

GRAPHICAL ABSTRACTS

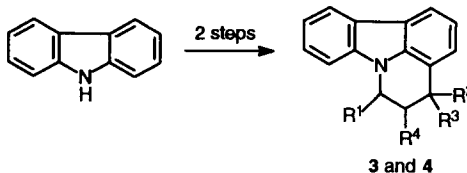
SYNTHESIS OF 5,6-DIHYDRO-4H-PYRIDO[3,2,1-*JK*]CARBAZOLES VIA INTERMOLECULAR [4+2] CYCLOADDITION

Tetrahedron Letters, 1997, 38, 6959

Alan R. Katritzky,* Guifen Zhang, Ming Qi, and Linghong Xie

Center for Heterocyclic Compounds, Department of Chemistry, University of Florida, Gainesville, FL 32611-7200

A novel, two step synthesis of a range of substituted 5,6-dihydro-4H-pyrido[3,2,1-*jk*]carbazoles was reported, starting from carbazole.



The Development of Hydrazide γ -Turn Mimetics

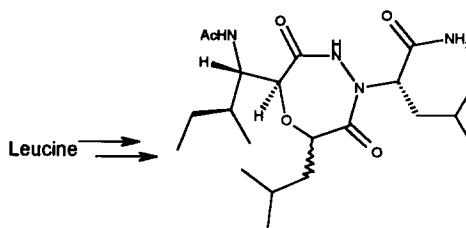
Mark D. Ferguson^a, Joseph P. Meara^a, Hiroshi Nakanishi^a,

Min S. Lee^a, and Michael Kahn^{a,b,*}

^aMolecumetics Ltd, 2023 120th Avenue NE, Suite 400, Bellevue, WA 98005 USA

^bDepartment of Pathobiology, University of Washington, Seattle, WA 98195 USA

The synthesis of epimeric γ -turn mimetics based on the malformin cyclic pentapeptide.

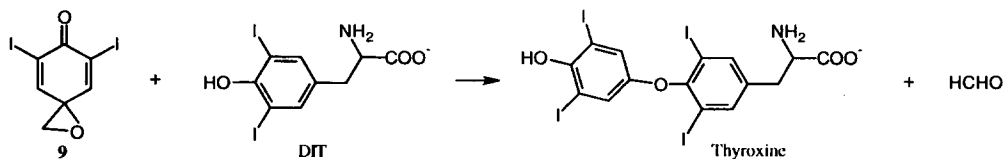


Tetrahedron Letters, 1997, 38, 6961

A CONCISE SYNTHESIS OF THYROXINE (T₄) AND 3,5,3'-TRIODO-L-THYRONINE (T₃).

Tetrahedron Letters, 1997, 38, 6965

Grzegorz M. Salamonczyk, Vibha B. Oza and Charles J. Sih,* School of Pharmacy, University of Wisconsin, 425 N. Charter St., Madison, WI 53706-1515 USA



Reaction of oxirane 9 with 3,5-diiodo-L-tyrosine afforded L-thyroxine in high yield.

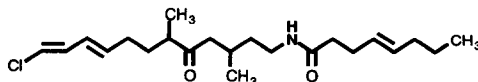
PITIAMIDE A, A NEW CHLORINATED LIPID FROM A MIXED MARINE CYANOBACTERIAL ASSEMBLAGE

Tetrahedron Letters, 1997, 38, 6969

Dale G. Nagle,

Peter U. Park, and Valerie J. Paul,* University of Guam Marine Laboratory, U.O.G. Station, Mangilao, Guam 96923, USA

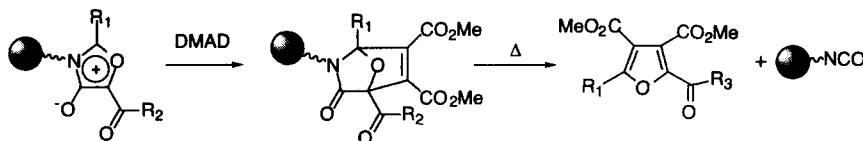
Pitiamide A was isolated from an extract of a mixed cyanobacterial assemblage growing on the tips of hard coral colonies on Guam



"Traceless" Solid-Phase Synthesis of Furans via 1,3-Dipolar Cycloaddition**Reactions of Isomünchnones**

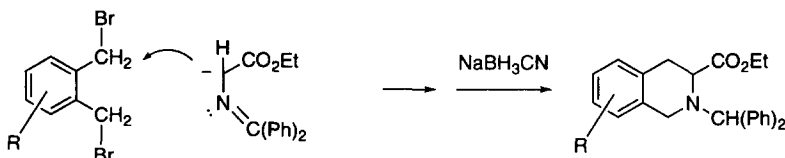
Madhusudhan R. Gowravaram and Mark A. Gallop*

Affymax Research Institute, 4001 Miranda Avenue, Palo Alto, CA 94304.

**SYNTHESIS OF ETHYL N-(DIPHENYL)METHYL-1,2,3,4-TETRAHYDROISOQUINOLINE-3-CARBOXYLATES.**

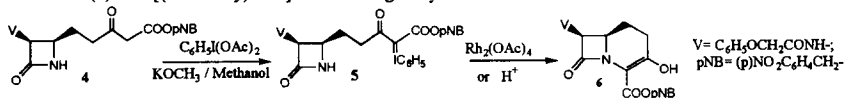
Eugene A. Mash,* Lawrence J. Williams, and Steven S. Pfeiffer

Department of Chemistry, The University of Arizona, Tucson, Arizona 85721-0041

**Use of an Iodonium Ylide in the Synthesis of p-Nitrobenzyl (6R, 7S) 3-hydroxy-8-oxo-7-phenoxyacetamido-1-azabicyclo[4.2.0]octa-2-ene-2-carboxylate**

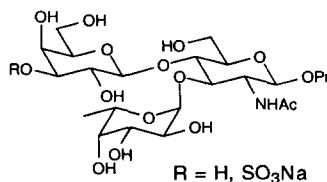
Radhe K. Vaid* and Thomas E. Hopkins, Contribution from Lilly Research Laboratories, Development and Technical Services, Eli Lilly and Company, Clinton Laboratories, Clinton, IN 47832

p-Nitrobenzyl (6R,7S)-3-hydroxy-8-oxo-7-phenoxyacetamido-1-azabicyclo[4.2.0]octa-2-ene-2-carboxylate (**6**) was synthesized utilizing rhodium(II)- or acid-catalyzed cyclization of iodonium ylide (**5**). The iodonium ylide was easily prepared from the corresponding β -keto ester (**4**) and [(diacetoxy)iodo]benzene in good yield.

**PARA-CHLOROBENZYL PROTECTING GROUPS AS STABILIZERS OF THE GLYCOSIDIC LINKAGE. SYNTHESIS OF THE 3'-O-SULFATED LEWIS X TRISACCHARIDE.**

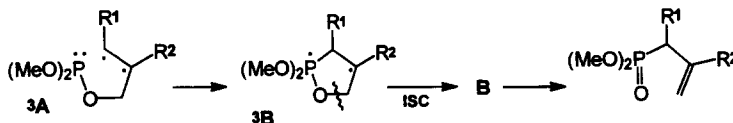
Nicola L. Pohl and Laura L. Kiessling*, Department of Chemistry, University of Wisconsin-Madison, Madison, Wisconsin 53706, USA

The 3'-O-sulfated trisaccharide Lewis x and unsulfated Lewis x have been synthesized using a route that highlights a more facile regioselective benzylidene ring-opening procedure and the employment of chlorobenzyl groups as a way of strengthening the acid-labile α -fucose linkage.

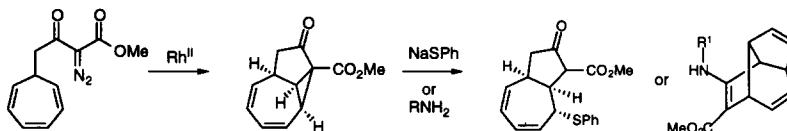


STRUCTURE-REACTIVITY STUDIES OF THE TRIPLET-SENSITIZED PHOTOREARRANGEMENTS OF ALLYL PHOSPHITES

Yande Huang and Wesley G. Bentrude*, Department of Chemistry, University of Utah, Salt Lake City, Utah 84112

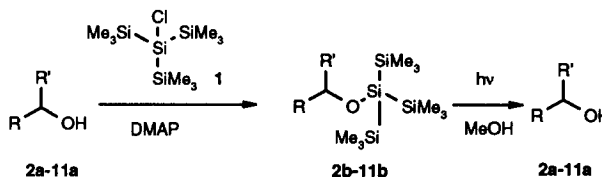
 Relative quantum efficiencies for allylphosphonate formation on triplet-sensitized photorearrangements of allyl phosphites are correlated by the "1,2-diradical" model for $\pi-\pi^*$ alkene functionality along with the effects on excited state energies and lifetimes of placement of the double bond in small ring.

Intramolecular Cyclopropanation of 7-Diazotethered-1,3,5-cycloheptatriene: Preparation and Reactions of Tricyclo[5.3.0.0^{2,10}]deca-5-dien-9-one.

Henry H. Gu, Keith F. McDaniel,* Mark C. McMills,* Glenn P. A. Yap, and Arnold L. Rheingold, Department of Chemistry, Ohio University, Athens, OH 45701 and Department of Chemistry, University of Delaware, Newark, DE 19716

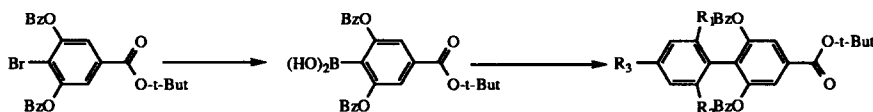
 The preparation of tricyclo[5.3.0.0^{2,10}]deca-5-dien-9-one and its reaction with several nucleophiles is presented.

THE SISYL (TRIS(TRIMETHYLSILYL)SILYL) GROUP: A FLUORIDE RESISTANT, PHOTOLABILE ALCOHOL PROTECTING GROUP

Michael A. Brook,* Christine Gottardo, Sonya Balduzzi and Mustafa Mohamed, Department of Chemistry, McMaster University, 1280 Main St. W., Hamilton, Ontario, Canada, L8S 4M1.

The tris(trimethylsilyl)silyl group serves as an alcohol protecting group that can be easily deprotected by photolysis.


THE PREPARATION OF HINDERED BIPHENYLS VIA THE
SUZUKI REACTION. Mary George Johnson and Robert J. Foglesong, Sphinx Pharmaceuticals, A Division of Eli Lilly and Company, 4615 University Drive, Durham, NC, 27707

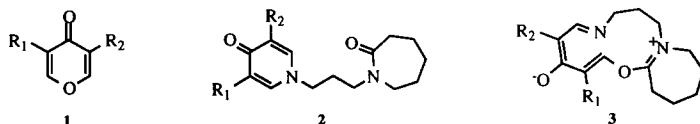
The preparation of a number of hindered biphenyls is presented in which the arylboronate suffers from both steric crowding and electron withdrawing group deactivation.



NUCLEOPHILIC BEHAVIOR OF DBU IN A CONJUGATE

ADDITION REACTION. Mary George Johnson and Robert J. Foglesong, Sphinx Pharmaceuticals, A Division of Eli Lilly and Company, 4615 University Drive, Durham, NC, 27707

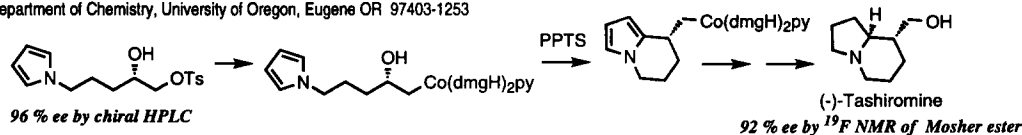
DBU reacts with pyrones 1 to give unusual pyridones 2. Labeling studies indicate a novel mechanism via 3.



A SYNTHESIS OF (-)-TASHIROMINE AND FORMAL SYNTHESIS OF (+)-TASHIROMINE UTILIZING A HIGHLY ENANTIOSELECTIVE PYRROLE/COBALOXIME π -CATION CYCLIZATION

Jennifer L. Gage and Bruce P. Branchaud*

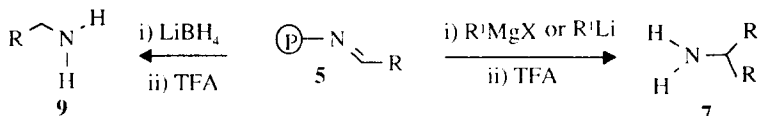
Department of Chemistry, University of Oregon, Eugene OR 97403-1253



SYNTHESIS OF PRIMARY AMINES VIA NUCLEOPHILIC ADDITION OF ORGANOMETALLIC REAGENTS TO ALDIMINES ON SOLID SUPPORT.

Alan R. Katritzky*, Linghong Xie, Guifen Zhang, Center for Heterocyclic Compounds, Department of Chemistry, University of Florida, Gainesville, FL 32611-7200, and Michael Griffith, Karen Watson, John S. Kiehl, TREGA Biosciences, Inc., formerly Houghten Pharmaceuticals, Inc., 3550 General Atomics Court, San Diego, CA 92121

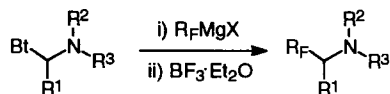
Reactions of *N*-immobilized aldimines 5 with alkyllithiums, Grignard reagents or LiBH₄, afford a wide variety of primary amines in good yields upon TFA cleavage. Thus, Rink resin acts both as a solid support and as a NH protecting group.



SYNTHESES OF PERFLUOROALKYLATED AMINES AND DIAMINES BY REACTIONS OF PERFLUOROALKYL GRIGNARD REAGENTS WITH *N*-(α -AMINOALKYL)BENZOTRIAZOLES

Alan R. Katritzky,* Zhongxing Zhang, and Ming Qi

Center for Heterocyclic Compounds, Department of Chemistry, University of Florida, Gainesville, FL 32611-7200

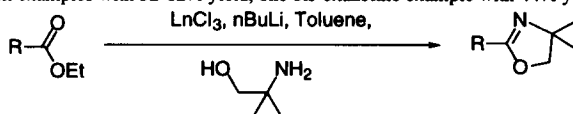


The first syntheses of (α,α' -diperfluoroalkylated)diamines are reported together with substituted α -perfluoroalkylated amines all prepared from benzotriazole derivatives and perfluoroalkyl Grignard reagents.

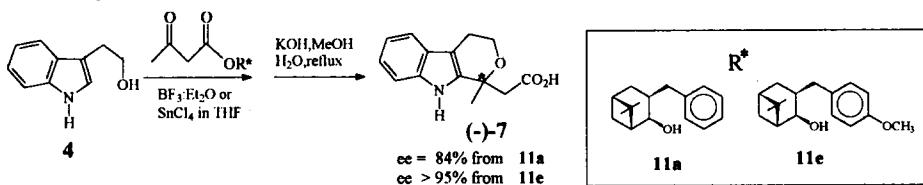
THE DIRECT SYNTHESIS OF 2-OXAZOLINES FROM CARBOXYLIC ESTERS USING LANTHANIDE CHLORIDE AS CATALYST Peiwen Zhou,

Jason E. Blubaum, Christopher T. Burns, Nicholas R. Natale* 301 Renfrew Hall, Department of Chemistry, University of Idaho, Moscow, ID 83844-2343

The one-pot direct synthesis of 2-oxazolines from carboxylic esters, using lanthanide chloride and amino alkoxyde, has been developed. Seven examples with 52-82% yield, one bis-oxazoline example with 44% yield.

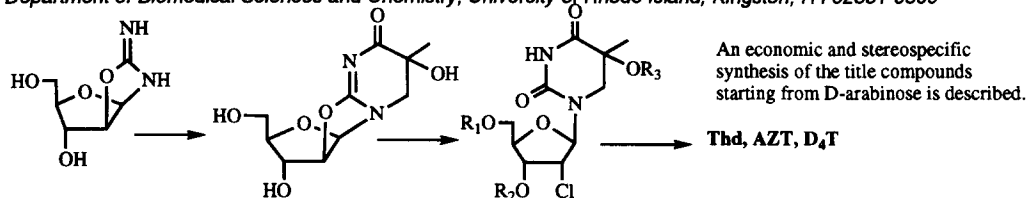
**Asymmetric Friedel-Crafts Reaction Mediated by New Chiral Auxiliaries Derived From (1S)-(-)-β-Pinene: Enantioselective Synthesis of (-)-8-Norethyl, 1'-Normethyl Etodolac.**

Paulo R.R. Costa*, Lúcio M. Cabral, Karla G. Alencar, Luciana L. Schmidt, Mário L. A. A. Vasconcelos* Núcleo de Pesquisas de Produtos Naturais, Centro de Ciências da Saúde, bloco H, Ilha da Cidade Universitária, Brazil.

**STEREOSPECIFIC SYNTHESIS OF 2'-DEOXY PYRIMIDINE AND 5,6-DIHYDRO 5-HYDROXY THYMIDINE NUCLEOSIDES**

Palle V. P. Pragnacharyulu and Elie Abushanab*

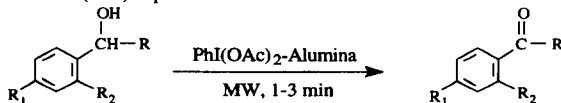
Department of Biomedical Sciences and Chemistry, University of Rhode Island, Kingston, RI 02881-0809

**IODOBENZENE DIACETATE ON ALUMINA: RAPID OXIDATION OF ALCOHOLS TO CARBONYL COMPOUNDS IN SOLVENTLESS SYSTEM USING MICROWAVES**

Rajender S. Varma,* Rajender Dahiya and Rajesh K. Saini

Department of Chemistry and Texas Regional Institute for Environmental Studies (TRIES), Sam Houston State University, Huntsville, Texas 77341-2117, U.S.A.

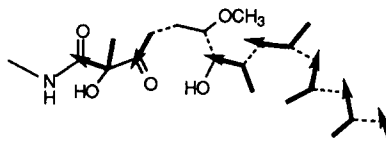
In a simple microwave-assisted and solvent-free approach, alcohols are rapidly oxidized to their corresponding carbonyl compounds using iodobenzene diacetate (IBD) doped alumina as an oxidant.



Biosynthetic Origin of the Tetrahydropyranyl Side Chain of Verucopeptin.

Youla S. Tsantrizos* and Jianhua Shen,
Department of Chemistry and Biochemistry, Concordia University, Montréal, Québec H3G 1M8, Canada
Laird A. Trimble, Merck Frosst Canada Inc., P.O. Box 1005, Pointe-Claire-Dorval, Québec H9R 4P8, Canada

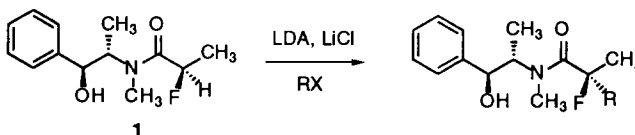
Incorporation of ^{13}C -labeled acetate and propionate, followed by analysis of labeled **1** by 1D-INADEQUATE and ^{13}C 1D-COSY NMR experiments, suggested that the tetrahydropyranyl side chain is derived from 3 acetate and 5 propionate units.



SYNTHESIS OF TERTIARY ALKYL FLUORIDE CENTERS BY ASYMMETRIC C-C(F) BOND FORMATION.

Andrew G. Myers* Lydia McKinstry, and James L. Gleason, Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA 91125 USA

Asymmetric alkylation of pseudoephedrine α -fluoropropionamide (**1**) affords α -alkylated products efficiently and with excellent stereocontrol at the newly formed tertiary alkyl fluoride center. Mild alkaline hydrolysis of the products provides the corresponding carboxylic acids with high enantiomeric excess.

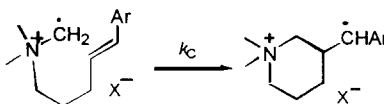


The Reactive Nature of α -Ammonium Dicationic Radical Cations

Luz Amalia Rios,^a Michael D. Bartberger,^a William R. Dolbier, Jr.^{*a} and Rodrigo Paredes^b

^aDepartment of Chemistry, University of Florida, Gainesville, FL 32611-7200.

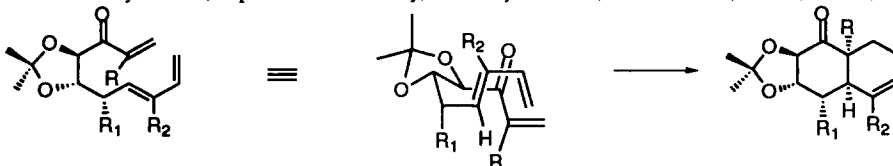
^bDepartamento de Quimica, Universidad del Valle, Cali, Colombia



ISOPROPYLIDENE ACETALS: TETHER CONTROL GROUPS for ASYMMETRIC INTRAMOLECULAR DIELS-ALDER REACTIONS

Timothy Wong, Peter D. Wilson, Simon Woo, and Alex G. Fallis*

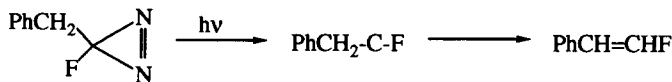
Ottawa-Carleton Chemistry Institute, Department of Chemistry, University of Ottawa, 10 Marie Curie, Ottawa, Canada, K1N 6N5



Tartrate and carbohydrate derived isopropylidene acetal tether control groups greatly facilitate the asymmetric synthesis of substituted decalins by intramolecular Diels-Alder reactions, and allow cleavage to cyclohexenes.

BENZYLFLUOROCARBENE: REACTIONS AND KINETICS.

R.A. Moss, L. Maksimovic, and D.C. Merrer,
Department of Chemistry, Rutgers University, New Brunswick, New Jersey 08903

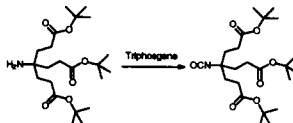


In tetrachloroethane, $E_a = 3.2$ kcal/mol; $\log A = 9.5$ s⁻¹

**A USEFUL DENDRITIC BUILDING BLOCK:
DI-*tert*-BUTYL 4-[(2-*tert*-BUTOXYCARBONYL)ETHYL]-
4-ISOCYANATO-1,7-HEPTANEDICARBOXYLATE**

George R. Newkome,* Claus D. Weis and Charles
N. Moorefield *Center for Molecular Design and Recognition, Department of Chemistry, University of South
Florida, Tampa, FL 33620*, and Frank R. Fronczek, *Department of Chemistry, Louisiana State University,
Baton Rouge, LA 70803*

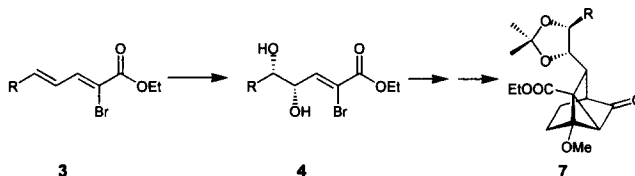
Synthesis, structure determination, and the
chemistry of the title isocyanato monomer:



**SYNTHESIS AND REACTIONS OF CHIRAL 5-SUBSTITUTED
(*Z*)-ETHYL 2-BROMO-3-(1,3-DIOXOLAN-4-YL)-2-PROPENOATES**

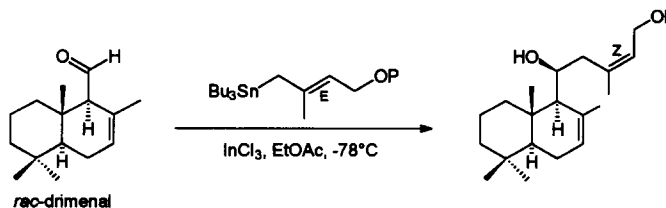
Norbert A. Braun, Ulrike Bürkle, Iris Klein, Dietrich Spitzner*, Institut für Chemie, Abt. Organische Chemie,
Universität Hohenheim, Garbenstraße 30,
D-70599 Stuttgart, Germany

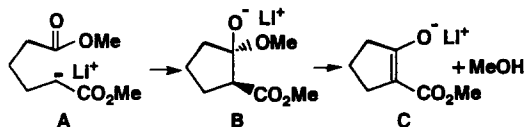
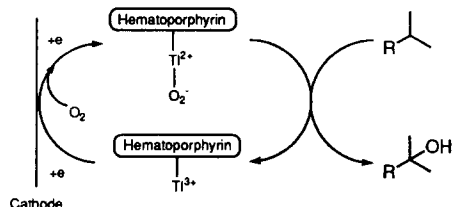
Sharpless dihydroxylation of dienes **3** led
to diols **4** (ee > 94). Cascade reaction
after protection of **4** gave tricyclooctanes **7**
(de > 95 %).



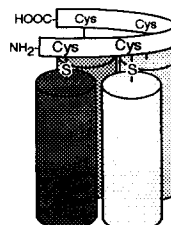
An Allylic Isoprenoid C₅ Nucleophile for the Synthesis of Forskolin

Dirk Behnke, Stefan Hamm,
Lothar Hennig, Peter Welzel*
Institut für Organische Chemie
der Universität Leipzig, Talstr.35,
D-04103 Leipzig (Germany)



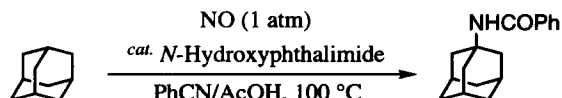
TRANSITION STRUCTURES FOR DIECKMANN CYCLIZATION*Tetrahedron Letters, 1997, 38, 7063*Tamiki Nishimura^a, Makoto Sunagawa^{a*}, Toshiya Okajima^b and Yoshimasa Fukazawa^{c*}^aResearch Center, Sumitomo Pharmaceuticals Co., Ltd. 3-1-98 Kasugadenaka, Konohanaka, Osaka 554, Japan^bDepartment of Chemistry, Faculty of Culture and Education, Saga University, Honjyo-machi 1, Saga 840, Japan^cDepartment of Chemistry, Hiroshima University, Kagamiyama 1-3, Higashi-Hiroshima, 739, JapanTransition structures for Dieckmann Cyclization were located with *ab initio* MO method.**SELECTIVE OXIDATION OF TERMINAL ISOPROPYL GROUPS TO TERTIARY ALCOHOLS BY ELECTROCHEMICAL METHODOLOGY.***Tetrahedron Letters, 1997, 38, 7067*Shojiro Maki, Katsuhiko Konno and Hiroaki Takayama,*
Faculty of Pharmaceutical Sciences, Teikyo University,
Sagamiko, Kanagawa 199-01, JapanTerminal isopropyl groups were selectively oxidized to the corresponding tertiary alcohols by electrochemical method using Ti(TFA)₃-hematoporphyrin-O₂-cathodic reduction system.**ASSEMBLING OF THE FOUR INDIVIDUAL HELICES CORRESPONDING TO THE TRANSMEMBRANE SEGMENTS (S4 IN REPEAT I-IV) OF THE SODIUM CHANNEL***Tetrahedron Letters, 1997, 38, 7071*Shiroh Futaki,^{a*} Mika Aoki,^a Masayuki Fukuda,^a Fusayo Kondo,^a Mineo Niwa,^a
Kouki Kitagawa,^b and Yutaka Nakaya^c^aInstitute for Medicinal Resources and ^cSchool of Medicine, The University of Tokushima,
Tokushima 770, Japan; ^bNiigata College of Pharmacy, Niitaga 950-21, Japan

A four-helix-bundle protein having ion channel activity with rectification was constructed with the aid of a multiple component introducible template.

***N*-Hydroxyphthalimide (NHPI)-Catalyzed Reaction of Adamantane Under Nitric Oxide Atmosphere***Tetrahedron Letters, 1997, 38, 7075*

Satoshi Sakaguchi, Masahiro Eikawa and Yasutaka Ishii*

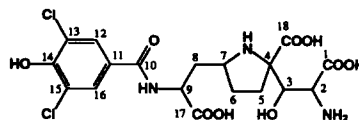
Department of Applied Chemistry, Faculty of Engineering, Kansai University, Suita, Osaka 564, Japan

Adamantane was successfully converted into 1-*N*-adamantylbenzamide in benzonitrile under the influence of nitric oxide in the presence of a catalytic amount of *N*-hydroxyphthalimide (NHPI).

Structure of Kaitocephalin, a Novel Glutamate Receptor Antagonist Produced by *Eupenicillium shearii*.

Tetrahedron Letters, 1997, 38, 7079

Kazuo Shin-ya*, Jung-Sik Kim, Kazuo Furihata†, Yoichi Hayakawa and Haruo Seto*, Institute of Molecular and Cellular Biosciences,†Department of Applied Biological Chemistry, The University of Tokyo, Bunkyo-ku, Tokyo 113, Japan.



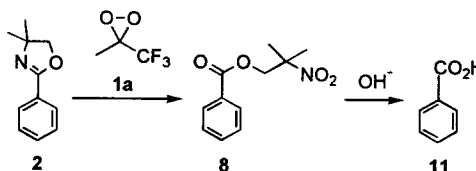
Kaitocephalin was isolated from *Eupenicillium shearii* PF1191 as a glutamate receptor antagonist. It possesses a pyrrolidine moiety with tricarboxylic acids and a dichlorohydroxybenzoate substructure.

Oxidative Cleavage of Aryl Oxazolines Using Methyl(trifluoromethyl)dioxirane Generated *in situ*

Tetrahedron Letters, 1997, 38, 7083

Dan Yang*, Yiu-Chung Yip and Xue-Chao Wang
Department of Chemistry, The University of Hong Kong, Pokfulam Road, Hong Kong

Oxidative cleavage of aryl oxazoline **2** using methyl(trifluoromethyl)dioxirane **1a** generated *in situ* provides the intermediate nitro-ester **8**, which undergoes a basic hydrolysis to furnish benzoic acid **11**.

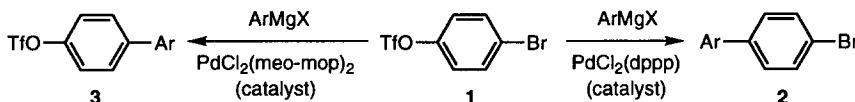


CONTROL OF REACTIVE SITE IN PALLADIUM-CATALYZED GRIGNARD CROSS-COUPLING OF ARENES CONTAINING BOTH BROMIDE AND TRIFLATE

Tetrahedron Letters, 1997, 38, 7087

Takashi Kamikawa and Tamio Hayashi*
Department of Chemistry, Faculty of Science, Kyoto University, Sakyo, Kyoto 606-01, Japan

Reaction of 4-bromophenyl triflate (**1**) with ArMgX catalyzed by PdCl₂(dppp) and PdCl₂(meo-mop)₂ gave selective substitution products at triflate (**2**) and at bromide (**3**), respectively.

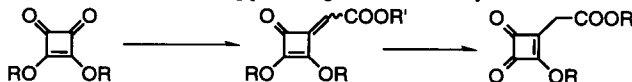


OLEFINATION OF DIALKYL SQUARATES BY WITTIG AND HORNER-EMMONS REACTIONS. A FACILE SYNTHESIS OF 3,4-DIOXO-1-

Tetrahedron Letters, 1997, 38, 7091

CYCLOBUTENE-1-ACETIC ACID ESTERS. Ken-ichi Hayashi, Tetsuro Shinada,* Kazuhiko Sakaguchi, Manabu Horikawa,* and Yasufumi Ohfuné* Department of Material Science, Faculty of Science, Osaka City University, Sugimoto, Sumiyoshi, Osaka 558, Japan. #Suntory Institute for Bioorganic Research, Shimamoto-cho, Mishima-gun, Osaka 618, Japan

Olefination of dialkyl squarates with several ylides and phosphines gave alkylidene products in high yields. An acid-catalyzed hydrolysis of the resulting products gave 3,4-dioxo-1-cyclobutene-1-acetic acid esters.

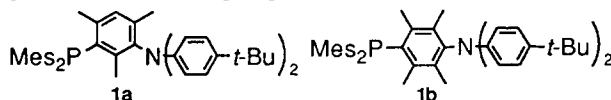


SYNTHESIS AND REDOX PROPERTIES OF STERICALLY HINDERED META- AND PARA-AMINOPHOSPHINOENZENES

Tetrahedron Letters, 1997, 38, 7095

Shigeru Sasaki, Fumiki Murakami, and Masaaki Yoshifuji,* Department of Chemistry, Graduate School of Science, Tohoku University, Aoba, Sendai 980-77, Japan

Synthesis and redox properties of novel aminophosphinobenzenes **1a** and **1b** are described.



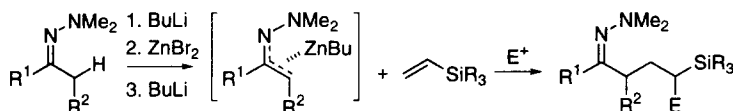
THE OLEFINIC ALDOL REACTION. ADDITION OF ZINCATED HYDRAZONE TO VINYLSILANE

Tetrahedron Letters, 1997, 38, 7099

Eiichi Nakamura* and Katsumi Kubota

Department of Chemistry, The University of Tokyo, Bunkyo-ku, Tokyo 113, Japan

Zincated hydrazones bearing a BuZn(II) cation undergo rapid addition to various vinylsilanes to afford silylated hydrazones in good to high yields.



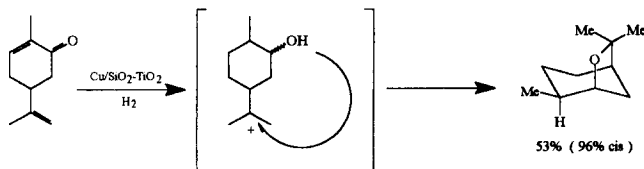
BIFUNCTIONAL COPPER CATALYSTS, A ONE STEP SYNTHESIS OF BICYCLIC ETHERS STARTING FROM α,β -UNSATURATED KETONES.

Tetrahedron Letters, 1997, 38, 7103

N.Ravasio*, V.Leo, F.Babudri, M.Gargano, Centro C.N.R. MISO,

Dipartimento di Chimica dell'Università, via Amendola, 173,I- 70126 BARI, Italy E-mail: ravasio@area.ba.cnr.it

Catalysts able to promote both a chemoselective hydrogenation and the attack of an OH group to a C=C double bond allow to synthesize bicyclic ethers starting from readily available substrates.

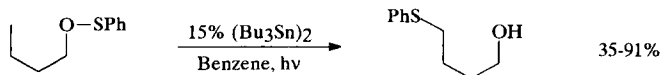


FREE RADICAL PHENYLTHIO GROUP TRANSFER TO NON ACTIVATED δ -CARBON ATOM IN THE PHOTOLYSIS REACTIONS OF ALKYL BENZENESULFENATES

Tetrahedron Letters, 1997, 38, 7107

Goran Petrović, Radomir N. Saičić i Živorad Čeković Faculty of Chemistry, University of Belgrade, Studentski trg 16, 11000 Belgrade and ICTM, Center for Chemistry, Njegoševa 12, Belgrade Yugoslavia

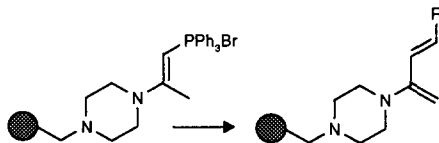
A free radical phenylthio group transfer was achieved in the photolysis reaction of alkyl benzenesulfenates.



Solid Phase Synthesis of 2-Aminobutadienes Using a Piperazine Linker

Tetrahedron Letters, 1997, 38, 7111

Nicholas W. Hird* *SmithKline Beecham Pharmaceuticals, New Frontiers Science Park, Third Avenue, Harlow, Essex, CM19 5AD, U.K.*
Kazuyuki Irie and Katsunori Nagai *Takeda Chemical Industries, 2-17-85, Juso-Honmachi, Yodogawa-Ku, Osaka, 532 Japan.*

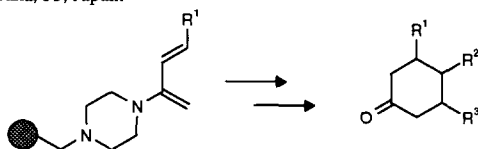


A series of resin-bound 4-substituted-2-aminobutadienes have been synthesised via Wittig reaction with polymer supported 2-(*N*-piperazino)prop-1-enyl-1-triphenylphosphonium bromide.

Synthesis of 3,4,5-Trisubstituted Cyclohexanones by Cycloaddition to Solid Phase 2-Aminobutadienes

Tetrahedron Letters, 1997, 38, 7115

Melanie Crawshaw, Nicholas W. Hird* *SmithKline Beecham Pharmaceuticals, New Frontiers Science Park, Third Avenue, Harlow, Essex, CM19 5AD, U.K.* Kazuyuki Irie and Katsunori Nagai *Takeda Chemical Industries, 2-17-85, Juso-Honmachi, Yodogawa-Ku, Osaka, 53, Japan.*

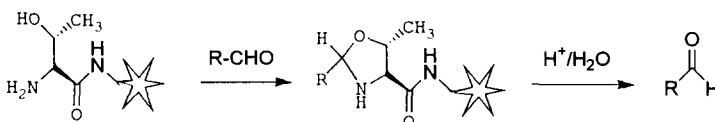


[4+2] Cycloaddition of maleimides and nitrostyrenes to resin bound 4-substituted-2-aminobutadienes gives, after cleavage, 3,4,5-trisubstituted cyclohexanones in moderate to good yields and high purities.

A SIMPLE LINKER FOR THE ATTACHMENT OF ALDEHYDES TO THE SOLID PHASE. APPLICATION TO SOLID PHASE SYNTHESIS BY THE MULTIPIN™ METHOD.

Tetrahedron Letters, 1997, 38, 7119

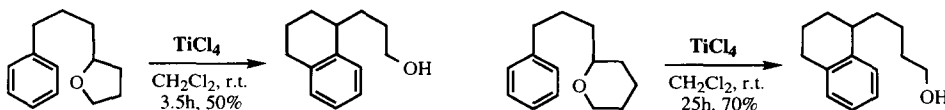
Nicholas J. Ede and Andrew M. Bray*. *Chiron Technologies Pty. Ltd., 11 Duerdin St., Clayton, Victoria, 3168, Australia*
A new and simple linker has been developed for the attachment of aldehydes to the solid phase. The linker lends itself to the straightforward synthesis of peptide aldehydes.



THE INTRAMOLECULAR ALKYLATION OF ARENES BY HIGHER CYCLIC ETHERS PROVIDES A STEREOEFFICIENT ROUTE TO TETRALINS

Tetrahedron Letters, 1997, 38, 7123

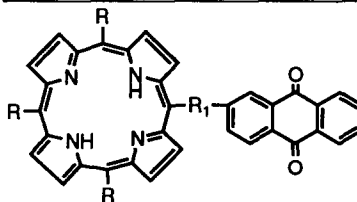
David C. Harrowven* and Richard F. Dainty, Department of Chemistry, The University, Southampton, S017 1BJ, UK.



**Porphyrin-Anthraquinone Hybrids:
Wavelength Dependent DNA Photocleavases**

G. Mehta, S. Muthusamy, B.G. Maiya and S. Arounagiri
School of Chemistry, University of Hyderabad
Hyderabad 500 046, India

Synthesis and wavelength-dependent photocleavase
activity of porphyrin-anthraquinone hybrids are described



R= tolyl

R₁= OC(O), O(CH₂)_n or NHC(O)