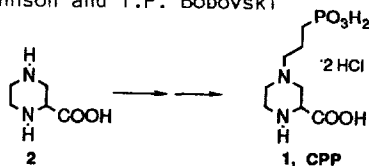


GRAPHICAL ABSTRACTS

Tetrahedron Lett 30,5193 (1989)

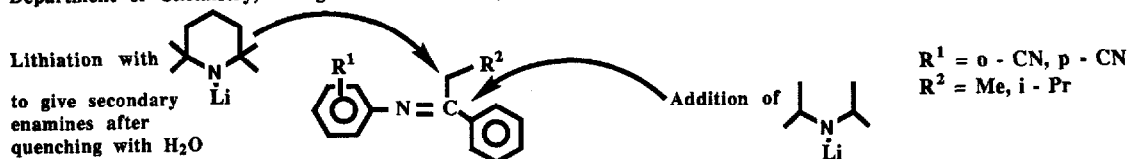
NEW PREPARATIONS OF THE N-METHYL-D-ASPARTATE RECEPTOR ANTAGONIST, 4-(3-PHOSPHONOPROPYL)-2-PIPERAZINE-CARBOXYLIC ACID (CPP)

C.F. Bigge, S.J. Hays, P.M. Novak, J.T. Drummond, G. Johnson and T.P. Bobovski
Parke-Davis Pharmaceutical Research Division
Warner Lambert Company, Ann Arbor, Michigan 48105



ADDITION AND LITHIATION REACTIONS OF N-(1-PHENYLALKYLIDENE)ANILINES WITH LITHIUM DIALKYLAMIDES

L. Strekowski,* S. Patterson, M.T. Cegla, R.L. Wydra, A. Czarny, and D.B. Harden
Department of Chemistry, Georgia State University, Atlanta, GA 30303, USA

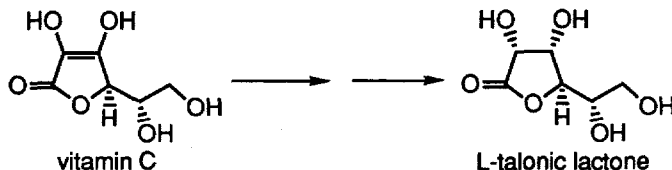


Tetrahedron Lett. 30,5201 (1989)

THE TOTAL SYNTHESIS OF L-TALONIC LACTONE

A. J. Poss* and M. S. Smyth

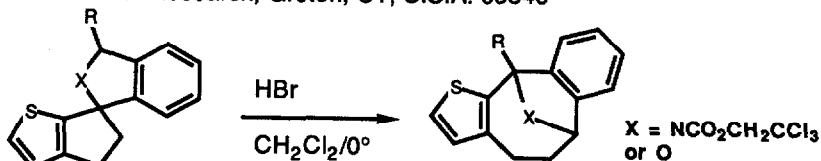
Department of Chemistry, SUNY at Buffalo, Buffalo, NY 14214



Tetrahedron Lett. 30,5203 (1989)

A NOVEL REARRANGEMENT FORMING 4,5,6,11-TETRAHYDROBENZO[6,7]-CYCLOOCTA[1,2-b]THIOPHEN-6,11-IMINES

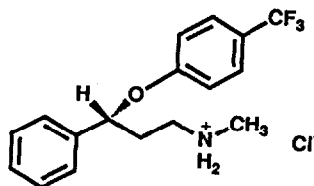
Ralph P. Robinson*, Kathleen M. Donahue and Nicholas A. Saccomano
Pfizer Central Research, Groton, CT, U.S.A. 06340



**ENANTIOSELECTIVE AND PRACTICAL SYNTHESSES
OF R- AND S-FLUOXETINES**

Tetrahedron Lett. 30, 5207 (1989)

E. J. Corey and Gregory A. Reichard
Department of Chemistry, Harvard University
Cambridge, Massachusetts, 02138

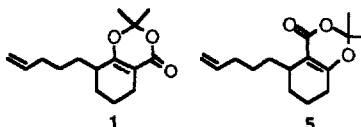


**THE EFFECT OF CHROMOPHORE TRANSPOSITION ON THE STEREO-
CHEMICAL OUTCOME OF THE INTRAMOLECULAR DIOXENONE
PHOTOCYCLOADDITION REACTION**

Tetrahedron Lett. 30, 5211 (1989)

Jeffrey D. Winkler*, Cheryl L. Muller, John P. Hey, Ronald J. Ogilvie, Nizar Haddad, Philip J. Squattrito and Paul G. Williard
Searle Chemical Laboratories, Department of Chemistry, The University of Chicago, Chicago, Illinois 60637

Photocycloaddition of **1** and **5** leads to the exclusive formation of *trans*- and *cis*-fused photoadducts, respectively. A proposal to explain this reversal of selectivity is presented.

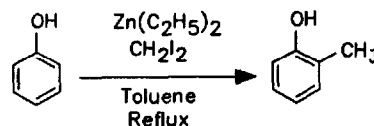


ORTHO-METHYLATION OF PHENOLS WITH ETHYL(IODOMETHYL)ZINC

Tetrahedron Lett. 30, 5215 (1989)

Erich K. Lehnert, J. Scott Sawyer and Timothy L. Macdonald*
Department of Chemistry, University of Virginia, Charlottesville, VA 22901 USA

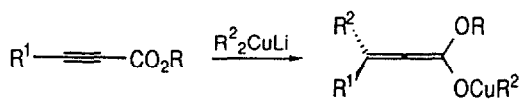
A method is described for the regioselective *ortho*-methylation of phenols by *in situ* generated ethyl(iodomethyl)zinc, which is proposed to proceed *via* an internal alkylation or cycloalkylation process.



**STRUCTURE OF THE ADDUCTS OF LITHIUM DIMETHYL-
CUPRATE TO ACETYLENIC ESTERS: SPECTROSCOPICAL
PROOF FOR THE PRESENCE OF COPPER ALLENOLATES**

Tetrahedron Lett. 30, 5219 (1989)

Norbert Krause (Yale University, Department of Chemistry, P.O. Box 6666, New Haven, CT 06511, U.S.A.)



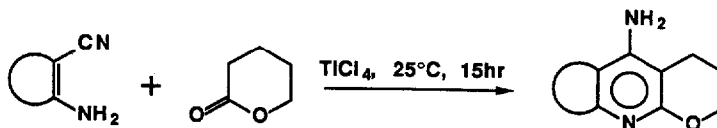
The ¹³C NMR spectra of the adducts of Me₂CuLi to acetylenic esters in Et₂O and THF between -100° and -60°C show the presence of copper allenolates.

**Titanium(IV) Chloride Promoted Condensation of
Ortho-aminonitriles with δ -Valerolactone**

Manoj C. Desai* and Peter F. Thadeio

Pfizer Central Research, Medicinal Chemistry Department, Groton, CT 06340.

Tetrahedron Lett. 30, 5223 (1989)

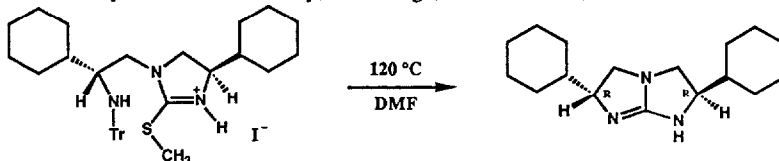


**ENANTIOSPECIFIC SYNTHESIS OF A RIGID, C_2 SYMMETRIC,
CHIRAL GUANIDINE BY A NEW AND DIRECT METHOD**

E. J. Corey and Mitsuaki Ohtani

Department of Chemistry, Harvard University, Cambridge, Massachusetts, 02138

Tetrahedron Lett. 30, 5227 (1989)

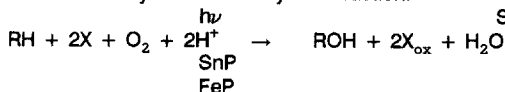


**PHOTOCHEMICALLY-DRIVEN BIOMIMETIC OXIDATION OF ALKANES
AND OLEFINS**

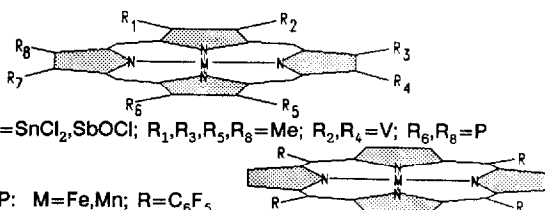
John A. Shelnutt* and Daniel E. Trudell

Fuel Science Division 6211, Sandia National Laboratories
Albuquerque, New Mexico 87185

Oxidation of hydrocarbons by the reaction:



where X=reductant (triethanolamine), RH=alkane (olefin), and SnP=photosensitizer, and FeP = catalyst.



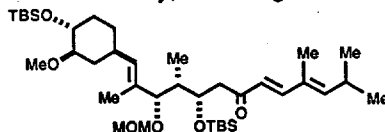
Tetrahedron Lett. 30, 5231 (1989)

**ENANTIOSELECTIVE SYNTHESIS OF THE C(18) - C(35)
SEGMENT OF IMMUNOSUPPRESSANT FK-506 USING
EFFICIENT NEW METHODOLOGY**

E. J. Corey and Horng-Chih Huang

Department of Chemistry, Harvard University, Cambridge, Massachusetts, 02138

Tetrahedron Lett. 30, 5235 (1989)

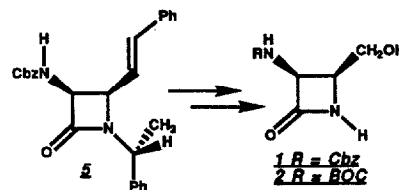


Tetrahedron Lett. 30, 5239 (1989)

AN EFFICIENT ASYMMETRIC SYNTHESIS OF 3S,4S-3-ACYLAMINO-4-HYDROXYMETHYL AZETIDIN-2-ONES

Richard C. Thomas
Cancer and Infectious Diseases Research
The Upjohn Company, Kalamazoo, MI 49001

An efficient method for the synthesis of azetidiones **1** and **2** from readily available precursors is presented. [2 + 2]-Cycloaddition gives enantiomerically pure azetidione **5** in 46% isolated yield after a single crystallization. Olefin cleavage and N-1-deprotection afford the desired products in high yield via crystalline intermediates.



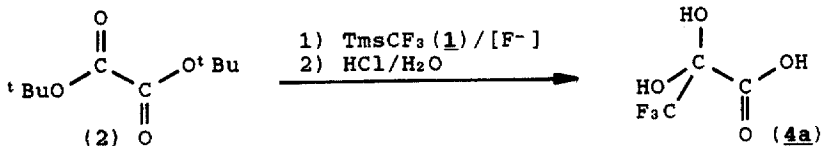
Tetrahedron Lett. 30, 5243 (1989)

ERGIEBIGE UND EINFACHE SYNTHESE VON TRIFLUOR BRENZTRAUBENSAURE-MONOHYDRAT

Volker Broicher * und Detlef Geffken **;

* Pharmazeutisches Institut der Universität Bonn, An der Immenburg 4, 5300 Bonn 1, F.R.G.

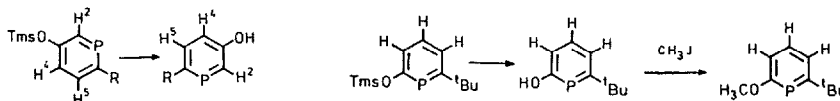
** Institut für Pharmazeutische Chemie Hamburg, Bundesstr. 45, 2000 Hamburg 13, F.R.G.



Tetrahedron Lett. 30, 5245 (1989)

3-HYDROXY-1³-PHOSPHININE - 2-HYDROXY-1³-PHOSPHININE

G. Märkl und A. Kallmüser, Institut für Organische Chemie
der Universität, Universitätsstr. 31, D-8400 Regensburg

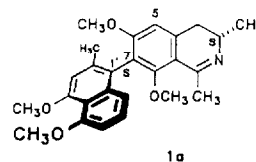


Tetrahedron Lett. 30, 5249 (1989)

ARYL-COUPLING VIA "AXIALLY PROSTEREOGENIC" LACTONES: FIRST TOTAL SYNTHESIS OF (+)-ANCISTROCLADISINE AND (OPTIONALLY) ITS ATROPISOMER

Gerhard Bringmann* and Helmut Reuscher
Institut für Organische Chemie der Universität Würzburg
Am Hubland, D-8700 Würzburg, FRG

Stereochemically pure (+)- ancistrocladisine (**1a**)₁ is synthesized for the first time, via bridged, planarized biaryl intermediates.

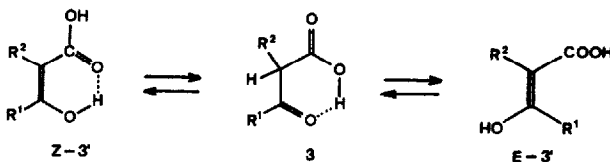


Tetrahedron Lett. 30, 5253 (1989)

DURCH STERISCHE EFFEKTE STABILISIERTE β -KETOCARBONSÄUREN

Herbert Meier,* Horst Wengenroth, Wolfgang Lauer, Volker Krause, Institut für Organische Chemie der Universität Mainz, J.J. Becherweg 18 - 22, D-6500 Mainz, BRD

Bulky substituents R^1 and R^2 stabilize β -keto carboxylic acids and affect significantly the keto-enol tautomerism in favour of the enols Z,E-3'.



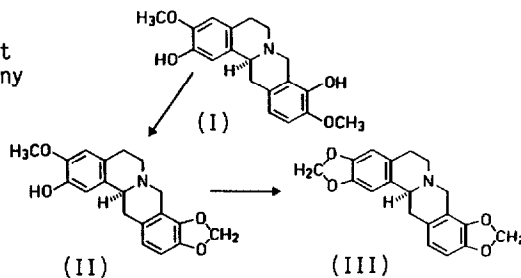
Tetrahedron Lett. 30, 5257 (1989)

FORMATION OF BOTH METHYLENEDIOXY GROUPS IN THE ALKALOID (S)-STYLOPINE IS CATALYZED BY CYTOCHROME P-450 ENZYMES

W. Bauer and M.H. Zenk

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

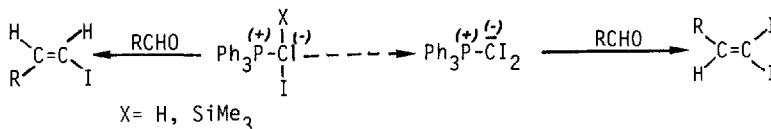
Two highly stereospecific microsomal cytochrome P-450 NADPH dependent enzymes have been discovered and characterized which are responsible for the methylenedioxy group formation from (S)-scoulerine (I) via (S)-cheilanthifoline (II) to (S)-stylopine (III).



Tetrahedron Lett. 30, 5261 (1989)

Z-1-VINYLIODIDE DURCH WITTIG-REAKTION

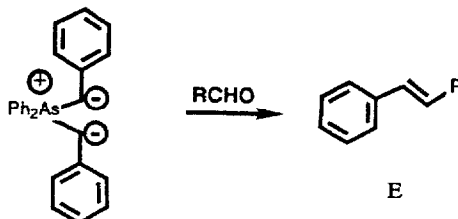
Hans Jürgen Bestmann,* Hans Christoph Rippel und Roman Dostalek
Institut für Organische Chemie der Universität Erlangen-Nürnberg,
Henkestraße 42, D-8520 Erlangen



Tetrahedron Lett. 30, 5263 (1989)

STEREOSPECIFIC E OLEFINATION OF ALDEHYDES WITH A BISBENZYLIC ARSONIUM YLID-ANION

B. BOUBIA*, C. MIOSKOWSKI* and F. BELLAMY**
*Université Louis Pasteur, Laboratoire de Chimie Bio-organique associé au CNRS, Faculté de Pharmacie, 74 route du Rhin BP 24, 67401 ILLKIRCH
**Laboratoires Fournier, 50 rue de Dijon 21121 FONTAINE les DIJON

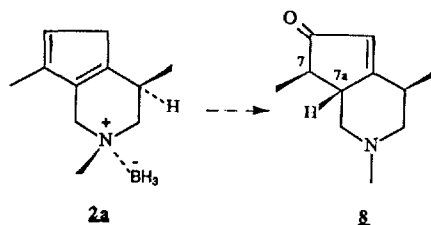


Tetrahedron Lett. 30,5267(1989)

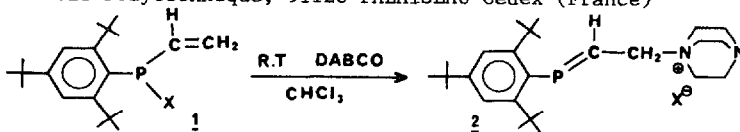
STEREOSPECIFIC SYNTHESIS OF THE (±) EPI-7,7a TECOMANINE

J.P. ALAZARD, A. LEBOFF and C. THAL
ICSN-CNRS, 91198 Gif-sur-Yvette Cedex, FRANCE

The presence of a borane axial group in compound 2a induces a regio and stereospecific¹⁰ cycloaddition. This result allows a stereospecific synthesis of the (±) epi-7,7a tecomanine 8.

Tetrahedron Lett. 30,5269(1989)

THE NUCLEOPHILIC ATTACK OF A VINYL-HALO-PHOSPHINE BY A TERTIARY AMINE: A NEW ACCESS TO PHOSPHAALKENES

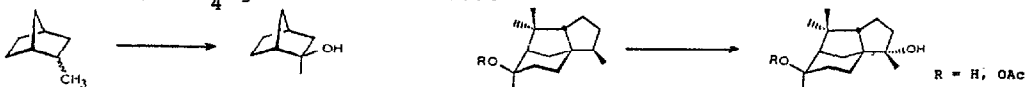
François MERCIER and François MATHEY
Laboratoire de Chimie du Phosphore et des Métaux de Transition
DCPH - Ecole Polytechnique, 91128 PALAISEAU Cedex (France)Tetrahedron Lett. 30,5271(1989)

RUTHENIUM-CATALYZED C-H BOND ACTIVATION

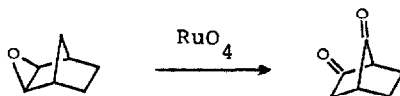
OXIDATION OF BRIDGED BICYCLIC AND TRICYCLIC ALKANES

A.Tenaglia, E.Terranova & B.Waegell
Laboratoire de Stéréochimie, associé au CNRS, Faculté des Sciences
St-Jérôme, Av.Escadrille Normandie Niemen, 13397 Marseille Cédex 13.

Bicyclic [2.2.1] heptanes and tricyclic [5.3.1^{1,7}.0^{1,5}] undecanes derivatives are preferentially hydroxylated in tertiary unhindered positions by RuO₄ generated in situ.

TANDEM RUTHENIUM-CATALYZED EPOXIDE REARRANGEMENT/
OXIDATION OF BICYCLIC [2.2.1] HEPTANES EPOXIDESTetrahedron Lett. 30,5275(1989)A.Tenaglia, E.Terranova & B.Waegell
Laboratoire de Stéréochimie, associé au CNRS, Faculté des Sciences
St-Jérôme, Av.Escadrille Normandie Niemen, 13397 Marseille Cédex 13.

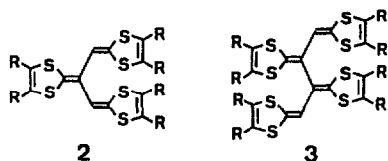
Norbornane epoxides are transformed by the title reaction into bicyclic β-diketones in fairly to good yields via a Wagner-Meerwein type rearrangement.



**SYNTHESIS AND PROPERTIES OF 1,3-DITHIOLE[3]-
AND [4]-DENDRALENES, ACYCLIC SYSTEMS OF THE
CORRESPONDING [3]- AND [4]-RADIALENES**

Yohji Misaki, Yasushi Matsumura, Toyonari Sugimoto,* and Zen-ichi Yoshida*
Department of Synthetic Chemistry, Kyoto University, Yoshida 606, Kyoto, Japan

Tetrahedron Lett. 30, 5289 (1989)



R = H, CO₂Me, -(CH=CH)₂-

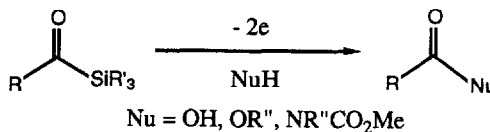
2

3

ELECTROCHEMICAL OXIDATION OF ACYLSILANES

Jun-ichi Yoshida,* Shin-ichiro Matsunaga, and Sachihiko Isoe*
Institute of Organic Chemistry, Faculty of Science, Osaka City University,
Sugimoto 3-3-138, Sumiyoshi, Osaka 558, Japan

Electrochemical oxidation of acylsilanes resulted in facile
cleavage of the carbon-silicon bond and introduction of
oxygen and nitrogen nucleophiles at the carbonyl carbon.



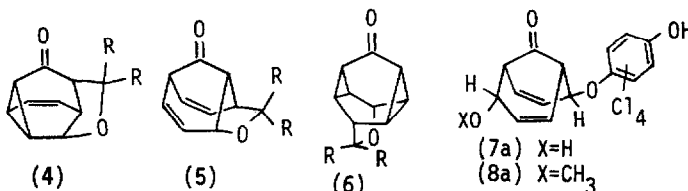
Tetrahedron Lett. 30, 5293 (1989)

**PHOTOCYCLOADDITION REACTION OF TRICYCLO[3.3.1.0^{2,8}]NONA-
3,6-DIEN-9-ONE (BARBARALONE) AND CARBONYL COMPOUNDS**

T. Miyashi, A. Konno, Y. Takahashi, A. Kaneko, T. Suzuki, and T. Mukai
Department of Chemistry, Faculty of Science, Tohoku University, Sendai 980, Japan

N. Koga and H. Iwamura
Institute for Molecular Science
Myodaiji, Okazaki 444, Japan

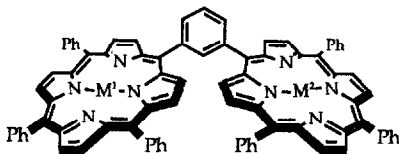
Photocycloaddition of barbaralone
with benzophenones and quinones
is reported.



Tetrahedron Lett. 30, 5297 (1989)

**FLUORESCENCE CHARACTERISTICS OF
UNSYMMETRICAL METAL COMPLEXES
OF "GABLE PORPHYRIN"**

H. Meier, Y. Kobuke* and S. Kugimiya
Department of Synthetic Chemistry, Kyoto University, Yoshida, Kyoto 606, Japan



Energy- and Electron Transfer
between Porphyrin Subunits

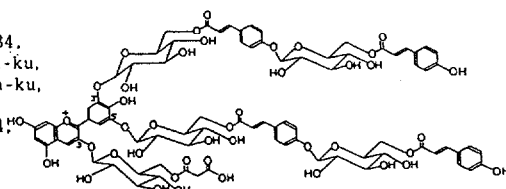
1	a	b	c	d	e
M ¹	H ₂	H ₂	Fe ^{III} Cl	Fe ^{III} Cl	Fe ^{III} Cl
M ²	H ₂	Zn	Zn	H ₂	Fe ^{III} Cl

Tetrahedron Lett. 30, 5301 (1989)

Tetrahedron Lett. 30, 5305 (1989)

STRUCTURE OF TERNATIN DI, AN ACYLATED ANTHOCYANIN FROM *CLITORIA TERNATEA* FLOWERS

N. Terahara*, N. Saito*†, T. Honda‡, K. Toki§ and Y. Osajima¶
 Department of Food Science and Technology, College of Horticulture, Minami-Kyushu University, Takanahe, Miyazaki 884, Japan; † Chemical Laboratory, Meiji-gakuin University, Totsuka-ku, Yokohama 224, Japan; ‡ Hoshi College of Pharmacy, Shinagawa-ku, Tokyo 142, Japan; § Department of Horticulture, College of Horticulture, Minami-Kyushu University, Takanahe, Miyazaki 884, Japan; ¶ Department of Food Science and Technology, Faculty of Agriculture, Kyushu University Fukuoka 812, Japan.

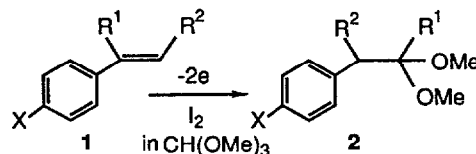


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Tetrahedron Lett. 30, 5309 (1989)

ELECTROOXIDATIVE REARRANGEMENT OF CONJUGATED ARYLOLEFINS TO ARYLACETALDEHYDE DIMETHYL ACETALS

Tatsuya Shono,* Yoshihiro Matsumura, Susumu Katoh, Kaoru Ikeda, Tetsuhiro Fujita, and Tohru Kamada
 Department of Synthetic Chemistry, Kyoto University, Kyoto 606, Japan

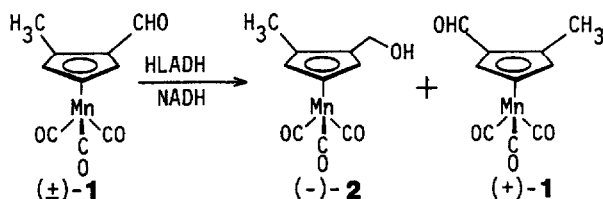


Arylacetaldehyde dimethyl acetals 2 are prepared in high yields from conjugated arylolefins 1 by electrochemical oxidation in trimethyl orthoformate containing iodine.

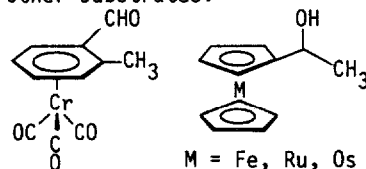
Tetrahedron Lett. 30, 5313 (1989)

KINETIC RESOLUTION OF CHIRAL METALLOCENIC ALDEHYDES AND ALCOHOLS WITH LIVER CHIRAL METALLOPROTEIN ALCOHOL DEHYDROGENASE

Y. Yamazaki and K. Hosono (Fermentation Research Institute, Tsukuba, Japan)



Other substrates:



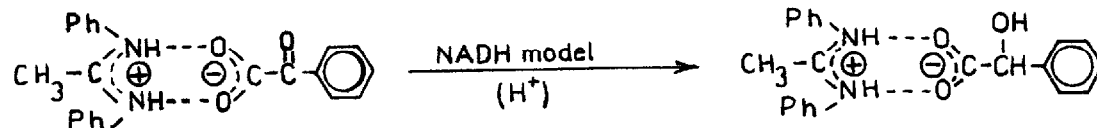
M = Fe, Ru, Os

Tetrahedron Lett. 30, 5315 (1989)

BIOMIMETIC MODELS OF LACTATE DEHYDROGENASE

Jiří Krechl* and Svatava Smrčková
 Department of Organic Chemistry, Prague Institute of Chemical Technology, 166 28 Prague 6, Czechoslovakia

α -Oxoacids were reduced with the lactate dehydrogenase model.

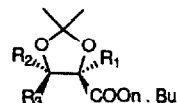


Tetrahedron Lett. 30, 5319 (1989)

ENZYMATIC ENANTIOSELECTIVE HYDROLYSIS OF 2,2-DIMETHYL-1,3-DIOXOLANE-4-CARBOXYLIC ESTERS

M. Pottle, J. Van der Eycken and M. Vandewalle*
 State Univ. Gent, Dept. Org. Chem., Krijgslaan, 281 (S4), B-9000 GENT (Belgium)
 and J.M. Dewanckele and H. Röper
 CERESTAR, Res. & Developm. Centre, Havenstraat, 84, B-1800 VILVOORDE (Belgium)

2,2-Dimethyl-1,3-dioxolane-4-carboxylic acid derived chiral building blocks were prepared from substituted α,β -unsaturated acids with high enantiomeric purities by enzymatic hydrolysis of their *n*.butyl esters.



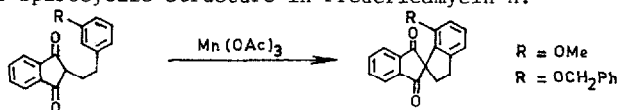
$R_1, R_2, R_3 = H, Me$

Tetrahedron Lett. 30, 5323 (1989)

INTRAMOLECULAR ARYLATION OF SOFT CARBON CENTRE OR ENOLATE USING $Mn(III)$ ACETATE : STUDIES TOWARD SPIROSTRUCTURE OF FREDERICAMYCIN A

Indrapal Singh Aidhen, N.S. Narasimhan*, Garware Research Centre, Department of Chemistry, University of Poona, Pune 411 007, (INDIA).

Abstract : Intramolecular arylation of cyclic β -diketone using $Mn(OAc)_3$ is applied for construction of the spirocyclic structure in Fredericamycin A.



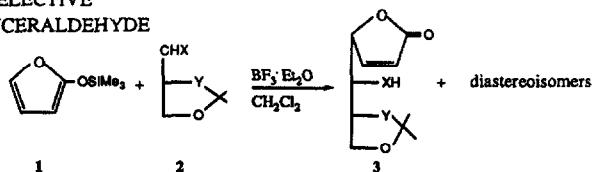
Tetrahedron Lett. 30, 5325 (1989)

SYNTHESIS OF ENANTIOMERICALLY PURE 2,3-DIDEOXY-HEPT-2-ENONO-1,4-LACTONE DERIVATIVES VIA DIASTEREOSELECTIVE ADDITION OF 2-(TRIMETHYLSILOXY)FURAN TO D-GLYCERALDEHYDE AND D-SERINAL-BASED THREE-CARBON SYNTHONS

Giovanni Casiraghi, Lino Colombo, Gloria Rassu, and Pietro Spanu

Dipartimento di Chimica dell'Università, and Istituto A. T. C. A. P. A. del CNR, I-07100 Sassari, Italy

Summary: The BF_3 -promoted addition of 1 to 2 gives seven-carbon lactones 3 preferentially.



a: $X = Y = O$

b: $X = O; Y = N-t\text{-BOC}$

c: $X = N-p\text{-anisyl}; Y = O$

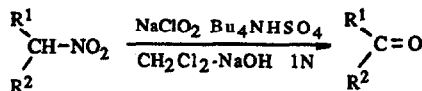
d: $X = N-p\text{-anisyl}; Y = N-t\text{-BOC}$

Tetrahedron Lett. 30, 5329 (1989)

OXIDATIVE CONVERSION OF ALIPHATIC NITROCOMPOUNDS TO CARBONYLS USING SODIUM CHLORITE

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 Via S. Agostino, 1 I-62032 Camerino Italy



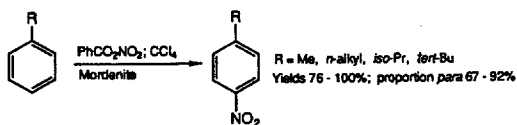
Summary : Aliphatic Nitrocompounds are converted to corresponding Carbonyls by means of Sodium Chlorite under phase transfer catalysis conditions (CH_2Cl_2 - $NaOH$ - $1N$ - Bu_4NHSO_4). Primary nitrocompounds give aldehydes while secondary nitroalkanes give ketones in good yields.

PARA-SELECTIVE MONONITRATION OF ALKYLBENZENES UNDER MILD CONDITIONS BY USE OF BENZOYL NITRATE IN THE PRESENCE OF A ZEOLITE CATALYST

Keith Smith* and Karl Fry
Department of Chemistry, University College of Swansea, Swansea SA2 8PP, UK.

Michael Butters and Barry Nay
BP Research Centre, Chertsey Road, Sunbury-on-Thames, Middlesex, TW16 7LN, UK.

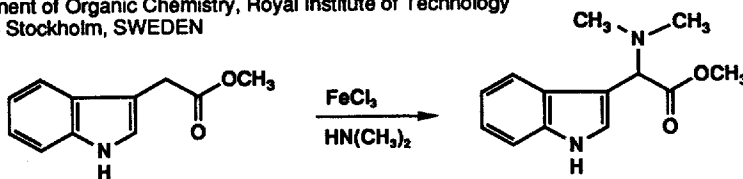
The use of benzoyl nitrate in combination with an acidic zeolite catalyst provides a convenient method for high yielding and para-selective nitration of alkylbenzenes.



Tetrahedron Lett. 30, 5333 (1989)

OXIDATION OF METHYL INDOLE-3-ACETATE INDUCED BY FeCl₃ AND SECONDARY AMINES.

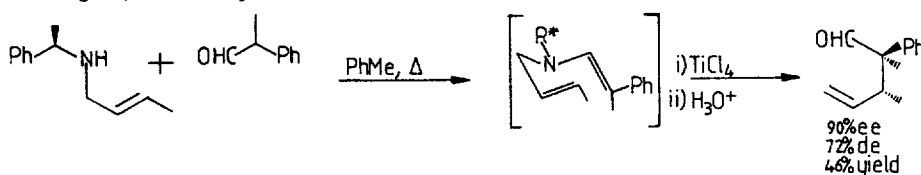
J. Bergman, S. Bergman and J.-O. Lindström
Department of Organic Chemistry, Royal Institute of Technology
S10044 Stockholm, SWEDEN



Tetrahedron Lett. 30, 5337 (1989)

ASYMMETRIC 3-AZA-COPE REARRANGEMENTS USING TiCl₄ CATALYSIS

Patrick D Bailey and Michael J Harrison
Department of Chemistry, University of York
Heslington, York YO1 5DD



Tetrahedron Lett. 30, 5341 (1989)

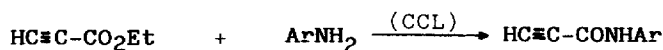
ENZYMATIC SYNTHESIS OF PROPARGYLAMIDES

Francisca Rebolledo, Rosario Brieva and Vicente Gotor*

Departamento de Química Organometálica. Facultad de Química.

Universidad de Oviedo. 33071 Oviedo. Spain.

Candida cylindracea lipase (CCL) catalyzes the formation of propargylamides



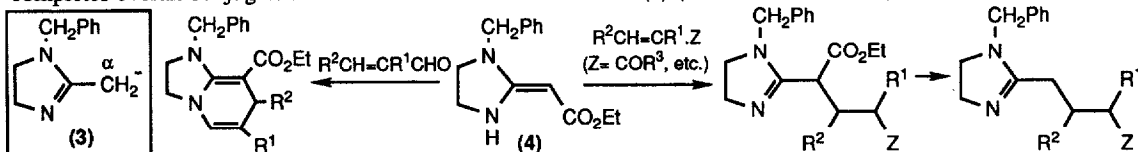
Tetrahedron Lett. 30, 5345 (1989)

Conjugate Addition of Imidazolines: A Protocol for 1,4-Addition to Enones and other Acceptors

Raymond C.F. Jones * and Simon C. Hirst

(Chemistry Department, Nottingham University, Nottingham NG7 2RD, U.K.)

Enaminoester (4) reacts with Michael acceptors to give 1,4-adducts; removal of the ethoxycarbonyl group completes overall conjugate addition of the imidazoline α -anion (3) (which itself adds 1,2).



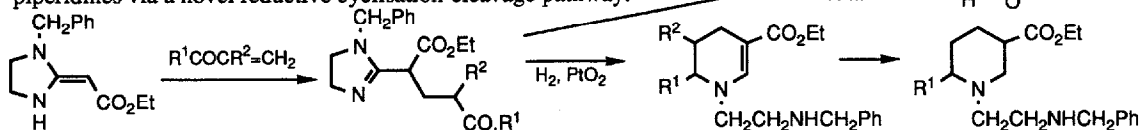
Tetrahedron Lett. 30, 5361 (1989)

Nucleophilic Attack on 2-(4-Oxoalkyl)-2-imidazolines: A Novel Route to Tetrahydropyridines and Piperidines

Raymond C.F. Jones * and Simon C. Hirst

(Chemistry Department, Nottingham University, Nottingham NG7 2RD, U.K.)

2-(1-Ethoxycarbonyl-4-oxoalkyl)-2-imidazolines add organometallic C-nucleophiles to produce lactones, whereas hydrogenation affords tetrahydropyridines and piperidines via a novel reductive cyclisation-cleavage pathway.



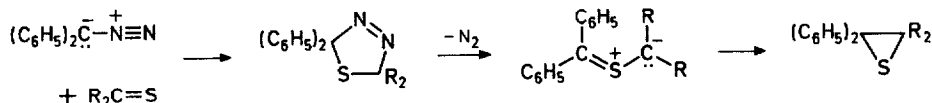
Tetrahedron Lett. 30, 5365 (1989)

THIONES AS SUPERDIPOLAROPHILES

Rolf Huisgen * and Elke Langhals

Institut für Organische Chemie der Universität München, FRG

According to kinetic measurements, the 1,3-cycloadditions of diphenyldiazomethane to thioketones are much faster than those to α,β -unsaturated carbonyl compounds and nitriles previously regarded as record dipolarophiles.



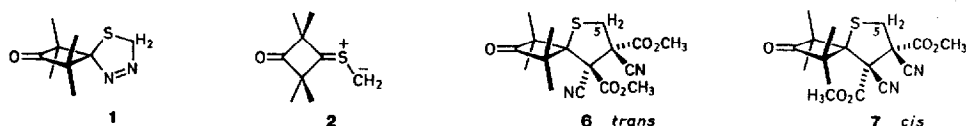
Tetrahedron Lett. 30, 5369 (1989)

1,3-CYCLOADDITIONS OF ALIPHATIC THIONE S-METHYLIDES TO DIMETHYL 2,3-DICYANOFUMARATE AND 2,3-DICYANOMALEATE; A TEST CASE FOR STERIC COURSE AND MECHANISM

Grzegorz Mloston, Elke Langhals, and Rolf Huisgen *

Institut für Organische Chemie der Universität München, FRG

In the nonstereospecific formation of 6 and 7 from 2 ($1 + 2 + N_2$) and the title compounds, losses of structural integrity *before* and *during* the cycloaddition were separated.



Tetrahedron Lett. 30, 5373 (1989)