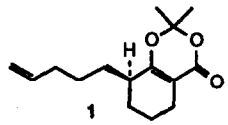
Tetrahedron Lett. **1993**, *34*, 3355

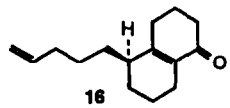
ON THE STEREOSELECTIVITY OF THE INTRAMOLECULAR DIOXENONE PHOTOCYCLOADDITION

Jeffrey D. Winkler* and Bin Shao
Department of Chemistry, The University of Pennsylvania, Philadelphia, PA 19104

The stereoselectivities of the intramolecular photocycloaddition of dioxenone, **1**, and enone, **16**, substrates are compared.



1

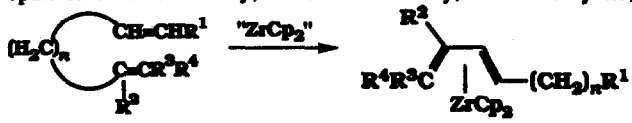


16

Tetrahedron Lett. **1993**, *34*, 3359

CONVERSION OF NON-CONJUGATED DIENES INTO CONJUGATED DIENE-ZIRCONOCENES VIA MULTIPOSITIONAL REGIOISOMERIZATION

John P. Maye, Ei-ichi Negishi*
Department of Chemistry, Purdue University, West Lafayette, IN 47907, USA



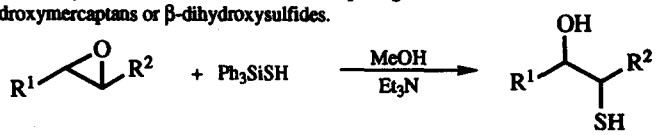
A novel method for the preparation of conjugated diene-zirconocenes involving $ZrCp_2$-promoted multipositional diene regioisomerization is described.

Tetrahedron Lett. **1993**, *34*, 3363

TRIPHENYLSILANETHIOL: A SOLID H_2S EQUIVALENT IN THE RING OPENING OF EPOXIDES.

John Brittain, Yves Gareau*, Merck Frosst Center for Therapeutic Research, P.O. Box 1005, Pointe Claire-Dorval, Québec, Canada, H9R 4P8.

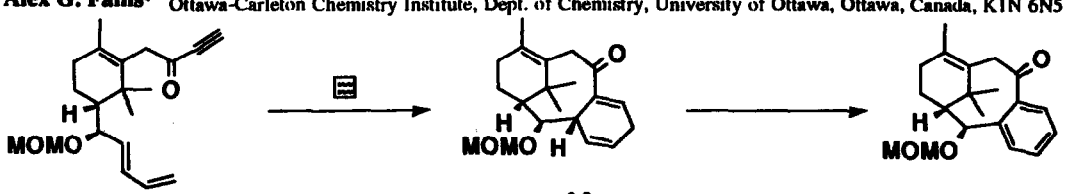
Triphenylsilanethiol, a white crystalline solid can be used in the opening of epoxides to form β-hydroxymercaptans or β-dihydroxysulfides.



Tetrahedron Lett. **1993**, *34*, 3367

AN INTRAMOLECULAR DIELS-ALDER APPROACH TO TRICYCLIC TAXOID SKELETONS

Yee-Fung Lu and Alex G. Fallis* Ottawa-Carleton Chemistry Institute, Dept. of Chemistry, University of Ottawa, Ottawa, Canada, K1N 6N5

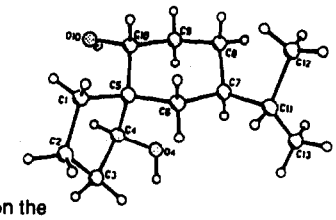


The synthesis of taxol type, functionalized tricyclo[9.3.1.$0^{3,8}$]pentadecene skeletons, is described.

ERYTHRODIENE: A NEW SPIROBICYCLIC SESQUITERPENE OF A RARE SKELETAL CLASS FROM THE CARIBBEAN GORGONIAN CORAL *ERYTHROPODIUM CARIBAEORUM*

Tetrahedron Lett. **1993**, *34*, 3371

Charles Pathirana and William Fenical*, Scripps Institution of Oceanography
University of California at San Diego, La Jolla, CA 92093-0236
Ethan Corcoran and Jon Clardy*, Department of Chemistry—Baker Laboratory
Cornell University, Ithaca, NY 14853-1301



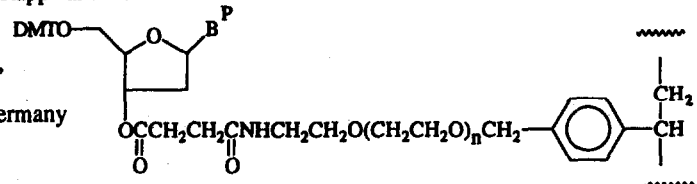
The structure of a new sesquiterpene compound, erythrodiene (1), was assigned on the basis of spectral studies and through an X-ray analysis of the reduced ozonolysis product 2.

LARGE SCALE SYNTHESIS OF OLIGONUCLEOTIDES VIA PHOSPHORAMIDITE NUCLEOSIDES AND A HIGH-LOADED POLYSTYRENE SUPPORT

Tetrahedron Lett. **1993**, *34*, 3373

Peter Wright, David Lloyd, Wolfgang Rapp# and Alex Andrus*

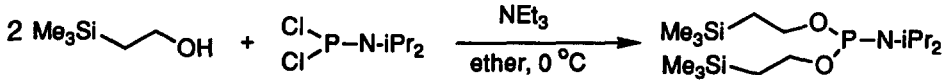
Applied Biosystems, Inc.,
850 Lincoln Centre Drive, Foster City,
CA 94404, USA #Rapp Polymere,
Eugenstrasse 38/1, 7400 Tubingen, Germany



Tetrahedron Lett. **1993**, *34*, 3377

N,N-DIISOPROPYL-BIS[2-(TRIMETHYLSILYL)ETHYL]PHOSPHORAMIDITE. AN ATTRACTIVE PHOSPHITYLATING AGENT COMPATIBLE WITH THE FMOC/T-BUTYL STRATEGY FOR THE SYNTHESIS OF PHOSPHOTYROSINE CONTAINING PEPTIDES. **Hann-Guang Chao*, Michael S. Bernatowicz, Clifford E. Klimas, and Gary R. Matsueda.** Department of Macromolecular Biochemistry, Pharmaceutical Research Institute, Bristol Myers-Squibb, Princeton, NJ 08543

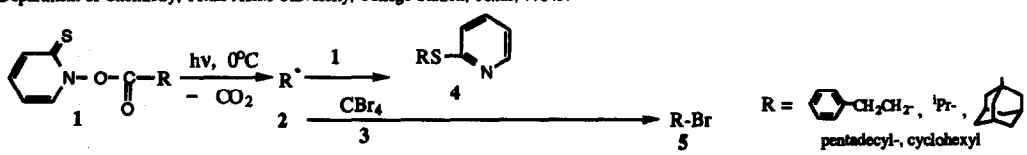
A new silicon-based phosphitylating agent, compatible with the Fmoc/t-butyl strategy for the production of phosphotyrosine containing peptides was prepared and shown to be useful for peptide synthesis.



Tetrahedron Lett. **1993**, *34*, 3381

PHOTOLYTIC GENERATION OF CARBON RADICALS FROM BARTON ESTERS: RECENT DEVELOPMENTS

Derek H. R. Barton, Joseph Cs. Jaszberenyi* and Dagang Tang
Department of Chemistry, Texas A&M University, College Station, Texas, 77843.

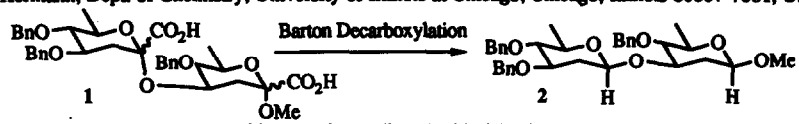


Barton esters (1) were photolysed with various commercial lamps and Texan sunshine. The best results were obtained with Texan sunshine or a well focused 1 million candlepower xenon lamp

Tetrahedron Lett. **1993**, *34*, 3385

SEQUENTIAL DIASTEREOSELECTIVE FREE RADICAL REACTIONS: SYNTHESIS OF AN ADVANCED OLIVOMYCIN A C-D DISACCHARIDE

D. Crich* and F. Hermann, Dept. of Chemistry, University of Illinois at Chicago, Chicago, Illinois 60607-7061, USA



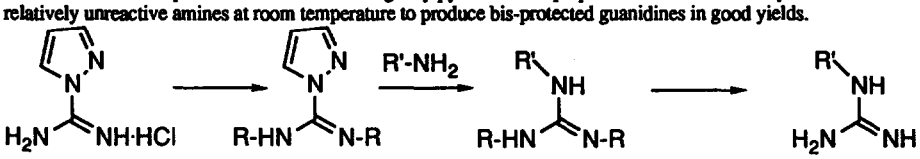
Reductive decarboxylation of both carboxylic acid groups in the disaccharide 1 (4 diastereoisomers) leads, with high selectivity, to 2

Tetrahedron Lett. **1993**, *34*, 3389

URETHANE PROTECTED DERIVATIVES OF 1-GUANYLPYRAZOLE FOR THE MILD AND EFFICIENT PREPARATION OF GUANIDINES

Michael S. Bernatowicz,* Youling Wu, and Gary R. Matsueda
The Bristol-Myers Squibb Pharmaceutical Res. Inst., P.O. Box 4000, Princeton, New Jersey 08543, USA

Bis-Boc and bis-Cbz protected derivatives of 1-guanylpyrazole were prepared and found to readily react with relatively unreactive amines at room temperature to produce bis-protected guanidines in good yields.

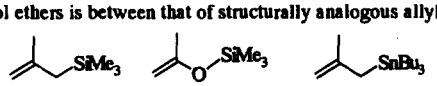


Tetrahedron Lett. **1993**, *34*, 3393

How Nucleophilic Are Silyl Enol Ethers? Kinetics of the Reactions of Electron Rich CC-Double Bonded Systems with Carbenium Ions

Matthias Patz and Herbert Mayr*, Institut für Organische Chemie, Technische Hochschule Darmstadt, Petersenstr. 22, W-6100 Darmstadt, Federal Republic of Germany

The nucleophilicity of silylated enol ethers is between that of structurally analogous allylsilanes and stannanes.



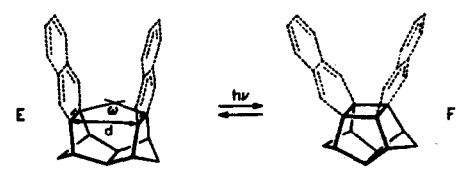
k_{rel} vs $(p\text{-}Me_2NC_6H_4)_2CH^+$	1.0	12	840

Tetrahedron Lett. **1993**, *34*, 3397

RIGID FACE-TO-FACE[3.3]-*o,o'*-CYCLOPHANES - ARENE/ALKENE AND ARENE/ARENE PHOTOCYCLOADDITION REACTIONS

Regina Thiergardt, Manfred Keller,
Markus Wollenweber, and Horst Prinzbach
Chemisches Laboratorium der Universität Freiburg

The chances for photocycloaddition reactions of type E ⇄ F are being explored.

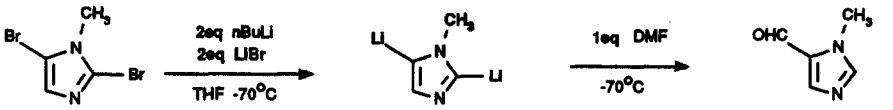


Tetrahedron Lett. **1993**, *34*, 3401

SYNTHESIS OF 2,5-DILITHIO-1-METHYLIMIDAZOLE

Gideon Shapiro* and Martin Marzi. Sandoz Pharma Ltd. CH-4002 Basel, Switzerland

The unequivocal preparation of the previously postulated 2,5-dilithio-1-methylimidazole has been achieved by double lithium halogen reaction. Selective formylation of this species in the 5-position was successful.

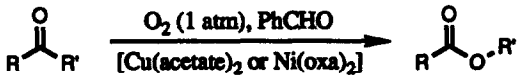


Tetrahedron Lett. **1993**, *34*, 3405

USE OF MOLECULAR OXYGEN IN THE BAEYER-VILLIGER OXIDATION - THE INFLUENCE OF METAL CATALYSTS

Carsten Bolm*, Gunther Schlingloff, and Konrad Weickhardt
Department of Chemistry, University of Basel, St. Johanns-Ring 19, CH-4056 Basel (Switzerland)

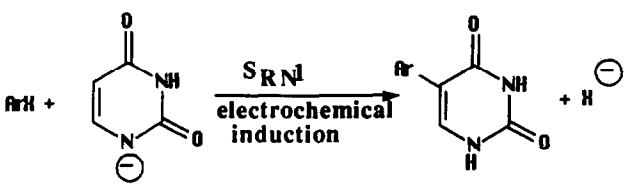
Baeyer-Villiger oxidation of ketones using molecular oxygen and benzaldehyde *in the absence of metal catalysts* afforded lactones in high yields. The catalytic activities of various metal salts and complexes have been studied.



Tetrahedron Lett. **1993**, *34*, 3409

A New Convenient Synthesis of 5-Aryl Uracils Using $S_{RN}1$ Aromatic Nucleophilic Substitution.

Maurice Médebielle*, Mehmet Ali Oturan, Jean Pinson and Jean-Michel Savéant
Laboratoire d'Electrochimie Moléculaire de l'Université Paris 7, Unité Associée au CNRS, 2 Place Jussieu, 75251 Paris Cedex 05, France.

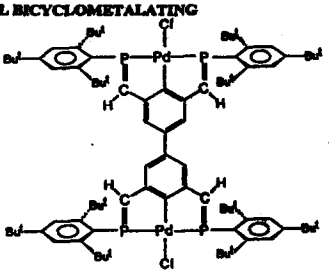


Tetrahedron Lett. **1993**, *34*, 3413

3, 3', 5, 5' TETRA(PHOSPHAALKENE)BIPHENYL: SYNTHESIS OF A NOVEL BICYCLOMETALATING BRIDGING LIGAND, AND STRUCTURE OF ITS DIPALLADIUM COMPLEX.

Abdelaziz Jouaiti, Michel Geoffroy* and Gérald Bernardinelli,
Département de Chimie Physique, Université de Genève, 30 quai E. Ansermet 1211 Genève (Suisse).

The synthesis of a bis-terdentate ligand containing four phophaalkene groups is reported as well as the structure of the corresponding dipalladium complex.

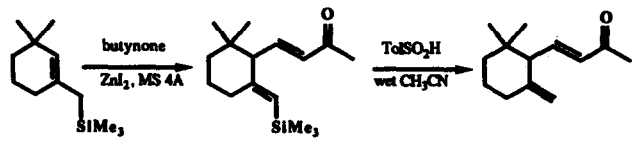


Tetrahedron Lett. **1993**, *34*, 3417

REGIOSELECTIVE CATALYSED H-ENE REACTION OF ALLYLSILANES WITH 3-BUTYN-2-ONE. APPLICATION TO A NEW SYNTHESIS OF (±)-γ-IONONE.

Gérard Audran, Honoré Monti*, Gilbert Léandri, Jean-Pierre Monti§.
Laboratoire de Réactivité Organique Sélective, associé au CNRS. Faculté des Sciences de St. Jérôme. 13397 Marseille Cedex 20.
§Laboratoire de Biophysique. 13385 Marseille cedex 5 - France

A new synthesis of (±)-γ-ionone using an unexpected H-ene reaction of allylsilanes



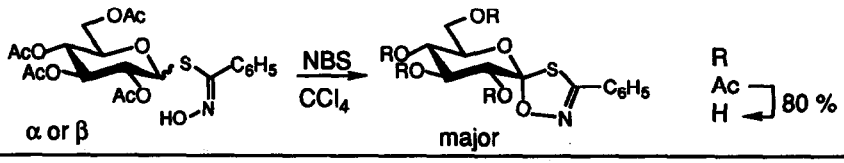
Tetrahedron Lett. **1993**, *34*, 3419

Novel Cyclization of D-Glucopyranosyl-(*Z*)-Thiohydroximates leading to New Anomeric Spiro Oxathiazole Derivatives

J.-P. Praly[a], S. Boyé[b], B. Joseph[b], P. Rollin[b]

[a] Laboratoire de Chimie Organique II, ESCIL, 43 Boulevard du 11 Novembre 1918, 69622 Villeurbanne (France)

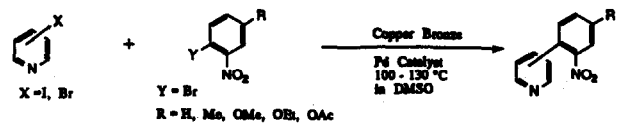
[b] Laboratoire de Chimie Bioorganique et Analytique, Université d'Orléans, BP 6759, 45067 Orléans (France)



Tetrahedron Lett. **1993**, *34*, 3421

A SIMPLE AND EFFICIENT SYNTHESIS OF 2-, 3-, OR 4-(2-NITROPHENYL)PYRIDINE DERIVATIVES VIA PALLADIUM CATALYZED ULLMANN CROSS-COUPLING REACTION

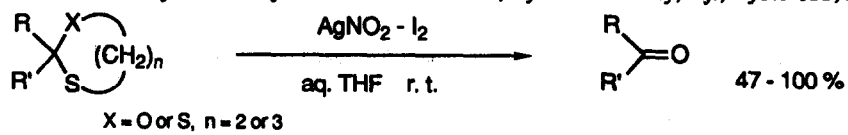
Noboru Shimizu,* Takahiro Kitamura, Koichiro Watanabe, Takashi Yamaguchi, Hiromichi Shigyo and Tomio Ohta
Tokyo Research Laboratories, Kowa Co., Ltd., 2-17-43, Noguchi-cho, Higashimurayama, Tokyo 189, Japan



Tetrahedron Lett. **1993**, *34*, 3425

A New Entry for the Deprotection of Monothioacetals and Dithioacetals: Silver Nitrite - Iodine System

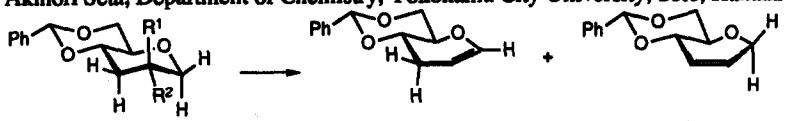
Kiyoharu Nishide, Kouichi Yokota, Daisaku Nakamura,
Toshio Sumiya, and Manabu Node*
Kyoto Pharmaceutical University, Misasagi, Yamashina, Kyoto 607, Japan
Masaru Ueda and Kaoru Fuji *Institute for Chemical Research, Kyoto University, Uji, Kyoto 611, Japan*



Tetrahedron Lett. **1993**, *34*, 3429

ANOMERIC EFFECT ON KINETIC ACIDITY: EXAMPLES FOR THE OXYGEN ATOM OF ETHERS TO ACCELERATE ABSTRACTION OF AN α-HYDROGEN ATOM

Tohru Sakakibara*, Shinji Ito, Hiroshi Ikegawa, Ichiro Matsuo, and Akinori Seta, Department of Chemistry, Yokohama City University, Seto, Kanazawa-ku, Yokohama 236, Japan



R^1 = SePh, R^2 = H	2	:	1
R^1 = H, R^2 = SePh	1	:	10

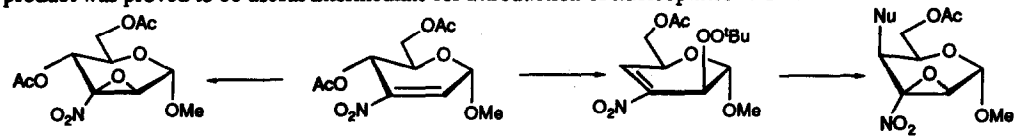
Theoretical (AM1) and different two types of experiments indicate that the abstraction of an α-hydrogen atom of ethers having proper conformation is slightly accelerated by the oxygen atom.

Tetrahedron Lett. **1993**, *34*, 3433

FIRST PREPARATION OF PYRANOSID NITROOLEFIN HAVING A PEROXY GROUP AND ITS REACTION WITH SOME NUCLEOPHILES

Akinori Seta, Kiyohisa Tokuda, and Tohru Sakakibara,*
Department of Chemistry, Yokohama City University, Seto, Kanazawa-ku, Yokohama 236, Japan

Treatment of the below nitroalkene with *t*-butyl hydroperoxide and *m*-chloroperbenzoic acid under basic conditions gave the SN2' product and 2,3-anhydro sugar in high yields, respectively. The former product was proved to be useful intermediate for introduction of nucleophiles at C-4.

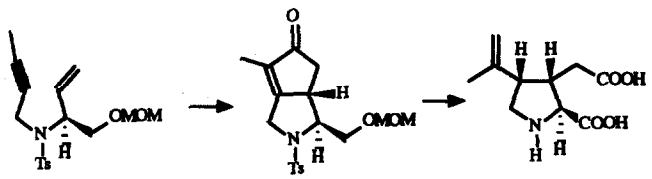


Tetrahedron Lett. **1993**, *34*, 3435

A Total Synthesis of (-)-α-Kainic Acid By the Pauson-Khand Reaction

Sung-eun Yoo*, Sang-Hee Lee, Nakcheol Jeong, Inho Cho
Korea Research Institute of Chemical Technology,P.O.Box 9,Daedeog Science Town,DaeJeon,Korea

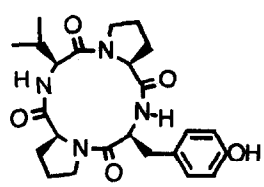
A total synthetic route to (-)-α-kainic acid has been developed based on the Pauson-Khand reaction as a key reaction for the construction of the bicyclo ring system.



Tetrahedron Lett. **1993**, *34*, 3439

A NOVEL CYCLOTETRAPEPTIDE PRODUCED BY *LACTOBACILLUS HELVETICUS* AS A TYROSINASE INHIBITOR

Hirokazu Kawagishi[a]*, *Shigeaki Somoto*[b], *Jun Kuranari*[b], *Atsuo Kimura*[c], *and Seiya Chiba*[c]
[a] Department of Applied Biological Chemistry, Faculty of Agriculture, Shizuoka University, 836 Ohya, Shizuoka 422, Japan.
[b] R & D Center, The Calpis Food Industry Co., Ltd., Sagamihara 229, Japan
[c] Department of Applied Bioscience, Faculty of Agriculture, Hokkaido University, Sapporo 060, Japan

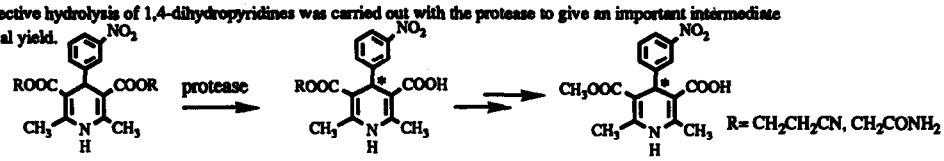


Tetrahedron Lett. **1993**, *34*, 3441

PROTEASE-CATALYZED ENANTIOSELECTIVE SYNTHESIS OF OPTICALLY ACTIVE 1,4-DIHYDROPYRIDINES.

Yoshihiko Hirose*, Kinya Kariya, Ikuharu Sasaki and Yoshiaki Kurono,
Central Research Laboratory, Amano Pharmaceutical Co., Ltd., Kunotsubo, Nishiharu, Nishikasugai, Aichi 481, Japan
Kazuo Achiwa*, School of Pharmaceutical Sciences, University of Shizuoka, 52-1 Yada, Shizuoka 422, Japan

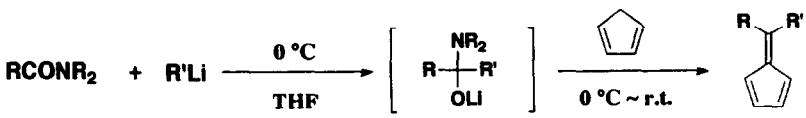
The enantioselective hydrolysis of 1,4-dihydropyridines was carried out with the protease to give an important intermediate in a good optical yield.



Tetrahedron Lett. **1993**, *34*, 3445

Tandem Reactions of N,N-Dialkylamides with Organolithium Compounds and Cyclopentadiene. A New Efficient Synthesis of Pentafulvenes

Hiroyuki Kurata, Tatsuya Ekinaka, Takeshi Kawase, and Masaji Oda*
Department of Chemistry, Faculty of Science, Osaka University,
Toyonaka, Osaka 560, Japan

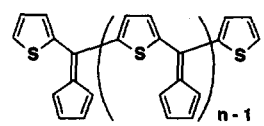


Tetrahedron Lett. **1993**, *34*, 3449

Synthesis and Properties of Oligo-6-(2-thienyl)pentafulvenes

Takeshi Kawase, Hiroyuki Kurata, Tatsuya Morikawa, and Masaji Oda*
Department of Chemistry, Faculty of Science, Osaka University,
Toyonaka, Osaka 560, Japan

Oligothienylpentafulvenes 1 show considerably low reduction potentials on cyclic voltammetry to suggest ready transformation to polyanions or polyanion radicals with oligoacetylene spine.



n = 1, 2, 3, 4

1

Tetrahedron Lett. **1993**, *34*, 3453

Facile and Highly Stereoselective Allylation of Aldehydes Using Allyltrichlorosilanes in DMF

Shu KOBAYASHI,* Koichi NISHIO, Department of Applied Chemistry, Faculty of Science,
Science University of Tokyo (SUT), Kagurazaka, Shinjuku-ku, Tokyo 162.

82 - 91% yield

The reactions proceed *without catalyst.*
High yields and high regio- and stereoselectivities are attained.

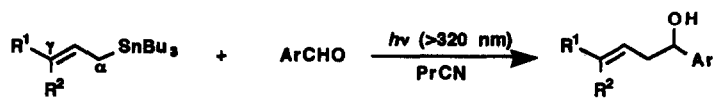
syn/anti=>99/1-96/4(Z-silanes)
syn/anti = 3/97-7/93(E-silanes)

α-REGIOSELECTIVE AND STEREOSPECIFIC ADDITION OF ALLYLIC TINS TO ALDEHYDES VIA PHOTOINDUCED ELECTRON TRANSFER.

Tetrahedron Lett. **1993**, *34*, 3457

Akio Takuwa,* Junji Shiigi and Yutaka Nishigaichi, Department of Chemistry, Shimane University, Matsue 690, Japan

Regioreversed and stereospecific allylation can be achieved by photochemical reaction of aromatic aldehydes with (E)- and (Z)-allylic tins.



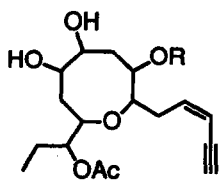
DOLICULOLS A AND B, THE NON-HALOGENATED C_{15} ACETOGENINS WITH CYCLIC ETHER FROM THE SEA HARE *DOLABELLA AURICULARIA*

Tetrahedron Lett. **1993**, *34*, 3461

Makoto Ojika,* Takayuki Nemoto, and Kiyoyuki Yamada*

Department of Chemistry, Faculty of Science, Nagoya University, Chikusa, Nagoya 464, Japan

Doliculols A (**1**) and B (**2**), the first non-halogenated C_{15} acetogenins with cyclic ether, were isolated from the sea hare *Dolabella auricularia* and the gross structures were determined.



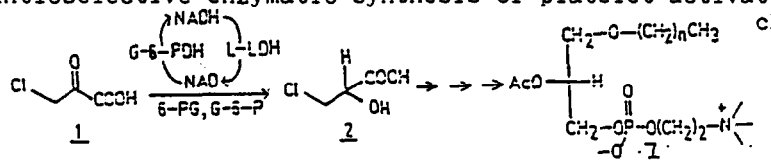
1, R = H
2, R = Ac

NOVEL CHEMO-ENZYMATIC SYNTHESIS OF OPTICALLY ACTIVE PLATELET ACTIVATING FACTOR

Tetrahedron Lett. **1993**, *34*, 3463

ATUL KUMAR AND VINOD BHAKUNI*, C.D.R.I., LUCKNOW, INDIA.

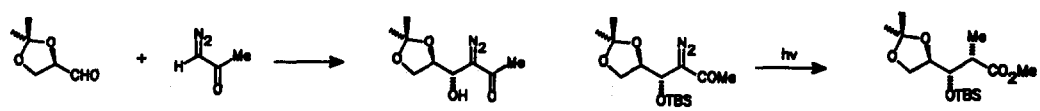
An enantioselective enzymatic synthesis of platelet activating factor (7) from chloropyruvic acid.



β-OXY-α-DIAZO CARBONYL COMPOUNDS.I. PHOTOCHEMISTRY OF CHIRAL β-OXY-α-DIAZO METHYL KETONES. STEREOSELECTIVE SYNTHESIS OF CHIRAL MACROLIDE SYNTHONS.

Tetrahedron Lett. **1993**, *34*, 3467

Fidel J. López-Herrera and Francisco Sarabia-García
Departamento de Química Orgánica. Facultad de Ciencias. Universidad de Málaga. 29071 Málaga. Spain.



Tetrahedron Lett. **1993**, *34*, 3471

FLASH VACUUM THERMOLYSIS OF 5-SUBSTITUTED-4,4-DIPHENYL-3-OXA-1-AZABICYCLO[3.1.0]HEXAN-2-ONES. A NEW ROUTE TO QUINOLINES.

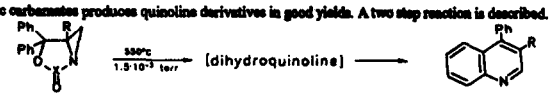
Gerard Alvernhe †, Romuald Bartnik ††, Stanislaw Leśniak ††*, Jean-Louis Ripoll †††

† Université Claude-Bernard Lyon I, Laboratoire de Chimie Organique 3, 43 Bd du 11 Novembre 1918, 69622 Villeurbanne Cedex (France)

†† University of Łódź, Department of Organic and Applied Chemistry, ul. Narutowicza 68, 90-136 Łódź (Poland)

††† Laboratoire de Chimie des Composés Thioorganiques (UA CNRS 480). Institute des Sciences de la Matière et du Rayonnement, 14032 Caen (France)

Thermolysis of bicyclic carbamates produces quinoline derivatives in good yields. A two step reaction is described.



Tetrahedron Lett. **1993**, *34*, 3473

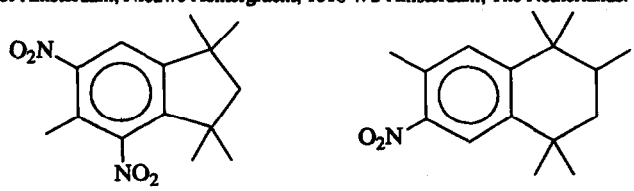
NMR INVESTIGATION OF BICYCLIC NITROMUSK COMPOUNDS.

Dirk J.A. De Ridder[1]*, Henk Schenk[1] & Jan A.J. Geenevasen[2].

[1] Laboratory for Crystallography, University of Amsterdam, Nieuwe Achtergracht 166, 1018 WV Amsterdam, The Netherlands.

[2] Laboratory for Organic Chemistry, University of Amsterdam, Nieuwe Achtergracht, 1018 WS Amsterdam, The Netherlands.

NMR spectra of five bicyclic nitromusk compounds have been obtained and are discussed with respect to the crystal structures determined from the same batches.



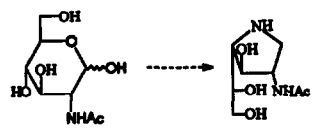
Tetrahedron Lett. **1993**, *34*, 3477

SYNTHESIS OF 2-ACETAMIDO-1,2,4-TRIDEOXY-1,4-IMINO-D-GALACTITOL, A NEW HEXOSAMINIDASE INHIBITOR

Richard H. Furneaux,[a] Gregory P. Lynch,[a,c] Gemma Way[b] and Bryan Winchester.[b]

[a]Industrial Research Limited, PO Box 31-310, Lower Hutt, New Zealand. [b]Division of Biochemistry and Metabolism, Institute of Child Health (University of London), 30 Guilford Street, London, WC1N 1EH, UK.

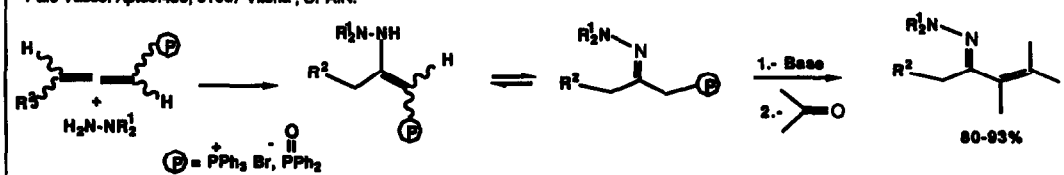
The title compound was synthesised in 12 steps (8.7% overall yield) and was found to be a reversible competitive hexosaminidase inhibitor.



Tetrahedron Lett. **1993**, *34*, 3481

A SIMPLE AND EFFICIENT SYNTHESIS OF α,β-UNSATURATED HYDRAZONES FROM FUNCTIONALIZED YLIDES AND PHOSPHINE OXIDES.

Francisco Palacios*, Domitila Aparicio, J. Manuel de los Santos. Departamento de Química Orgánica. Facultad de Farmacia. Universidad del País Vasco. Aptdo.450, 01007 Vitoria, SPAIN.



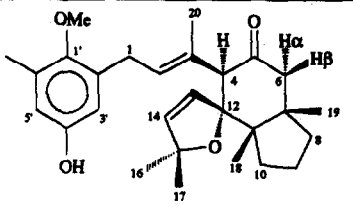
Claraenone, a New Meroditerpene from Brown Alga.

Tetrahedron Lett. **1993**, *34*, 3485

Manuel Norte, Armando Sánchez and Antonio G. González

C.P.N.O. "Antonio González", Instituto Universitario de Bioorgánica.
Universidad de La Laguna. 38206 La Laguna, Tenerife, Spain.

A new meroditerpene, claraenone **1**, having an unprecedented carbon skeleton with a [4,3,0] bicarbocyclic nonane ring system, has been isolated from the brown alga *Cystoseira sp.* Its structure and relative stereochemistry have been determined by spectroscopical methods.

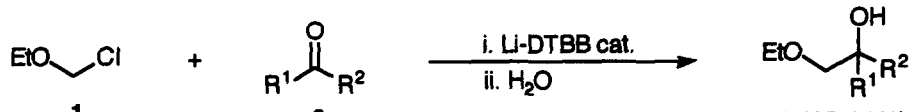


1

4,4'-DI-*TERT*-BUTYLBIPHENYL-CATALYSED LITHIATION OF CHLOROMETHYL ETHYL ETHER: A BARBIER-TYPE NEW AND EASY ALTERNATIVE TO ETHYL LITHIOMETHYL ETHER

Tetrahedron Lett. **1993**, *34*, 3487

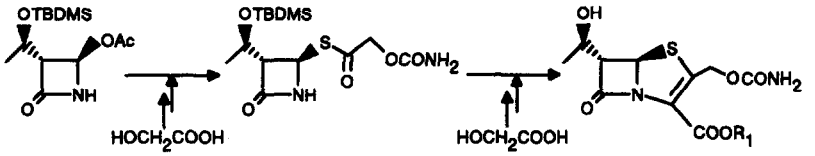
Albert Guijarro and Miguel Yus*
Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, Apdo. 99, 03080 Alicante, Spain



TOTAL SYNTHESIS OF RITIPENEMS. CONSTRUCTION OF PENEM THIAZOLINE RING BY INCORPORATION OF TWO 2C UNITS OF GLYCOLIC ACID.

Tetrahedron Lett. **1993**, *34*, 3491

Walter Cabri,* Franco Zarini, Matteo D'Anello, Marcello Marchi, Angelo Bedeschi,* and Giovanni Franceschi. Farmitalia Carlo Erba, R&D, Process Research, via Giovanni XXIII,23 20014-Nerviano (MI), Italy.



	R_1
Ritipenem Acoxyl	CH_2OAc
Ritipenem	H