

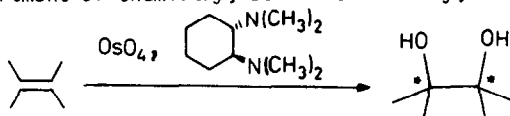
GRAPHICAL ABSTRACTS

Tetrahedron Lett. 27, 3951 (1986)

ASYMMETRIC OXIDATION OF OLEFINS TO VICINAL DIOLS WITH OSMIUM TETROXIDE.

Maritherese Tokles and John K. Snyder*

Department of Chemistry, Boston University, 590 Commonwealth Avenue, Boston, MA 02215



High levels of asymmetry can be achieved in the osmium tetroxide cis-hydroxylation of olefins by employing (-)-(R,R)-N,N',N'',N'''-tetramethylcyclohexane-1,2-trans-diamine as a chiral ligand for the osmium.

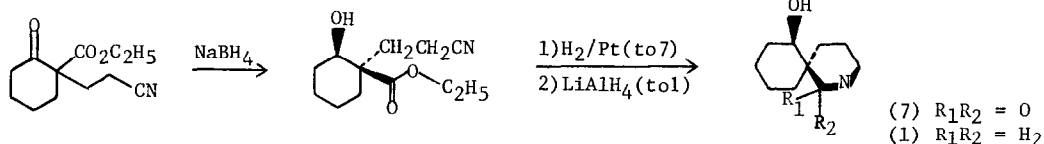
Tetrahedron Lett. 27, 3955 (1986)

SYNTHESIS OF THE SPIROCYCLIC ALKALOID NITRAMINE

Lars H. Hellberg*, Craig Beeson* and Ratnasamy Somanathan**

*Department of Chemistry, San Diego State University, San Diego, CA 92182-0328

**Centro de Graduados, Instituto Tecnológico de Tijuana, Tijuana, BC, Mexico



A NEW SYNTHESIS OF PRIMARY AMINES FROM DIARYLIDENESULFAMIDES

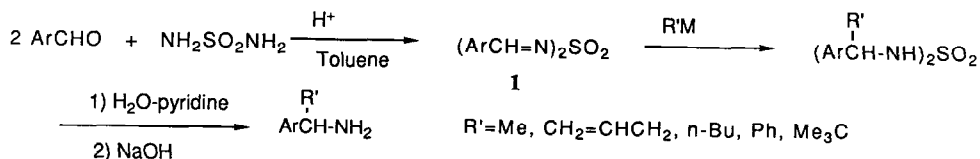
Franklin A. Davis*, Mark A. Giangiardano and William

E. Starner

Department of Chemistry, Drexel University, Philadelphia, PA 19104 USA

Tetrahedron Lett. 27, 3957 (1986)

Addition of organometallic reagents (R'M) to the C-N double bond of diarylidene sulfamides, **1**, affords, after hydrolysis primary amines illustrating the application of sulfamides as amino protecting groups.



Tetrahedron Lett. 27, 3961 (1986)

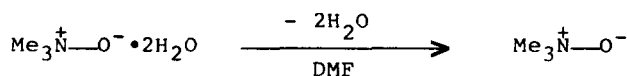
CRYSTALLINE ANHYDROUS TRIMETHYLAMINE N-OXIDE

John A. Soderquist* and Charles L. Anderson

Department of Chemistry, University of Puerto Rico

Rio Piedras, Puerto Rico 00931 USA

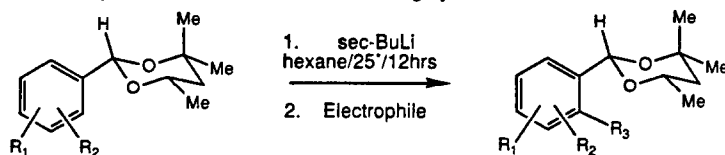
A rapid, efficient procedure for the preparation of pure, crystalline anhydrous trimethylamine N-oxide (mp 225-7°C (dec)) in excellent (94%) yield from the commercially available dihydrate form of the reagent is described.



METALLATION OF RIGID 2-ARYL-1,3-DIOXANES

Arthur L. Campbell* and Ish Kumar Khanna
G.D. Searle & Co., Skokie, Illinois 60077

Regioselective metallation and alkylation/acylation of rigid 2-aryl-1,3-dioxanes was achieved in high yield.



14 Examples
Yields 65-95%

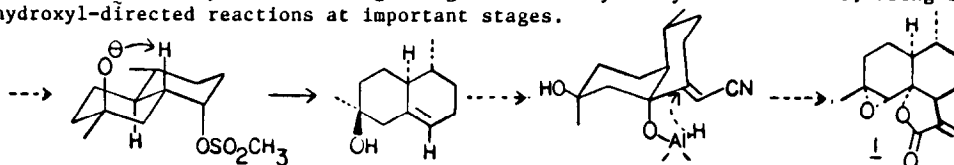
Tetrahedron Lett. 27, 3963 (1986)

TOTAL SYNTHESIS OF (±)-ARTEANNUIN B

Peter T. Lansbury* and Carlos A. Mojica

Department of Chemistry, SUNY at Buffalo, Buffalo, New York 14214 USA

Arteannuin B (1) was synthesized, beginning with 4-methyl-2-cyclohexen-1-one, using intramolecular hydroxyl-directed reactions at important stages.

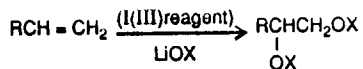


Tetrahedron Lett. 27, 3967 (1986)

NOVEL REAGENTS CONTAINING HYPERVALENT IODINE AND THEIR USE FOR ELECTROPHILIC ADDITIONS TO OLEFINS

Nikolai S. Zefirov, Viktor V. Zhdankin, Yu.V. Dan'kov, Viktor D. Sorokin, Vladimir N. Semerikov and Anatoly S. Koz'min, Department of Chemistry, Moscow State University, Moscow 119899 USSR, and Ronald Caple and Bruce A. Berglund, Department of Chemistry, University of Minnesota-Duluth, Duluth, Minnesota 55812 USA

The electrophilic addition of a series of new I(III) reagents to olefins yields *vic*-disubstituted products.



a X = Ts b X = CF₃CO
c X = ClO₃ d X = CF₃SO₂
e X = CH₃SO₂

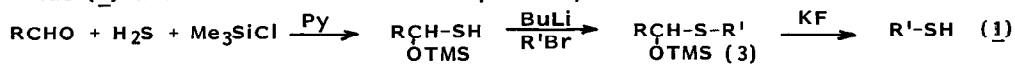
Tetrahedron Lett. 27, 3971 (1986)

PREPARATION OF THIOLS USING α-TRIMETHYLSILOXY DERIVATIVES

David N. Harpp and Michio Kobayashi

Department of Chemistry, McGill University, Montreal, Quebec, Canada, H3A 2K6

Aliphatic thiols (1) can be prepared by desilylation of the appropriate α-trimethylsiloxy sulfide (3) under the mildest conditions presently available.



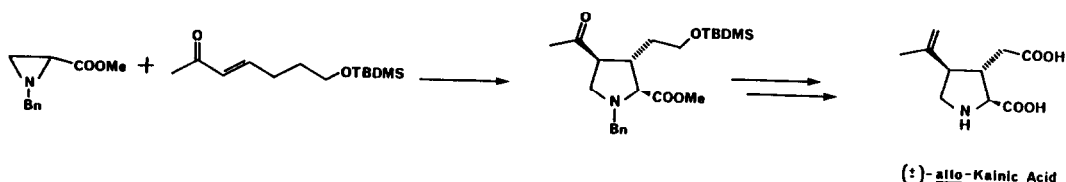
Tetrahedron Lett. 27, 3975 (1986)

A TOTAL SYNTHESIS OF (+)-allo-KAINIC ACID

Philip DeShong* and David A. Kell

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

Tetrahedron Lett. 27, 3979 (1986)



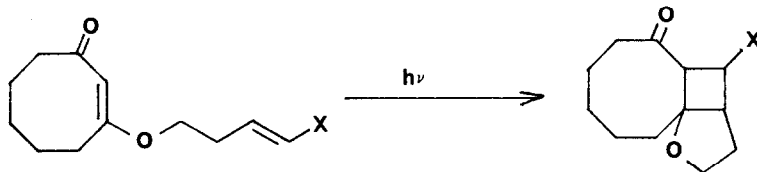
CYCLOOCTENONE PHOTOCYCLOADDITIONS

Michael C. Pirrung* and Nicholas J. G. Webster

Department of Chemistry, Stanford University, Stanford, CA 94305

Tetrahedron Lett. 27, 3983 (1986)

Study of photochemistry of 3-butenyloxycyclooctenones.



PREPARATION AND PHOTOISOMERIZATION OF 2-FORMYLCINNAMALDEHYDE IN SOLUTION

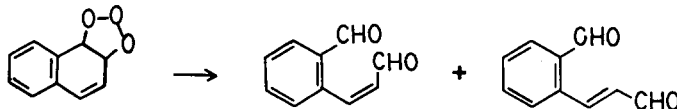
Richard A. Larson*, Wendy J. Garrison, and Karen Marley

Institute for Environmental Studies, University of Illinois

Urbana IL 61801 USA

Tetrahedron Lett. 27, 3987 (1986)

Naphthalene, in dilute aqueous solution, reacts with ozone to form one or both isomers of 2-formylcinnamaldehyde.

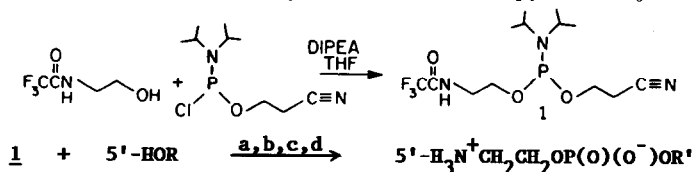


NOVEL METHOD FOR THE INTRODUCTION OF AN ALIPHATIC PRIMARY AMINO GROUP AT THE 5' TERMINUS OF SYNTHETIC OLIGONUCLEOTIDES

James M. Coull, H. Lee Weith and Rainer Bischoff

Department of Biochemistry, Purdue University, W. Lafayette, IN 47907

Tetrahedron Lett. 27, 3991 (1986)

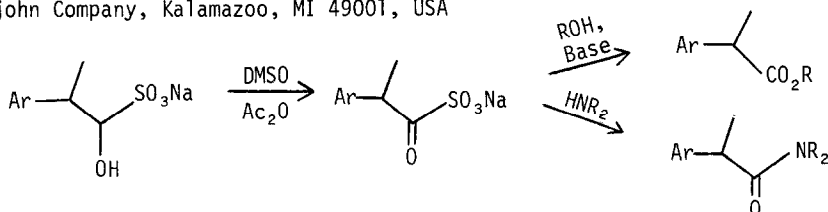


R = protected oligonucleotide
 R' = deprotected oligonucleotide
 a) 1-H-tetrazole b) aqu. I₂
 c) DBU d) conc. NH₄OH, 60°C

THE OXIDATION OF ALDEHYDE BISULFITE ADDUCTS TO CARBOXYLIC ACIDS AND THEIR DERIVATIVES WITH ACETIC ANHYDRIDE AND DIMETHYLSULFOXIDE

Peter G. M. Wuts, Carol L. Bergh
The Upjohn Company, Kalamazoo, MI 49001, USA

Tetrahedron Lett. 27, 3995 (1986)

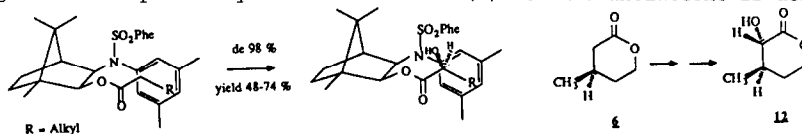


STRUCTURE AND DIASTEREOSELECTIVITY OF THE α -HYDROXYLATION OF CHIRAL ESTER ENOLATES BY MOLYBDENUM PEROXO COMPLEX

Remo Gamboni & Christoph Tamm*

Institut für Organische Chemie der Universität Basel, St. Johannis-Ring 19, CH-4056 Basel

The diastereoselective α -hydroxylation of chiral ester enolates by MoO₅·Py·HMPT was investigated. An improved synthesis of natural(-)-verrucarinolactone is described.



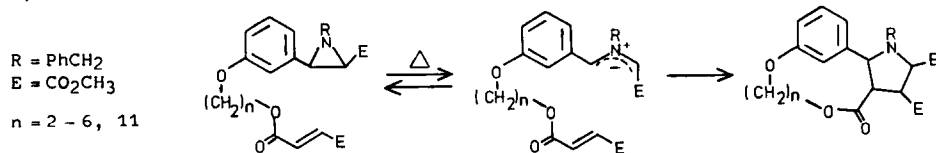
Tetrahedron Lett. 27, 3999 (1986)

INTRAMOLECULAR CYCLOADDITIONS WITH AZOMETHINE YLIDES FOR THE SYNTHESIS OF METACYCLOPHANES

W. Eberbach^a, H. Fritz^b, I. Heinze^a, P. v. Laer^a and P. Link^a

Institut für Organische Chemie und Biochemie der Universität, D-7800 Freiburg, West Germany^a
Ciba-Geigy AG, CH-4002 Basel, Switzerland^b

Tetrahedron Lett. 27, 4003 (1986)

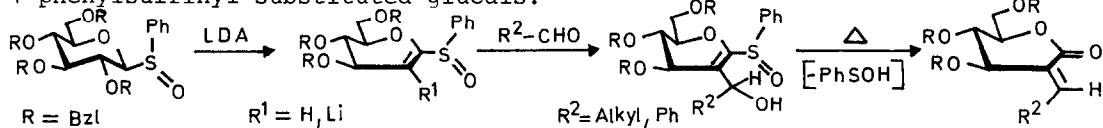


DIRECT LITHIATION OF GLYCAL. SYNTHESIS OF C-2 BRANCHED SUGARS

Richard R. Schmidt* and Jürgen Kast

Fakultät Chemie, Universität Konstanz, D-7750 Konstanz, Germany

A convenient 2-alkylidene gluconolactone formation via direct lithiation of 1-phenylsulfinyl substituted glycols.



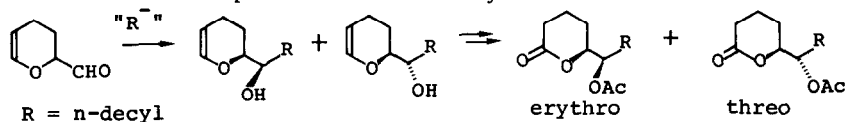
Tetrahedron Lett. 27, 4007 (1986)

A SHORT, STEREODIVERGENT SYNTHESIS OF THE RACEMIC ERYTHRO AND THREO DIASTEREOMERS OF 6-ACETOXY-5-HEXADECANOLIDE, A MOSQUITO OVIPOSITION ATTRACTANT PHEROMONE

C.W. Jefford, D. Jaggi and J. Boukouvalas

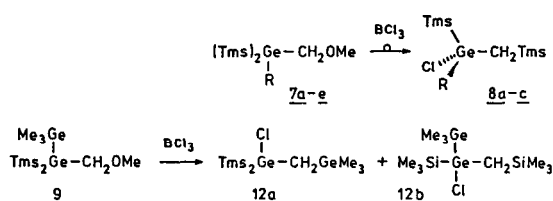
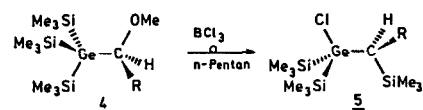
Department of Chemistry, University of Geneva, 1211 Geneva 4, Switzerland

Stereocontrol of the first step enables selective synthesis of either diastereomeric lactone



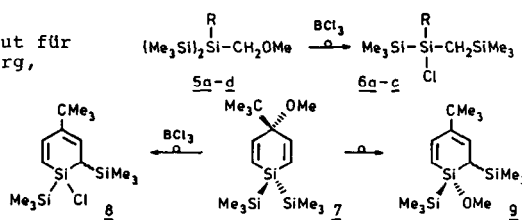
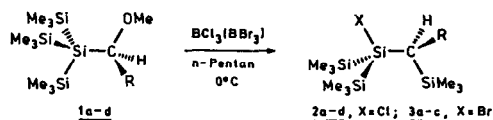
TRIMETHYLSILYL-1,2-VERSCHIEBUNG VON GERMANIUM ZU KOHLENSTOFF BEI DER SPALTUNG VON [(TRIMETHYLSILYL)-GERMYL]METHYL-ETHERN

G. Märkl und R. Wagner, Institut für Organische Chemie der Universität Regensburg, Universitätsstraße 31, D-8400 Regensburg



ZUR WAGNER-MEERWEIN-ANALOGEN 1,2-SiMe₃-VERSCHIEBUNG VON SILICIUM ZU KOHLENSTOFF BEI DER SPALTUNG VON [(TRIMETHYLSILYL)-SILYL]METHYL-ETHERN

G. Märkl, M. Horn und W. Schlosser, Institut für Organische Chemie der Universität Regensburg, Universitätsstraße 31, D-8400 Regensburg

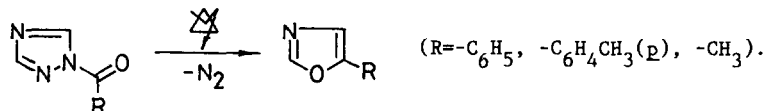


CONVERSION OF TRIAZOLIDES INTO OXAZOLES BY FLASH-VACUUM PYROLYSIS.

André MAQUESTIAU*, Eric PUK and Robert FLAMMANG

Organic Chemistry Laboratory, State University of Mons, 7000 Mons, Belgium.

Flash-vacuum pyrolysis (800°C/10⁻² Torr) of azolides of 1,2,4-triazole affords 5-monosubstituted oxazoles.

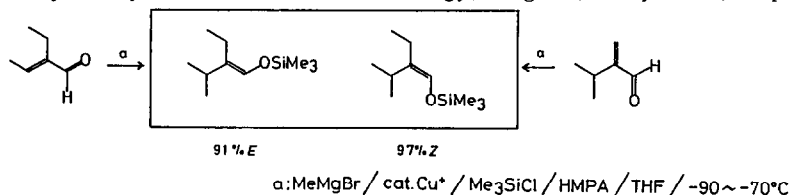


Me₃SiCl/HMPA ACCELERATED CONJUGATE ADDITION OF CATALYTIC COPPER REAGENT.

Tetrahedron Lett. 27, 4025 (1986)

STEREOSELECTIVE SYNTHESIS OF ENOL SILYL ETHER OF ALDEHYDE

Yoshiaki Horiguchi, Satoshi Matsuzawa, Eiichi Nakamura,* and Isao Kuwajima*
Department of Chemistry, Tokyo Institute of Technology, Meguro, Tokyo 152, Japan

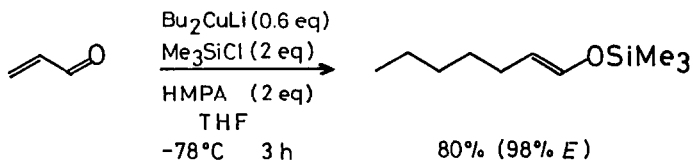


Me₃SiCl ACCELERATED CONJUGATE ADDITION OF STOICHIOMETRIC ORGANOCOPPER REAGENTS

Tetrahedron Lett. 27, 4029 (1986)

Eiichi Nakamura,* Satoshi Matsuzawa, Yoshiaki Horiguchi, and Isao Kuwajima*
Department of Chemistry, Tokyo Institute of Technology, Meguro, Tokyo 152, Japan

Conjugate addition of R⁻ can be achieved with either 1/2 equiv of R₂CuLi or 1 equiv of RCu.



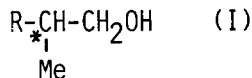
ASSIGNMENT OF ABSOLUTE CONFIGURATION OF 2-SUBSTITUTED-1-PROPANOLS BY ¹H NMR SPECTROSCOPY

Tetrahedron Lett. 27, 4033 (1986)

F. Yasuhara, S. Yamaguchi,* R. Kasai,[§] and O. Tanaka[§]
Department of Chemistry, College of General Education, Tohoku University, Kawauchi, Sendai 980 Japan

[§]Institute of Pharmaceutical Sciences, Hiroshima University School of Medicine, Kasumiku Hiroshima, 734 Japan

Absolute configuration of C-2 position of primary alcohols(I) were determined from the coupling patterns of C-1 methylene protons of their MTPA esters.



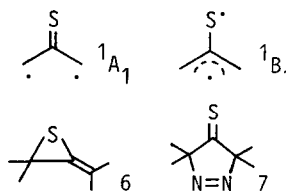
R: Alkyl or Cycloalkyl

MCSCF STUDIES OF THIOXYALLYL INTERMEDIATE

Tetrahedron Lett. 27, 4035 (1986)

Toshiya Furuhashi and Wataru Ando*
Department of Chemistry, University of Tsukuba, Sakura-mura, Ibaraki 305, Japan

The MCSCF studies of thioxyallyl intermediate showed that ¹B₁ state is more stable than ¹A₁ state. The results of F.V.P. of 6 and 7 agreed with that of the MCSCF studies.

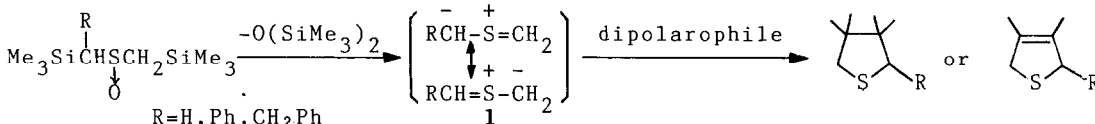


GENERATION OF THIOCARBONYL YLIDES WITH RELEASE OF DISILOXANE FROM BIS(TRIMETHYLSILYLMETHYL) SULFOXIDES

Tetrahedron Lett. 27, 4039 (1986)

Masahiro Aono, Chiaki Hyodo, Yoshiyasu Terao, and Kazuo Achiwa*
Shizuoka College of Pharmacy, 2-2-1 Oshika, Shizuoka 422, Japan

1,3-dipolar cycloaddition via thiocarbonyl ylides(1)



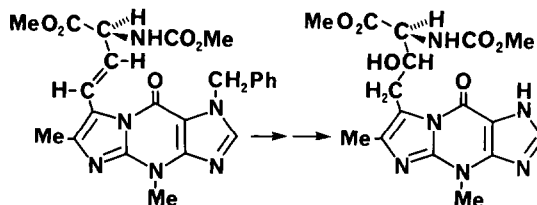
Tetrahedron Lett. 27, 4043 (1986)

SYNTHESIS OF OPTICALLY ACTIVE FORMS OF HYDROXY- γ BASE, THE MINOR COMPONENT OF RAT LIVER PHENYLALANINE TRANSFER RIBONUCLEIC ACID

Taisuke Itaya,* Nobuhide Watanabe, and Akemi Mizutani

Faculty of Pharmaceutical Sciences, Kanazawa University, Takara-machi, Kanazawa 920, Japan

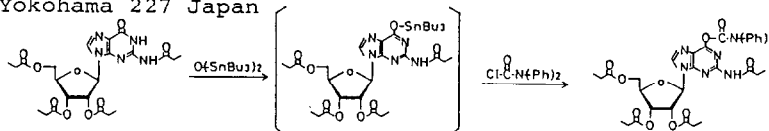
The first synthesis of [R-(R*,S*)]- and [S-(R*,R*)]- β -hydroxywybutine



Tetrahedron Lett. 27, 4047 (1986)

AN EFFECTIVE METHOD OF THE PREPARATION OF O⁶-SUBSTITUTED GUANOSINE AND N³-SUBSTITUTED URIDINE DERIVATIVES VIA THE CORRESPONDING STANNYLATED INTERMEDIATES

Hiroshi Tanimura, Mitsuo Sekine, and Tsujiaki Hata
Department of Life Chemistry, Tokyo Institute of Technology, Nagatsuta, Midoriku, Yokohama 227 Japan



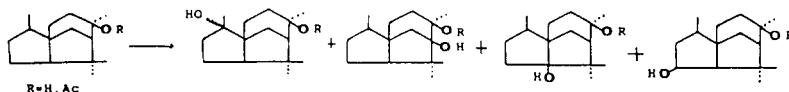
Tetrahedron Lett. 27, 4059 (1986)

OXIDATION OF UNACTIVATED CARBON ATOMS OF CEDROL AND CEDROL ACETATE WITH *m*-CHLOROPERBENZOIC ACID.

Min-Jen Shiao^a, Jing Luen Lin^a, Yueh-Hsiung Kuo^{a,b}, and Kae-Shyang Shih^b.

^aInstitute of Chemistry, Academia Sinica, Taipei, Taiwan, ROC.

^bDepartment of Chemistry, National Taiwan University, Taipei, Taiwan, ROC.

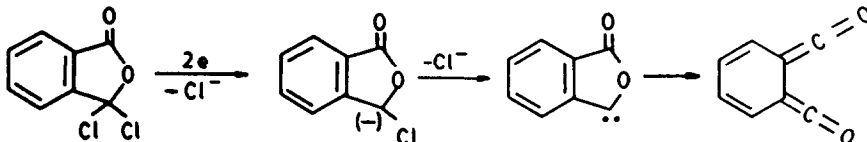


ELECTROCHEMICAL REDUCTION OF PHTHALYL CHLORIDE. A NEW ROUTE FOR THE SYNTHESIS OF 3-SUBSTITUTED PHTHALIDES.

Tetrahedron Lett. 27, 4063 (1986)

Antonio Guirado^a, Fructuoso Barba^b, Michael B. Hursthouse^b, Antonio Martínez^a, and Aurelia Arcas^a. a) Facultad de Ciencias, Universidad de Murcia, 30001 Murcia, Spain. b) Department of Chemistry, Queen Mary College, Mile end Road, London, E1 4NS, U.K.

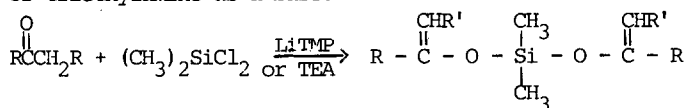
Synthesis through electrogenerated intermediates from phthalyl chloride.



PREPARATION OF DIMETHYLSILYL BIS-ENOL ETHERS
Zacharia A. Fataftah*, Mustafa R. Ibrahim and
Mahmoud S. Abu-Agil
Chemistry Department, Yarmouk University, Irbid, Jordan

Tetrahedron Lett. 27, 4067 (1986)

Dimethylsilyl bis-enol ethers from acetone, 3-pentanone, cyclopentanone, cyclohexanone, acetophenone and dibenzyl ketone are synthesised by using lithium tetramethylpiperidide or triethylamine as a base.

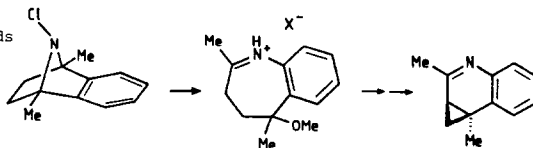


HETEROLYSIS OF N-CHLORO-1,2,3,4-TETRAHYDRO-1,4-IMINONAPHTHALENES AND RELATED SYSTEMS; EFFECTS OF STRUCTURE AND OF SOLVENT ON REACTION PATHWAYS

Tetrahedron Lett. 27, 4071 (1986)

John W. Davies, John R. Malpass* and Richard E. Moss, Department of Chemistry, University of Leicester, Leicester LE1 7RH, U.K.

A novel Ag(I)/MeOH-induced rearrangement of the title compounds yielding tetrahydrobenzazepines is observed when the bridge-head positions bear methyl groups; secondary products include methanoquinoline derivatives.

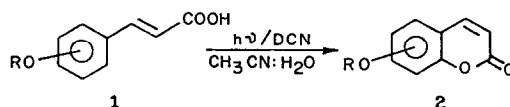


SINGLE ELECTRON TRANSFER INITIATED PHOTOCYCLIZATION OF SUBSTITUTED CINNAMIC ACIDS TO CORRESPONDING COUMARINS

Tetrahedron Lett. 27, 4075 (1986)

G. Pandey*, A. Krishna and Jampani Madhusudana Rao
Organic Division, RRL Hyderabad 500 007, India

Efficient photocyclization of substituted cinnamic acids to corresponding coumarins, initiated by single electron transfer processes, have been reported.

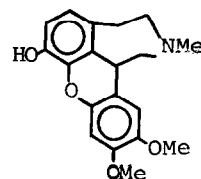


CLAVIZEPINE, THE FIRST DIBENZOPYRANAZEPINE ALKALOID

Tetrahedron Lett. 27, 4077 (1986)

J.M.Boente, L.Castedo, D.Domínguez and M.C.Ferro
 Departamento de Química Orgánica, Facultad de Química y
 Sección de Alcaloides del CSIC, Santiago de Compostela, Spain

Clavizepine, the first naturally occurring dibenzopyran-
 azepine alkaloid, has been isolated from Corydalis clavi-
culata (L.) DC. and its structure deduced from its
 spectroscopic data.



SUBSTITUENT DIRECTED OXIDATIVE CYCLIZATION
 WITH CETYLTRIMETHYLAMMONIUM PERMANGANATE: A
 GENERAL APPROACH TO THE SYNTHESIS OF γ - AND δ -LACTONES

Tetrahedron Lett. 27, 4079 (1986)

Rajendra Rathore, Padma S. Vankar and S. Chandrasekaran*
 Department of Chemistry, Indian Institute of Technology, Kanpur 20816, India

A general synthesis of γ - and δ -lactones
 by oxidative cyclization

1. R = R' = H
2. R = H, R' = alkyl
3. R = R' = alkyl

