

GRAPHICAL ABSTRACTS

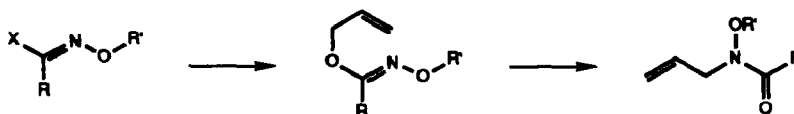
Tetrahedron Letters, 1994, 35, 15

Synthesis of N-allylhydroxamic Acids via [3,3]-Sigmatropic Rearrangement

J. A. De la Torret, M. Fernandez†, D. Morgans, Jr.*, David B. Smith, F. X. Talamas† and A. Trejot

Syntex Research, 3401 Hillview Avenue, Palo Alto, CA 94303

†Research Division, Syntex, S.A. de C.V., Km 4 Carretera Federal Cuernavaca-Cuautla, 62500 Jiutepec, Morelos, Mexico

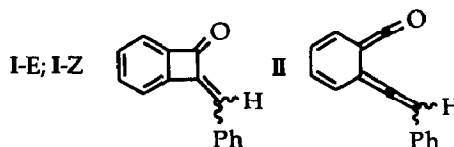


Tetrahedron Letters, 1994, 35, 19

Z - E PHOTOISOMERIZATION OF BENZYLIDENEBENZO-CYCLOBUTENONES VIA KETENE-ALLENE INTERMEDIATES. A LASER FLASH PHOTOLYSIS STUDY

R. Boch, J.C. Bradley, T. Durst* and J.C. Scaiano*, Department of Chemistry, University of Ottawa, Ottawa, Canada K1N 6N5

I-E and I-Z undergo photoinduced isomerization via the intermediacy of ketene-allene II which in acetonitrile has a lifetime of ~30 μs and can be trapped with water and methanol.

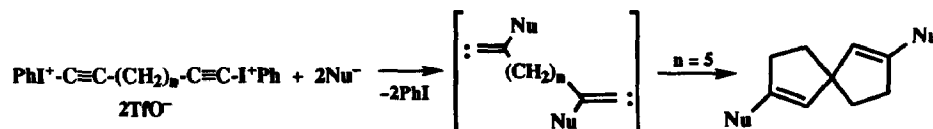


Tetrahedron Letters, 1994, 35, 23

Preparation of Bis-Cyclopentene Ring Systems via Reaction of Bis-[phenyl(iodonium)] Diyne Triflates with Soft Nucleophiles. Rik R.

Tykwinski, Peter J. Stang,* and Neal E. Persky, Department of Chemistry, University of Utah, Salt Lake City, UT 84112

The synthesis and characterization of substituted bis-cyclopentene ring systems derived from the interaction of nucleophiles and bis[phenyl(iodonium)] diyne triflate salts is described.

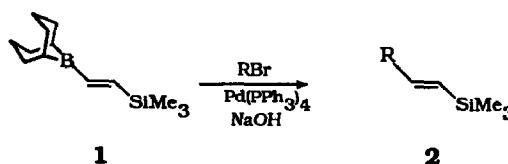


Tetrahedron Letters, 1994, 35, 27

TRANS-VINYLSILANES VIA SUZUKI-MIYAUURA COUPLING

John A. Soderquist* and Juan C. Colberg
Department of Chemistry, University of Puerto Rico
Río Piedras, Puerto Rico 00931

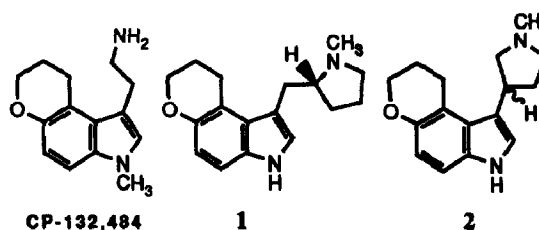
Representative *trans* styryl-, dienyl- and enynyl-silanes (**2**) are easily prepared (58-89%) in high isomeric purities from the Pd-catalyzed cross coupling of aryl, vinyl and alkynyl bromides with **1** under basic conditions.



The Synthesis of Conformationally/Rotationally Restricted Analogs of the Neurotransmitter Serotonin

John E. Macor*, David H. Blank, and Ronald J. Post
Department of Medicinal Chemistry
Central Research Division
Pfizer Inc., Groton, CT 06340

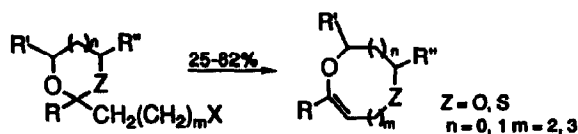
The syntheses of two novel conformationally/rotationally restricted analogs of the neurotransmitter serotonin which are modeled after the 5-HT₂ receptor selective agonist CP-132,484 [a dihydropyrano[3,2-e]indole] are described.



SYNTHESIS OF MEDIUM SIZE RINGS CONTAINING OXYGEN AND SULFUR

BY RING EXPANSION OF HALODIOXOLANES, DIOXANES AND OXATHIOLANES. James J. De Voss and Zhihua Sui.*
Department of Pharmaceutical Chemistry, University of California San Francisco, San Francisco, CA 94143-0446

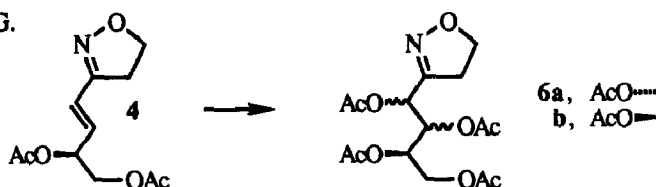
Ring expansion of cyclic haloketals and halo-O,S-ketals yields medium sized rings containing sulfur and/or oxygen atoms.



DIASTEREOCONTROL IN THE ASYMMETRIC DIHYDROXYLATION OF CHIRAL 3-ALKENYL-4,5-DIHYDROISOXAZOLES.

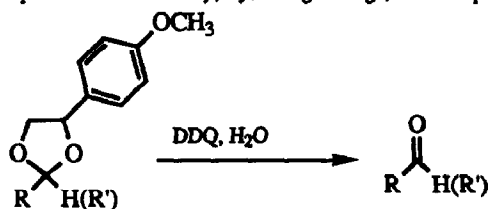
Peter A. Wade*, Damien T. Cole, and Stephen G. D'Ambrosio, Department of Chemistry, Drexel University, Philadelphia, PA 19104 USA

Catalytic asymmetric dihydroxylation of 4 afforded either 6a or 6b in high d.e. depending on the chiral auxiliary.



An Oxidatively Removable Protecting Group for Aldehydes and Ketones

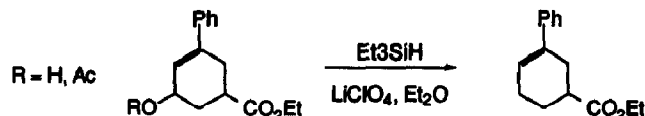
Chris E. McDonald, Lois E. Nice, Kenneth E. Kennedy
Department of Chemistry, Lycoming College, Williamsport, PA 17701



p-Methoxyphenylethylene acetals and ketals can be efficiently converted to the corresponding carbonyl compounds upon treatment with DDQ and water.

Selective Deoxygenation of Allylic Alcohols and Acetates by

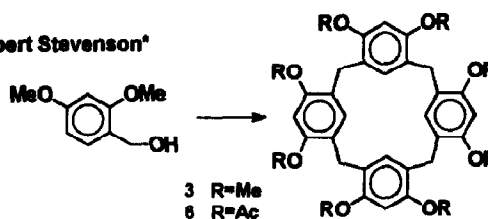
Lithium Perchlorate Promoted Triethylsilane Reduction David J. Wustrow,* William J. Smith III and Lawrence D. Wise, Parke-Davis Pharmaceutical Research, Division of Warner-Lambert Company, 2800 Plymouth Rd, Ann Arbor, MI 48105



HIGH YIELD SYNTHESIS OF THE PARENT C-UNSUBSTITUTED CALIX[4]RESORCINARENE OCTAMETHYL ETHER.

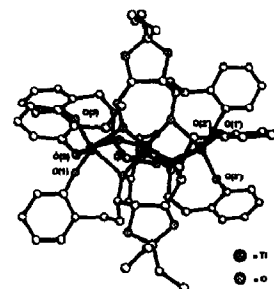
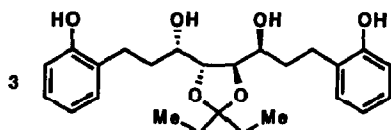
Olusegun M. Falana, Emile Al-Farhan, Philip M. Keehn* and Robert Stevenson*
Department of Chemistry, Brandeis University, MA 02254-9110

Treatment of 2,4-dimethoxybenzyl alcohol with TFA affords, in almost quantitative yield, calix[4]resorcinarene octamethyl ether **3**, which on demethylation and acetylation yields the derived octa-acetate **6**.



SYNTHESIS AND X-RAY STRUCTURE OF A NOVEL CHIRAL TRINUCLEAR TITANIUM-TETRAOL COMPLEX

E. J. Corey, Charles L. Cywin and Mark C. Noe
Department of Chemistry, Harvard University
Cambridge, Massachusetts, 02138

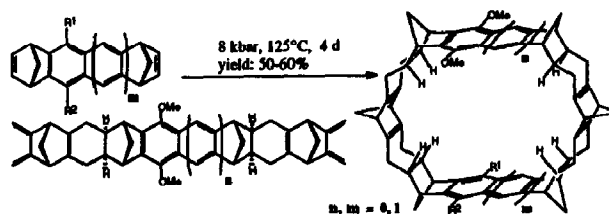


Synthesis of Sterically Rigid Macrocycles by the Use of Pressure-Induced

Repetitive Diels-Alder Reactions

J. Benkhoff ^{a)}, R. Boese ^{b)}, F.-G. Klärner ^{aa)},
A. E. Wigger ^{a)}

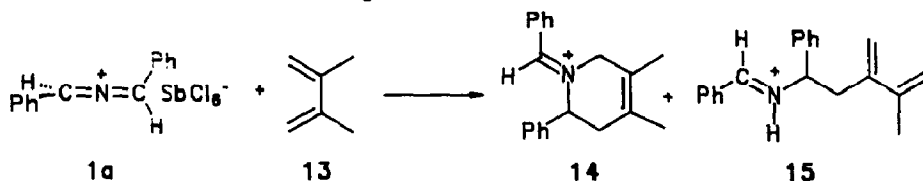
a) Institut für Organische Chemie, b) Institut für Anorganische Chemie, Universität-GH Essen, Universitätsstr. 5, D-45117 Essen, F.R.G., FAX: Int. + 201-1833082



DIELS-ALDER- AND ENE-REACTIONS OF 2-AZAALLENIUM SALTS

Tetrahedron Letters, 1994, 35, 77

A. Geisler and E.-U. Würthwein*, Org.-Chem. Institut, Universität Münster, D-48149 Münster, FRG

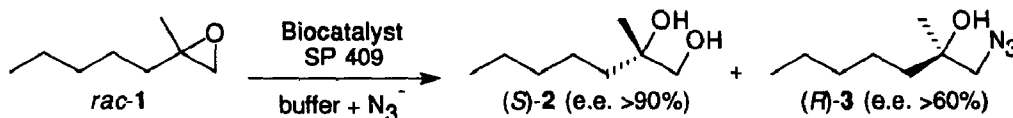


ASYMMETRIC OPENING OF AN EPOXIDE BY AZIDE CATALYZED BY AN IMMOBILIZED ENZYME PREPARATION FROM *RHODOCOCCUS SP.*

Tetrahedron Letters, 1994, 35, 81

Martin Mischitz and Kurt Faber*, Institute of Organic Chemistry, Graz University of Technology, Stremayrgasse 16, A-8010 Graz, Austria

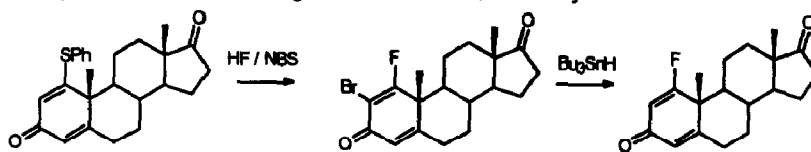
The biocatalytic hydrolysis of (±)-2-methyl-2-pentyloxirane (**1**) performed in buffer containing azide gave diol (*S*)-**2** and azido-alcohol (*R*)-**3**.



A New Route To Steroidal Vinyl Fluorides

Tetrahedron Letters, 1994, 35, 85

Rolf Bohlmann, Schering AG, Pharmaforschung, D-13342 Berlin, Germany



Steroidal β-fluoro-α,β-unsaturated ketones are formed in 50 - 70% yield by reaction with NBS / HF or NBS / DAST in dichloromethane.

Photolysis of Sugar Anomeric Diazides: Sugar-derived Tetrazoles as Evidences for a major Nitrene Decomposition Pathway

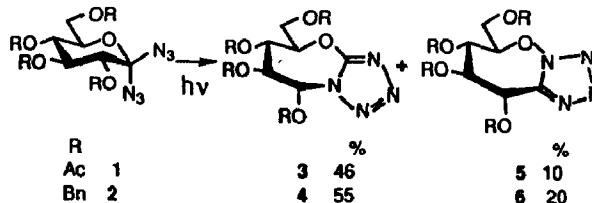
Tetrahedron Letters, 1994, 35, 89

J.-P. Praly*, C. Di Stéfano, G. Descotes, R. Faure

Université Claude-Bernard Lyon I, 43, Boulevard du 11 Novembre 1918

69622 Villeurbanne - France

Sugar-derived tetrazoles are obtained in good yield from both acetylated and benzylated sugar anomeric diazides which decomposed predominately, under UV light irradiation, via excited nitrogen-containing intermediates. Identification of the products follows from the X-ray analysis of tetrazole **5**, which proves the erroneous assignment proposed for **6** by a Japanese group.



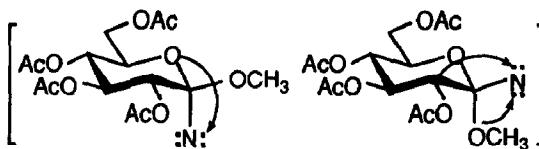
**Photolysis of Methyl 1-Azido Glucosides:
unprecedented Expansions of the Pyranose
Ring under high Stereocontrol**

Tetrahedron Letters, 1994, 35, 93

C. Di Stéfano, G. Descotes, J.-P. Praly*

Université Claude-Bernard Lyon I, 43, Boulevard du 11 Novembre 1918
69622 Villeurbanne - France

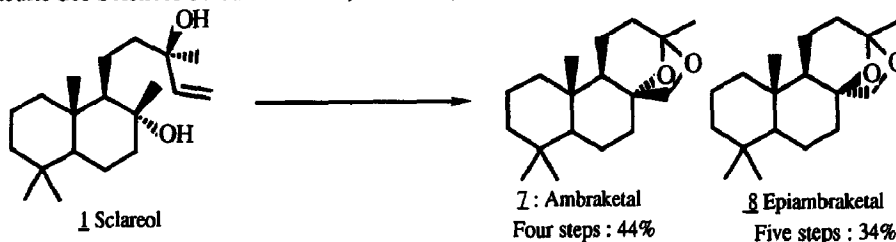
Excited intermediates generated from methyl 1-azido- α - (or β -) D-glucopyranosides by photolysis, undergo preferentially the indicated 1,2-shifts, depending on the anomeric configuration of the substrates, to yield either sugar hydroximo lactone derivatives or new ring-expanded compounds.



**A Short Efficient Synthesis of Ambraketal (four steps)
and Epiambraketal (five steps) from Sclareol.**

Tetrahedron Letters, 1994, 35, 97

Paul Martres, Patricia Perfetti, Jean-Pierre Zahra and Bernard Waegell.*Laboratoire de Stéréochimie associé au CNRS LASCO, faculté des Sciences de Saint-Jérôme, Case 532, 13397 Marseille Cédex 20, France.



**Studies Towards the Total Synthesis of Taxoids. Lead Tetraacetate
Oxidations of Selected Unsaturated Bicyclic Diols**

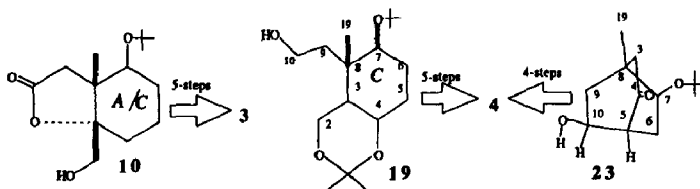
Tetrahedron Letters, 1994, 35, 99

S. Arseniyadis*, D.V. Yashunsky, R. Brondi Alves, Q. Wang, E. Toromanoff, L. Toupet[§] and P. Potier

Institut de Chimie des Substances Naturelles, CNRS, F-91198 Gif-sur-Yvette (France)

[§]Groupe Matière Condensée et Matériaux associé au CNRS, Université de Rennes I, 35042 Rennes (France)

A straightforward procedure to taxoid A and C ring moieties is reported.

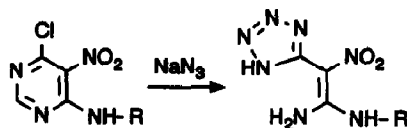


A MULTISTEP REARRANGEMENT IN THE NITROPYRIMIDINE SYSTEM

Tetrahedron Letters, 1994, 35, 103

Didier Babin, Isabelle Terrié, Michel Girardin, Antonio Ugolini and Jean-Pierre Demoute
Agrochemical Research Department, 102, route de Noisy, 93230 Romainville, France.

4-chloro 5-nitropyrimidine derivatives upon treatment with sodium azide, rearrange to give nitromethylene products.

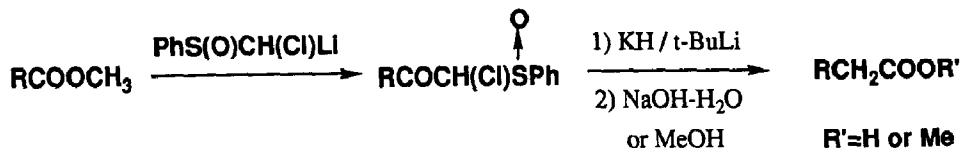


Ligand Exchange Reaction of Sulfoxides in Organic Synthesis: A New Method for One-Carbon Homologation of Esters to Carboxylic Acids and Esters via α -Chloro α -Sulfinyl Ketones

Tetrahedron Letters, 1994, 35, 133

Tsuyoshi Satoh, Yasuhiro Mizu, Yasumasa Hayashi, and Koji Yamakawa*

Faculty of Pharmaceutical Sciences, Science University of Tokyo; Shinjuku-ku, Tokyo 162, Japan



Kinetic Effects of Thiourea Addition on Benzylic Solvolyses

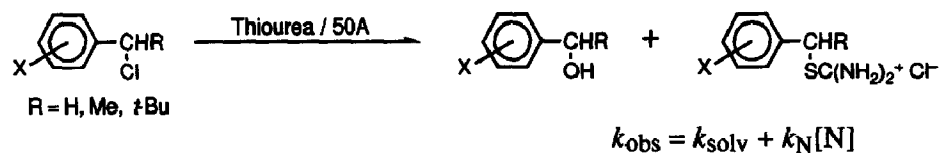
Tetrahedron Letters, 1994, 35, 135

Ken-ichi Yatsugi, Izumi Akasaka, Yutaka Tsuji,

Sung Hong Kim, Soo-Dong Yoh, Naoki Sugiyama,

Masaaki Mishima, Mizue Fujio,* and Yuho Tsuno

Institute for Fundamental Research of Organic Chemistry, Kyushu University, Hakozaki, Higashi-ku, Fukuoka 812, Japan

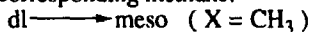


PREPARATION OF AND DYNAMIC GEARING IN CIS-1,2-BIS(9-TRIPTYCYL)ETHYLENE. Yuzo KAWADA*,

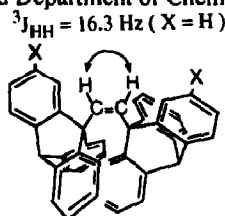
Tetrahedron Letters, 1994, 35, 139

Hiromi SAKAI, Makoto OGURI, and Gen KOGA, Instrumental Analysis Center and Department of Chemistry, Ibaraki University, 2-1-1 Bunkyo, Mito 310, Japan

A new molecular gear, *cis*-1,2-bis(9-triptycyl)ethylene has been prepared and a deep meshing in the ground state is suggested by unusually large $^3J_{\text{HH}}$ between the two olefinic protons. It is, however, a slightly looser gear compared to the corresponding methane.



$$\Delta H^\ddagger = 30.0 \pm 0.2 \text{ kcal/mol} \quad \Delta S^\ddagger = -3.7 \pm 0.4 \text{ e.u.}$$



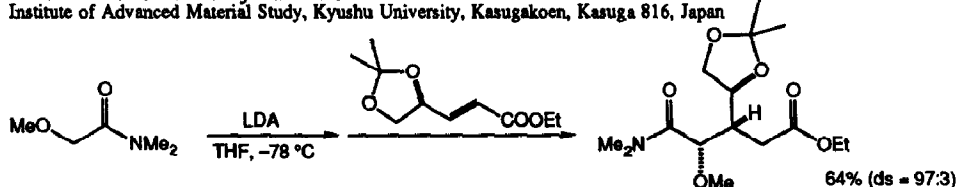
Michael Additions of the Lithium Enolates of α -Heterosubstituted Esters and Amides to a Chiral α,β -Unsaturated Carbonyl Acceptor, Ethyl (*E*)-3-[(*S*)-2,2-Dimethyl-1,3-dioxolan-4-yl]propenoate.

Tetrahedron Letters, 1994, 35, 143

High Stereoselection and Chiral Induction

Masafumi Nomura and Shuji Kanemasa*

Institute of Advanced Material Study, Kyushu University, Kasugakoen, Kasuga 816, Japan

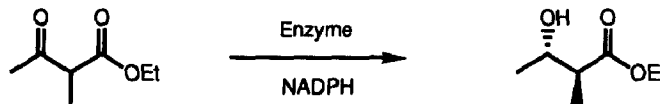


STERESELECTIVE SYNTHESIS OF ETHYL (2S,3S)-ANTI-2-METHYL-3-HYDROXYBUTANOATE MEDIATED BY AN OXIDOREDUCTASE FROM GEOTRICHUM CANDIDUM

Tetrahedron Letters, 1994, 35, 147

Yasushi Kawai,* Kousuke Takanobe, Munekazu Tsujimoto, and Atsuyoshi Ohno
Institute for Chemical Research, Kyoto University, Uji, Kyoto 611 Japan

Reduction of ethyl 2-methyl-3-oxobutanoate by an oxidoreductase from *Geotrichum candidum* affords corresponding (2S,3S)-anti-hydroxy ester.

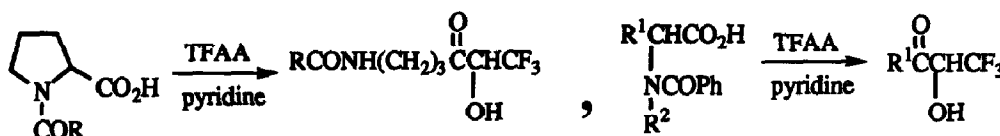


Unusual Reactions of Secondary Amino Acids with Trifluoroacetic Anhydride: A Novel Access to α -Trifluoromethylated Acylloins

Tetrahedron Letters, 1994, 35, 149

Masami Kawase

Faculty of Pharmaceutical Sciences, Josai University, 1-1 Keyakidai, Sakado-shi, Saitama 350-02, Japan

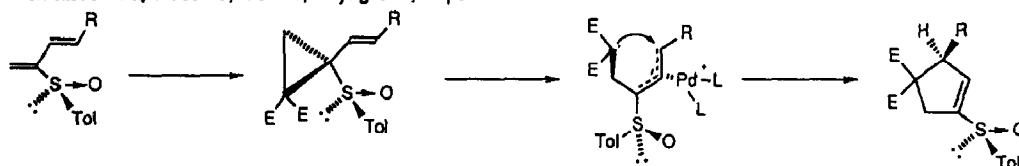


TRANSITION METAL-CATALYZED ASYMMETRIC VINYL-CYCLOPROPANE-CYCLOPENTENE REARRANGEMENTS. ASYMMETRIC SYNTHESIS OF CYCLOPENTANE DERIVATIVES USING CHIRAL SULFOXIDES AS CHIRAL SOURCES

Tetrahedron Letters, 1994, 35, 153

Kunio Hiroi* and Yoshihisa Arinaga

Department of Synthetic Organic Chemistry, Tohoku College of Pharmacy, 4-4-1 Komatsushima, Aoba-ku, Sendai, Miyagi 981, Japan

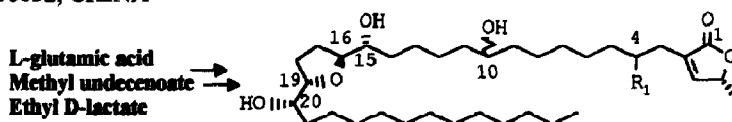


Total Synthesis of (10E,15R,16S,19S,20S,34R)-Corrossoline

Tetrahedron Letters, 1994, 35, 157

Zhu-Jun Yao and Yu-Lin Wu*

State Key Laboratory of Bio-organic and Natural Products Chemistry, Shanghai Institute of Organic Chemistry Shanghai 200032, CHINA



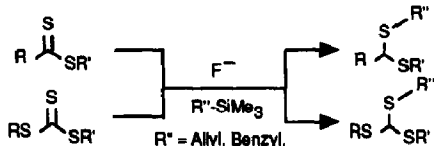
THIOPHILIC ALLYLATION OF DITHIOESTERS AND TRITHIOCARBONATES

Tetrahedron Letters, 1994, 35, 161

Antonella Capperucci^a, Alessandro Degl'Innocenti^b, M. Cristiana Ferrara^a, Bianca F. Bonini^c, Germana Mazzanti^c, Paolo Zani^c and Alfredo Ricci^{c,d}.

^aDipartimento di Chimica Organica, via G. Capponi 9, 50121 Firenze, Italy. ^bDipartimento di Chimica, via N. Sauro 85, 85100 Potenza, Italy.

^cDipartimento di Chimica Organica, viale Risorgimento 4, 40136 Bologna, Italy. ^dCentro CNR Composti Eterociclici, via Capponi 9, 50121 Firenze, Italy.



Fluoride ion induced reactions of dithioesters and trithiocarbonates with benzyl- and allyl silanes afford a novel example of silicon mediated thiophilic functionalization.

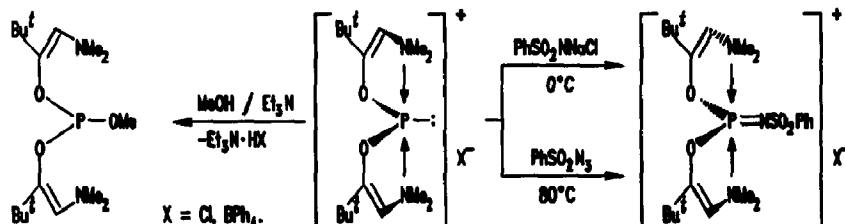
PECULIARITIES OF STRUCTURE AND PROPERTIES OF PHOSPHORUS-CONTAINING CATIONS WITH TWO INTRAMOLECULAR DONOR-ACCEPTOR BONDS N→P. SYNTHESIS OF THE FIRST 5-COORDINATED P-CATION WITH P=N BOND.

Tetrahedron Letters, 1994, 35, 165

Sergey E. Pipko^{*}
Yuri V. Balitskiy
Anatoly D. Sinitin

Institute of Organic Chemistry
of the Academy of Sciences of Ukraine,
Kiev 25380, Murmanshaya Str. 5, Ukraine.

Yuri G. Gololobov
All-Russian Institute
of Organo-Element Compounds
of the Russian Academy of Sciences,
Moscow 117334, Vavilova Str. 28, Russia.

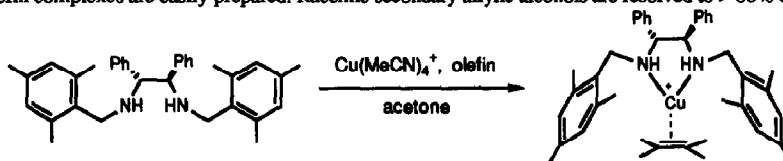


RESOLUTION OF ALLYLIC ALCOHOLS VIA COPPER(I) COMPLEXES WITH A CHIRAL DIAMINE.

Tetrahedron Letters, 1994, 35, 169

Maria E. Cucciolito,
Francesco Ruffo and Aldo Vitagliano^{*}, Dipartimento di Chimica, Università di Napoli, via Mezzocannone 4, 80134 Napoli, Italy
Maria Funicello, Dipartimento di Chimica, Facoltà di Scienze, Università della Basilicata, via N. Sauro 85, 85100 Potenza, Italy

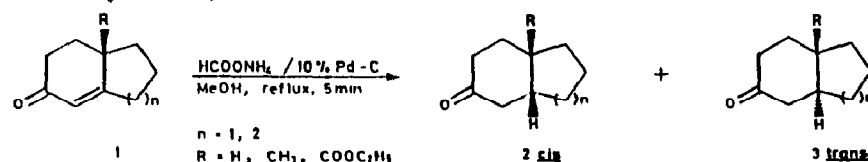
Cu(I) olefin complexes are easily prepared. Racemic secondary allylic alcohols are resolved to > 80% e.e. in one crystallization step.



PALLADIUM ASSISTED TRANSFER HYDROGENATION OF CYCLIC α,β-UNSATURATED KETONES BY AMMONIUM FORMATE

Tetrahedron Letters, 1994, 35, 171

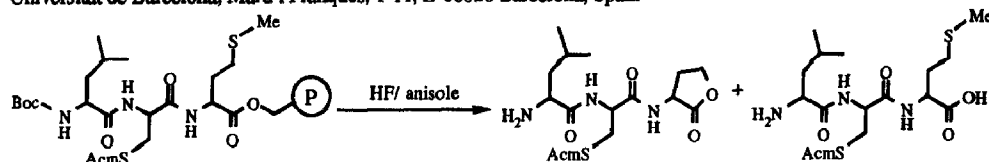
H. Surya Prakash Rao^{*} and K. Subba Reddy
Department of Chemistry, Pondicherry University,
Pondicherry - 605 014, India.



SEVERE SIDE-REACTION IN THE ACIDOLYTIC CLEAVAGE OF A C-TERMINAL MET-CONTAINING PEPTIDE FROM THE SOLID SUPPORT. FORMATION OF THE HOMOSERINE LACTONE PEPTIDE

Margarida Gairó, Paul Lloyd-Williams, Fernando Albericio and Ernest Giralt*
 Universitat de Barcelona, Martí i Franquès, 1-11, E-08028 Barcelona, Spain

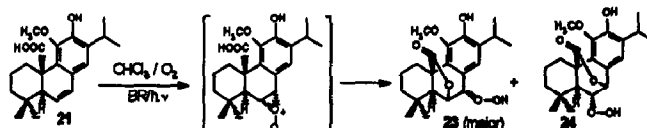
Tetrahedron Letters, 1994, 35, 175



CHEMICAL EVIDENCE FOR THE PARTICIPATION OF A PEROXIDE INTERMEDIATE IN THE REACTION OF SINGLET OXYGEN WITH MONO-OLEFINS IN RELATIONSHIP WITH THE BIOGENETIC PATHWAY TO HIGHLY OXIDIZED ABIETANE DITERPENES. Javier G. Luis*, Lucía S. Andrés and Winston Q. Fletcher. C.P.N.O. "Antonio González", Instituto Universitario de Bio-Organica, Universidad de La Laguna. Carretera de La Esperanza, 2, La Laguna, 38206 Tenerife. Canary Islands, Spain.

Tetrahedron Letters, 1994, 35, 179

The intramolecular trapping of a peroxide intermediate in the reaction of 21 with O_2 in unequivocal 1O_2 generating conditions to give 23 and 24 represents a conclusive proof of the no-concerted nature of such a process.



REGIOSELECTIVE ADAMANTYLATION OF N-UNSUBSTITUTED PYRAZOLE DERIVATIVES

Pilar CABILDO, Rosa María CLARAMUNT*, Isabelle FORFAR†, and José ELGUERO
 Departamento de Química Orgánica y Biología and Instituto de Química Médica,
 UNED and CSIC, C/ Senda del Rey s/n, 28040-Madrid, Spain

Reaction of NH-pyrazoles with 1-bromoadamantane in a high pressure stainless steel autoclave (250 ml, maximum working pressure of 200 atm) gives regioselectively 1-adamantyl or 4-adamantylpyrazoles depending on the temperature.

Tetrahedron Letters, 1994, 35, 183

