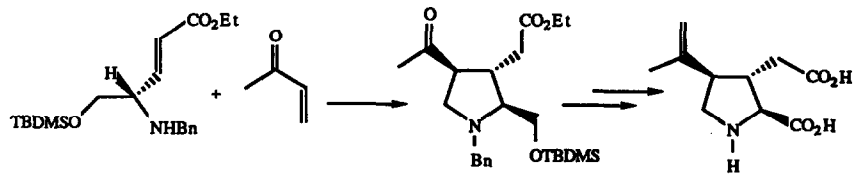
Kasatkin A.N.*, Kulak A.N., Biktimirov R.Kh., and Tolstikov G.A.
Institute of Chemistry, Bashkirian Research Centre,Ural Department, USSR Acad.Sci., Ufa



Tetrahedron Lett. **1990**, *31*, 4917

ENANTIOSELECTIVE SYNTHESIS OF (+)- and (-)-α-ALLOKAINIC ACID

Achille Barco[a], Simonetta Benetti[a], Alberto Casolari[b], Gian Piero Pollini[b] and Giampiero Spalluto[a]
[a] Dipartimento di Chimica - Via L. Borsari 46, [b] Dipartimento di Scienze Farmaceutiche -Via Scandiana 21, 44100 Ferrara, Italy.



Tetrahedron Lett. **1990**, *31*, 4921

OXIDATION OF THE METHYL GROUPS OF N, N-DIMETHYLBENZAMIDES BY A CYTOCHROME P450 MONO-OXYGENASE MODEL SYSTEM

Jim Iley* *POCRG, Chemistry Department, The Open University, Milton Keynes, MK7 6AA, U.K.*
Luís Constantino, Fátima Norberto and Eduarda Rosa* *CECF, Instituto Nacional de Investigação Científica, Faculdade de Farmácia, Avenida das Forças Armadas, 1699-Lisboa, Portugal.*

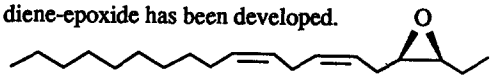
Biomimetic oxidation of *N, N*-dimethylbenzamides by tetraphenylporphyrinato iron (III) chloride - Bu^{t}OOH is consistent with the formation of a carbon-centred radical intermediate.

Tetrahedron Lett. **1990**, *31*, 4923

IDENTIFICATION AND ENANTIOSELECTIVE SYNTHESIS OF (Z,Z)-6,9-*CIS*-3S,4R-EPOXYNONADECADIENE, A SEX PHEROMONE COMPONENT OF *BOARMIA SELENARIA*

D. Becker[a*], R. Cyjon[a], A. Cosse[a], I. Moore[b], T. Kimmel[a], and M. Wysoki[b].
[a)]Dept. of Chemistry, Technion-Israel Institute of Technology, Haifa 32000, Israel.
[b)]Dept. of Entomology, ARO, The Volcani Center, P.O.B. 6, Bet-Dagan, Israel.

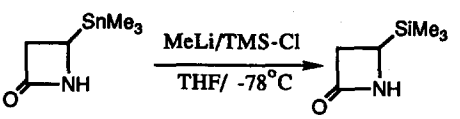
An efficient synthesis of chiral methylene interrupted diene-epoxide has been developed.



Tetrahedron Lett. **1990**, *31*, 4927

The Preparation of ß-Lactam Homoenolates

Donald MacLeod and Peter Quayle*
Department of Chemistry. University of Manchester.
Manchester M13 9PL, UK.
Gareth M. Davies
ICI Pharmaceuticals
Alderley Park. Macclesfield. SK10 4TG.



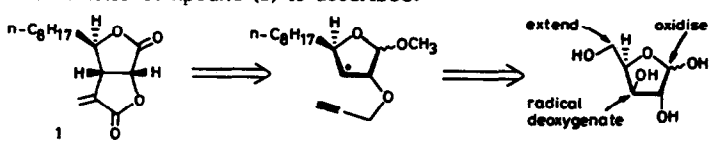
The praparation and transmetallation of tin substituted ß-lactams is presented.

Tetrahedron Lett. **1990**, *31*, 4931

A SIMPLE AND STEREOSELECTIVE SYNTHESIS OF AVENACIOLIDE FROM D-GLUCOSE

G V M Sharma* and Sreenivasa Rao Vepachedu
Indian Institute of Chemical Technology, Hyderabad 500 007, India

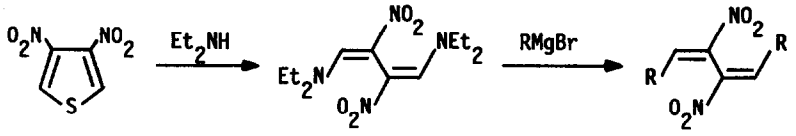
Synthesis of title compound (1) is described.



Tetrahedron Lett. **1990**, *31*, 4933

SYNTHETIC EXPLOITATION OF THE RING-OPENING OF 3,4-DINITROTHIOPHENE. A NOVEL ACCESS TO 1,4-DIALKYL- AND 1,4-DIARYL-2,3-DINITRO-1,3-BUTADIENES

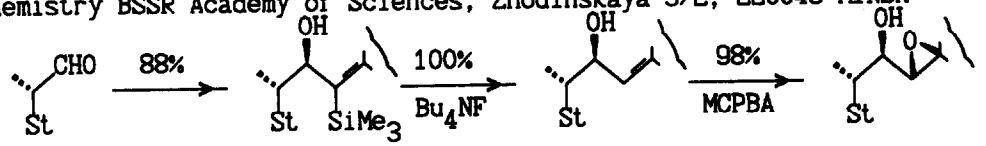
C. Dell'Erba, A. Mele, M. Novi, G. Petrillo, and P. Stagnaro
Istituto di Chimica Organica, C.N.R. Centro di Studio sui Diariloidi e loro Applicazioni, Corso Europa 26, 16132 Genova, Italy



Tetrahedron Lett. **1990**, *31*, 4937

HIGHLY STEREOSELECTIVE SYNTHESIS OF STEROIDAL 22α-ALLYLIC ALCOHOLS *VIA* 22-ALDEHYDES AND 1-SILYL-1-IODO-1-ALKENES: A NEW EFFICIENT ROUTE TO THE SIDE CHAIN CONSTRUCTION OF BRASSINOLIDE

V. A. Khripach , V. N. Zhabinskiy, V. K. Olkhovick, Institute of Bioorganic Chemistry BSSR Academy of Sciences, Zhodinskaya 5/2, 220045 MINSK

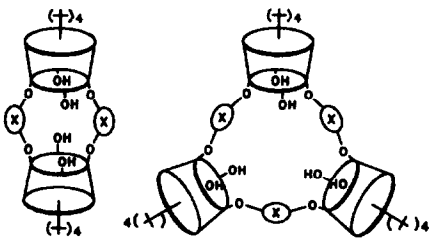


Tetrahedron Lett. **1990**, *31*, 4941

DOUBLE AND TRIPLE CALIX[4]ARENES CONNECTED VIA THE OXYGEN FUNCTIONS

D.Kraft, J.-D.van Loon, M.Owens, W.Verboom, W. Vogt, M.A. McKervey, V.Böhmer*, D.N.Reinhoudt* University of Mainz, W.Germany; University of Twente, The Netherlands; University College Cork, Ireland.*

Syntheses of new macrocyclic molecules containing two or three p-*t*-butylcalix[4]arene subunits.



Tetrahedron Lett. **1990**, *31*, 4945

INTRAMOLECULAR ALKYLATION OF 3-HYDROXYPYRROLE-2-CARBOXYLATES. FORMATION OF 5/5, 5/6, AND 5/7 RING SYSTEMS RELATED TO PYRROLIDINE ALKALOIDS

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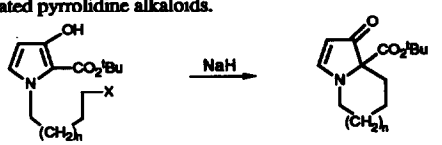
The intramolecular alkylation of substituted 3-hydroxypyrrole-2-carboxylates leads to fused ring systems found in the pyrrolizidine, indolizidine, and related pyrrolidine alkaloids.



Tetrahedron Lett. **1990**, *31*, 4949

STEREOSELECTIVE SYNTHESIS OF STATIN ANALOGUES

Anna Bernardi, Fabrizio Micheli, Donatella Potenza, Carlo Scolastico* and Roberto Villa.*Dipartimento di Chimica Organica e Industriale via Venezian 21, 20133 Milano- Italy*

Cis-selective allylation of a malic acid derived N-acyliminium ion leads to the synthesis of statin analogues.