

GRAPHICAL ABSTRACTS

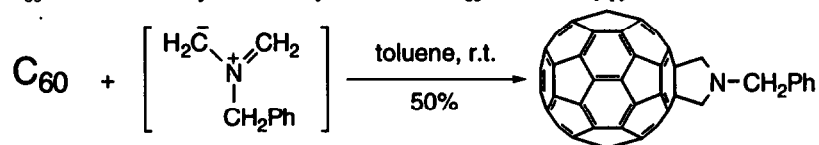
Tetrahedron Lett. 1993, 34, 8187

1,3-Dipolar Cycloaddition of *N*-Benzyl Azomethine Ylide to C₆₀: Formation of C₆₀-fused *N*-Benzylpyrrolidine

Xiaojun Zhang, Matthew Willems and Christopher S. Foote*

Department of Chemistry and Biochemistry, University of California, Los Angeles, Los Angeles, CA 90024-1569.

C₆₀ reacts with *N*-benzyl azomethine ylide to afford a C₆₀-fused *N*-benzylpyrrolidine in 50% isolated yield.

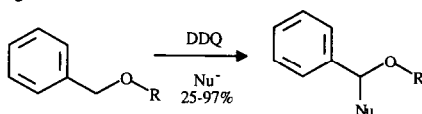


Tetrahedron Lett. 1993, 34, 8189

DDQ-induced and Stereoselective Functionalization at Heterosubstituted Benzylic Positions by Carbon Nucleophiles. Yao-Chang Xu,* Caroline Roy,

Elaine Lebeau, BioChem Pharma Inc., 531 Blvd. des Prairies, Laval, Quebec, Canada H7V 1B7

DDQ-induced functionalization at heterosubstituted benzylic positions with a variety of carbon nucleophiles proceeds in high yield with good stereochemical control.



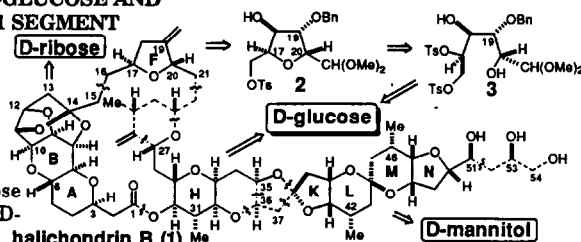
Nu⁻: silyl enol ethers, allyl stannanes, allyl silanes, TMSiCN, Grignard reagents, and lithium reagents

TOTAL SYNTHESIS OF HALICHONDRIIN B FROM COMMON SUGARS: AN F-RING INTERMEDIATE FROM D-GLUCOSE AND EFFICIENT CONSTRUCTION OF THE C1 TO C21 SEGMENT

Arthur J. Cooper, Wenxi Pan, Robert G. Salomon*

Department of Chemistry,
Case Western Reserve University,
Cleveland, OH 44106-2699

An F-ring intermediate is assembled from D-glucose and joined with an ABCDE-ring precursor from D-ribose to give a C1-C21 fragment of halichondrin B. **halichondrin B (1)**

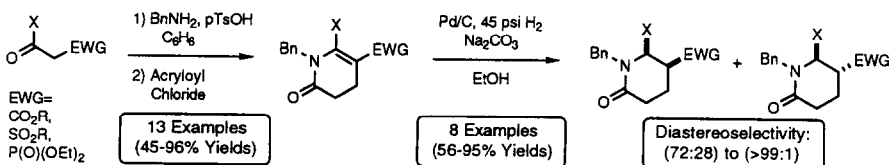


Tetrahedron Lett. 1993, 34, 8193

CONFORMATIONALLY RESTRICTED β-AMINO ACID ISOMERES PREPARED THROUGH REGIOSELECTIVELY CONTROLLED AZA-ANNULATION.

K. Paulvannan and John R. Stille*

Department of Chemistry, Michigan State University, East Lansing, MI 48824

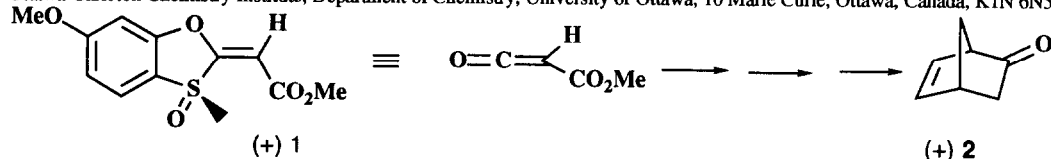


Tetrahedron Lett. 1993, 34, 8197

ENANTIOSELECTIVE CYCLOADDITION via a
CHIRAL KETO-ESTER KETENE EQUIVALENT

Jacek Martynow, Martin Dimitroff, and Alex G. Fallis*

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

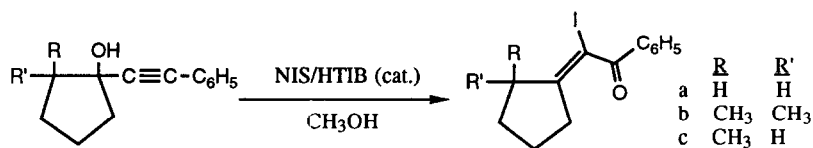


Cycloaddition of (+)**1** and cyclopentadiene (-78 °C, BCl_3), syn to the sulfoxide lone pair, afforded (+)**2** after hydrolysis and decarboxylation.

CONVERSIONS OF PHENYLALKYNYLCYCLOPENTANOLS TO α -IODOENONES

Pakorn Bovonsombat and Edward Mc Nelis*

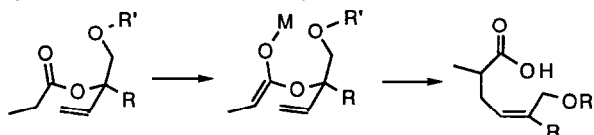
Department of Chemistry, New York University, New York, New York 10003



A LIGAND ASSISTED CLAISEN REARRANGEMENT

Marie E. Krafft,* Sandra Jarrett and Olivier Dasse

Department of Chemistry, The Florida State University, Tallahassee, FL 32306-3006

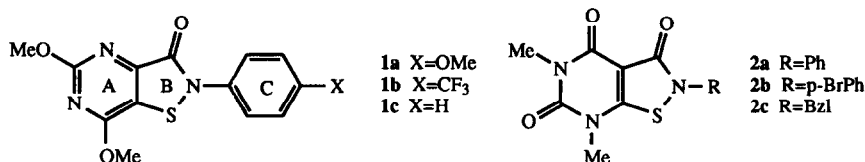


The Ireland ester enolate Claisen rearrangement gives rise to Z-trisubstituted alkenes via heteroatom mediated substrate pre-organization prior to rearrangement.

THE SYNTHESIS OF PYRIMIDINEISOTHIAZOLONES.

THE EFFECT OF TEMPERATURE ON THE ADDITION

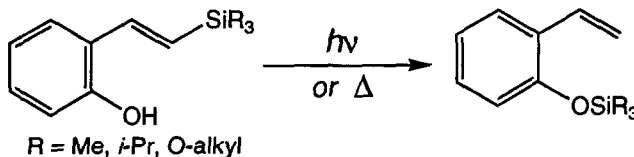
OF ARYL AMINES TO FUNCTIONALIZED PYRIMIDINES. Carl P. Decicco* and David J. Nelson, Inflammatory Diseases Research Department, The DuPont Merck Pharmaceutical Company, Experimental Station, Wilmington Delaware, USA, 19880-0353.



**TANDEM PHOTOCHEMICAL OR THERMAL [1,5]-H,
THERMAL [1,5]-SI MIGRATIONS OF VINYL SILANES**

Tetrahedron Lett. 1993, 34, 8217

Michael C. Pirrung* & Yong Rok Lee
Department of Chemistry, Duke University
P. M. Gross Chemical Laboratory
Durham, North Carolina 27708-0346 USA



The irradiation or thermolysis of (*o*-hydroxystyryl)vinylsilanes results in migration of the silyl group to the phenolic oxygen via consecutive [1,5]-H and [1,5]-Si shifts.

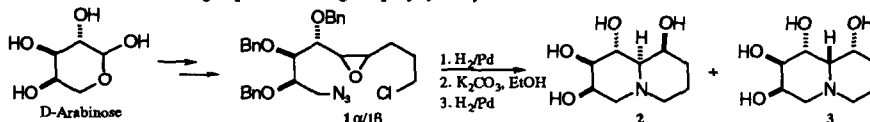
**SYNTHESIS OF NOVEL POLYHYDROXYLATED
QUINOLIZIDINES: RING EXPANDED ANALOGS OF
GLYCOSIDASE INHIBITORY INDOLIZIDINES**

Tetrahedron Lett. 1993, 34, 8221

William H. Pearson* and Erik J. Hembre

Department of Chemistry, The University of Michigan, Ann Arbor, MI 48109-1055

Reductive double cyclization of 1 α /1 β gives (1*R*,2*R*,3*R*,9*S*,9*aR*)-1,2,3,9-tetrahydroxyquinolizidine **2** and (1*R*,2*R*,3*R*,9*R*,9*aS*)-1,2,3,9-tetrahydroxyquinolizidine **3**, which are ring expanded analogs of polyhydroxylated indolizidines such as swainsonine and castanospermine.



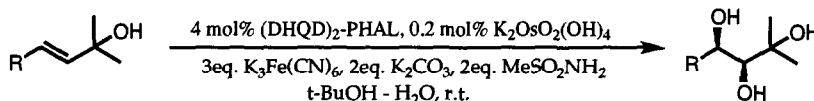
Asymmetric Dihydroxylation of Tertiary Allylic Alcohols

Tetrahedron Lett. 1993, 34, 8225

Zhi-Min Wang and K. Barry Sharpless*

Department of Chemistry, The Scripps Research Institute, 10666 North Torrey Pines Road, La Jolla, CA 92037, U.S.A.

The asymmetric dihydroxylation (AD) of tertiary allylic alcohols is examined.

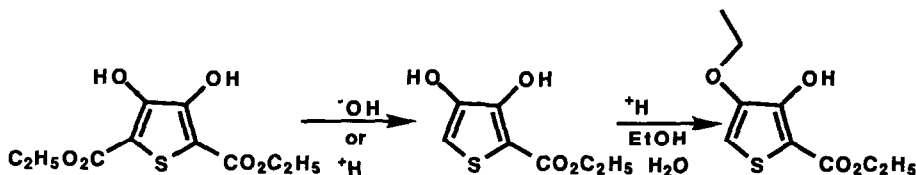


**STRUCTURE OF 3,4-DIHYDROXY-2-THIOPHENECARBOXYLIC ACID
ETHYL ESTER IN THE CRYSTAL AND SOLUTION STATES.**

Tetrahedron Lett. 1993, 34, 8229

William A. Hada, Frank W. Rusek, Jon Bordner and Lawrence S. Melvin, Jr.*,
Pfizer Inc., Central Research, Groton, CT 06340 USA

The structure of 3,4-dihydroxy-2-thiophenecarboxylic acid ethyl ester is the dihydroxy tautomer.

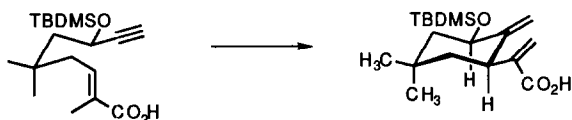


A REACTIVITY CONTROL SUBSTITUENT IN THE Pd CATALYZED CYCLOISOMERIZATION OF 1,7-ENYNES

Barry M. Trost, and Onko J. Gelling

Department of Chemistry, Stanford University, Stanford 94305-5080

The presence of a free carboxylic acid facilitates the palladium catalyzed cycloisomerization of 1,7-enynes with excellent 1,2- and 1,3-diastereoselectivity.

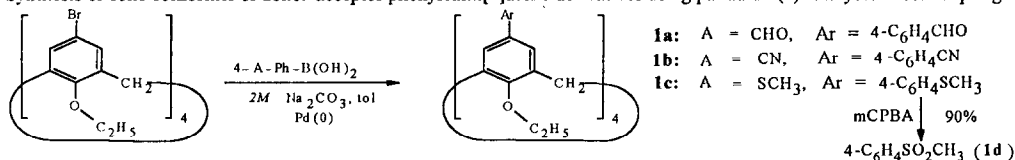


Synthesis of Extended, Chromogenic Tetra-(p-substitutedphenyl)-Tetraethoxycalix[4]arenes.

Man Shing Wong and Jean-François Nicoud*

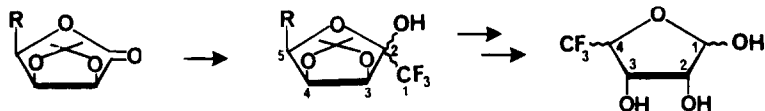
I.P.C.M.S., Groupe des Matériaux Organiques, Institut Charles Sadron, 6, rue Boussingault, 67083 Strasbourg Cedex, France

Synthesis of cone conformer of donor-acceptor phenylcalix[4]arene derivatives using palladium(0) catalysed cross coupling.



Trifluoromethylation of Sugar 1,4-Lactones : Synthesis of 5-Deoxy-5,5-Trifluoro-D and L-Ribose and Lyxose Derivatives

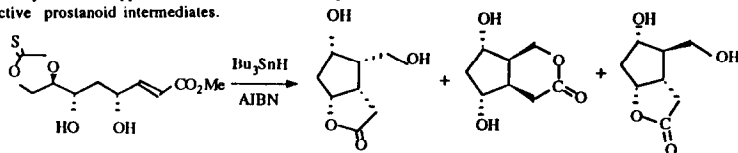
Pascal Munier, Dominique Picq and Daniel Anker* Université Claude Bernard - Lab. de Chimie Organique 3, associé au CNRS, 43 Bd du 11 Novembre 1918 69622 Villeurbanne (France)



The first syntheses of trifluorinated analogues of 5-deoxypentoses are described; the CF₃ group was introduced using CF₃SiMe₃. Diastereoselectivity at C-4 is induced by the reduction at the anomeric centre of the 2-ketoses.

A FREE RADICAL ROUTE TO SYN LACTONES AND OTHER PROSTANOID INTERMEDIATES IN ISOPROSTAGLANDIN SYNTHESIS. B. Rondot^a, Th. Durand^a, J. P. Girard^a, J. C. Rossi^a, L. Schiob^b, S.P. Khanapure^b and J. Rokach^b. (a) : URA C.N.R.S.1111, Univ. Montpellier I, 15 Av. Ch. Flahault, Montpellier, FRANCE. (b) : Claude Pepper Institute (FIT), 150 W. University Blvd., Melbourne, FL 32901 USA.

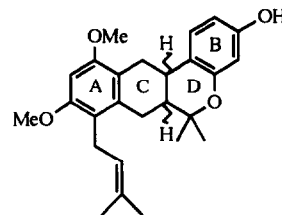
The radical cyclization, applied to the thionocarbonate precursor from diacetone-D-glucose as starting material, give the optical active prostanoid intermediates.



HETEROPHYLLOL, A PHENOLIC COMPOUND WITH NOVEL SKELETON FROM *ARTOCARPUS HETEROPHYLLUS*

Chun-Nan Lin* and Chai-Ming Lu, Natural Products Research Center, Kaohsiung Medical College, Kaohsiung, Taiwan 807, R.O.C.

Novel phenolic compound, heterophyllol, from *Artocarpus heterophyllus*

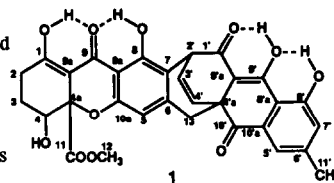


The Structure of Xanthoquinodin A1, A Novel Anticoccidial Antibiotic Having A New Xanthone-Anthraquinone Conjugate System

Keiichi Matsuzaki, Noriko Tabata, Hiroshi Tomoda, Yuzuru Iwai, Haruo Tanaka and Satoshi Omura*

School of Pharmaceutical Sciences, Kitasato University, and Research Center for Biological Function, The Kitasato Institute, Minato-ku, Tokyo 108, Japan

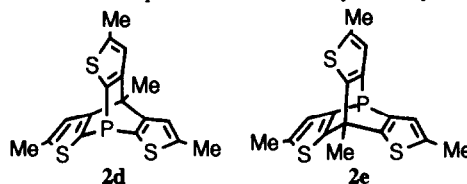
The structure of xanthoquinodin A1(1), isolated from *Humicola* sp. FO-888, was elucidated by ¹H- and ¹³C-NMR experiments.



SYNTHESES AND REACTIONS OF 4- AND 8-PHOSPHATHIOPHENETRIPTYCENES.

Akihiko Ishii, Ikuo Takaki, Juzo Nakayama, and Masamatsu Hoshino, Department of Chemistry, Faculty of Science, Saitama University, Urawa, Saitama 338, Japan

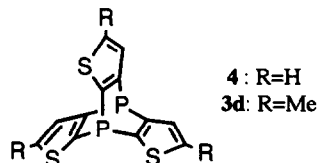
8- and 4-Phosphathiophenetriptycenes, **2d** and **2e**, are synthesized. The decreased reactivity of **2d** compared to **2e** is shown by competitive chalcogenation reactions. Complexation of **2d** with $M(CO)_5(THF)$ ($M=W, Mo$) gives the corresponding 1:1 complexes.



4,8-DIPHOSPHATHIOPHENETRIPTYCENES.

Akihiko Ishii, Rie Yoshioka, Juzo Nakayama, and Masamatsu Hoshino, Department of Chemistry, Faculty of Science, Saitama University, Urawa, Saitama 338, Japan

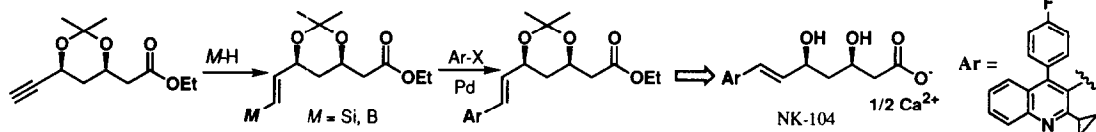
Unsubstituted and trimethyl-4,8-diphosphathiophenetriptycenes, **4** and **3d**, are synthesized by reduction of the corresponding phosphine oxides with trichlorosilane. The reaction of **3d** with $W(CO)_5(THF)$ gives a 1:2 complex in high yield.



A NEW SYNTHESIS OF HMG-CoA REDUCTASE INHIBITOR NK-104 THROUGH HYDROSILYLATION-CROSS COUPLING REACTION

Tetrahedron Lett. 1993, 34, 8263

Kyoko Takahashi, Tatsuya Minami, Yoshio Ohara,[‡] and Tamejiro Hiyama*[§]
 Sagami Chemical Research Center, 4-4-1 Nishiohnuma, Sagamihara, Kanagawa 229, Japan
[‡]Central Research Institute, Nissan Chemical Industries Ltd., 722-1 Tsuboi-cho, Funabashi, Chiba 274, Japan

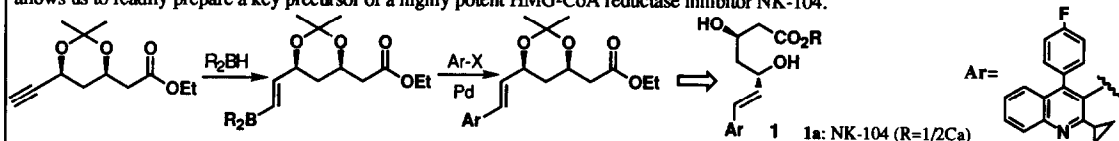


A NOVEL SYNTHETIC METHOD OF HMG-CoA REDUCTASE INHIBITOR NK-104 VIA A HYDROBORATION-CROSS COUPLING SEQUENCE

Tetrahedron Lett. 1993, 34, 8267

Nobuhide Miyachi,* Yoshinobu Yanagawa, Hiroshi Iwasaki, Yoshio Ohara, and Tamejiro Hiyama*[†]
 Central Research Institute, Nissan Chemical Industries Ltd., 722-1 Tsuboicho, Funabashi, Chiba 274, Japan
[†]Research Laboratory of Resources Utilization, Tokyo Institute of Technology, 4259 Nagatsuta, Midori-ku, Yokohama 227, Japan

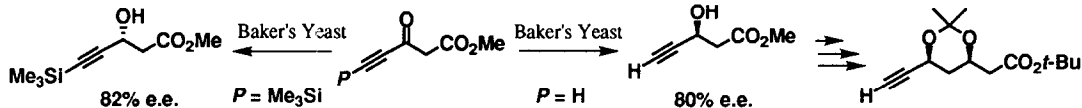
Hydroboration of ethyl (3*R*,5*S*)-3,5-isopropylidenedioxy-6-heptynoate and subsequent cross-coupling reaction with an aryl halide or aryl triflate allows us to readily prepare a key precursor of a highly potent HMG-CoA reductase inhibitor NK-104.



SYNTHESIS OF OPTICALLY ACTIVE *t*-BUTYL (3*R*,5*S*)-3,5-ISOPROPYLIDENEDIOXY-6-HEPTYNOATE THROUGH BAKER'S YEAST REDUCTION OF METHYL 3-OXO-4-PENTYNOATE.

Tetrahedron Lett. 1993, 34, 8271

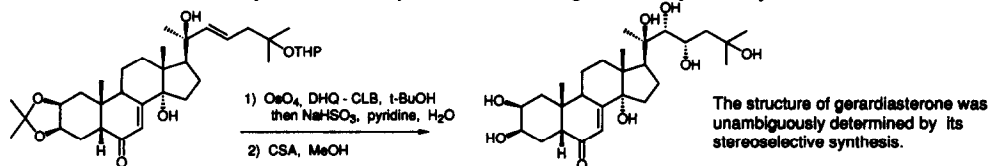
Mohammad Hafeez Ansari, Tetsuo Kusumoto and Tamejiro Hiyama*
 Sagami Chemical Research Center, 4-4-1 Nishiohnuma, Sagamihara, Kanagawa 229, Japan.



SYNTHESIS AND STRUCTURE ELUCIDATION OF A NOVEL ECDYSTEROID, GERARDIASTERONE

Tetrahedron Lett. 1993, 34, 8275

Toshio Honda,* Hironao Takada, Shigehiro Miki, and Masayoshi Tsubuki
 Institute of Medicinal Chemistry, Hoshi University, Ebara 2-4-41, Shinagawa-ku, Tokyo 142, Japan

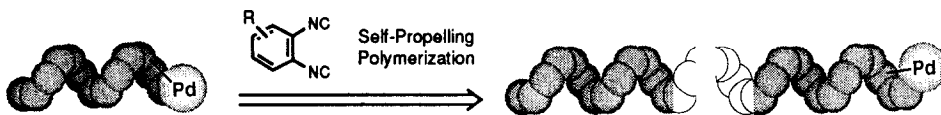


SCREW-SENSE SELECTIVE SELF-PROPELLING POLYMERIZATIONS PRODUCING CHIRAL POLY(QUINOXALINE-2,3-DIYL)S

Yoshihiko Ito,* Yutaka Kojima, and Masahiro Murakami

Department of Synthetic Chemistry, Faculty of Engineering, Kyoto University, Yoshida, Kyoto 606-01, Japan

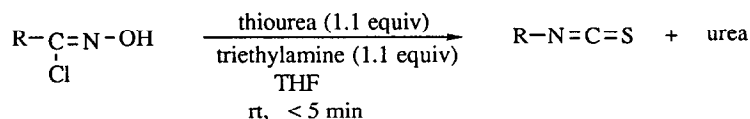
An enantiomerically pure [sexi(quinoxaline-2,3-diyl)]palladium(II) complex having no chiral auxiliary but just a single chirality of secondary helical structure could successfully induce the screw-sense selective self-propelling polymerization of 1,2-diisocyanoarenes.



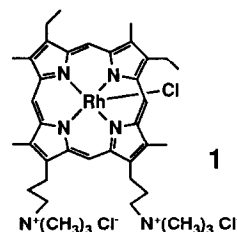
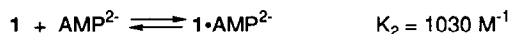
A Convenient Synthesis of Isothiocyanates from Nitrile Oxides

Jae Nyong Kim and Eung K. Ryu*

Korea Research Institute of Chemical Technology, Daedeog-Danji, Daejeon 305-606, Korea



Nucleotide Recognition in Aqueous Media with Artificial Receptor Based on Porphyrin

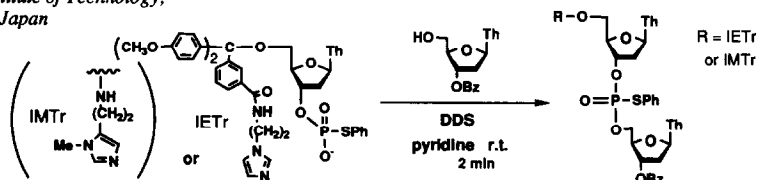
Yasuhiro Kuroda*, Hitoshi Hatakeyama, Naoto Inakoshi, and Hisanobu Ogoshi
Department of Synthetic Chemistry, Kyoto University, Sakyo-ku, Kyoto 606, JapanThe water soluble porphyrin Rh(III) complex, **1**, recognizes AMP in an aqueous solution and the pH dependence of the association constant suggested that present molecular recognition involved a Coulombic interaction in addition to coordination of nucleobases on the Rh atom.

NEW 5'-HYDROXYL PROTECTING GROUPS FOR RAPID INTERNUCLEOTIDE BOND FORMATION

Mitsuo Sekine,* Toshiya Mori, and Takeshi Wada

Department of Life Science, Tokyo Institute of Technology,
Nagatsuta Midoriku, Yokohama 227, Japan

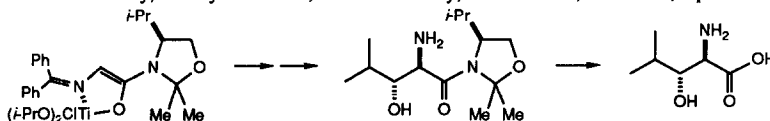
The IETr and IMTr groups containing imidazole residues accelerated the condensation more effectively than the IDTr group previously known.



Asymmetric *anti*-Selective Aldol Reactions of Titanium Z-Enolates Derived from *N*-Alkylidene-glycinamides Bearing a 2,2-Dimethylloxazolidine Chiral Controller

Shuji Kanemasa,* Takashi Mori,[†] and Akira Tatsukawa^{††}

Institute of Advanced Material Study, Kyushu University, Kasugakoen, Kasuga 816, Japan. [†]Department of Molecular Science and Technology, Interdisciplinary Graduate School of Engineering Sciences, Kyushu University, Kasugakoen, Kasuga 816, Japan. ^{††}Department of Chemistry, Faculty of Science, Kochi University, Akebono-cho, Kochi 780, Japan.

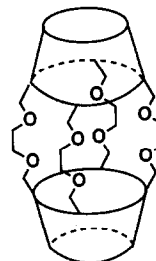


MOLECULAR DESIGN AND SYNTHESIS OF A BISCALIX[4]ARENE-BASED CAGE MOLECULE

Koji Araki, Koichi Sasaki, Katsuya Hisaichi, and Seiji Shinkai

Department of Organic Synthesis, Faculty of Engineering, Kyushu University, Fukuoka 812, Japan

A biscalix[4]arene-based cage molecule was designed on the basis of the careful assessment of the reaction route and synthesized for the first time in reasonable yield.

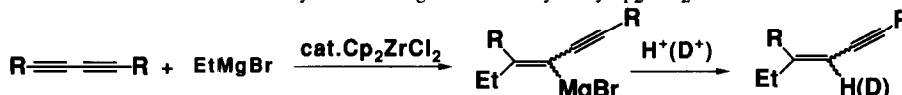


ZIRCONIUM CATALYZED C-C BOND FORMATION REACTION OF CONJUGATED DIYNES WITH EtMgBr

Tamotsu Takahashi,^a Koichiro Aoyagi,^a Victor Denisov,^a Noriyuki Suzuki,^a Danièle Choueiry^b and Ei-ichi Negishi^{*b}

^aCoordination Chemistry Laboratories, Institute for Molecular Science, Okazaki 444, Japan, ^bDepartment of Chemistry, Purdue University, West Lafayette, Indiana 47907, U.S.A.

A carbon-carbon bond formation reactions of diynes with EtMgBr can be catalyzed by Cp₂ZrCl₂.

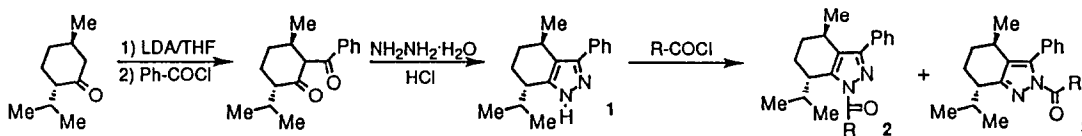


STEREOSELECTIVE N-ACYLATION OF A NEW CHIRAL AUXILIARY COMPOUND; 3-PHENYL-1-MENTHOPYRAZOLE

Choji Kashima,* Iwao Fukuchi, Katsumi Takahashi, and Akira Hosomi

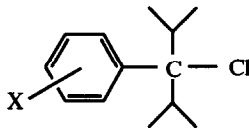
Department of Chemistry, University of Tsukuba, Tsukuba, Ibaraki 305, Japan

As a new chiral auxiliary compound having a pyrazole ring system, 3-phenyl-1-menthopyrazole was prepared and N-acylated.



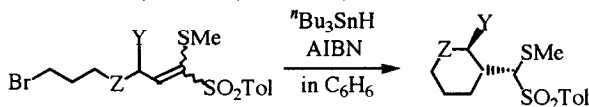
The Importance of Resonance Stabilization in the Benzylic Solvolysis.
Substituent Effects on the Solvolysis of α,α -Diisopropylbenzyl Chlorides
 Mizue Fujio,* Kazuhide Nakata, Takashi Kuwamura, Hirotaka Nakamura, Yoshihiro Saeki,
 Masaaki Mishima, Shinjiro Kobayashi, and Yuho Tsuno
 Institute for Fundamental Research of Organic Chemistry, Kyushu University,
 Hakozaki, Higashi-ku, Fukuoka 812, Japan

$$\log k/k_0 = \rho(\sigma^0 + r\Delta\sigma_R^+)$$



Highly Stereoselective 6-Exo Ring-Closure of
5-Substituted Hept-6-enyl Radicals

Katsuyuki Ogura,* Akio Kayano,[†] Takeo Fujino, Naoko Sumitani, and Makoto Fujita
 Department of Applied Chemistry, Faculty of Engineering and [†]Graduate School of Science and Technology,
 Chiba University, 1-33 Yayoicho, Inageku, Chiba 263, Japan



Y = OMe, OⁱPr, OAc, OH, Me

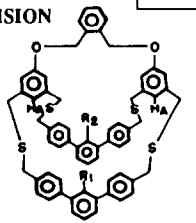
Z = CH₂, O

Transition states of the ring-closure are discussed by the experimental results and MO calculations.

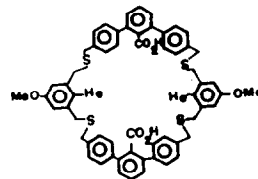
SYNTHESIS OF FUNCTIONALISED CYCLOPHANES WITH CAGE
STRUCTURE ; VIA AN UNUSUAL TERMOMOLECULAR COLLISION

Perumal Rajakumar* and Arunachalam Kannan
 Department of Organic Chemistry, University of Madras,
 Madras 600 025, INDIA.

Cyclophanes of the type **1** & **13** are obtained by the coupling of a suitable di or tetrathiol with di or tetrabromides under high dilution technique in the presence of KOH in benzene-ethanol.



R₁ = R₂ = Br, CO₂H, CO₂CH₃
 R₁ & R₂ = CO₂CH₂CH₂OCO

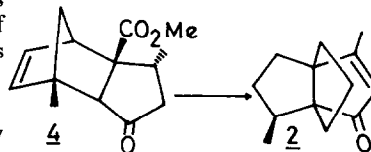


13

A Formal Total Synthesis of Modhephene

Suresh Chander Suri, Regional Research Laboratory (CSIR),
 Industrial Estate P.O., Trivandrum-695019, India and University of
 Dayton Research Institute c/o Phillips Laboratory/RKFE, Edwards
 Air Force Base, CA 93524, U.S.A.

A formal total synthesis of modhephene is achieved by synthesizing **2** from **4**.

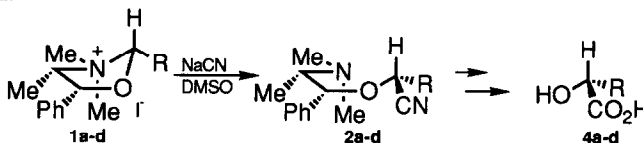


A NOVEL HIGHLY DIASTEREOSELECTIVE SYNTHESIS OF CYANO ETHERS BY REGIOSELECTIVE RING OPENING OF CHIRAL OXAZOLIDINIUM METHIODIDES WITH SODIUM CYANIDE.

C. Andrés, M. Delgado, R. Pedrosa*, R. Rodríguez, Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Valladolid, Dr. Mergelina s/n, 47011-Valladolid, Spain

Chiral oxazolidinium methiodides **1a-d**, derived from ephedrine and pseudoephedrine, are open regio- and stereoselectively (d.e. 82-94%) to **2a-d**, in moderate to good chemical yields (51-95%).

The cyanoethers **2a-d** are transformed into enantiomerically pure α -hydroxy acids **4a-d** by heating with conc. HCl.

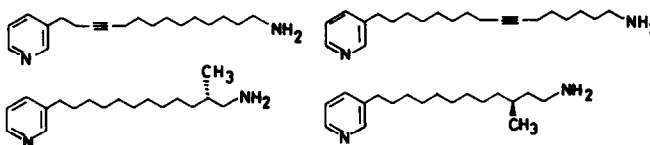


FIRST TOTAL SYNTHESIS OF NIPHATESINES A-D AND ASSIGNMENT OF ABSOLUTE CONFIGURATION

A V Rama Rao* and Gongiti Ravindra Reddy

Indian Institute of Chemical Technology

Hyderabad 500 007, India



BENT AROMATIC RINGS IN NAPHTHALENE DERIVATIVES

Peter R. Ashton,^a George R. Brown,^b Alan J. Foubister,^b Diane R. Smith,^c

Neil Spencer,^a J. Fraser Stoddart,^a and David J. Williams^d

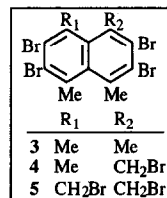
^a School of Chemistry, University of Birmingham, Edgbaston, Birmingham B15 2TT, UK

^b ZENeca Pharmaceuticals, Mereside, Alderley Park, Macclesfield, Cheshire SK10 4TG, UK

^c Department of Chemistry, The University, Sheffield S3 7HF, UK

^d Department of Chemistry, Imperial College, London SW7 2AY, UK

X-Ray crystallography and dynamic ¹H NMR spectroscopy have revealed that 1,4,5,8-tetramethyl-, 1-bromomethyl-4,5,8-trimethyl-, and 1,8-bis(bromomethyl)-4,5-dimethyl-2,3,6,7-tetrabromonaphthalene, i.e. **3**, **4**, and **5**, have severely distorted naphthalene nuclei in the solid state that also correspond to the gross conformations that occupy appreciable ($\Delta G^\ddagger \sim 16$ Kcal mol⁻¹) energy wells in the solution state.



STEREOSELECTIVITY IN THE SYNTHESIS OF POLYACENE DERIVATIVES BY REPETITIVE DIELS-ALDER REACTIONS

Peter R. Ashton,^a George R. Brown,^b Diane R. Smith,^c J. Fraser Stoddart,^a and David J. Williams^d

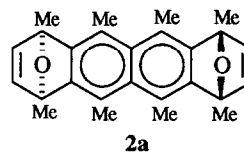
^a School of Chemistry, University of Birmingham, Edgbaston, Birmingham B15 2TT, UK

^b ZENeca Pharmaceuticals, Mereside, Alderley Park, Macclesfield, Cheshire SK10 4TG, UK

^c Department of Chemistry, The University, Sheffield S3 7HF, UK

^d Department of Chemistry, Imperial College, London SW7 2AY, UK

X-Ray crystallography reveals that the bisaryne generated from 1,4,5,8-tetramethyl-2,3,6,7-tetrabromonaphthalene reacts with 2,5-dimethylfuran to give preferentially (>10:1 for *anti*:*syn*) the 2:1 adduct, i.e. **2a** with the *anti*-configuration.

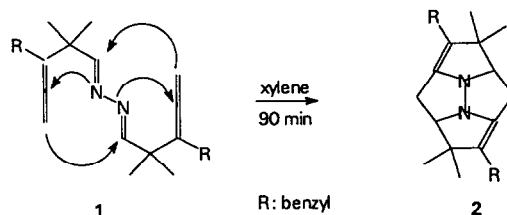


**NOVEL THERMAL TETRACYCLIZATION
BY INTRAMOLECULAR AZINE "CRISS-CROSS" ADDITION**

Tetrahedron Lett. 1993, 34, 8341

Milan Potáček, Radek Marek, Zdirad Žák,
Department of Chemistry, Masaryk University,
Kotlářská 2, CZ-611 37 Brno, Czech Republic

Julie Trottier, Zdeněk Janoušek, Heinz G. Viehe,
Laboratoire de Chimie Organique,
Place Pasteur 1, B-1348 Louvain-la-Neuve, Belgium

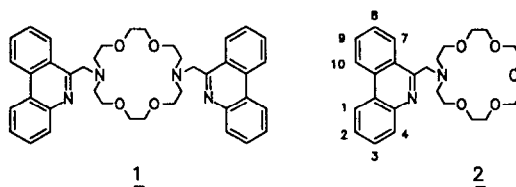


FLUOROIONOPHORES WITH PHENANTHRIDINYL UNITS

Tetrahedron Lett. 1993, 34, 8345

S. Alihodžić¹, M. Žinić¹, B. Klaić¹, R. Kiralj², B. Kojić-Prodić², M. Herceg² and Z. Cimerman³
¹Rudjer Bošković Institute, P.O.B. 1016, 41000 Zagreb, Croatia
²Faculty of Science, University of Zagreb, 41000 Zagreb, Croatia

The fluoroionophores **1** and **2** bind Na⁺ and K⁺ exhibiting strong complexation induced shifts (CIS) in ¹H-NMR spectra while alkaline earth cations produced large intensity enhancements in fluorescence spectra.



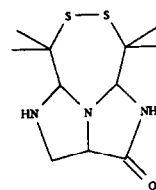
**NOVEL REARRANGEMENT OF A 10-MEMBERED SCHIFF BASE
MACROCYCLE TO A TRICYCLIC PRODUCT: CRYSTAL
STRUCTURES OF THE TRICYCLE AND A RELATED MACROCYCLE**

Tetrahedron Lett. 1993, 34, 8349

Louisa G. Wrench, William Clegg, Mark R.J. Elsegood, Harjit K. Gill,* Lynne Horsburgh and Joyce C. Lockhart

Department of Chemistry, University of Newcastle, Newcastle upon Tyne, NE1 7RU, UK.
*Pharmaceuticals R and D, Amersham International plc., Amersham, Bucks., HP7 9LL, UK.

A tricyclic rearrangement product has been identified during the synthesis of bis(aminoethanethiol) (BAT) ligands.

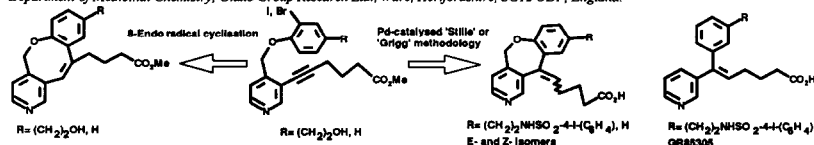


**THE SYNTHESIS OF A CONFORMATIONALLY RESTRAINED, COMBINED THROMBOXANE
ANTAGONIST /SYNTHASE INHIBITOR USING AN INTRAMOLECULAR 'STILLE'- OR
'GRIGG'-PALLADIUM-CATALYSED CYCLISATION STRATEGY**

Tetrahedron Lett. 1993, 34, 8353

Harry Finch*, Neil A. Pegg, and Brian Evans

Department of Medicinal Chemistry, Glaxo Group Research Ltd., Ware, Hertfordshire, SG12 0DP, England.



The synthesis of a conformationally restrained analogue of the combined thromboxane antagonist / synthase inhibitor GR85305, has been achieved using novel intramolecular 'Stille'- and/or 'Grigg'-palladium-catalysed cyclisation reactions. A novel 8-endo free radical cyclisation leading to an eight-membered carbocycle is also described.

SOLID PHASE SYNTHESIS OF Ψ [CH(CN)NH] PSEUDOPEPTIDES. APPLICATION TO THE SYNTHESIS OF

ANALOGUES OF NEUROTENSIN NT(8-13). Rosario Herranz ^{a*}, M. Luisa Suárez-Gea ^a, M. Teresa García-López ^a, Rosario González-Muñiz ^a, Nils L. Johansen ^b, Kjeld Madsen ^b, Henning Thogersen ^b and Peter Suzdak ^b. ^aInstituto de Química Médica, C.S.I.C., Juan de la Cierva 3, 28006 Madrid, Spain. ^bNovo Nordisk A/S, Novo Nordisk Park, DK-2760 Maaloev, Denmark.

Tetrahedron Lett. 1993, 34, 8357

The solid phase synthesis of the Ψ [CH(CN)NH] pseudopeptides **1** and **2**, NT(8-13) analogues, is described



1



2

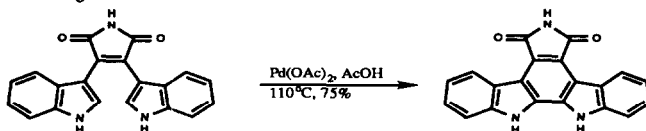
OXIDATIVE CYCLISATIONS WITH PALLADIUM ACETATE. A SHORT SYNTHESIS OF STAUROSPORINE AGLYCONE.

William Harris, Christopher H. Hill*, Elizabeth Keech and Patrick Malsher.

Roche Products Ltd., Research Centre, Broadwater Road, Welwyn Garden City, Herts., AL7 3AY, U.K.

Tetrahedron Lett. 1993, 34, 8361

A palladium acetate mediated oxidative cyclisation has been used as the key step for the syntheses of staurosporine aglycone and related analogues.



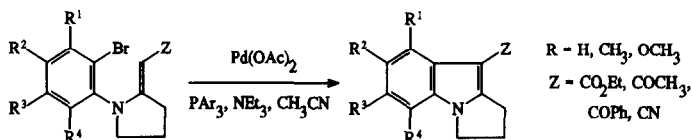
SYNTHESIS OF PYRROLO[1,2-*a*]INDOLES BY INTRAMOLECULAR HECK REACTION OF N-(2-BROMOARYL) ENAMINONES

Joseph P. Michael,* Shih-Fang Chang and Clare Wilson

Centre for Molecular Design, Department of Chemistry, University of the Witwatersrand, Wits 2050, South Africa

Tetrahedron Lett. 1993, 34, 8365

The title compounds (eleven examples) are formed in yields of 50% - 100% by the reaction shown alongside.



AN EFFICIENT ASYMMETRIC SYNTHESIS OF THE HIGHER DIPTERAN JUVENILE HORMONE III BISEPOXIDE

Rodney W. Rickards* and Richard D. Thomas

Research School of Chemistry, Australian National University, Canberra, A.C.T. 0200, AUSTRALIA

Tetrahedron Lett. 1993, 34, 8369

(2*E*,6*S*,7*S*,10*R*)-JHB₃ is synthesised in high stereochemical purity from geraniol via Sharpless asymmetric oxidation procedures.

