

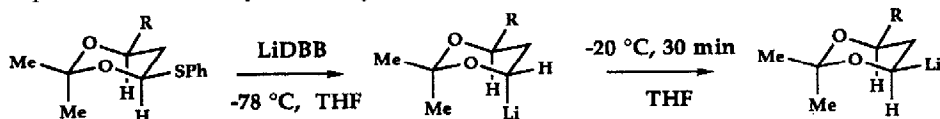
GRAPHICAL ABSTRACTS

Tetrahedron Lett. 30, 3011 (1989)

PREPARATION OF 2-LITHIOTETRAHYDROPYRANS: KINETIC AND THERMODYNAMIC GENERATION OF ALKYLLITHIUM REAGENTS

Scott D. Rychnovsky* and Daniel E. Mickus

Department of Chemistry, University of Minnesota, Minneapolis, Minnesota 55455

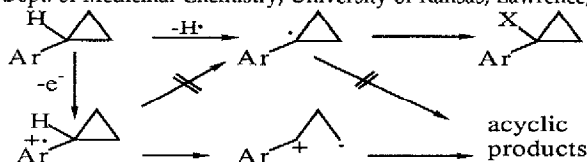


Tetrahedron Lett. 30, 3015 (1989)

FREE RADICAL CHLORINATION AND ONE-ELECTRON OXIDATION OF ARYLCYCLOPROPANES. DESIGNER PROBES FOR CYTOCHROME P-450 HYDROXYLATION MECHANISMS.

Pamela Riley and Robert P. Hanzlik,*

Dept. of Medicinal Chemistry, University of Kansas, Lawrence, KS. 66045-2506



Arylcyclopropanes discern free-radical
from one-electron oxidations.

Tetrahedron Lett. 30, 3019 (1989)

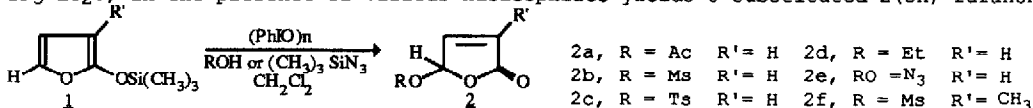
HYPERVALENT IODINE OXIDATION: SYNTHESIS OF 5-SUBSTITUTED 2(5H)-FURANONES USING IODOSOBENZENE

Robert M. Moriarty,* Radhe K. Vaid, Thomas E. Hopkins, Beena K. Vaid

Department of Chemistry, University of Illinois at Chicago, Chicago, IL 60607

Atilla Tuncay, Department of Chemistry, Indiana University Northwest, Gary, IN 46408

Summary: Hypervalent iodine oxidation of 2-(trimethylsiloxy)furan with iodosobenzene/ $\text{BF}_3 \cdot \text{Et}_2\text{O}$, in the presence of various nucleophiles yields 5-substituted-2(5H)-furanones.

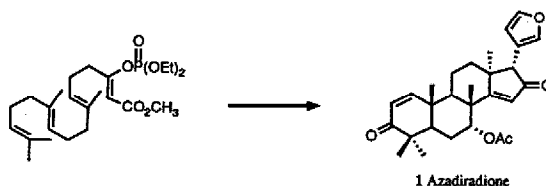


Tetrahedron Lett. 30, 3023 (1989)

SYNTHESIS OF A LIMONOID, AZADIRADIONE

E. J. Corey and Robert W. Hahl

Department of Chemistry, Harvard University
Cambridge, Massachusetts, 02138



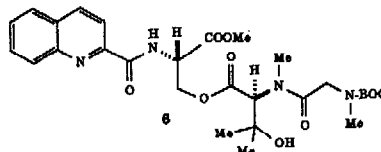
SYNTHESIS OF A MODEL DEPSIPEPTIDE SEGMENT OF LUZOPEPTINS (BBM 928), POTENT ANTITUMOR AND ANTIRETROVIRAL ANTIBIOTICS

Tetrahedron Lett. 30, 3027 (1989)

Marco A. Ciufolini* and Shankar Swaminathan

Department of Chemistry, Rice University, P. O. Box 1892, Houston, Texas 77251, U.S.A.

The preparation of compound **6** is described. This depsipeptide incorporates the unusual amino acid, (L)-N-methyl-3-hydroxyvaline, and it constitutes a model for a portion of the luzopeptins.



CRYSTAL STRUCTURE AND SOLID STATE PHOTOREACTIVITY OF 2,5-DIBENZYLIDENECYCLOPENT-3-ENE-1-ONE AND ITS TETRACHLORODERIVATIVE

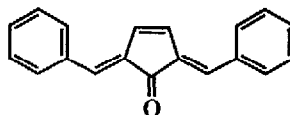
Tetrahedron Lett. 30, 3029 (1989)

Gautam R. Desiraju^a, Joel Bernstein^b, K.V. Radha Kishan^a and Jagarlapudi A.R.P. Sarma^b

^aSchool of Chemistry, University of Hyderabad, Hyderabad 500 134, India

^bDepartment of Chemistry, Ben-Gurion University of the Negev, Beer Sheva, 84105, Israel

The synthesis and crystal structure of a molecule designed to undergo triple solid state photodimerisation, are described. The alternate single photodimerisation actually observed is discussed.

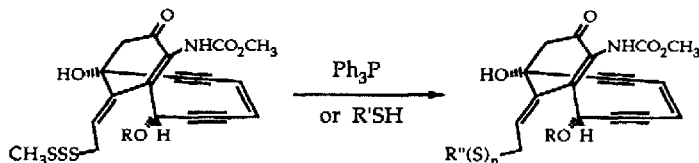


REACTIONS OF THE TRISULFIDE MOIETY IN CALICHEAMICIN

Tetrahedron Lett. 30, 3033 (1989)

George A. Ellestad*, Philip R. Hamann, Nada Zein, George O. Morton, Marshall M. Siegel, Michael Pastel, Donald B. Borders and William J. McGahren

American Cyanamid Co., Medical Research Division/Lederle Labs, Pearl River, NY 10965



The reaction of the trisulfide moiety of calicheamicin with phosphines or thiols to produce tri- and disulfides is discussed.

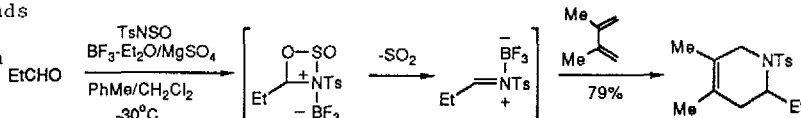
A CONVENIENT IN SITU PROCEDURE FOR EFFECTING INTER- AND INTRAMOLECULAR DIELS-ALDER REACTIONS OF N-SULFONYL IMINES

Tetrahedron Lett. 30, 3037 (1989)

Joseph Sisko and Steven M. Weinreb*

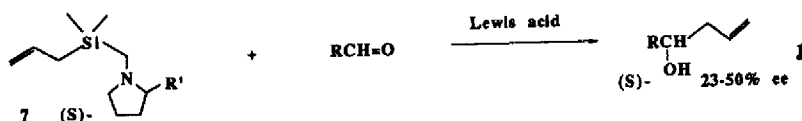
Department of Chemistry, The Pennsylvania State University, University Park, Pennsylvania 16802

Treatment of an aldehyde and a 1,3-diene with N-sulfinyl-p-toluene-sulfonamide/boron trifluoride etherate leads to products of an imino Diels-Alder reaction via an N-sulfonyl imine produced in situ.



CHIRAL ORGANOSILICON COMPOUNDS IN ORGANIC SYNTHESIS II.
 ENANTIOSELECTIVE SYNTHESIS OF HOMOALLYLIC ALCOHOLS
 T. H. Chan and D. Wang
 Department of Chemistry,
 McGill University, Montreal, P. Q., Canada. H3A 2K6

Tetrahedron Lett. 30, 3041 (1989)



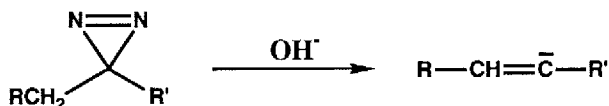
VINYL ANION SYNTHESIS IN THE GAS PHASE

Kraig K. Anderson and Steven R. Kass*

Department of Chemistry, University of Minnesota, Minneapolis, Minnesota 55455

A general and convenient method for the gas phase preparation of vinyl anions has been developed. Their reactivity with N₂O is presented.

Tetrahedron Lett. 30, 3045 (1989)



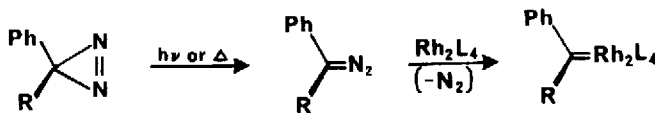
DIAZIRINES IN CARBENOID REACTIONS CATALYZED BY RHODIUM(II) CARBOXYLATES

M.P. Doyle, K.G. High, S.-M. Oon, and A.K. Osborn

Department of Chemistry, Trinity University, San Antonio, Texas 78284

3-Alkyl-3-phenyldiazirines rearrange to diazo compounds that are effectively directed to metal carbenoid products by rhodium(II) carboxylates.

Tetrahedron Lett. 30, 3049 (1989)



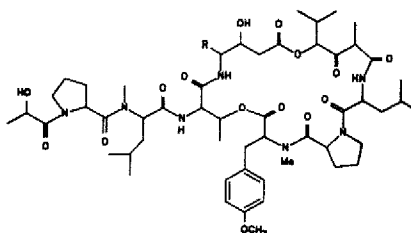
THE COMPLETE SPECTRAL ASSIGNMENT OF DIDEMNIN B AND NORDIDEMNIN B

Tawnya C. McKee and Chris M. Ireland
 Dept. Medicinal Chemistry, Univ. of Utah, Salt Lake City,
 UT 84112

Niels Lindquist and William Fenical
 Scripps Institute of Oceanography, Univ. of California,
 San Diego, CA 92023

The complete spectral assignments for the cyclic peptides nordidemnin B and didemnin B isolated from *Trididemnin solidum*, are presented.

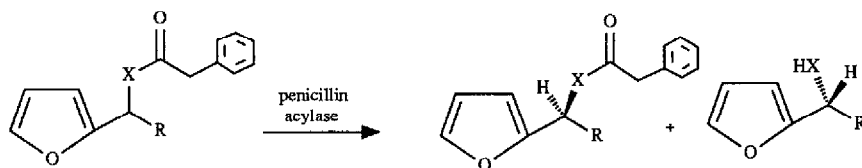
Tetrahedron Lett. 30, 3053 (1989)



Tetrahedron Lett. 30,3057(1989)

**A NEW ACCESS TO CHIRAL 2-FURYL CARBINOLS
BY ENANTIOSELECTIVE HYDROLYSIS WITH PENICILLIN ACYLASE**

Herbert Waldmann, Joh.-Gutenberg-Univ., Institut für Organische Chemie, Becherweg 18-20, D-6500 Mainz



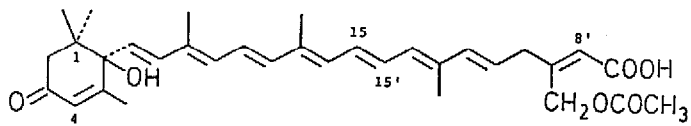
Tetrahedron Lett. 30,3059 (1989)

VITIXANTHIN AND DIHYDROVITIXANTHIN - NEW 7'-APO-

CAROTENOIC ACIDS FROM *COCHLOSPERMUM VITIFOLIUM*

Hans Achenbach*, Elmar Blümm and Reiner Waibel
Department of Pharmaceutical Chemistry, University of Erlangen,
Fed. Rep. Germany

The new pigments 1 and 2 from
Cochlospermum vitifolium re-
present 7'-apocarotenoic acids
with unusual structural fea-
tures.

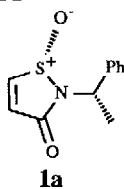


1
2: 4,5-dihydro-1

Tetrahedron Lett. 30, 3061 (1989)

**SYNTHESIS AND APPLICATION OF A HIGHLY
EFFICIENT, HOMOCHIRAL DIENOPHILE**

Adrian Waldner
Central Research Laboratories
Ciba-Geigy Ltd., CH-4000 Basel
Switzerland



1a

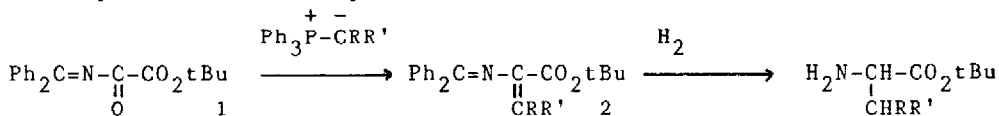
Excellent diastereoselectivity is observed in the cycloaddition of the
homochiral dienophile **1a** with cyclopentadiene and a 1-azadiene.

Tetrahedron Lett. 30, 3065 (1989)

**NEW SYNTHESIS OF DL- α -AMINOACIDS FROM
t-BUTYL N(DIPHENYLMETHYLENE) OXAMATE**

J.P. Bazureau, D. Person and M. Le Corre
Laboratoire de synthèse organique, Université de Rennes 35042- RENNES FRANCE

Reaction of oxamate **1** with phosphorus ylids gives azadienes **2** which are
readily converted into protected α -aminoacids.



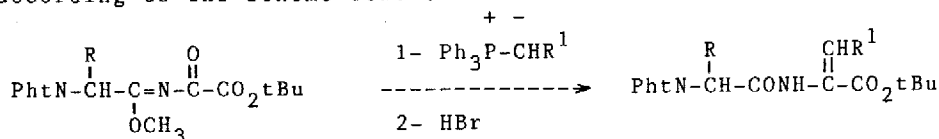
NEW SYNTHESIS OF DEHYDRODIPEPTIDES
FROM SUBSTITUTED OXAMIC ACIDS

D. Person and M. Le Corre

Laboratoire de synthèse organique Université de Rennes 35042-RENNES, FRANCE

Tetrahedron Lett. 30, 3069 (1989)

Dehydrodipeptides of the structure Pht-AA₁-DAA₂OtBu were synthesized according to the scheme below.

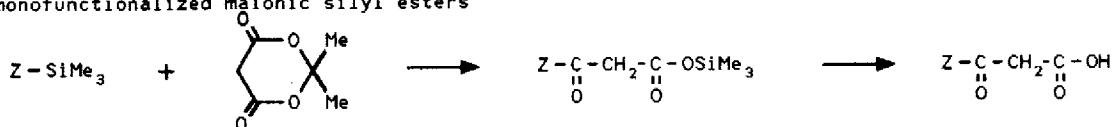


REACTION OF TRIMETHYLSILYL DERIVATIVES WITH MELDRUM'S ACID
A NEW AND EASY MONOFUNCTIONALIZATION OF MALONIC ACID.

B. Rigo, D. Fasseur, P. Cauliez and D. Couturier

HEI, 13 rue de Toul, Lille, France ; USTL, 59655 Villeneuve d'Ascq, France

Reaction of Meldrum's acid with silylated amines, lactams or alcohols yields monofunctionalized malonic silyl esters



Tetrahedron Lett. 30, 3073 (1989)

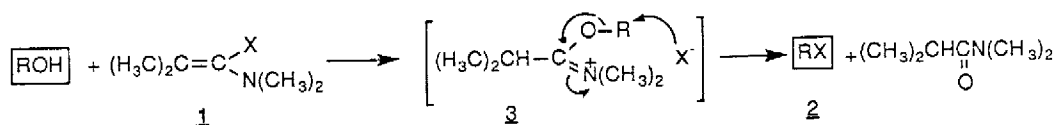
SYNTHESIS OF ALKYL HALIDES UNDER NEUTRAL CONDITIONS

François Munyemana, Anne-Marie Frisque-Hesbain, Alain Devos and Léon Ghosez

Université Catholique de Louvain, Laboratoire de Chimie Organique de Synthèse
Place L. Pasteur, 1- B-1348 LOUVAIN-LA-NEUVE, BELGIUM

Tetrahedron Lett. 30, 3077 (1989)

Primary and secondary alcohols are efficiently converted into the corresponding halides under neutral conditions using α -halogenoenamines.

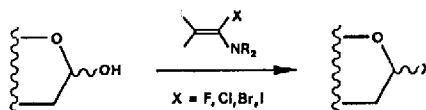


PREPARATION OF GLYCOSYL HALIDES UNDER NEUTRAL CONDITIONS.

Beat Ernst* and Tammo Winkler

Central Research Laboratories, CIBA-GEIGY Ltd., CH 4002 Basel, Switzerland

The anomeric hydroxyl group of various furanose and pyranose hemiacetals can be replaced by a halogen atom under neutral conditions using haloenamines.



Tetrahedron Lett. 30, 3081 (1989)

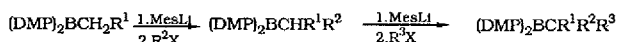
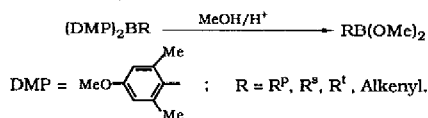
Tetrahedron Lett. 30, 3085 (1989)

HINDERED ORGANOBORON GROUPS IN ORGANIC SYNTHESIS. 12. THE BIS[2,6-DIMETHYL-4-METHOXYPHENYL]BORON [(DMP)₂B] GROUP, A NEW, READILY SOLVOLYSED CARBANION STABILISING GROUP.

Andrew Pelter,¹ Robert Drake¹ and Malcolm J. Stewart.²

¹Department of Chemistry, University College of Swansea, Singleton Park, Swansea SA2 8PP, U.K.

²Ministry of Defence, Waltham Abbey, Essex EN9 1AX, U.K.

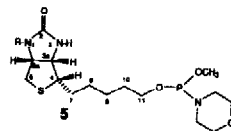


Tetrahedron Lett. 30, 3089 (1989)

A CHEMICAL METHOD OF LABELLING OLIGODEOXYRIBONUCLEOTIDES WITH BIOTIN.

Anne M. Alves, ICI Diagnostics, Gadbrook Park, Rudheath, Northwich, Cheshire, CW9 7RA. and David Holland and Michael D. Edge, ICI Pharmaceuticals, Biotechnology Department, Mereside, Alderley Park, Macclesfield, Cheshire, SK10 4TG.

The synthesis of N-1 protected D(+)-biotinol phosphoramidites is described.

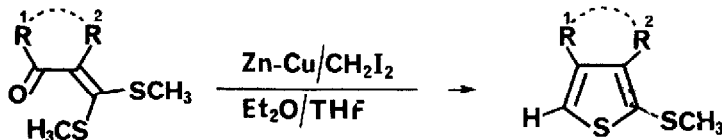


Tetrahedron Lett. 30, 3093 (1989)

ATTEMPTED SIMMONS-SMITH REACTION ON α -OXOKETENE DITHIOACETALS: A NEW GENERAL ROUTE TO 3,4-SUBSTITUTED AND ANNELATED THIOPHENES

Abraham Thomas, Gurdeep Singh, Hiriyakkanavar Ila* and Hiriyakkanavar Junjappa*

Department of Chemistry, North-Eastern Hill University, Shillong 793 003, Meghalaya, India.



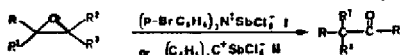
Tetrahedron Lett. 30, 3097 (1989)

ELECTRON-TRANSFER CHAIN ISOMERIZATION OF EPOXIDES INDUCED BY ONE-ELECTRON OXIDIZING AGENTS.

Luigi Lopez, Luigino Troisi

Centro CNR "M.I.S.O." Dipartimento di Chimica, Università di Bari via Amendola 173-70126 Bari Italy.

One-electron oxidizing agents such as tris-*p*-bromophenylammoniumyl hexachloro antimonate and/or the corresponding trityl salt have been employed to achieve the isomerization of epoxides to carbonyl compounds.

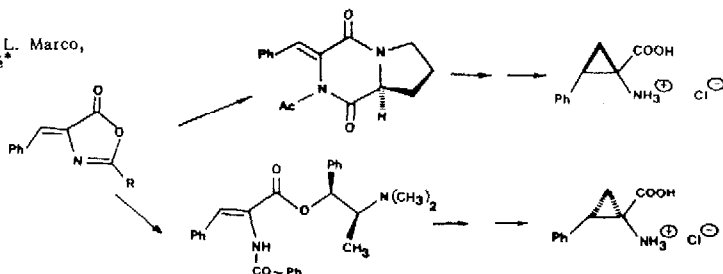


Tetrahedron Lett. 30, 3101 (1989)

SYNTHESIS OF ASYMMETRIC 1-AMINO-2-PHENYL-CYCLOPROPANECARBOXYLIC ACIDS BY DIASTERESELECTIVE CYCLOPROPANATION OF HIGHLY FUNCTIONALIZED HOMOCHIRAL OLEFINS

M^a Dolores Fernández, M^a Pilar de Frutos, José L. Marco, Eldiberto Fernández-Alvarez, and Manuel Bernabé*

Instituto de Química Orgánica, CSIC, Juan de la Cierva 3, 28006 Madrid, Spain.



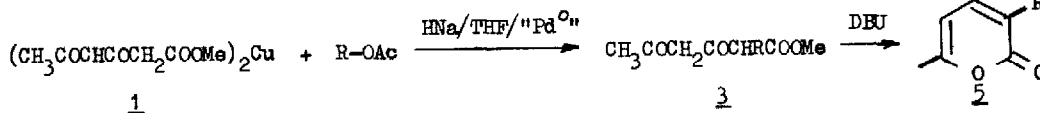
Tetrahedron Lett. 30, 3105 (1989)

COPPER PROTECTION IN THE PALLADIUM CATALYZED REGIOSELECTIVE ALLYLATION OF A MODEL POLYKETIDE: METHYL 3,5-DIOXOHEXANOATE

Jorge Marquet, Marcial Moreno-Mañas, María Prat

Dep. of Chemistry. Universidad Autónoma de Barcelona. Bellaterra. 08193-Barcelona. Spain.

Different products **3** can be prepared by regioselective allylation of **1**



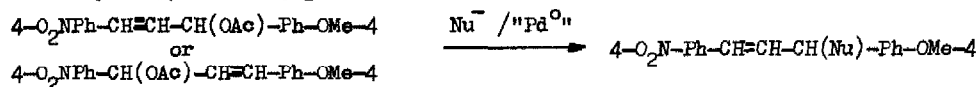
Tetrahedron Lett. 30, 3109 (1989)

ELECTRONIC EFFECTS ON THE REGIOSELECTIVITY OF NUCLEOPHILIC ATTACKS ON α -ALLYLPALLADIUM COMPLEXES

Marcial Moreno-Mañas, Jordi Ribas

Dep. of Chemistry. Universidad Autónoma de Barcelona. Bellaterra. 08193-Barcelona. Spain.

The indicated reactions occur with high regioselectivity for pentane-2,4-dione and 4-hydroxy-6-methyl-2-pyrone conjugate bases.

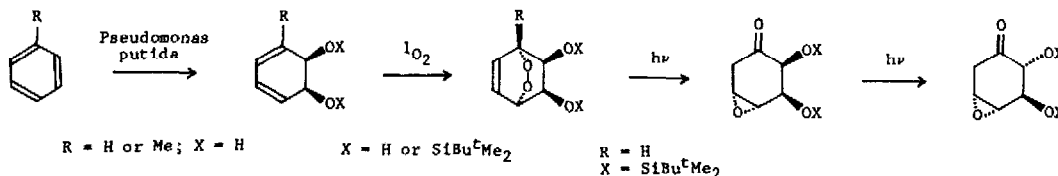


Tetrahedron Lett. 30, 3113 (1989)

PHOTOCHEMICAL ROUTES FROM ARENES TO INOSITOL INTERMEDIATES: THE PHOTO-OXIDATION OF SUBSTITUTED *cis*-CYCLOHEXA-3,5-DIENE-1,2-DIOLS.

Howard A.J. Carless*, Jacqueline R. Billinge and Ozer Z. Oak

Department of Chemistry, Birkbeck College, Malet Street, London WC1E 7HX



SYNTHESIS OF (5R) (E)-6-[(1-METHYL-1,2,3-TRIAZOL-4-YL)METHYLENE]-7-OXO-1-AZABICYCLO[3.2.0]HEPT-2-ENE-2-CARBOXYLIC ACID, A NOVEL CARBAPENEM DERIVATIVE, FROM 6-AMINOPENICILLANIC ACID

Steven Coulton* and Irene François

Beecham Pharmaceuticals, Research Division, Brockham Park, Betchworth, Surrey, RH3 7AJ, England.

The title compound (2) was prepared from 6-APA (3) via the novel 6-bromocarbapenem derivative (10).

