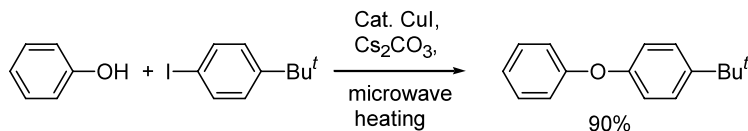


Synthesis of diaryl ethers through the copper-catalyzed arylation of phenols with aryl halides using microwave heating*Tetrahedron Letters 44 (2003) 3445*

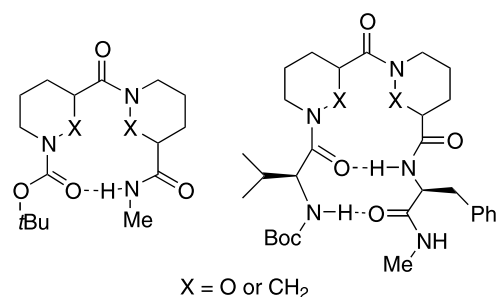
Huan He and Yong-Jin Wu*

Department of Neuroscience Chemistry, Bristol-Myers Squibb Pharmaceutical Research Institute, 5 Research Parkway, Wallingford, CT 06492, USA

The copper-catalyzed arylation of phenols with a variety of aryl halides using microwave heating is described.

**Di-oxanipeptic acids as more stable turn motifs than di-nipeptic acids***Tetrahedron Letters 44 (2003) 3447*

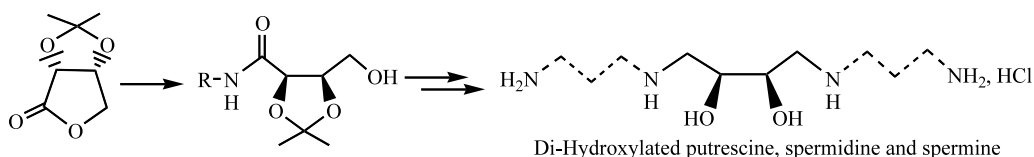
Bong-hyeon Baek, Myung-ryul Lee, Kwang-Yon Kim, Ung-In Cho, Doo Wan Boo* and Injae Shin*

Department of Chemistry, Yonsei University, Seoul 120-749, Republic of Korea**Synthesis of dihydroxylated polyamines from an erythronolactone***Tetrahedron Letters 44 (2003) 3451*

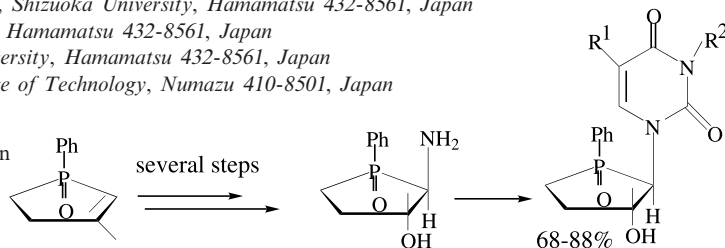
Myriam Le Roch, Jacques Renault, Kristell Penlaë and Philippe Uriac*

UPRES 2234: Synthèse et Extraction de Molécules à Visée Thérapeutique, Université de Rennes I, Faculté des Sciences Biologiques et Médicales, 2, Avenue du Pr. Léon Bernard, 35043 Rennes, France

The opening of a protected erythronolactone by an amine or a diamine furnished hydroxy-amides whose multistep functional conversion led to either selectively protected or free dihydroxy-polyamines.

**An efficient synthesis of novel deoxy phospho sugar pyrimidine nucleosides***Tetrahedron Letters 44 (2003) 3455*Mitsuji Yamashita,^{a,*} Valluru Krishna Reddy,^b Putta Mallikarjuna Reddy,^b Yukihiro Kato,^c Buchammagari Haritha,^c Kazumitsu Suzuki,^c Masaki Takahashi^a and Tatsuo Oshikawa^d^a*Department of Materials Chemistry, Faculty of Engineering, Shizuoka University, Hamamatsu 432-8561, Japan*^b*Satellite Venture Business Laboratory, Shizuoka University, Hamamatsu 432-8561, Japan*^c*Graduate School of Science and Engineering, Shizuoka University, Hamamatsu 432-8561, Japan*^d*Department of Chemistry and Biochemistry, Numazu College of Technology, Numazu 410-8501, Japan*

An efficient method has been developed in the synthesis of several novel deoxy phospho sugar pyrimidine nucleosides in racemic form.



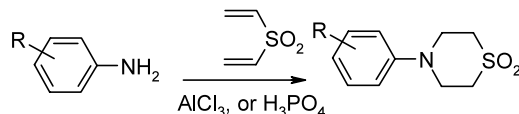
Catalyzed double Michael addition of anilines to vinyl sulfone

Tetrahedron Letters 44 (2003) 3459

Jiong Jack Chen,* Cuong V. Lu and Rebecca N. Brockman

Early Process Research and Development, Pharmacia Corporation, Kalamazoo, MI 49001, USA

Substituted anilines and vinyl sulfone undergo a facile double Michael addition to form substituted phenylthiomorpholine dioxides, catalyzed with AlCl_3 or H_3PO_4 .

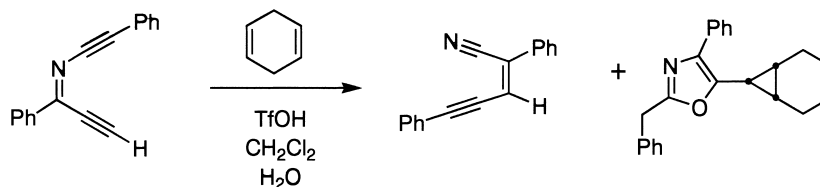


Isolation of a cyclopropane-containing product from the rearrangement of a 3-aza-3-ene-1,5-diyne under acid catalysis

Tetrahedron Letters 44 (2003) 3463

Liping Feng and Sean M. Kerwin*

Division of Medicinal Chemistry, College of Pharmacy, Institute for Cellular and Molecular Biology, University of Texas at Austin, Austin, TX 78712, USA

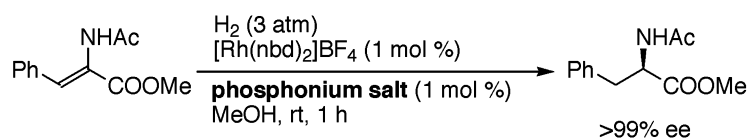


P-Chirogenic phosphonium salts: preparation and use in Rh-catalyzed asymmetric hydrogenation of enamides

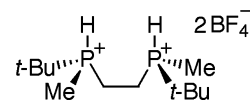
Tetrahedron Letters 44 (2003) 3467

Hiroshi Danjo, Wataru Sasaki, Takehiro Miyazaki and Tsuneo Imamoto*

Department of Chemistry, Faculty of Science, Chiba University, Yayoi-cho, Inage-ku, Chiba 263-8522, Japan



phosphonium salt:



Structures and cytotoxicities of Fascaplysin and related alkaloids from two marine phyla—*Fascaplysinopsis* sponges and *Didemnum* tunicates

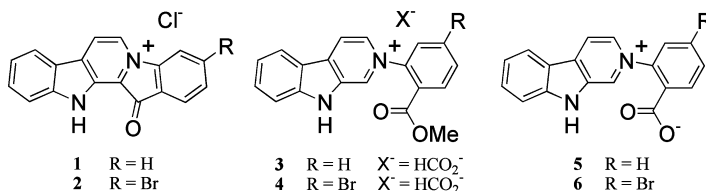
Tetrahedron Letters 44 (2003) 3471

Nathaniel L. Segraves,^a Suzette Lopez,^a
Tyler A. Johnson,^a Sadri A. Said,^b Xiong Fu,^b
Francis J. Schmitz,^b Halina Pietraszkiewicz,^c
Frederick A. Valeriote^c and Phillip Crews^{a,*}

^aDepartment of Chemistry and Biochemistry and Institute for Marine Sciences, University of California, Santa Cruz, CA 95064, USA

^bDepartment of Chemistry and Biochemistry, University of Oklahoma, Norman, OK 73019, USA

^cJosephine Ford Cancer Center, Detroit, MI 48202, USA



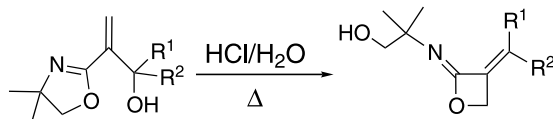
Isomerization of oxazolinyl allylic alcohols: synthesis of 3-alkylidene-2-iminooxetanes

Tetrahedron Letters 44 (2003) 3477

Filippo M. Perna,^{a,b} Vito Capriati,^{a,b} Saverio Florio^{a,b,*} and Renzo Luisi^{a,b}

^aUniversità di Bari, Dipartimento Farmaco-Chimico, Via E. Orabona 4, I-70125 Bari, Italy

^bCNR, Istituto di Chimica dei Composti OrganoMetallici 'ICCOM', Sezione di Bari, Italy



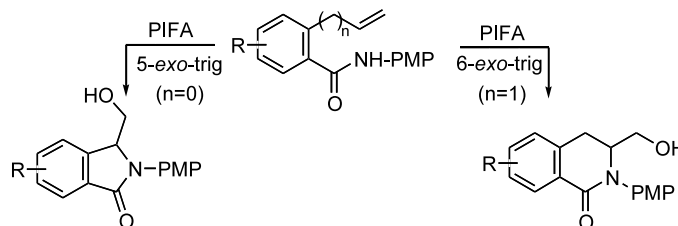
A new and practical PIFA-promoted olefin amidohydroxylation: six- versus five-membered ring formation

Tetrahedron Letters 44 (2003) 3483

Sonia Serna, Imanol Tellitu,* Esther Domínguez,* Isabel Moreno and Raúl SanMartín

Departamento de Química Orgánica II, Facultad de Ciencias, Universidad del País Vasco–Euskal Herriko Unibertsitatea (UPV/EHU), PO Box 644, 48080 Bilbao, Spain

A novel access to the isoindolinone and isoquinolinone skeletons through a new PIFA-mediated amidohydroxylation reaction is presented.

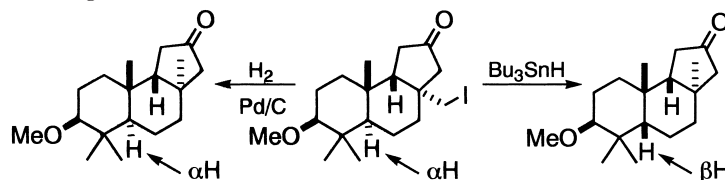


Conversion of a *trans*-*syn*-*trans* to a *cis*-*syn*-*trans* perhydrobenz[e]indene triggered by intramolecular 1,5-hydrogen transfer

Tetrahedron Letters 44 (2003) 3487

Franck Raeppe and Denis Heissler*

Université Louis Pasteur and Centre National de la Recherche Scientifique, Institut de Chimie, 1, rue Blaise Pascal, 67008 Strasbourg, France

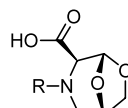


A new bicyclic proline-mimetic amino acid

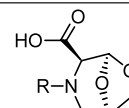
Tetrahedron Letters 44 (2003) 3489

Andrea Trabocchi, Nicoletta Cini, Gloria Menchi and Antonio Guarna*

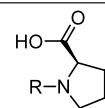
Dipartimento di Chimica Organica 'Ugo Schiff', Università degli Studi di Firenze, and Istituto di Chimica dei Composti Organometallici-CNR, Polo Scientifico di Sesto Fiorentino, Via della Lastruccia 13, Sesto Fiorentino, I-50019 Firenze, Italy



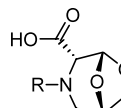
BGS



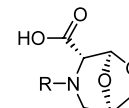
BgS



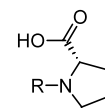
D-Pro



BGs



Bgs



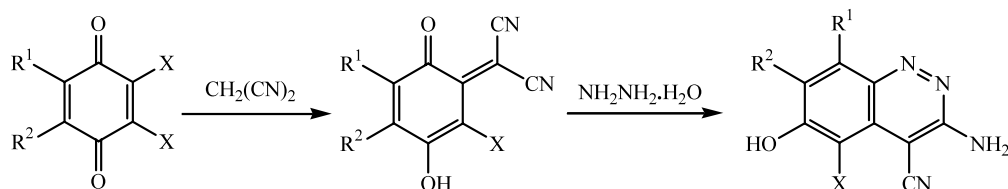
L-Pro

An efficient and facile synthesis of substituted cinnoline and benzo[h]cinnoline derivatives

Tetrahedron Letters 44 (2003) 3493

Mohsen Abdel-Motaal Gomaa*

Chemistry Department, Faculty of Science, Minia University, 61519 El-Minia, Egypt

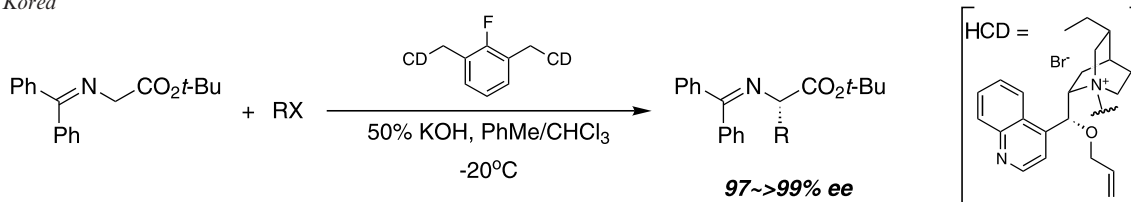


Highly efficient *ortho*-fluoro-dimeric cinchona-derived phase-transfer catalysts

Tetrahedron Letters 44 (2003) 3497

Hyeung-geun Park,* Byeong-Seon Jeong, Mi-Sook Yoo, Jeong-Hee Lee, Boon-saeng Park, Myoung Goo Kim and Sang-sup Jew*

Research Institute of Pharmaceutical Sciences and College of Pharmacy, Seoul National University, Seoul 151-742, South Korea

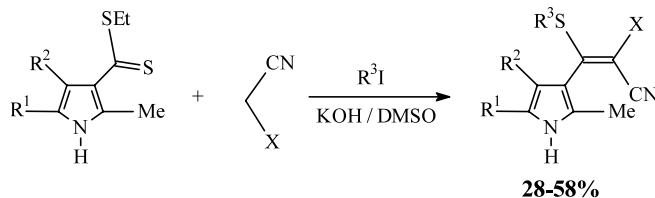


The first chemoselective synthesis of functionalized 3-vinylpyrroles

Tetrahedron Letters 44 (2003) 3501

Boris A. Trofimov, Andrey P. Demenev, Lyubov' N. Sobenina,* Al'bina I. Mikhaleva and Ol'ga A. Tarasova

A. E. Favorsky Irkutsk Institute of Chemistry, Siberian Branch of the Russian Academy of Sciences, 1 Favorsky Str., Irkutsk 664033, Russia



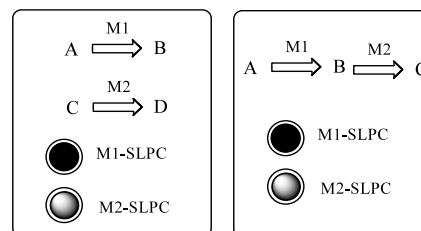
Simultaneous application of two or more supported liquid-phase organometallic catalysts: heterogeneous multifunctional reaction systems

Tetrahedron Letters 44 (2003) 3505

Bhalchandra M. Bhanage, Shin-ichiro Fujita, Takeshi Yoshida, Yoko Sano and Masahiko Arai*

Division of Materials Science and Engineering, Graduate School of Engineering, Hokkaido University, Sapporo 060-8628, Japan

The supported liquid-phase catalysts enables simultaneous use of two or more homogeneous catalysts retaining their own activities and taking the advantage of catalyst-product separation and catalyst recycling.



Peculiar side-chain fission of steroidal glycosides

Tetrahedron Letters 44 (2003) 3509

Alaa Mohamed Nafady,^a Mohamed Ahmed El-Shanawany,^b

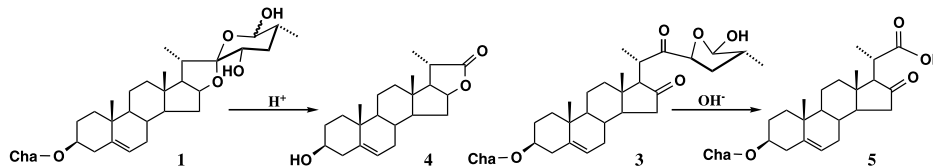
Mahmoud Hamed Mohamed,^c Hashim Abdel-Halim Hassanean,^b

Xing-Hua Zhu,^a Tsutomu Yoshihara,^a Masafumi Okawa,^a Tsuyoshi Ikeda^a and Toshihiro Nohara^{a,*}

^aFaculty of Pharmaceutical Sciences, Kumamoto University, Oe-honmachi 5-1, Kumamoto 862-0973, Japan

^bFaculty of Pharmacy, Assiut University, Assiut, Egypt

^cFaculty of Pharmacy, Al-Azhar University, Assiut Branch, Assiut, Egypt



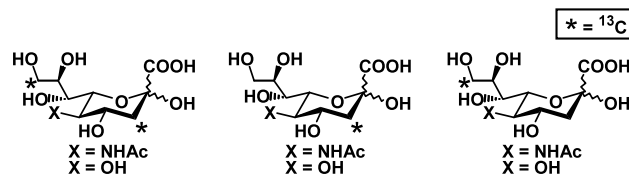
Chemoenzymatic synthesis of [3,9-¹³C]-labeled NeuAc and KDN

Tetrahedron Letters 44 (2003) 3513

Ken-ichi Sato,^{*} Shoji Akai, Toshiyuki Hiroshima, Hidenori Aoki, Mayumi Sakuma and Ken-ju Suzuki

Laboratory of Organic Chemistry, Faculty of Engineering, Kanagawa University, 3-27-1, Rokkakubashi, Kanagawa-ku, Yokohama 221-8686, Japan

The chemoenzymatic synthesis of ¹³C-labeled NeuAc and KDN was performed by using [6-¹³C]-ManNAc, [6-¹³C]-Man and [3-¹³C]-pyruvic acid sodium salt. Furthermore, it was demonstrated that identical results are obtained by NMR for both [3,9-¹³C]-NeuAc and 1:1 mixtures of [3-¹³C]- and [9-¹³C]-NeuAc.



Synthesis and evaluation of new chiral diols based on the dicyclopentadiene skeleton

Tetrahedron Letters 44 (2003) 3517

Giuseppe Borsato,^a Ottorino De Lucchi,^b

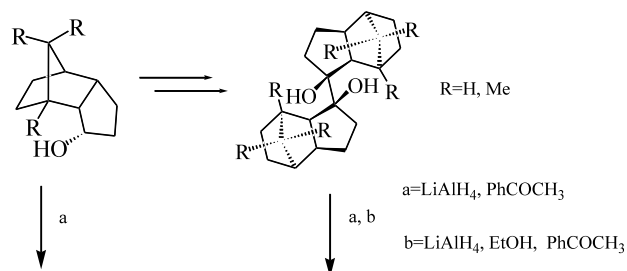
Fabrizio Fabris,^b Vittorio Lucchini,^{a,*}

Pietrogiulio Frascella^a and Alfonso Zamboni^a

^aDipartimento di Scienze Ambientali, Università Ca'

Foscari di Venezia, Dorsoduro 2137, I-30123 Venezia, Italy

^bDipartimento di Chimica, Università Ca' Foscari di Venezia, Dorsoduro 2137, I-30123 Venezia, Italy

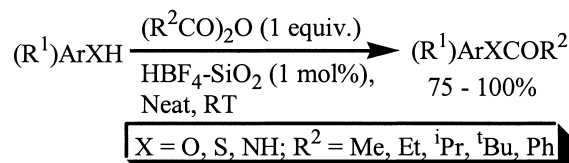


Fluoroboric acid adsorbed on silica gel as a new and efficient catalyst for acylation of phenols, thiols, alcohols, and amines

Tetrahedron Letters 44 (2003) 3521

Asit K. Chakraborti^{*} and Rajesh Gulhane

Department of Medicinal Chemistry, National Institute of Pharmaceutical Education and Research (NIPER), Sector 67, S. A. S. Nagar, Punjab 160 062, India



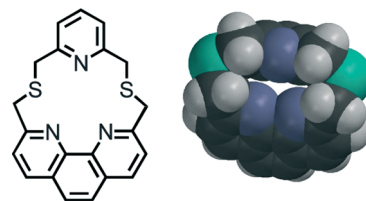
9,21,22-Triaza-2,11-dithia[3.3](2,6)pyridino(2,9)phenanthrolinophane: a five-donor macrocycle functioning as a bidentate ligand

Tetrahedron Letters 44 (2003) 3527

Lin Ma, K. F. Mok and Yee-Hing Lai*

Department of Chemistry, National University of Singapore, 3 Science Drive 3, Singapore 117543

The title compound was shown by results derived from semi-empirical calculations to adopt a *syn* conformation. ¹H NMR studies of the zinc(II) complex of **1** indicates that it behaves as a bidentate ligand involving only the two nitrogen atoms in the phenanthroline moiety in coordination to zinc.



Lancifodilactone A, a novel bisnortriterpenoid from *Schisandra lancifolia*

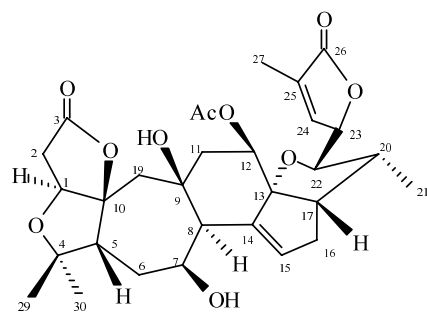
Tetrahedron Letters 44 (2003) 3531

Rong-Tao Li,^a Sheng-Hong Li,^a Qin-Shi Zhao,^a Zhong-Wen Lin,^a Han-Dong Sun,^{a,*} Yang Lu,^b Chen Wang^b and Qi-Tai Zheng^b

^aState Key Laboratory of Phytochemistry and Plant Resources in West China, Kunming Institute of Botany, Chinese Academy of Sciences, Kunming 650204, PR China

^bInstitute of Materia Medica, Chinese Academy of Medical Sciences, Beijing 100050, PR China

Lancifodilactone A, with a novel 3,4:9,10-*seco*-18,28-bisnortriterpenoid skeleton, was isolated from the leaves and stems of *Schisandra lancifolia*. Its structure and stereochemistry were determined primarily from 1D and 2D spectroscopic data, and were confirmed by a single crystal X-ray analysis.

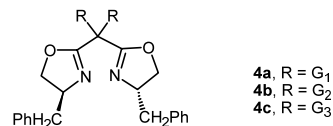
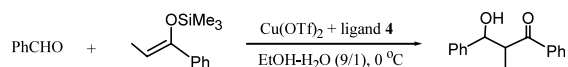


Chiral dendritic bis(oxazoline) copper(II) complexes as Lewis acid catalysts for enantioselective aldol reactions in aqueous media

Tetrahedron Letters 44 (2003) 3535

Bai-Yuan Yang,[†] Xiao-Min Chen,^{*} Guo-Jun Deng,[†] Yi-Li Zhang[†] and Qing-Hua Fan^{*}

Laboratory of Chemical Biology, Center for Molecular Science, Institute of Chemistry, The Chinese Academy of Sciences, Beijing 100080, PR China



Synthesis of new semi-rigid chelating agents for samarium-153

Tetrahedron Letters 44 (2003) 3539

Anthony Loussouarn,^{a,*} Ali Ouadi,^b Laurence Morandeau,^c

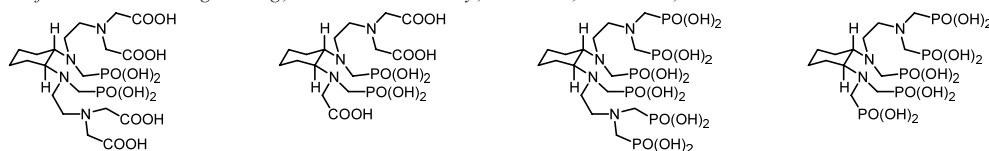
Patricia Remaud,^a Robin Giles,^d Jean-Francois Gestin^c and John Webb^d

^aCHELATEC, Institut de biologie, 9 quai Moncousu, 44093 Nantes cedex, France

^bEuropean Commission, JRC, Institute for Transuranium Elements, Postfach 2340, D-76125 Karlsruhe, Germany

^cINSERM U463, Institut de biologie, Chimie des bioconjugués, 9 quai Moncousu, 44093 Nantes cedex, France

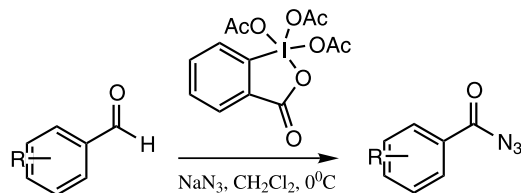
^dChemistry, Division of Sciences and Engineering, Murdoch University, Murdoch, WA 6150, Australia



Iodine(V) reagents in organic synthesis. Dess–Martin periodinane mediated efficient one-pot oxidation of aldehydes to acyl azides

D. Subhas Bose* and A. V. Narsimha Reddy

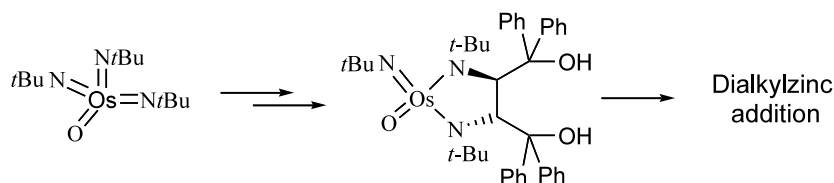
Organic Chemistry Division III, Fine Chemicals Laboratory, Indian Institute of Chemical Technology, Hyderabad 500 007, India



Dialkylzinc additions with a chiral osmaimidazolidine ligand from asymmetric diamination of olefins

Kilian Muñiz*

Kekulé-Institut für Organische Chemie und Biochemie, Universität Bonn, Gerhard-Domagk-Str. 1, D-53121 Bonn, Germany



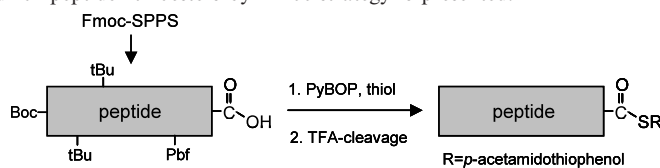
Peptide α thioester formation using standard Fmoc-chemistry

Regula von Eggelkraut-Gottanka,^a Annerose Klose,^b
Annette G. Beck-Sickinger^{a,*} and Michael Beyermann^{b,*}

^aInstitute of Biochemistry, University of Leipzig, 04103 Leipzig, Germany

^bInstitute of Molecular Pharmacology, Peptide Chemistry Group, 13125 Berlin, Germany

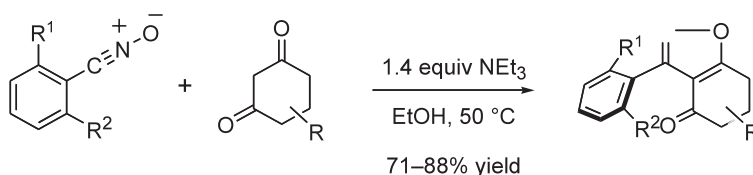
A fast and easy preparation method for peptide α thioesters by Fmoc-strategy is presented.



Amine-promoted cyclocondensation of highly substituted aromatic nitrile oxides with diketones

Jeffrey W. Bode, Yoshifumi Hachisu, Tomoo Matsuura and Keisuke Suzuki*

Department of Chemistry, Tokyo Institute of Technology and CREST, Japan Science and Technology Corporation O-okayama, Meguro-ku, Tokyo 152-8551, Japan

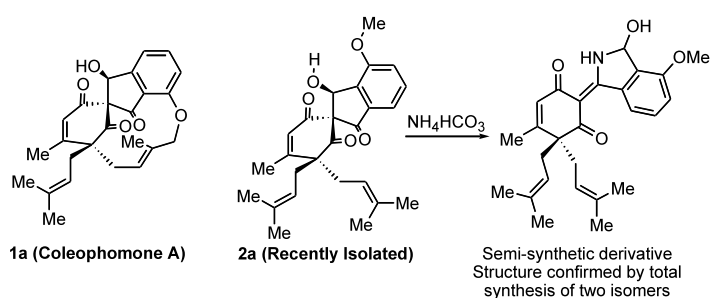


Structural incongruities of coleophomone natural products: insights by total synthesis of a semi-synthetic derivative

Tetrahedron Letters 44 (2003) 3559

Jeffrey W. Bode and Keisuke Suzuki*

Department of Chemistry,
Tokyo Institute of Technology and CREST,
Japan Science and Technology Corporation O-okayama,
Meguro-Ku, Tokyo 152-8551, Japan



The structure and first ^1H NMR spectral assignment of piperazine- C_{60} adducts

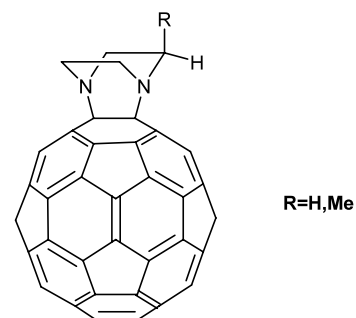
Tetrahedron Letters 44 (2003) 3565

Craig P. Butts,^{a,*} Remco W. A. Havenith,^a Mikael Jazdyk,^a
Thomas Drewello^b and Sotirios Kotsiris^b

^aSchool of Chemistry, University of Exeter, Exeter EX4 4QD, UK

^bDepartment of Chemistry, University of Warwick, Coventry CV4 7AL, UK

The ^1H NMR spectrum of the piperazine- C_{60} monoadduct has been assigned, almost 10 years after it was first synthesised. The preparation and characterisation of the first substituted piperazine- C_{60} monoadduct are also described.

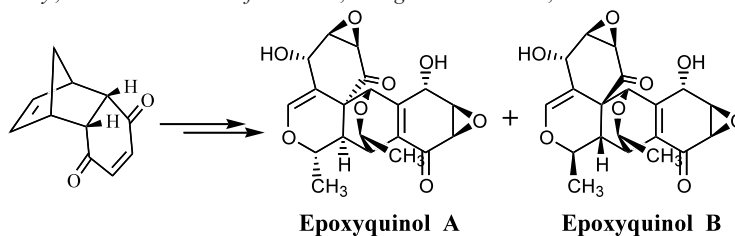


Total synthesis of the novel angiogenesis inhibitors epoxyquinols A and B

Tetrahedron Letters 44 (2003) 3569

Goverdhan Mehta* and Kabirul Islam

Department of Organic Chemistry, Indian Institute of Science, Bangalore 560 012, India

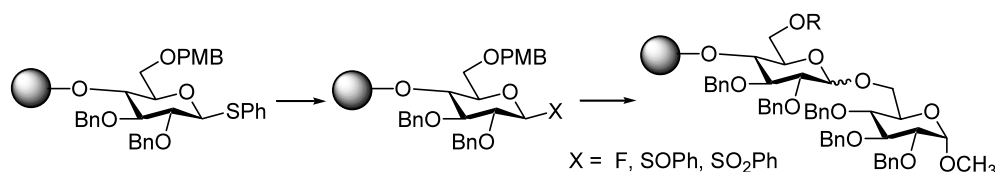


On-resin generation and reactions of orthogonal glycosyl donors

Tetrahedron Letters 44 (2003) 3573

Jack Ferguson and Cecilia Marzabadi*

Department of Chemistry and Biochemistry, Seton Hall University, 400 South Orange Ave., South Orange, NJ 07079, USA

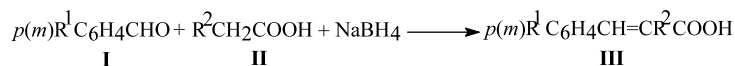


A new direct synthesis of cinnamic acids from aromatic aldehydes and aliphatic carboxylic acids in the presence of sodium borohydride

Constantin I. Chiriac,* Fulga Tanasa and Marioara Onciu

Institute of Macromolecular Chemistry 'Petru Poni', Aleea Grigore Ghica Voda 41A, Iasi 6600, Romania

A novel approach for synthesis of cinnamic acids in the presence of sodium borohydride, as a very effective alternative to the classical Perkin synthesis is reported.



Unexpected oxidation of a substituted benzo[a]phenazine: oxidative cleavage of a double bond and formation of a macrolactone

Marília O. F. Goulart,^{a,*} Alessandra G. Cioletti,^a José D. de Souza Filho,^b Carlos A. De Simone,^a Eduardo E. Castellano,^c Flavio S. Emery,^d Kelly C. G. De Moura,^d Maria C. F. R. Pinto^d and Antônio V. Pinto^{d,*}

^a*Departamento de Química, Universidade Federal de Alagoas, 57.092-970, Maceió, AL, Brazil*

^b*Departamento de Química, ICEx, Universidade Federal de Minas Gerais, Belo Horizonte, 31.270-200, MG, Brazil*

^c*Instituto de Física, Universidade de São Paulo, São Carlos, 13560-970, SP, Brazil*

^d*Núcleo de Pesquisas de Produtos Naturais, Universidade Federal do Rio de Janeiro, 21944-970, Rio de Janeiro, Brazil*

Peroxidation of the phenazine of β -lapachone using m -ClC₆H₄CO₃H/CH₂Cl₂ furnished a dihydrobenzophenazine-5-one and two rigid 10-membered ring macrolactones.

