

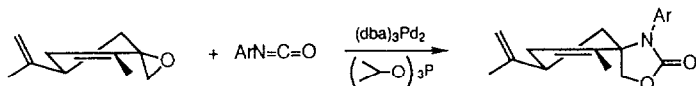
GRAPHICAL ABSTRACTS

ON THE MECHANISM OF Pd(0) CATALYZED FORMATION OF OXAZOLIDIN-2-ONES FROM VINYL EPOXIDES

Barry M. Trost* and Rudolf Hurnaas

Department of Chemistry, Stanford University, Stanford, CA 94305

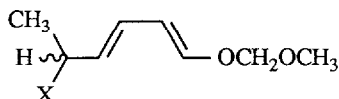
Differentiation between an anti and syn addition of the nitrogen nucleophile in the titled reaction provides a probe to assess the source of the contrathermodynamic stereochemistry of the process in acyclic substrates.



Tetrahedron Lett. 30, 3893 (1989)

DIELS-ALDER REACTIONS OF ACYCLIC CHIRAL ALKOXY DIENES: OXYGEN VERSUS SULFUR AS AN ALLYLIC DIRECTING GROUP

Patrick G. McDougal*, Joseph M. Jump, Christian Rojas, and Joseph G. Rico
School of Chemistry, Georgia Institute of Technology, Atlanta, GA 30332



- 1 X = OSi(Me)₂t-Bu (*S*-enantiomer)
2 X = SPh (*R*-enantiomer)

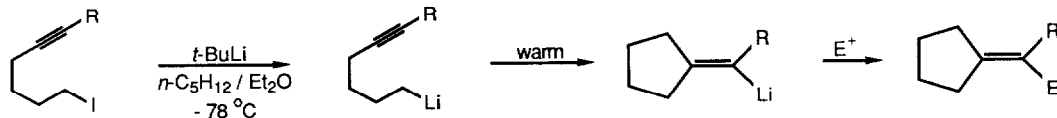
Facial selectivity in the Diels-Alder reaction of homochiral dienes **1** and **2** was probed using three dienophiles: *N*-phenylmaleimide, benzoquinone and 4-phenyl-1,2,4-triazoline-3,5-dione.

Tetrahedron Lett. 30, 3897 (1989)

PREPARATION AND FACILE CYCLIZATION OF 5-ALKYN-1-YLLITHIUMS

William F. Bailey*, Timo V. Ovaska, and Thomas K. Leipert

Department of Chemistry, University of Connecticut, Storrs, CT 06269-3060



Tetrahedron Lett. 30, 3901 (1989)

CHEMO- AND STEREOSELECTIVE REDUCTION OF (PIVALOYLOXY)METHYL 6,6-DIHALOPENICILLANATES BY TRINEOPHYLTIN HYDRIDE: SELECTIVE SYNTHESIS OF 6β-HALOPENICILLANATES.

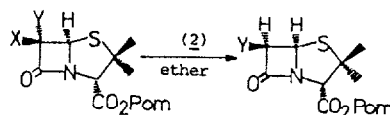
E.G. Mata and O.A. Mascaretti*

Casilla de Correo 991, 2000 Rosario, Argentina.

A.E. Zuñiga, A.B. Chopa and J.C. Podestá*

Av. Alem 1253, 8000 Bahía Blanca, Argentina.

Trineophyltin hydride, [PhC(CH₃)₂CH₂]₂SnH (**2**) is a new, effective and convenient reagent to reduce chemo- and stereoselectively 6,6-homo- and hetero- dihalopenicillanates to the corresponding 6β-halopenicillanates in high yield.

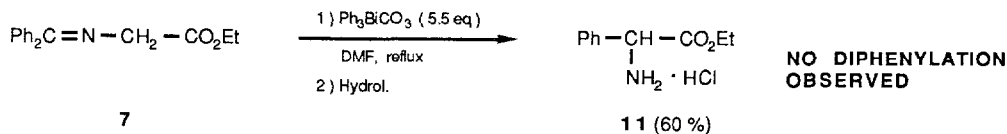


X= I, Br, Cl
Y= I, Br, Cl, F

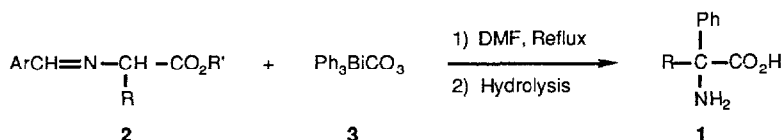
Tetrahedron Lett. 30, 3905 (1989)

Tetrahedron Lett., 30, 3909 (1989)**SELECTIVE MONOPHENYLATION OF AN ACTIVE METHYLENE COMPOUND**

Martin J. O'Donnell,* William D. Bennett, William N. Jacobsen, You-an Ma and John C. Huffman
 Department of Chemistry, Indiana-Purdue University at Indianapolis, Indianapolis, IN 46223 USA
 Molecular Structure Center, Department of Chemistry, Indiana University, Blomington, IN 47405 USA

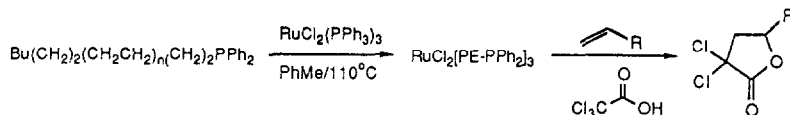
Tetrahedron Lett., 30, 3913 (1989)**PHENYLATION OF AMINO ACID DERIVATIVES: A NEW ROUTE TO α -PHENYL- α -SUBSTITUTED AMINO ACIDS**

Martin J. O'Donnell,* William D. Bennett, William N. Jacobsen and You-an Ma
 Department of Chemistry, Indiana-Purdue University at Indianapolis, Indianapolis, IN 46223 USA

Tetrahedron Lett., 30, 3915 (1989)**A POLYETHYLENE-BOUND RUTHENIUM(II) CATALYST FOR INTER- AND INTRAMOLECULAR KHARASCH REACTIONS**

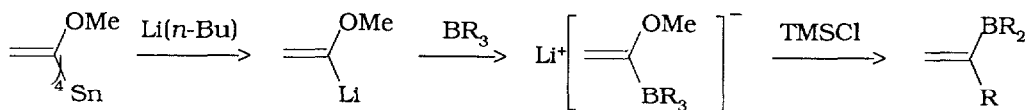
James C. Phelps and David E. Bergbreiter*, Dept. of Chemistry, Texas A&M University, College Station, Texas 77843; Gary M. Lee, Rosanna Villani and Steven M. Weinreb*, Dept. of Chemistry, The Pennsylvania State University, University Park, PA 16802

The preparation of a soluble, recoverable polyethylene-bound ruthenium(II) catalyst which is effective for both inter- and intramolecular additions of halocarbons to olefins (Kharasch reaction) is outlined.

Tetrahedron Lett., 30, 3919 (1989)**MARKOVNIKOV VINYLBORANES VIA α -METHOXYVINYL LITHIUM**

John A. Soderquist* and Isaac Rivera

Department of Chemistry, University of Puerto Rico, Rio Piedras, Puerto Rico 00931



Pure α -methoxyvinyl lithium, prepared from Sn/Li exchange, reacts cleanly with representative trialkylboranes, to form the corresponding "ate" complexes which rearrange in the presence of chlorotrimethylsilane to provide an efficient route to isolable Markovnikov vinylboranes in 70-90% yields.

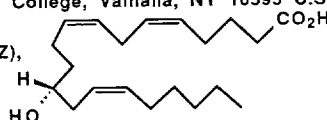
Tetrahedron Lett. 30, 3923 (1989)

SYNTHESIS AND STRUCTURE CONFIRMATION OF COMPOUND D, A PROINFLAMMATORY ARACHIDONATE METABOLITE

Dong-Soo Shin, Pendri Yadagiri, J.R. Falck*, Jaime L. Masferrer, Michael L. Schwartzman

Depts. of Molecular Genetics and Pharmacology, University of Texas Southwestern Medical Center, Dallas, TX 75235; Dept. of Pharmacology, New York Medical College, Valhalla, NY 10595 U.S.A.

Compound D was confirmed as 12(R)-hydroxyeicosa-5(Z),8(Z),14(Z)-trienoic acid by comparisons with standards prepared by total synthesis from L-glutamic acid.

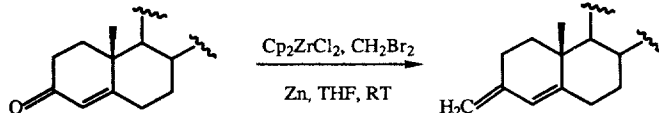
Tetrahedron Lett. 30, 3927 (1989)

A ZIRCONIUM-PROMOTED METHYLENATION OF ALDEHYDES, KETONES, AND ENONES

James M. Tour,* Peter V. Bedworth, and Ruilian Wu

Department of Chemistry, University of South Carolina, Columbia, SC 29208

Treatment of zirconocene dichloride with dibromomethane and zinc affords an organometallic intermediate which rapidly methylenates aldehydes, ketones, and enones at room temperature.

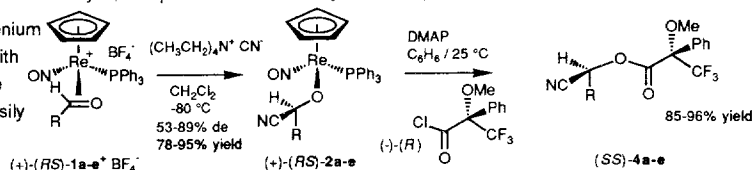
Tetrahedron Lett. 30, 3931 (1989)

STEREOSELECTIVE ADDITION OF CYANIDE ION TO CHIRAL RHENIUM π -ALDEHYDE COMPLEXES OF THE FORMULAE

$[(\eta^5-C_5H_5)Re(NO)(PPh_3)(\eta^2-O=CHR)]^+ BF_4^-$; A NEW SYNTHESIS OF OPTICALLY ACTIVE CYANOHYDRIN DERIVATIVES

Charles M. Garner, Jesus M. Fernández, and J. A. Gladysz,* Department of Chemistry, University of Utah, Salt Lake City, Utah 84112

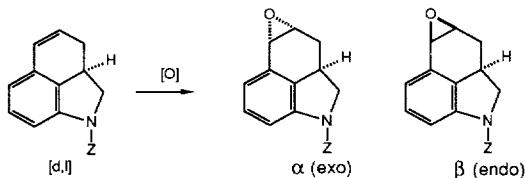
The addition of cyanide to chiral, cationic rhenium aldehyde complexes **1a-e** BF_4^- proceeds with good to excellent diastereoselectivity and the resulting cyanohydrin alkoxides **2a-e** are easily acylated without loss of stereochemistry.

Tetrahedron Lett. 30, 3935 (1989)

DIASTEREOSELECTIVITY IN ERGOLINE SYNTHESIS: A FACE SELECTIVE EPOXIDATION

M. Robert Leanna, Michael J. Martinelli*, David L. Varie, Thomas J. Kress
Process Research & Development; Lilly Research Laboratories; Eli Lilly & Co.; Indianapolis, Indiana 46285

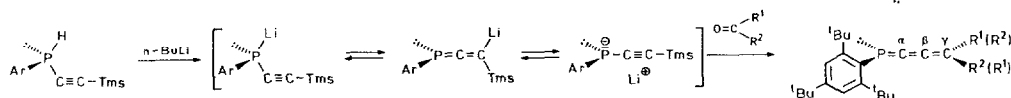
Oxidation of 1-Benzoyl-1,2,2a,3-tetrahydrobenz[cd]indole **4a** with m-CPBA, NBS in wet acetonitrile or OsO_4 afforded products with high diastereoselectivity (de=86-100%), from electrophilic attack on the α -(exo)-face. The basis for this selectivity was probed.



Tetrahedron Lett. 30, 3939 (1989)

PHOSPHABUTATRIENE
1,2-BIS-(PHOSPHAALLENYL)CYCLOBUTANE

G. Märkl and P. Kreitmeier
Institut für Organische Chemie der Universität Regensburg

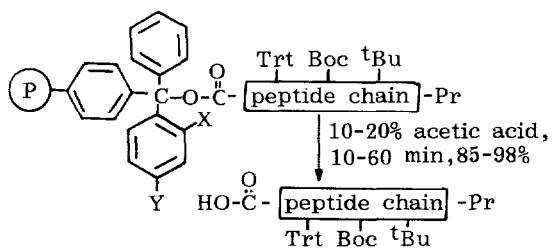


Tetrahedron Lett. 30, 3943 (1989)

DARSTELLUNG GESCHÜTZTER PEPTID-FRAGMENTE UNTER EINSATZ SUBSTITUIERTER TRIPHENYLMETHYL-HARZE

Kleomenis Barlos^{a)}*, Dimitrios Gatos^{a)}, John Kallitsis^{a)}, Giorgos Papaphotiu^{a)}, Petros Sotiriou^{a)}, Yao Wenqing^{a)} und Wolfram Schäfer^{b)}

^{a)}Chemisches Institut der Universität Patras, Patras Griechenland und ^{b)}Max-Planck-Institut für Biochemie, 8033 Martinsried, B. R. D.

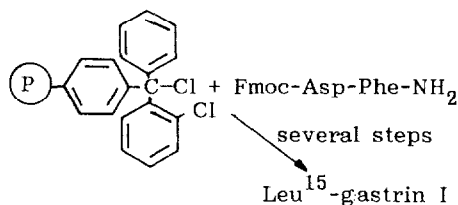


Tetrahedron Lett. 30, 3947 (1989)

VERESTERUNG VON PARTIELL GESCHÜTZTEN PEPTID-FRAGMENTEN MIT HARZEN. EINSATZ VON 2-CHLORTRITYLCHLORID ZUR SYNTHESE VON LEU¹⁵-GASTRIN I.

Kleomenis Barlos^{a)}*, Dimitrios Gatos^{a)}, Stauros Kapoulos^{a)}, Giorgos Papaphotiu^{a)}, Wolfram Schäfer^{b)} und Yao Wenqing^{a)}

^{a)}Chemisches Institut der Universität Patras, Patras Griechenland und ^{b)}Max-Planck-Institut für Biochemie, 8033 Martinsried, B. R. D.



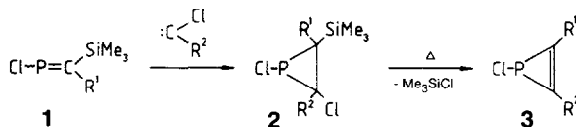
Tetrahedron Lett. 30, 3951 (1989)

1-CHLORO-1H-PHOSPHIRENES - A NEW SYNTHESIS FROM PHOSPHAALKENES AND CARBENES ¹

W. Schnurr and M. Regitz

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

Chloro carbenes add onto phosphalkenes to yield the chloro phosphiranes **2**. Subsequent thermal β -elimination of chloro trimethylsilane leads to the target compounds **3**.

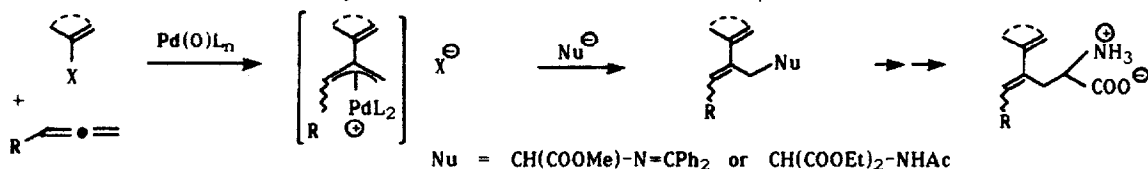


PALLADIUM-CATALYZED SYNTHESIS OF DIENIC α -AMINO ACIDS FROM ALLENES .

Tetrahedron Lett. 30, 3963 (1989)

Nina KOPOLA, Béatrice FRIESS, Bernard CAZES and Jacques GORE
 Université Claude Bernard - LYON I, 69622 VILLEURBANNE Cedex, FRANCE.

Preparation of dienic and styrenic α -amino acids via the carbopalladation of allenes.



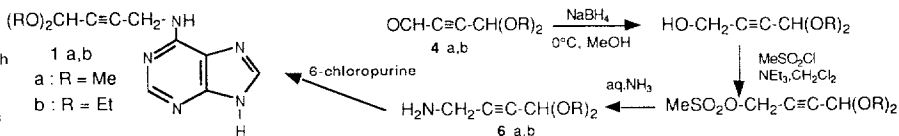
Tetrahedron Lett. 30, 3967 (1989)

Acetals of 4-amino-2-butyral : application to the synthesis of N⁶-substituted adenines with an acetylenic side chain, potential cytokinins.

M. Haidoune, M. Giffard, R. Mornet* and A. Gorgues*

Groupe de Recherche de Chimie Organique et Bioorganique, Ensemble Scientifique, 2, Boulevard Lavoisier, 49045-Angers, France

Acetylenedicarbaldehyde mono-acetals **4** are good precursors for the synthesis of the 4-amino 1,1-dialkoxy-2-butyne **6**, through simple reactions. Coupling of these amines **6** with 6-chloropurine leads to the N⁶-substituted adenines **1**, potential cytokinins.



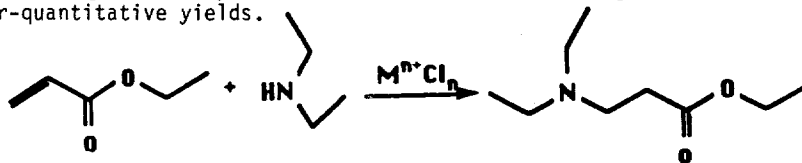
CATALYSIS OF THE SPECIFIC MICHAEL ADDITION : THE EXAMPLE OF ACRYLATE ACCEPTORS.

Tetrahedron Lett. 30, 3969 (1989)

Jose Cabral, Pierre Laszlo, Loïc Mahé, Marie-Thérèse Montaufier, and S. Lalatiana Randriamahefa.

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

Ferric chloride is a good catalyst for the addition of primary and secondary amines to acrylates in near-quantitative yields.



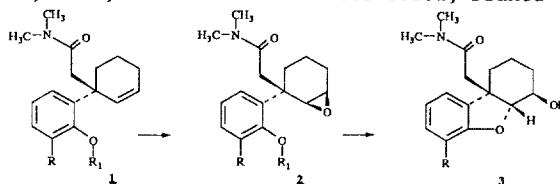
CONTRIBUTION OF MOLECULAR MODELING TO STEREOCHEMISTRY : AN EXAMPLE IN THE MORPHINIC SERIES

Tetrahedron Lett. 30, 3973 (1989)

R. Bucourt, P. Clapier, D. Guénard and C. Thal

Institut de Chimie des Substances Naturelles, CNRS, 91198 Gif-sur-Yvette Cedex, France

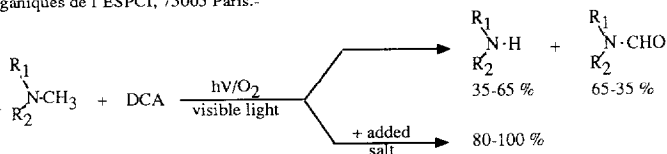
Molecular modeling is used as a help to conformational analysis in the search for conformational or stereoelectronic effects in epoxidation reactions.



Tetrahedron Lett. 30, 3977 (1989)

ELECTRON-TRANSFER ACTIVATION. SALT EFFECTS ON THE PHOTOOXIDATION OF TERTIARY AMINES : A USEFUL N-DEMETHYLATION METHOD.

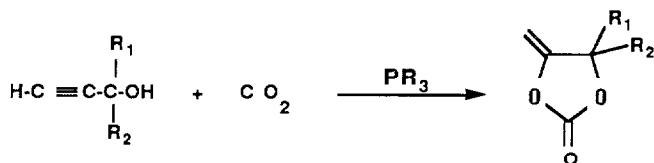
J. SANTAMARIA, R. OUCHABANE and J. RIGAUDY
Laboratoire de Recherches Organiques de l'ESPCI, 75005 Paris.-



Tetrahedron Lett. 30, 3981 (1989)

PHOSPHINE CATALYSED SYNTHESIS OF UNSATURATED CYCLIC CARBONATES FROM CARBON DIOXIDE AND PROPARGYLIC ALCOHOLS

Jean Fournier, Christian Bruneau and Pierre H. Dixneuf
Laboratoire de Chimie de Coordination Organique - CNRS URA DO415-Campus de Beaulieu, Université de Rennes, 35042 Rennes Cedex (France).

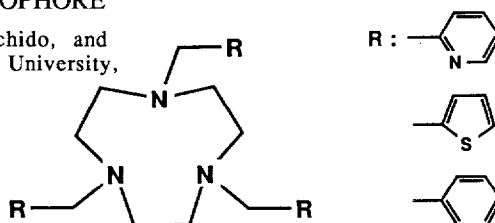


Tetrahedron Lett. 30, 3983 (1989)

TRIAZAMACROCYCLE HAVING PYRIDINE-PENDANT ARMS AS A NEW Na⁺ ION-SELECTIVE IONOPHORE

Hiroshi Tsukube,* Kouichi Yamashita, Tadashi Iwachido, and Michio Zenki (Department of Chemistry, Okayama University, Okayama 700, Japan)

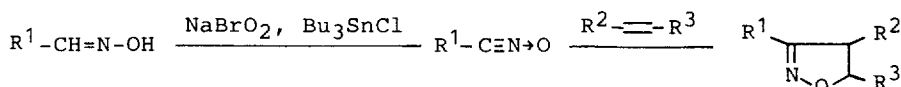
Pyridine-armed triazamacrocycle forms a three-dimensional complex with Na⁺ ion and specifically mediates its membrane transport.



Tetrahedron Lett. 30, 3987 (1989)

SYNTHESIS OF ISOXAZOLINES AND ISOXAZOLES FROM ALDOXIMES BY THE USE OF SODIUM BROMITE WITH ORGANOTIN HALIDE

Osamu Moriya,* Yoshikiyo Urata
Department of Chemistry, The National Defense Academy, Yokosuka 239, Japan
Hideki Nakamura, Toshifumi Kageyama
Department of Industrial Chemistry, Kanto-Gakuin University, Yokohama 236, Japan

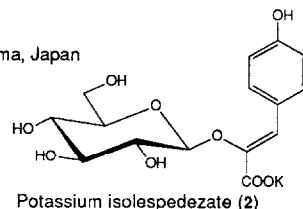
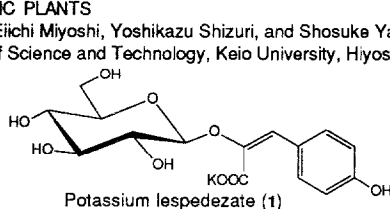


Tetrahedron Lett. 30, 3991 (1989)

POTASSIUM LESPEDEZATE AND POTASSIUM ISOLESPEDAZATE, BIOACTIVE SUBSTANCES CONCERNED WITH THE CIRCADIAN RHYTHM IN NYCTINASTIC PLANTS

Hideyuki Shigemori, Naomi Sakai, Eiichi Miyoshi, Yoshikazu Shizuri, and Shosuke Yamamura
Department of Chemistry, Faculty of Science and Technology, Keio University, Hiyoshi, Yokohama, Japan

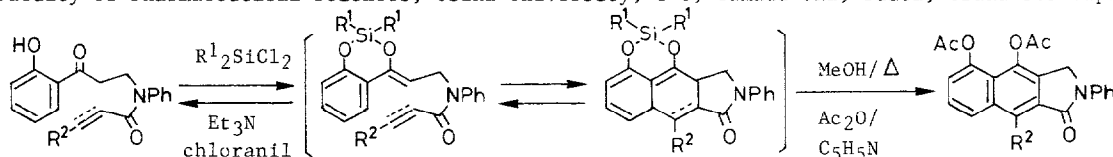
The title compounds 1 and 2 have been isolated as a leaf-opening factor from the nyctinastic plant *Lespedeza cuneata* L. G. Don.



Tetrahedron Lett. 30, 3995 (1989)

A NOVEL INTRAMOLECULAR [4+2]CYCLOADDITION OF SILYLENE PROTECTING DIHYDROXYSTYRENE DERIVATIVES: A VERSATILE SYNTHESIS OF LINEARLY CONDENSED PERI-HYDROXY AROMATIC COMPOUNDS

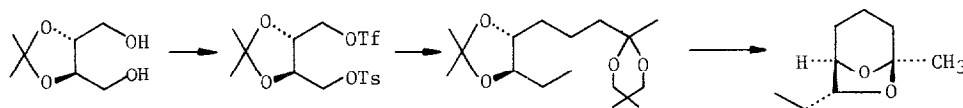
Yasuyuki Kita,* Ryuichi Okunaka, Takao Honda, Miki Shindo, and Osamu Tamura
Faculty of Pharmaceutical Sciences, Osaka University, 1-6, Yamada-oka, Suita, Osaka 565 Japan



Tetrahedron Lett. 30, 3999 (1989)

A NEW EXPEDITIOUS SYNTHESIS OF (+)-EXO-BREVICOMIN VIA EFFICIENT C-C BOND FORMATION OF TRIFLATES

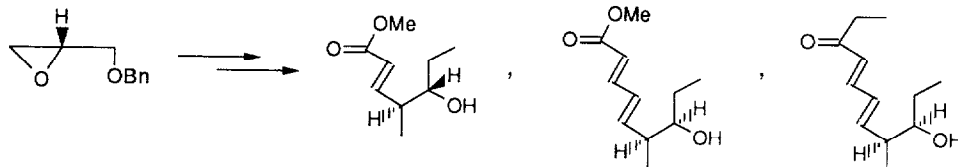
Hiyoshizo Kotsuki,* Isao Kadota, and Masamitsu Ochi
Department of Chemistry, Faculty of Science, Kochi University, Akebono-cho, Kochi 780, Japan



Tetrahedron Lett. 30, 4001 (1989)

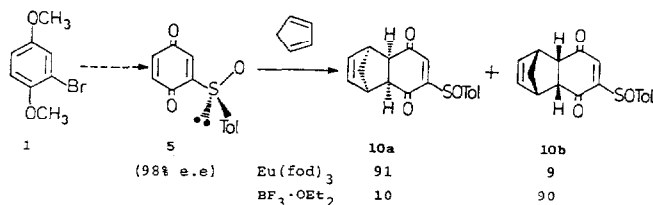
STEREOCHEMISTRY OF THE PROPOSED INTER-MEDIATES IN THE BIOSYNTHESIS OF MYCINAMICINS

Seiichi Takano,* Yoshinori Sekiguchi, Youichi Shimazaki, and Kunio Ogasawara
Pharmaceutical Institute, Tohoku University, Aobayama, Sendai 980, Japan



SYNTHESIS AND ASYMMETRIC DIELS-ALDER REACTIONS
OF (S)-p-TOLYLSULFINYL-1,4-BENZOQUINONE
M.C.Carreño, J.L.García Ruano and A.Urbano
Depto.Química C-I, F.Ciencias, UAM. Spain

Tetrahedron Lett.30,4003(1989)

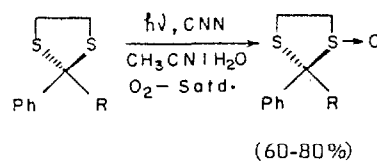


Tetrahedron Lett.30,4007(1989)

PHOTOSENSITIZED ELECTRON TRANSFER OXIDATION OF
2-SUBSTITUTED 1,3-DITHIOLANE TO 1,3-DITHIOLANE-1-OXIDE

Bipin Pandey, Smita Y. Bal and Uday R. Khire
National Chemical Laboratory, Pune 411008 (India)

Irradiation of a solution of 1,3-dithiolane, 1-cyanonaphthalene (CNN) in O₂-saturated CH₃CN:H₂O (3:1) at 350 nm furnishes good yields of 1,3-dithiolane-1-oxide.

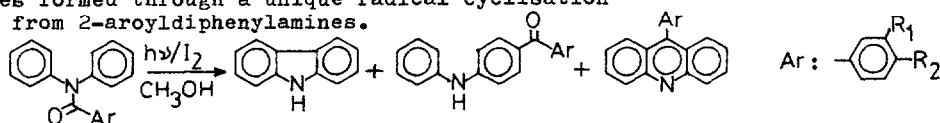


Tetrahedron Lett.30,4009(1989)

STUDIES ON ENAMIDES. PART-3¹: A NOVEL PHOTOCHEMICAL SYNTHESIS OF 9-ARYLACRIDINES

Indira Datta, Tapas Kumar Das and Somnath Ghosh^{*}
Department of Chemistry, Jadavpur University, Calcutta 700032, INDIA

Photolysis of N-aryldiphenylamines afforded carbazole, photomigrated products and for the first time, 9-arylacridines formed through a unique radical cyclisation pathway from 2-aryldiphenylamines.



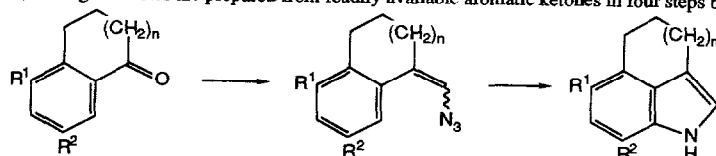
Tetrahedron Lett.30,4017(1989)

PREPARATION OF TETRAHYDROBENZ[*ca*]INDOLES FROM 1-TETRALONES

Christopher J. Moody,^a Anthony L. Beck,^a and William J. Coates^b

^aDepartment of Chemistry, Imperial College, London; ^bSmith Kline & French Research Ltd, The Frythe, Welwyn, Herts.

3,4-Bridged indoles are prepared from readily available aromatic ketones in four steps by way of vinyl azides.

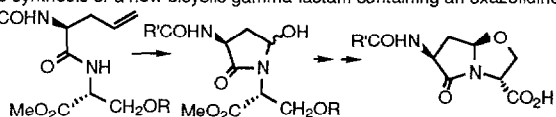


SYNTHESIS OF A NOVEL BICYCLIC γ -LACTAM ANALOGUE OF THE 1-OXAPENAMS

J. E. Baldwin, R. T. Freeman, and C. Schofield

THE DYSON PERRINS LABORATORY AND THE OXFORD CENTRE FOR MOLECULAR SCIENCES,
SOUTH PARKS ROAD, OXFORD, OX1 3QY.

The synthesis of a new bicyclic gamma-lactam containing an oxazolidine ring is described

METHYLENECYCLOPROPANE AS AN ALKENE COMPONENT IN THE
KHAND-PAUSON REACTIONW. A. Smit*, S. L. Kireev, O. M. Nefedov, V. A. Tarasov
Zelinsky Institute of Organic Chemistry, Leninsky pr 47, Moscow USSR