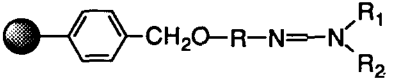
Tetrahedron Letters, **1997**, *38*, 5403

A NOVEL FORMAMIDINE LINKER FOR USE IN SOLID-PHASE SYNTHESIS.

Paul S. Furth*, Michael S. Reitman and Alan F. Cook, PharmaGenics, Inc., 4 Pearl Court, Allendale, New Jersey 07401.

Several amidines have been evaluated as linkers for solid phase synthesis, and the most suitable has been used to synthesize model compounds on solid supports.

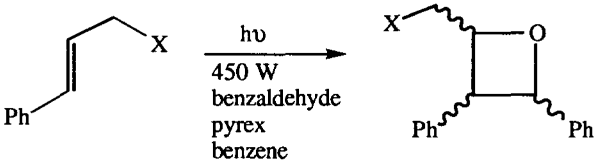


Tetrahedron Letters, **1997**, *38*, 5407

Stereocontrol of Paterno-Büchi Photocycloadditions

Steven A. Fleming* and J. Jerry Gao; Department of Chemistry and Biochemistry, Brigham Young University, Provo, UT 84602

Photocycloaddition of phenylpropene (X = H) with benzaldehylde gave a mixture of three oxetanes. The silylated cinnamyl alcohol (X = OSiMe$_3$) gave only one oxetane product.

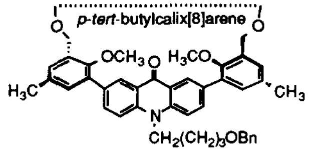


Tetrahedron Letters, **1997**, *38*, 5411

SYNTHESIS OF A NOVEL 1,4-BRIDGED CALIX[8]ARENE "HOST" CAVITY.

Youla S. Tsantrizos*, Warren Chew and Lawrence D. Colebrook, Department of Chemistry and Biochemistry, Concordia University, Montréal, Québec H3G 1M8.
Françoise Sauriol, Department of Chemistry, McGill University, Montréal, Québec H3A 2K6, Canada

Synthesis of a novel 1,4-bridged calix[8]arene derivative, cross-linked with a conformationally stable, acridone-based linker.

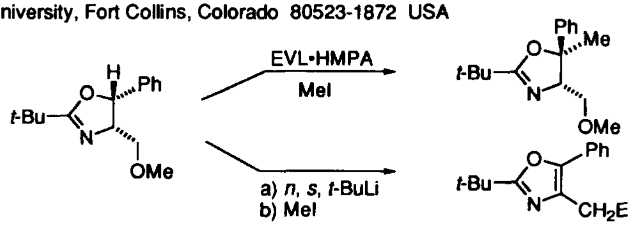


Tetrahedron Letters, **1997**, *38*, 5415

α-Ethoxyvinyllithium•HMPA. Further Studies on its Unusual Basic Properties.

Masanao Shimano and A. I. Meyers*
Department of Chemistry, Colorado State University, Fort Collins, Colorado 80523-1872 USA

EVL•HMPA behaves differently than conventional lithium bases.

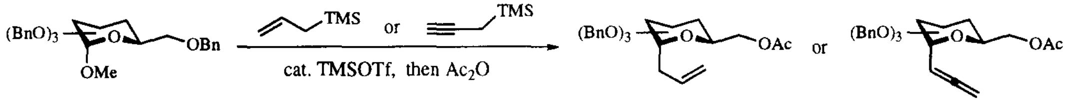


Tetrahedron Letters, **1997**, *38*, 5419

One-pot Synthesis of 1-Allyl- and 1-Allenyl-6-*O*-acetyl-2,3,4-tri-*O*-benzyl-α-D-glycosides from Methyl Tetra-*O*-benzyl-α-D-glycosides

Shang-Cheng Hung, Chun-Cheng Lin and Chi-Huey Wong*,
Department of Chemistry, The Scripps Research Institute,
10550 N. Torrey Pines Road, La Jolla, CA 92037

A one-pot synthesis of 1-allyl- and 1-allenyl-6-*O*-acetyl-2,3,4-tri-*O*-benzyl-α-D-glycosides from the corresponding methyl per-benzylglycosides in good yields is described.

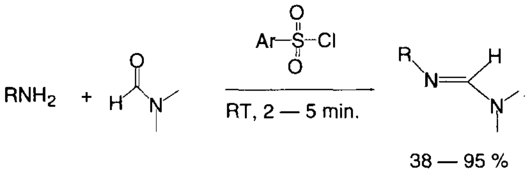


Tetrahedron Letters, **1997**, *38*, 5423

AN EFFICIENT AND CONVENIENT SYNTHESIS OF FORMAMIDINES

Ying Han and Lisheng Cai*, Department of Chemistry, The University of Illinois
at Chicago, Chicago, Illinois 60607 U.S.A.

New reagents, aryl sulfonyl chlorides, were used as coupling agents in the syntheses of formamidines from primary amines and N,N-dimethyl formamide in excellent yields.

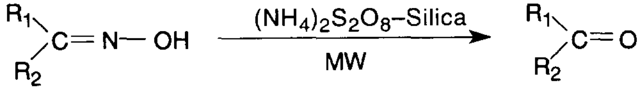


Tetrahedron Letters, **1997**, *38*, 5427

SOLID STATE DEOXIMATION WITH AMMONIUM PERSULFATE-SILICA GEL: REGENERATION OF CARBONYL COMPOUNDS USING MICROWAVES

Rajender S. Varma,*[1,2] and Harshadas M. Meshram[2]
[1]Department of Chemistry and Texas Regional Institute for Environmental Studies (TRIES),
Sam Houston State University, Huntsville, Texas 77341-2117, U.S.A.
[2]Houston Advanced Research Center (HARC), 4800 Research Forest Drive, The Woodlands, Texas 77381, U.S.A.

Ammonium persulfate on silica gel rapidly regenerates aldehydes and ketones from their corresponding oxime derivatives using microwaves under solventless 'dry' conditions.

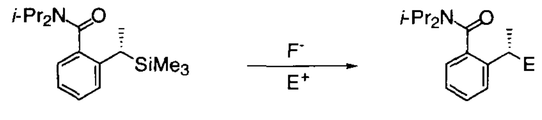


Tetrahedron Letters, **1997**, *38*, 5429

Fluoride Activated Stereoinformation Transfer from a C-Si Bond of a Chiral Benzyl Silane to C-C Bonds

S. Thayumanavan, Yong Sun Park, Payman Farid and Peter Beak*
Department of Chemistry, University of Illinois at Urbana-Champaign, Urbana, IL 61801

Reactions of (*S*)-*N,N*-diisopropyl-*o*-(1'-trimethylsilyl)ethyl benzamide with electrophiles in the presence of fluoride sources provide the substituted products with retention of configuration at the benzylic position in enantiomeric ratios up to 90:10.

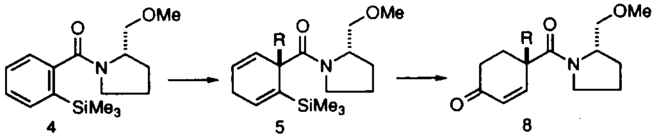


Tetrahedron Letters, **1997**, *38*, 5433

ASYMMETRIC SYNTHESIS OF 4,4-DISUBSTITUTED-2-CYCLOHEXEN-1-ONES FROM A CHIRAL 2-(TRIMETHYLSILYL)BENZAMIDE.

Arthur G. Schultz* and Liping Pettus. Department of Chemistry, Rensselaer Polytechnic Institute, Troy, NY 12180-3590

A four-step synthesis of 4,4-disubstituted-2-cyclohexen-1-ones **8** from the chiral benzamide **4** is described.

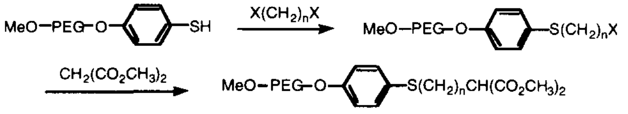


Tetrahedron Letters, **1997**, *38*, 5437

Syntheses of Alkylated Malonates on a Traceless Linker Derived Soluble Polymer Support

Xu-yang Zhao, Kim D. Janda*
Department of Chemistry, The Scripps Research Institute and The Skaggs Institute for Chemical Biology, 10550 N. Torrey Pines Road, La Jolla, CA 92037, USA

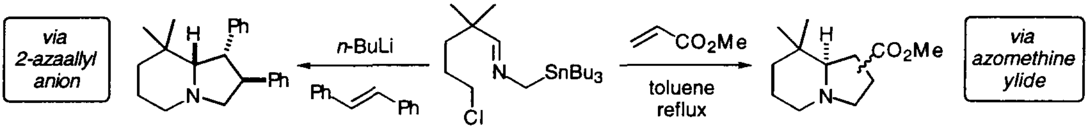
A new traceless linker and general alkylating strategy was developed, that allows incorporation of dimethyl malonate into a soluble PEG polymer.



Tetrahedron Letters, **1997**, *38*, 5441

THE GENERATION AND CYCLOADDITION OF 2-AZAALLYL ANIONS AND AZOMETHINE YLIDES FROM A COMMON PRECURSOR. A NOVEL SYNTHESIS OF INDOLIZIDINES AND OTHER HETEROCYCLES

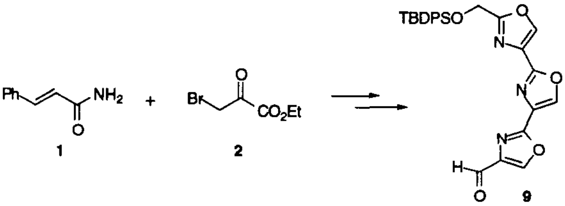
William H. Pearson* and Yuan Mi
Department of Chemistry, The University of Michigan, Ann Arbor, Michigan, USA 48109-1055



Tetrahedron Letters, **1997**, *38*, 5445

Synthesis of the Fully Functionalized Tris-oxazole Fragment Found in Metabolites Derived from Marine Organisms

Ping Liu, Cassandra A. Celatka, and James S. Panek*
Department of Chemistry, Metcalf Center for Science and Engineering, 590 Commonwealth Avenue, Boston University, Boston, MA 02215



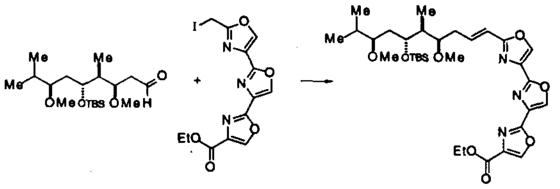
The synthesis of the fully functionalized tris-oxazole fragment **9** is reported employing modified Hantzsch methodology. Starting with the condensation reaction between cinnamamide **1** and ethyl bromopyruvate **2**, the synthetic sequence was carried out in 13 steps with an overall yield of 26%.

Tetrahedron Letters, **1997**, *38*, 5449

Studies Directed Toward the Synthesis of Ulapualide A: Phosphorous-Based Olefination as Model Studies for (Schlosser-like) Fragment Coupling

Cassandra A. Celatka, Ping Liu, and James S. Panek*
Department of Chemistry, Metcalf Center for Science and Engineering, 590 Commonwealth Avenue, Boston University, Boston, MA 02215

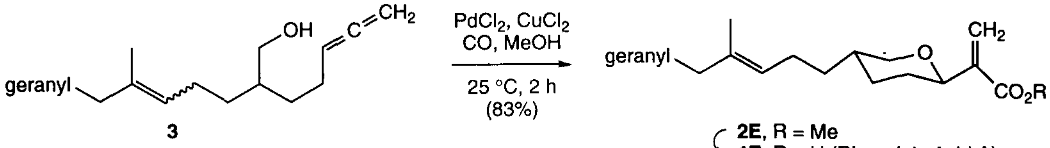
Preliminary studies aimed at developing reaction conditions for the fragment coupling between the C_{26}-C_{42} fragment and the tris-oxazole fragment of ulapualide A are described.



Tetrahedron Letters, **1997**, *38*, 5453

TOTAL SYNTHESIS OF (±)-RHOPALOIC ACID A

Barry B. Snider* and Feng He, Department of Chemistry
Brandeis University, Waltham, MA 02254-9110



3

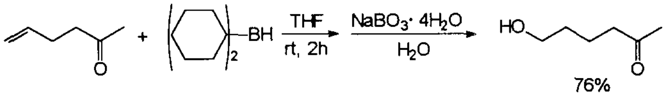
2E, R = Me
1E, R = H (Rhopaloic Acid A)

Tetrahedron Letters, **1997**, *38*, 5455

Selective Hydroboration of Alkenes In the Presence of Aldehydes and Ketones.

George W. Kabalka,* Su Yu and Nan-Sheng Li
Departments of Chemistry and Radiology;
The University of Tennessee; Knoxville, TN 37996-1600

The hydroboration of olefinic ketones and aldehydes with dicyclohexylborane gives the corresponding hydroxy aldehydes and ketones in good yields after oxidation with sodium perborate.



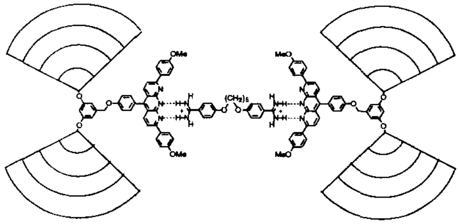
76%

Tetrahedron Letters, **1997**, *38*, 5459

DENDRIMERS WITH ANTHYRIDINE-BASED HYDROGEN-BONDING UNITS AT THEIR CORES: SYNTHESIS, COMPLEXATION AND SELF-ASSEMBLY STUDIES

Yue Wang, Fanwen Zeng, and Steven C. Zimmerman*
Department of Chemistry, Roger Adams Laboratory
University of Illinois, Urbana, Illinois 61801

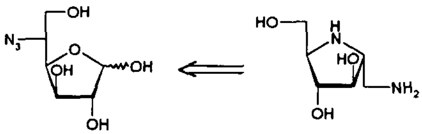
Dendrons with "sticky" anthyridine groups at their core bind amidinium ions. Pentamidine forms a 2:1 assembly, a noncovalent didendron.



Tetrahedron Letters, **1997**, *38*, 5463

SYNTHESIS OF 1-AMINO-1,2,5-TRIDEOXY-2,5-IMINO-D-MANNITOL, A NOVEL ANALOGUE OF THE POWERFUL GLUCOSIDASE INHIBITOR 2,5-DIDEOXY-2,5-IMINO-D-MANNITOL, VIA AN AMADORI REARRANGEMENT OF 5-AZIDO-5-DEOXY-D-GLUCOFURANOSE

Tanja M. Wrodnigg, Arnold E. Stütz*, and Steven G. Withers
Institut für Organische Chemie der Technischen Universität Graz
Stremayrgasse 16, A-8010 Graz, Austria



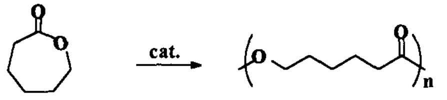
Selected examples show that ring expansion is an important driving force in the isomerisation reactions of 5-modified aldofuranoses into the corresponding ketopyranoses. This observation was taken advantage of in the preparation of the key intermediate, 1-amino-5-azido-1,5-dideoxy-D-fructose.

Tetrahedron Letters, **1997**, *38*, 5467

Ring-Opening Polymerization of ε-Caprolactone Catalyzed by Titanocene and Zirconocene Alkyne Complexes

Perdita Arndt*, Dominique Thomas and Uwe Rosenthal, Abteilung „Komplexkatalyse", Institut für Organische Katalyseforschung an der Universität Rostock, Buchbinderstr, 5-6, D-18055 Rostock, Germany

Different crystalline and well defind zirconocene and titanocene alkyne complexes **1** - **8** catalyze the ring-opening polymerization of ε-caprolactone. The highest T.O.N. of 8000 was found in the case of the agostic complex **8**.



e.g., cat.: $Cp_2M(L)(Me_3SiC_2SiMe_3)$

1: M = Ti

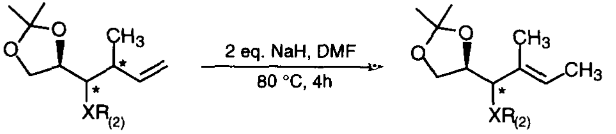
3: M = Zr, L = Py

Tetrahedron Letters, **1997**, *38*, 5469

A Mechanistically Unusual Base Induced [1,3]-H-Shift in Homoallylic Ethers.

Johann Mulzer*, Gregor Wille+, Jörn Bilow+, Duilio Arigoni++, Bruno Martinoni++, and Konrad Roten++. *Institut für Organische Chemie der Universität Wien,Währinger Strasse 38, A-1090 Wien, Austria. +Institut für Organische Chemie, Freie Universität Berlin, Takustrasse 3, D-14195 Berlin, Germany. ++Laboratorium für Organische Chemie, ETH Zürich, Universitätsstrasse 16, CH-8092 Zürich, Switzerland

Intramolecular and suprafacial [1,3]-H-shift, trisubstituted (*E*)- olefin, chiral acetic acid

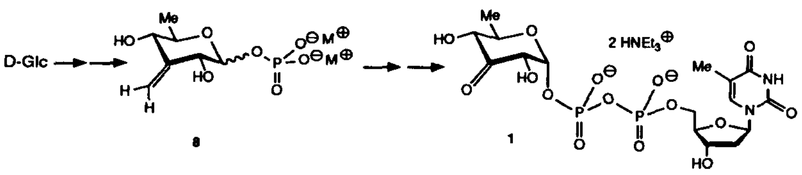


X = O or N
R = Protective Group

Tetrahedron Letters, **1997**, *38*, 5473

Investigation Towards the Synthe of dTDP-2,6-Dideoxy-D-erythro-3-hexulose – a Potential Intermediate in the Biosynthesis of Rare Sugars

Thomas Müller and Richard R. Schmidt
Fakultät Chemie, Universität Konstanz, Postfach 5560 M 725, D-78434 Konstanz, Germany

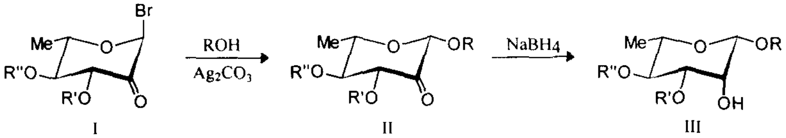


Tetrahedron Letters, **1997**, *38*, 5477

EFFICIENT GENERATION OF β-L-RHAMNOSIDIC LINKAGES VIA THE ULOSYL BROMIDE APPROACH

F. W. Lichtenthaler* and T. W. Metz, Institut für Organische Chemie, Technische Universität Darmstadt, D-64287 Darmstadt

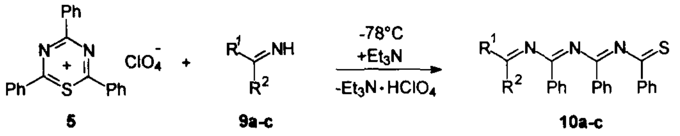
L-Rhamnose-derived ulosyl bromides of type I are useful indirect β-L-rhamnosyl donors, as their glycosidation proceeds with β-specificity (→ II) and the β-L-uloside reduction yields β-L-rhamnosides exclusively.



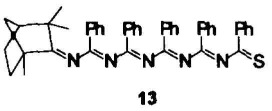
Tetrahedron Letters, **1997**, *38*, 5481

UNSATURATED HETERO CHAINS, VII.
THE SYNTHESIS OF 1-THIOACYL-OLIGONITRILES

Anke Beckmann, Roland Fröhlich and Ernst-Ulrich Würthwein*
Organisch-Chemisches Institut, Westfälische Wilhelms-Universität Münster, Corrensstr. 40, D-48149 Münster



Example:



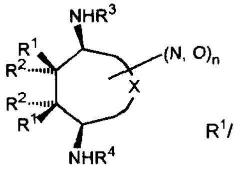
1-Thioacyl substituted oligonitriles **7**, **8**, **10** were prepared by nucleophilic ring opening reactions of 1-thia-3,5-diazinium salt **5**. Alkylation with oxonium salts furnishes the corresponding azavinylogous iminium salts, which may be converted to longer oligonitriles, e.g. **13**.

Tetrahedron Letters, **1997**, *38*, 5485

Biocatalysis in the Chiral Recognition of *meso*-Diamides - An Efficient Route from Cyclic Olefinic Hydrocarbons to Optically Pure Diamino-Polyols

Stefan Grabowski, Joachim Armbruster, and Horst Prinzbach*,
Institut für Organische Chemie und Biochemie der Universität Freiburg,
Albertstr. 21, D-79104 Freiburg i. Br., Germany

Eight *meso*-diamino-di(tri,tetr)ols of type **A**, readily available from carbocyclic olefins and *cis*-diepoxy derivatives, are efficiently enantiodifferentiated by enzyme catalyzed hydrolysis of their bis(phenylacet)amides (penicillin amidase, yields 73 - 90%, ee 91 - >97).



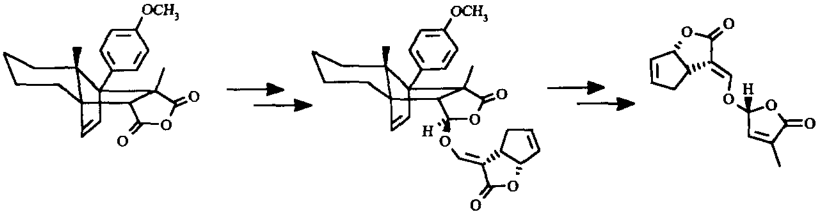
A

$R^1/R^2 = H / OH$

Tetrahedron Letters, **1997**, *38*, 5489

Strigol and Sorgolactone Synthetic Studies
Use of Winterfeldt's Template to Control the C-2′ Configuration

S. Röhrig, L. Hennig,
M. Findeisen, P. Welzel*,
Fakultät für Chemie und
Mineralogie der Universität
Leipzig, Talstr. 35,
D-04103 Leipzig (Germany),
D. Müller, Fakultät für Chemie
der Ruhr-Universität,
D-44780 Bochum (Germany)

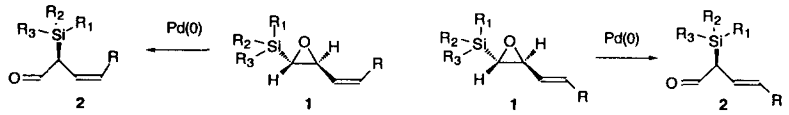


Tetrahedron Letters, **1997**, *38*, 5493

STEREOCONTROLLED REARRANGEMENT OF SILYLATED VINYLOXIRANES INTO α-TRIALKYLSILYL-β,γ-UNSATURATED ALDEHYDES.

Christine Courillon, Rachel Le Fol, Estelle Vandendris, Max Malacria*
Université P. et M. Curie, Laboratoire de Chimie Organique de Synthèse, associé au CNRS, B.229,
4 Place Jussieu, 75252 Paris Cedex 05, France.

Vinyloxiranes **1** rearrange into aldehydes **2** with retention of double bond configuration.

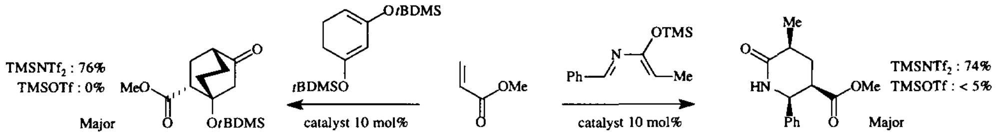


Tetrahedron Letters, **1997**, *38*, 5497

N-trimethylsilyl-bis(trifluoromethanesulfonyl)imide : an Efficient Catalyst for Diels-Alder Reactions.

Benoit Mathieu and Léon Ghosez* Laboratoire de Chimie Organique de Synthèse,
Université catholique de Louvain, place Louis Pasteur 1, 1348 Louvain-la -Neuve, Belgium

TMSNTf$_2$ was found to complex carbonyl groups much more efficiently than TMSOTf. This is illustrated by its catalytic effect on Diels-Alder reactions.

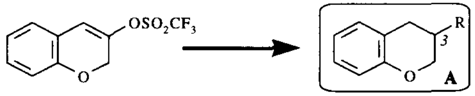


Tetrahedron Letters, **1997**, *38*, 5501

A NEW ROUTE TO 3,4-DIHYDRO-2*H*-1-BENZOPYRANS SUBSTITUTED AT 3-POSITION *VIA* PALLADIUM-CATALYSED REACTIONS

Stéphanie Usse, Gérald Guillaumet, Marie-Claude Viaud.*Institut de Chimie Organique et Analytique associé au CNRS, Université d'Orléans, B.P. 6759, 45067 Orléans Cedex 2, France.

3,4-Dihydro-2*H*-1-benzopyrans **A** substituted at 3-position were prepared *via* palladium catalysed reactions between a triflate and coupling reagents (alkyl or aryl tin reagents and boric acid derivatives) according to Stille or Suzuki methodologies.



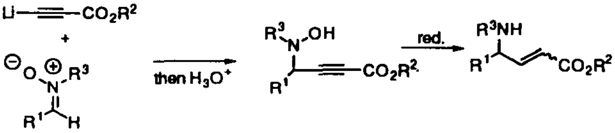
R = alkyl, aryl

Tetrahedron Letters, **1997**, *38*, 5503

THE REACTION OF PROPIOLATE ACETYLIDES WITH NITRONES. SYNTHESIS OF γ-AMINO-α,β-ETHYLENIC ACID DERIVATIVES

Jean-Noël Denis, Sylvie Tchertchian, Axel Tomassini and Yannick Vallée*, L.E.D.S.S., Université Joseph Fourier, 38041 Grenoble, France.

γ-Amino-α,β-ethylenic acid derivatives were obtained in two steps from nitrones and propiolic acid esters.



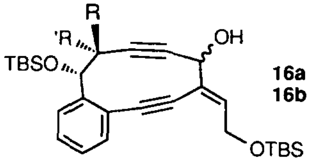
Tetrahedron Letters, **1997**, *38*, 5507

SYNTHESIS OF A CYCLIC DIENEDIYNE RELATED TO THE MADUROPEPTIN CHROMOPHORE

Jean Suffert* and Dominique Toussaint

Laboratoire de Pharmacochimie Moléculaire (UPR 421), Centre de Neurochimie, 5 rue Blaise Pascal, 67084 Strasbourg Cedex, France

The synthesis of aromatic analogues of the maduropeptin chromophore, compounds **16a**, **16b** is disclosed starting from 2-ethynyl benzaldehyde through a modified Nozaki-Hiyama reaction



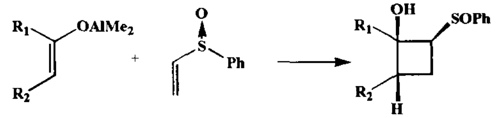
16a R = H, R' = OTBS
16b R = OTBS, R' =H

Tetrahedron Letters, **1997**, *38*, 5511

NEW EFFICIENT AND STEREOSELECTIVE [2+2] CYCLOADDITIONS OF DIMETHYLALUMINUM ENOLATES WITH PHENYLVINYLSULFOXIDE.

Hugues Bienaymé and Nathalie Guicher, Rhône-Poulenc Ind. CRIT-C, BP 62, 69192 St-Fons Cedex, France

Good yields of cis-substituted cyclobutanols were obtained when phenylvinylsulfoxide was reacted with dimethylaluminum enolates.

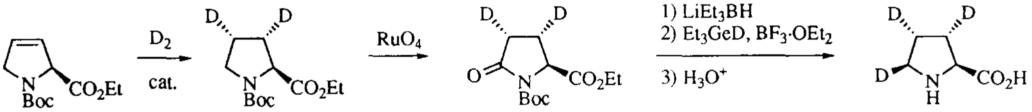


Tetrahedron Letters, **1997**, *38*, 5515

STEREOSELECTIVE SYNTHESIS OF (2*S*,3*S*,4*R*,5*S*)-PROLINE-3,4,5-d_3.

Makoto Oba, Tsutomu Terauchi, Jun Hashimoto, Tomohiro Tanaka, and Kozaburo Nishiyama,* Department of Material Science and Technology, Tokai University, 317, Nishino, Numazu, Shizuoka 410-03, Japan

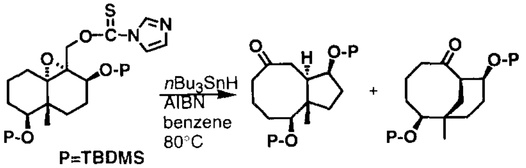
Synthesis of proline-3,4,5-d_3, in which all of the ring methylenes are stereoselectively labeled with deuterium, is described.



Tetrahedron Letters, **1997**, *38*, 5519

SKELETAL REARRANGEMENT VIA ALKOXY RADICAL: CONVERSION OF EPOXYDECALIN THIOCARBONYL-IMIDAZOLIDES TO BICYCLO[6.3.0]UNDECANONE AND BICYCLO[5.3.1]UNDECANONE

Atsushi Nishida,* You-Ichirou Kakimoto, Yukie Ogasawara, Norio Kawahara, Mayumi Nishida,[†] and Hiroaki Takayanagi[‡]
Hokkaido Institute of Pharmaceutical Sciences, 7-1 Katsuraoka, Otaru 047-02, Japan; [†]Faculty of Pharmaceutical Sciences, Hokkaido University, Sapporo 060, Japan; [‡]School of Pharmaceutical Sciences, Kitasato University, 5-9-1 Shirokane, Minato-ku, Tokyo 108, Japan

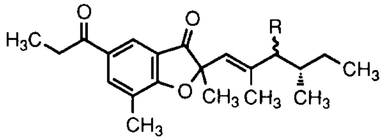


Tetrahedron Letters, **1997**, *38*, 5523

VASINFECTINS A AND B: NEW PHYTOTOXINS FROM *NEOCOSMOSPORA VASINFECTA*.

Toshio Furumoto, Takashi Hamasaki and Hiromitsu Nakajima,* Department of Agricultural Chemistry, Faculty of Agriculture, Tottori University, Koyama, Tottori 680, Japan

Structures of vasinfectins A (**1a**) and B (**1b**), phytotoxins produced by the phytopathogenic fungus *Neocosmospora vasinfecta*, were determined by NMR analysis and chemical reactions.



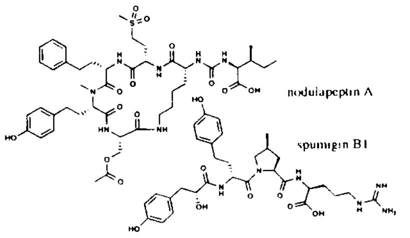
1a R = α-OH
1b R = β-OH

Tetrahedron Letters, **1997**, *38*, 5525

COMPARATIVE STUDY OF TOXIC AND NON-TOXIC CYANOBACTERIAL PRODUCTS: NOVEL PEPTIDES FROM TOXIC *NODULARIA SPUMIGENA* AV1

Kiyonaga Fujii, Makoto Suzuki and Ken-ichi Harada*, *Faculty of Pharmacy, Meijo University, Tempaku, Nagoya 468, Japan.* Kaarina Sivonen, *Department of Applied Chemistry and Microbiology, P.O. Box 56, FIN-00014, University of Helsinki, Helsinki, Finland.* Kyoko Adachi and Hiroshi Sano, *Marine Biotechnology Institute Co., Ltd, Shimizu, Shizuoka 424, Japan.* Kazuyoshi Noguchi and Kazuo Hirayama, *Central Research Laboratories, Ajinomoto Co., Inc. 1-1 Suzuki-cho, Kawasaki 210, Japan.*

Two types of novel peptides, cyclic peptides, nodulapeptins A and B and linear peptides, spumigins A~C, were isolated together with nodularin from toxic *Nodularia spumigena* AV1. Their structures were determined by 2D-NMR techniques, the advanced Marfey's method and MS/MS experiments.



nodulapeptin A

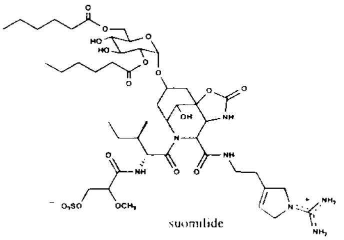
spumigin B1

Tetrahedron Letters, **1997**, *38*, 5529

COMPARATIVE STUDY OF TOXIC AND NON-TOXIC CYANOBACTERIAL PRODUCTS: A NOVEL GLYCOSIDE, SUOMILIDE, FROM NON-TOXIC *NODULARIA SPUMIGENA* HKVV

Kiyonaga Fujii, Makoto Suzuki and Ken-ichi Harada*, *Faculty of Pharmacy, Meijo University, Tempaku, Nagoya 468, Japan.* Kaarina Sivonen, *Department of Applied Chemistry and Microbiology, P.O. Box 56, FIN-00014, University of Helsinki, Helsinki, Finland.* Kyoko Adachi and Hiroshi Sano, *Marine Biotechnology Institute Co., Ltd, Shimizu, Shizuoka 424, Japan.* Kazuyoshi Noguchi and Kazuo Hirayama, *Central Research Laboratories, Ajinomoto Co., Inc. 1-1 Suzuki-cho, Kawasaki 210, Japan.*

A novel glycosidic compound, suomilide, was isolated together with 1-(*O*-α-glucopyranosyl)-3,25-hexacosanediol, a "heterocyst glycolipid" from the non-toxic *Nodulariaspumigena* HKVV. Their structures were determinated by 2D-NMR techniques and MS/MS experiments.



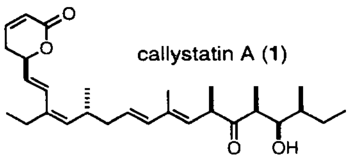
suomilide

Tetrahedron Letters, **1997**, *38*, 5533

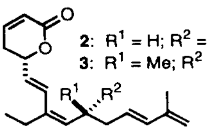
ABSOLUTE STEREOSTRUCTURE OF CALLYSTATIN A, A POTENT CYTOTOXIC POLYKETIDE FROM THE MARINE SPONGE, *CALLYSPONGIA TRUNCATA*

N. Murakami, W. Wang, M. Aoki, Y. Tsutsui, K. Higuchi, S. Aoki, and M. Kobayashi*
Faculty of Pharmaceutical Sciences, Osaka University,
Yamada-oka 1-6, Suita, Osaka 565, Japan

The absolute stereostructure of callystatin A (**1**), a potent cytotoxic polyketide from the marine sponge, *Callyspongia truncata*, was elucidated by CD comparison with two synthesized model compounds **2** and **3**.



callystatin A (**1**)

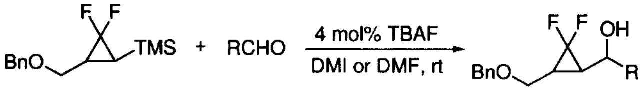


2: $R^1 = H$; $R^2 = Me$
3: $R^1 = Me$; $R^2 = H$

Tetrahedron Letters, **1997**, *38*, 5537

GENERATION AND REACTIONS OF DIFLUOROCYCLOPROPYL ANION

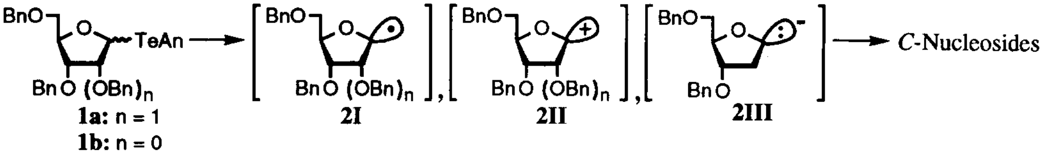
Akira Shibuya, Sylke Pietz, and Takeo Taguchi*
Tokyo University of Pharmacy and Life Science, 1432-1 Horinouchi, Hachioji, Tokyo 192-03, Japan



Tetrahedron Letters, **1997**, *38*, 5541

STRATEGIC APPROACH TO *C*-NUCLEOSIDES *VIA* SUGAR ANOMERIC RADICAL, CATION, AND ANION WITH SUGAR TELLURIDES

Wei He, Hideo Togo,* and Masataka Yokoyama*
Department of Chemistry, Faculty of Science, Chiba University, Yayoi-cho 1-33, Inage-ku, Chiba 263, Japan

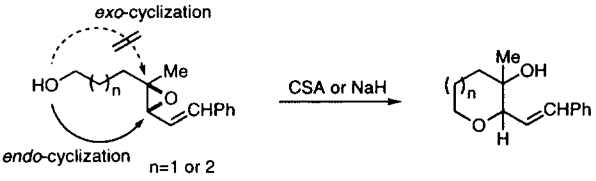


Tetrahedron Letters, **1997**, *38*, 5545

STEREOSELECTIVE SYNTHESIS OF TETRAHYDROPYRAN AND OXEPANE SYSTEMS BY THE *ENDO*-CYCLIZATION OF HYDROXY STYRYLEPOXIDES

Hiroko Matsukura, Masamichi Morimoto, Hiroyuki Koshino, and Tadashi Nakata*
The Institute of Physical and Chemical Research (RIKEN), Wako-shi, Saitama 351-01, Japan

Tetrahydropyran and oxepane systems were stereoselectively synthesized based on the *endo*-cyclization of hydroxy styrylepoxide.

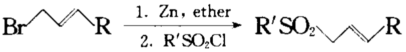


Tetrahedron Letters, **1997**, *38*, 5549

A CONVENIENT METHOD FOR THE SYNTHESIS OF β,γ-UNSATURATED SULFONES THROUGH ZINC-MEDIATED C-S COUPLING REACTION

Peipei Sun, Lei Wang and Yongmin Zhang*,
Department of Chemistry, Hangzhou University, Hangzhou, 310028, P. R. China

Zinc-mediated coupling reaction of allylic compounds to alkane- or arenesulfonyl chloride gives β,γ-unsaturated sulfones.

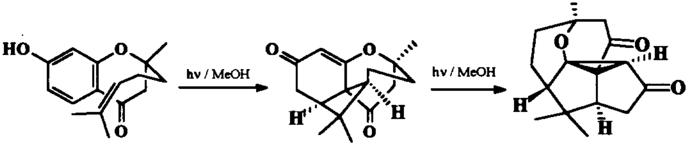


Tetrahedron Letters, **1997**, *38*, 5551

INTRAMOLECULAR PHOTOREARRANGEMENT OF A 2-ALKENYL-4-CHROMANONE TO AN OXAPENTACYCLOTETRADECANEDIONE

Govind P. Kalena[1], Padmanava P. Pradhan[1], Swarnalatha Y.[2], Tej P. Singh[2] and Asoke Banerji[1]*
[1] *Bio-Organic Division, Bhabha Atomic Research Centre, Mumbai-400 085, INDIA*
[2] *Departmentof Biophysics, All India Institute of Medical Sciences, New Delhi-110 029, INDIA*

A novel stereospecific conversion of 7-hydroxy-2-methyl-2-(4-methyl-3-pentenyl)-4-chromanone (1) to oxapentacyclo[8.3.1.0^{1,7}.0^{2,13}.0^{5,13}] tetradecanedione (3) *via* 2 is described.



(1) (2) (3)

Tetrahedron Letters, **1997**, *38*, 5555

NEW CNS AGENT PRECURSORS. A SIMPLE AND EFFICIENT ROUTE FOR SYNTHESIS OF 6-AMINOMETHYL-4,5,6,7-TETRAHYDROBENZOFURAN-4-ONES AS CONFORMATIONALLY CONSTRAINED BUTYROPHENONE ANALOGUES.

Isabel Casariego, Christian F. Masaguer and Enrique Raviña. Departamento de Quimica Organica, Laboratorio de Quimica Farmaceutica. Facultad de Farmacia, Universidad de Santiago de Compostela. 15706-Santiago de Compostela, SPAIN.

Starting from 3,4,5-trimethoxybenzoic acid we described a practical and efficient five-step synthesis of 6-aminomethyl-4,5,6,7-tetrahydrobenzofuran-4-ones as new CNS agent precursors in an overall yield of 20%.

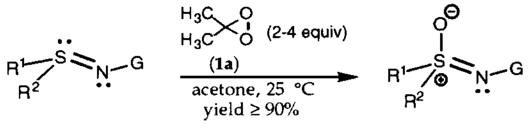
Tetrahedron Letters, **1997**, *38*, 5559

Facile Conversion of Sulfilimines into Sulfoximines Using Dioxiranes

Nicoletta Gaggero, Lucia D'Accolti, Stefano Colonna,* and Ruggero Curci*

Centro CNR e Istituto di Chimica Organica, Facoltà di Farmacia, Università di Milano, via Venezian 21, I-20133 Milano, Italy , and Centro CNR "M.I.S.O.", Dipartimento di Chimica, Università di Bari, I-70126 Bari, Italy

Employing dimethyldioxirane (**1a**), *N*-(*p*-tolylsulfonyl)sulfilimines and *N*-(acetyl)sulfilimines are oxidized to the corresponding sulfoximines in high yield. Optically active *S*-(*p*-tolyl)-*S*-methyl-*N*-(*p*-tolylsulfonyl)sulfilimine could be transformed into its sulfoximine in high ee with retention of configuration.

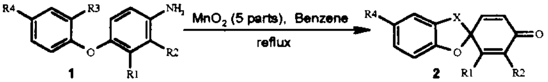


Tetrahedron Letters, **1997**, *38*, 5563

DIRECT PREPARATION OF SPIRODIOXOLE AND SPIRO -BENZOXAZOLE - CYCLOHEXADIENONES BY OXIDATION OF 4 - ARYLOXYANILINES.

Ian G.C.Coutts, Vasilios H.Pavlidis, Khalid Reza, Mark R.Southcott, and Gregory Wiley. Department of Chemistry and Physics, The Nottingham Trent University, Clifton Lane, Nottingham, NG11 8NS.

Oxidation of anilines **1** with manganese dioxide gives quinone ketals **2** directly in 30 to 50% yield.



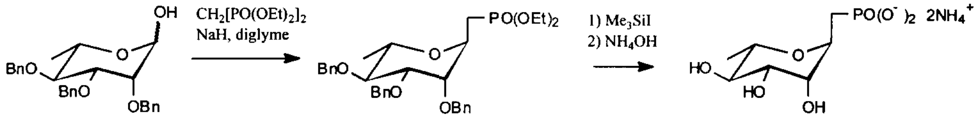
1 **2**

When R3 = OH: R1 = H or CF_3, R2 = R4 = H — X = O
When R3 = $NHSO_2R$: R1 = R2 = H, R4 = CF_3 — X = NSO_2R

Tetrahedron Letters, **1997**, *38*, 5567

EASY AND STEREOSELECTIVE SYNTHESIS OF THE PHOSPHONO ANALOGUE OF α-L-RHAMNOSE 1-PHOSPHATE

Laura Cipolla, Barbara La Ferla, Francesco Nicotra*, Luigi Panza
Dipartimento di Chimica Organica e Industriale, Università di Milano, V. Venezian 21, 20133 Milano



Tetrahedron Letters, **1997**, *38*, 5569

STEREOCONTROL BY INTRINSIC ANTIPARALEL DOUBLE REPULSION ON DIACETONE-D-GLUCOSE TEMPLATE. DIASTEREOSELECTIVE SYNTHESIS OF 3(S)-ISOTHIOCYANATO-3-DEOXY-3-C-VINYL GLUCOSE VIA (3,3)-SIGMATROPIC REARRANGEMENT OF ALLYLIC THIOCYANATES.

Jozef Gonda* and Miroslava Bednárikova, *Department of Organic Chemistry, P.J. Šafarik University, Moyzesova 11, 04167 Košice, Slovak Republic*

A stereoselective synthesis of the branched-chain sugar 3(*S*)-isothiocyanato-3-deoxy-3-C-vinyl glucose *via* (3,3)-sigmatropic rearrangement of allylic thiocyanates prepared from D-glucose is presented.