

Theadibenzotropolone A, a new type pigment from enzymatic oxidation of (-)-epicatechin and (-)-epigallocatechin gallate and characterized from black tea using LC/MS/MS

Tetrahedron Letters 43 (2002) 7129

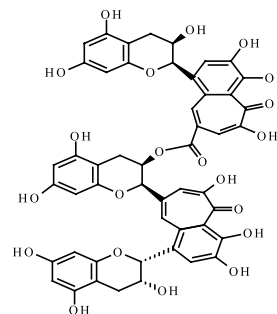
Shengmin Sang,^{a,*} Shiying Tian,^b Xiaofeng Meng,^c Ruth E. Stark,^b Robert T. Rosen,^a Chung S. Yang^c and Chi-Tang Ho^a

^aDepartment of Food Science and Center for Advanced Food Technology, Rutgers University, 65 Dudley Road, New Brunswick, NJ 08901-8520, USA

^bDepartment of Chemistry, Graduate Center and College of Staten Island, City University of New York, 2800 Victory Boulevard, Staten Island, NY 10314-6600, USA

^cLaboratory for Cancer Research, College of Pharmacy, Rutgers University, 164 Frelinghuysen Road, Piscataway, NJ 08854-8020, USA

A new type tea pigment, theadibenzotropolone A, together with theaflavin 3-gallate were formed by the reaction of (-)-epicatechin (EC) and (-)-epigallocatechin gallate (EGCG) with horseradish peroxidase in the presence of H₂O₂. The structure of theadibenzotropolone A was elucidated on the basis of MS and 2D NMR spectroscopic analyses. The existence of this compound in black tea was characterized by LC/ESI-MS/MS. Theadibenzotropolone A is the first theaflavin type trimer of catechins in black tea.

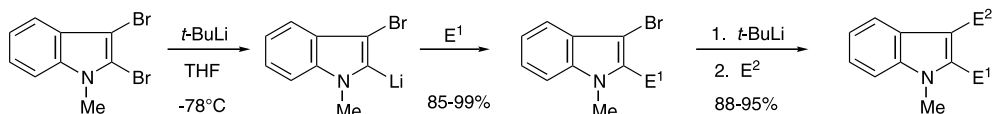


Selective lithiation of 2,3-dibromo-1-methylindole. A synthesis of 2,3-disubstituted indoles

Tetrahedron Letters 43 (2002) 7135

Yanbing Liu and Gordon W. Gribble*

Department of Chemistry, Dartmouth College, Hanover, NH 03755, USA



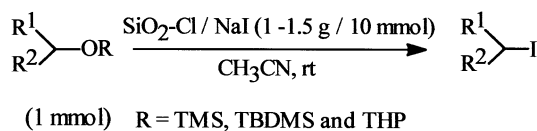
E¹ = H, CHO, CO₂H, Me; E² = H, CHO

Silica chloride in the presence of NaI is a useful system for the efficient and selective conversion of TMS, TBDMS and THP ethers into their corresponding iodides

Tetrahedron Letters 43 (2002) 7139

Habib Firouzabadi,* Nasser Iranpoor* and Hassan Hazarkhani

Department of Chemistry, College of Sciences, Shiraz University, Shiraz 71454, Iran



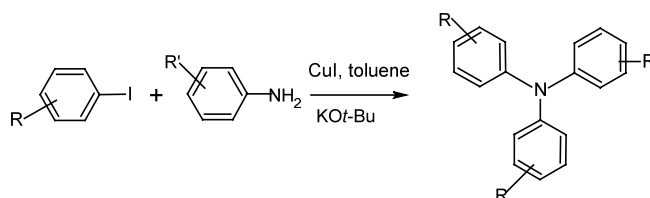
Copper-catalyzed amination of aryl halides: single-step synthesis of triaryl amines

Tetrahedron Letters 43 (2002) 7143

Ashutosh A. Kelkar, Nandkumar M. Patil and Raghunath V. Chaudhari*

Homogeneous Catalysis Division, National Chemical Laboratory, Pune 411 008, India

A simple and efficient methodology for the synthesis of triaryl amines in a single step has been demonstrated using ligand-free CuI catalyst and potassium tertiary butoxide as the base. Use of chelating ligands leads to the formation of triarylamine derivatives selectively (95% yield) with high catalytic activity.

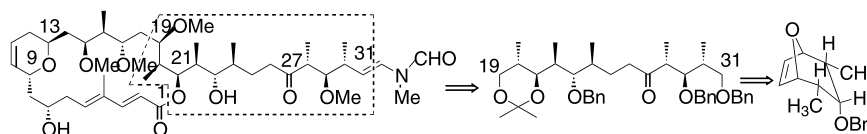


A stereoconvergent synthesis of the C(19)–C(31) fragment of scytophycin C

Tetrahedron Letters 43 (2002) 7147

J. S. Yadav* and Md. Moinuddin Ahmed

Organic Chemistry Division-I, Indian Institute of Chemical Technology, Hyderabad 500 007, India



Deprotection of silyl ethers using ZnBr₂ and H₂O in CH₂Cl₂

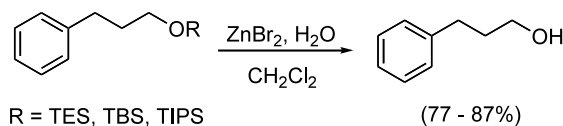
Tetrahedron Letters 43 (2002) 7151

R. David Crouch,* Joanna M. Polizzi, Rebecca A. Cleiman, Jihae Yi and Candice A. Romany

Department of Chemistry, Dickinson College, Box 1773, Carlisle, PA 17013, USA

TES-, TBS- and TIPS-protected alcohols are deprotected by heating with excess ZnBr₂ and water in CH₂Cl₂.

TBDPS-protected alcohols and silyl-protected phenols, however, are not deprotected, allowing for selective deprotection of differentially-protected bis-silyl ethers.

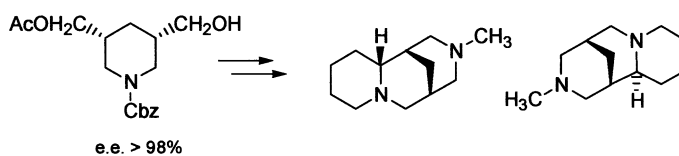


Synthesis of enantiopure diamine ligands related to sparteine, via scandium triflate-catalyzed imino Diels–Alder reactions

Tetrahedron Letters 43 (2002) 7155

Bruno Danieli, Giordano Lesma,* Daniele Passarella, Paola Piacenti, Alessandro Sacchetti, Alessandra Silvani* and Andrea Virdis

Dipartimento di Chimica Organica e Industriale, Università degli Studi di Milano, via Venezian 21, I-20133 Milano, Italy



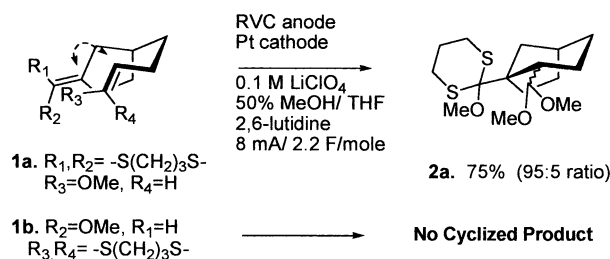
Anodic olefin coupling reactions involving ketene dithioacetals: evidence for a ‘radical-type’ cyclization

Tetrahedron Letters 43 (2002) 7159

Yongmao Sun and Kevin D. Moeller*

Department of Chemistry, Washington University, St. Louis, MO 63130, USA

Anodic coupling reactions between ketene dithioacetals and enol ethers show the same dependence on substituent location that is observed for radical cyclization reactions.

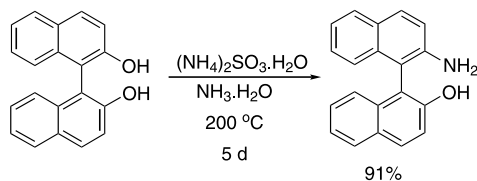


A practical synthesis of 2-amino-2'-hydroxy-1,1'-binaphthyl (NOBIN)

Tetrahedron Letters 43 (2002) 7163

Karsten Körber, Wenjun Tang, Xinquan Hu and Xumu Zhang*

Department of Chemistry, The Pennsylvania State University, University Park, PA 16802, USA

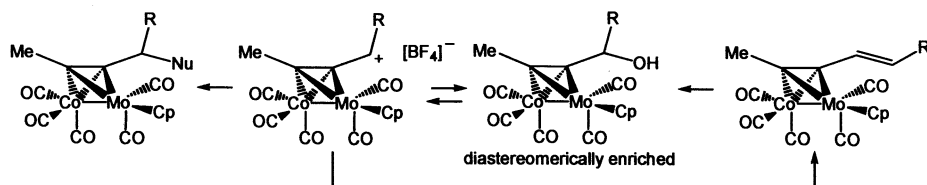


Exploration of Nicholas methodology using chiral heterobimetallic cobalt–molybdenum propargylium complexes

Tetrahedron Letters 43 (2002) 7167

Steven D. R. Christie,* Ryan J. Davoile and Raymond C. F. Jones*

Department of Chemistry, University of Loughborough, Loughborough LE11 3TU, UK



A novel approach to β-trifluoromethyl enaminones

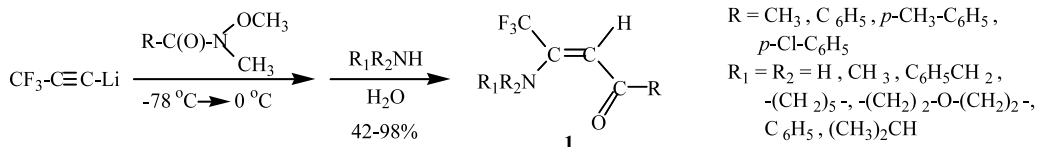
Tetrahedron Letters 43 (2002) 7171

In Howa Jeong,^{a,*} Sung Lan Jeon,^a Yong Ki Min^b and Bum Tae Kim^b

^aDepartment of Chemistry, Yonsei University, Wonju 220-710, Republic of Korea

^bKorea Research Institute of Chemical Technology, Daejeon 305-606, Republic of Korea

β-Trifluoromethyl enaminones **1** were prepared in good yields from the reaction of trifluoropropynyl lithium with *N*-methoxy-*N*-methylbenzamide, followed by quenching with H₂O in the presence of a variety of amines.



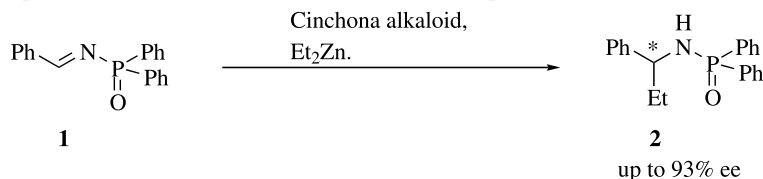
Enantioselective addition of diethylzinc to a *N*-diphenylphosphinoylimine employing cinchona alkaloids as chiral ligands

Tetrahedron Letters 43 (2002) 7175

Kenneth J. M. Beresford*

School of Pharmacy, De Montfort University, The Gateway, Leicester LE1 9BH, UK

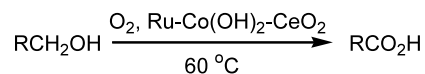
Addition of diethylzinc to **1** promoted by cinchona alkaloids gave **2** in up to 93% ee.



Highly efficient oxidation of alcohols to carbonyl compounds in the presence of molecular oxygen using a novel heterogeneous ruthenium catalyst

Hongbing Ji, Tomoo Mizugaki, Kohki Ebitani and Kiyotomi Kaneda*

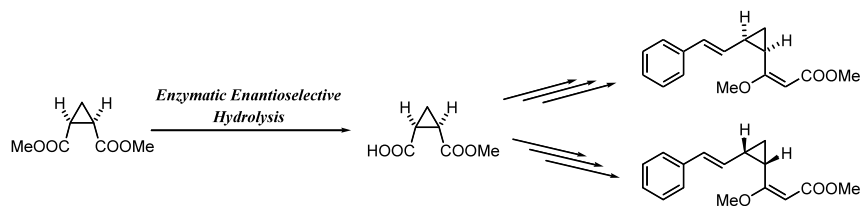
Department of Chemical Science and Engineering, Graduate School of Engineering Science, Osaka University, 1-3 Machikaneyama, Toyonaka, Osaka 560-8531, Japan



Asymmetric synthesis of novel β -substituted β -methoxyacrylates bearing a chiral 1,2-*cis*-disubstituted cyclopropane substructure

Daiju Hasegawa, Hiromi Uchiro and Susumu Kobayashi*

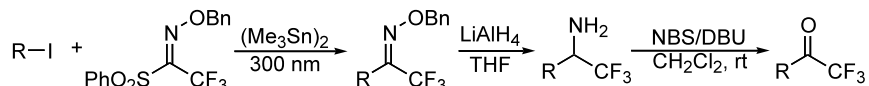
Faculty of Pharmaceutical Sciences, Tokyo University of Science, 12 Ichigaya-Funagawara-machi, Shinjuku-ku, Tokyo 162-0826, Japan



Radical-mediated synthesis of trifluoroethyl amines and trifluoromethyl ketones from alkyl iodides

Sungak Kim* and Rajesh Kavali

Center for Molecular Design and Synthesis and Department of Chemistry, School of Molecular Science, Korea Advanced Institute of Science and Technology, Taejeon 305-701, South Korea

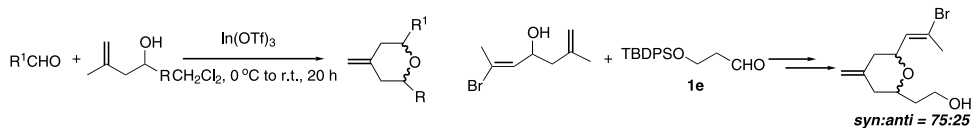


Diastereoselective construction of *cis* 2,6-disubstituted tetrahydropyran rings via In(OTf)₃-catalyzed intramolecular 2,5-oxonium-ene cyclization: synthetic studies towards the total synthesis of zampanolide and dactyloide

Teck-Peng Loh,^{a,*} Jian-Ying Yang,^a Li-Chun Feng^b and Yan Zhou^a

^aDepartment of Chemistry, National University of Singapore, 3 Science Drive 3, Singapore 117543

^bInstitute of Chemical and Engineering Science, Ayer Rajah Crescent, Blk 28, 02-08, Singapore 139959



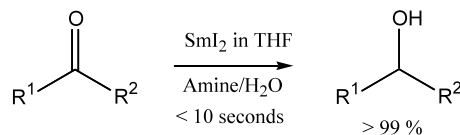
Instantaneous SmI₂-H₂O-mediated reduction of dialkyl ketones induced by amines in THF

Tetrahedron Letters 43 (2002) 7197

Anders Dahlén and Göran Hilmersson*

Organic Chemistry, Department of Chemistry, Göteborg University, SE-412 96 Göteborg, Sweden

The instantaneous SmI₂ mediated reduction of ketones is dependent on a combination of water and an amine. Rate enhancement is at least 100 000 compared to the reduction without a proton source, and at least 100 times faster than the rate of the widely used HMPA/alcohol accelerated reductions. This new and improved method is therefore suggested to be an excellent replacement for the toxic HMPA-mediated ketone reductions.



Solid phase-mediated synthesis of isonitriles

Tetrahedron Letters 43 (2002) 7201

Delphine Launay,^a Susan Booth,^b Ian Clemens,^c Andrew Merritt^d and Mark Bradley^{a,*}

^aCombinatorial Centre of Excellence, Department of Chemistry, University of Southampton, Southampton SO17 1BJ, UK

^bOrganon, Newhouse, Lanarkshire, Scotland, UK

^cEli Lilly & Co., Lilly Research Centre, Erl Wood Manor, Windlesham, Surrey GU20 6PH, UK

^dGSK, Research and Development, Medicines Research Centre, Gunnels Wood Road, Stevenage SG1 2NY, UK

Supported sulfonyl chlorides and microwave irradiation are an efficient combination for isonitrile synthesis.

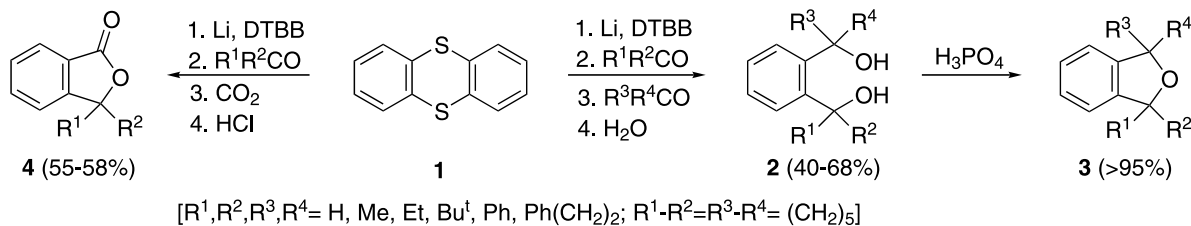


Thianthrene as a source of the 1,2-benzene dianion

Tetrahedron Letters 43 (2002) 7205

Miguel Yus,* Francisco Foubelo* and José V. Ferrández

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, Apdo. 99, 03080 Alicante, Spain

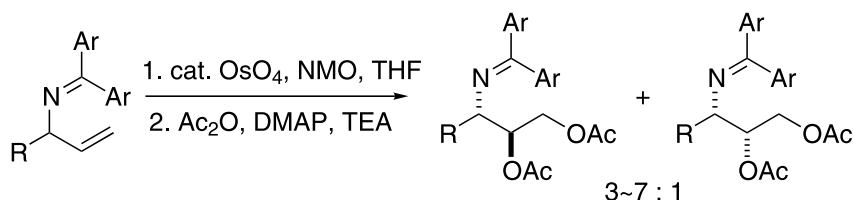


anti Selective dihydroxylation by the ketimine derivatives of the allylic amine in monosubstituted olefins

Tetrahedron Letters 43 (2002) 7209

Joon Seok Oh, Doh Yeon Park, Bu Sop Song, Jae Gwang Bae, Seung Woong Yoon and Young Gyu Kim*

School of Chemical Engineering, College of Engineering, Seoul National University, Seoul 151-744, South Korea

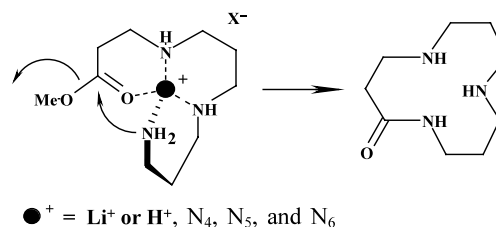


Lithium and proton templated ω -polyazamacrolactamization, new general routes to macrocyclic polyamines

Konstantin Drandarov and Manfred Hesse*

Organisch-chemisches Institut der Universität Zürich, Winterthurerstrasse 190, CH-8057 Zürich, Switzerland

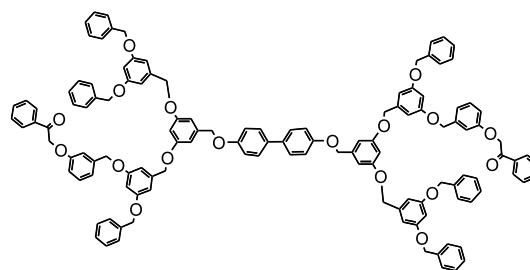
A general, lithium templated/catalyzed ω -polyazamacrolactamization method for the synthesis of macrocyclic polyamines including spermidine and spermine alkaloids is presented. The formation of 12-, 13-, 16-, 17-, and 19-membered N_3 , N_4 , N_5 , and N_6 containing rings is described. A proton templated/catalyzed macrolactamization of some ω -polyazaaminoesters is also observed.



Synthesis of difunctionalized dendrimers: an approach to main-chain poly(dendrimers)

Renuka N. Ganesh, Joshua Shraberg, Patrick G. Sheridan and S. Thayumanavan*

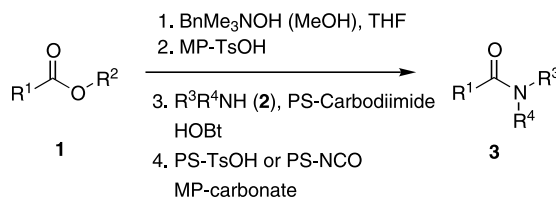
Department of Chemistry, Tulane University, New Orleans, LA 70118, USA



A single vessel protocol for the efficient formation of amide bonds from esters and lactones

Noriyuki H. Kawahata, Jesea Brookes and Gergely M. Makara*

NeoGenesis Pharmaceuticals, Inc., 840 Memorial Drive, Cambridge, MA 02139, USA

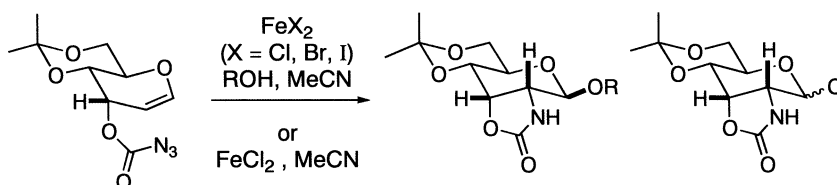


Iron(II)-promoted amidoglycosylation and amidochlorination of an allal C3-azidoformate

David G. Churchill^a and Christian M. Rojas^{b,*}

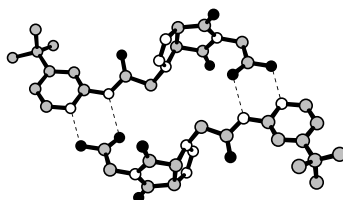
^a*Department of Chemistry, Columbia University, New York, NY 10027, USA*

^b*Department of Chemistry, Barnard College, 3009 Broadway, New York, NY 10027, USA*

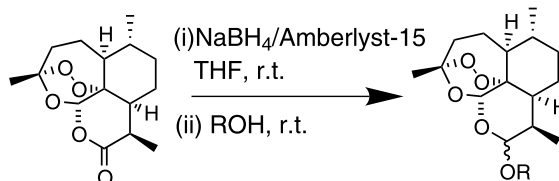
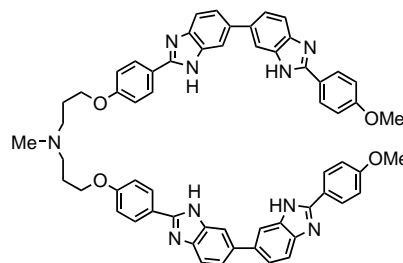
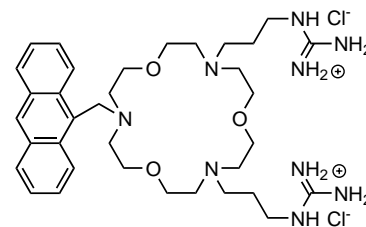


A structurally simple minimal self-replicating system

Julie M. Quayle, Alexandra M. Z. Slawin and Douglas Philp*

Centre for Biomolecular Sciences, School of Chemistry, University of St Andrews, North Haugh, St Andrews, Fife KY16 9ST, UK**A one-pot conversion of artemisinin to its ether derivatives**

Chandan Singh* and Pallavi Tiwari

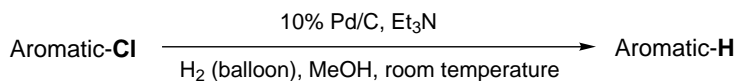
*Division of Medicinal Chemistry, Central Drug Research Institute, Lucknow 226001, India*A one-pot preparation of artemether, arteether and related antimalarial compounds from artemisinin, using NaBH_4 /Amberlyst-15, is reported.**Synthesis of a novel dimeric bis-benzimidazole with site-selective DNA-binding properties**Xiao-Wen Sun,^a Stephen Neidle^b and John Mann^{a,*}^a*School of Chemistry, Queen's University Belfast, Stranmillis Road, Belfast BT9 5AG, UK*^b*Biomolecular Structure Unit, Institute of Cancer Research, 237 Fulham Road, London SW3 6JB, UK***Fluororeceptor for zwitterionic form amino acids in aqueous methanol solution**Shin-ichi Sasaki,^a Akio Hashizume,^a Daniel Citterio,^b Eiji Fujii^a and Koji Suzuki^{a,b,*}^a*Department of Applied Chemistry, Keio University, 3-14-1 Hiyoshi, Kohoku-ku, Yokohama 223-8522, Japan*^b*Kanagawa Academy of Science and Technology (KAST), KSP West 614, 3-2-1 Sakato, Kawasaki 213-0012, Japan*

Mild and general procedure for Pd/C-catalyzed hydrodechlorination of aromatic chlorides

Tetrahedron Letters 43 (2002) 7247

Hironao Sajiki,* Akira Kume, Kazuyuki Hattori and Kosaku Hirota*

Laboratory of Medicinal Chemistry, Gifu Pharmaceutical University, 5-6-1 Mitahora-higashi, Gifu 502-8585, Japan



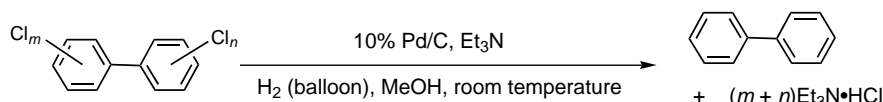
Complete and truly catalytic degradation method of PCBs using Pd/C–Et₃N system under ambient pressure and temperature

Tetrahedron Letters 43 (2002) 7251

Hironao Sajiki,^{a,*} Akira Kume,^a Kazuyuki Hattori,^a Hisamistu Nagase^b and Kosaku Hirota^{a,*}

^aLaboratory of Medicinal Chemistry, Gifu Pharmaceutical University, 5-6-1 Mitahora-higashi, Gifu 502-8585, Japan

^bLaboratory of Hygienics, Gifu Pharmaceutical University, 5-6-1 Mitahora-higashi, Gifu 502-8585, Japan



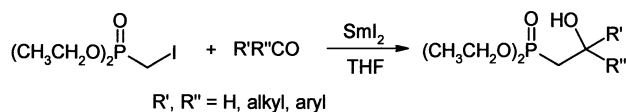
A new entry to β -hydroxyphosphonates: the SmI₂-mediated reaction of diethyl iodomethylphosphonate with carbonyl compounds

Tetrahedron Letters 43 (2002) 7255

Fulvia Orsini* and Alessandro Caselli

Dipartimento di Chimica Organica e Industriale, Universita' degli Studi di Milano, Via Venezian 21 20133 Milano, Italy

β -Hydroxyphosphonates can be prepared under neutral and mild conditions by reaction of diethyl iodomethyl phosphonate and carbonyl compounds (aldehydes and ketones) in the presence of samarium iodide.



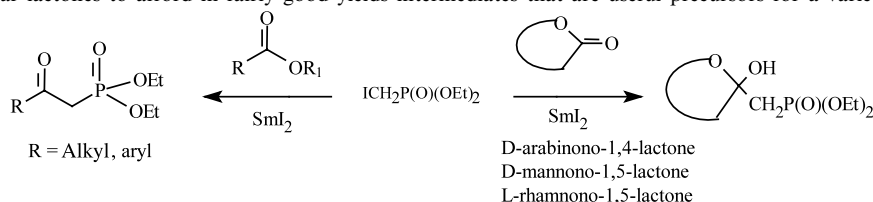
SmI₂-mediated reactions of diethyl iodomethylphosphonate with esters and lactones: a highly stereoselective synthesis of a precursor of the C-glycosyl analogue of thymidine 5'-(β -L-rhamnosyl)diphosphate

Tetrahedron Letters 43 (2002) 7259

Fulvia Orsini* and Alessandro Caselli

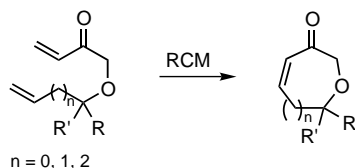
Dipartimento di Chimica Organica e Industriale, Universita' degli Studi di Milano, Via Venezian 21 20133 Milano, Italy

β -Ketophosphonates can be conveniently prepared by reaction of diethyl iodomethylphosphonate with esters and SmI₂. The protocol has been applied to sugar lactones to afford in fairly good yields intermediates that are useful precursors for a variety of potentially bioactive compounds.



Synthesis of 3-oxo oxacycloalkenes by ring closing metathesis

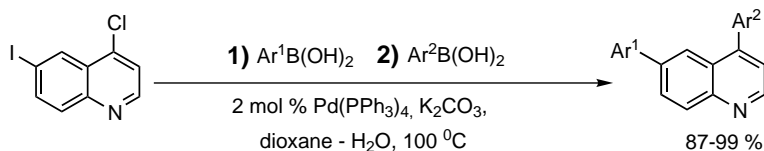
Janine Cossy,* Catherine Taillier and Véronique Bellosta

*Laboratoire de Chimie Organique associé au CNRS, ESPCI, 10 rue Vauquelin, 75231 Paris Cedex 05, France*3-Oxo oxacycloalkenes were synthesized in good to excellent yields from 1-(ω -alkenyloxy)-but-3-en-2-ones.**The successive substitution of halogens in 4-chloro-6-iodoquinoline by aryl groups in cross-coupling reactions with arylboronic acids**

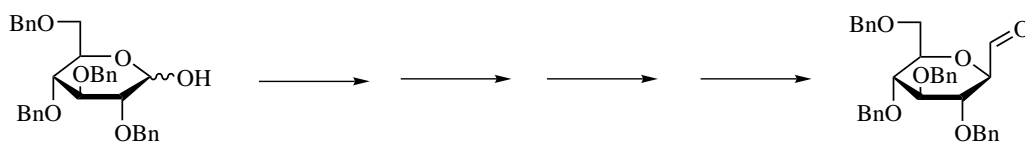
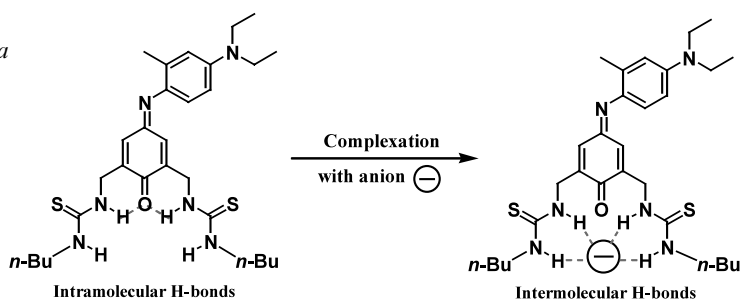
Alexey V. Tsvetkov, Gennadij V. Latyshev, Nikolai V. Lukashev* and Irina P. Beletskaya

Department of Chemistry, Moscow State Lomonosov University, Vorobyevy Gory, Moscow 119992, Russia

The conditions for selective stepwise substitution of iodine and chlorine atoms in 4-chloro-6-iodoquinoline which allow the synthesis of the corresponding diarylquinolines with different aryl groups in the 4- and 6-positions in a one-pot procedure in high yields are reported.

**An efficient diastereoselective synthesis of β -1-formyl-2,3,4,6-tetra-O-benzyl-D-glucopyranoside**

Frédéric Labégère,* Jean-Pierre Lavergne and Jean Martinez

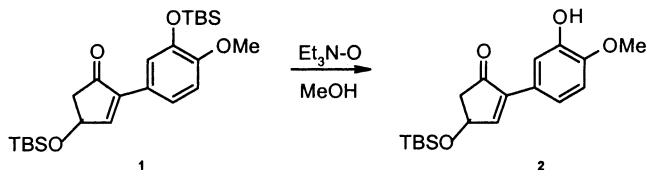
Laboratoire des Aminoacides, Peptides et Protéines, UMR-CNRS 5810-Université Montpellier II, Place E. Bataillon, 34095 Montpellier cedex 5, France**Anion sensor based on the indoaniline-thiourea system**Dong Hoon Lee,^a Ho Yong Lee^a and Jong-In Hong^{a,b,*}^a*School of Chemistry, College of Natural Sciences, Seoul National University, Seoul 151-742, South Korea*^b*Center for Molecular Design and Synthesis, KAIST, Taejeon 305-701, South Korea*

A facile and selective deprotection of *tert*-butyldimethylsilyl ethers of phenols using triethylamine *N*-oxide

P. K. Zubaidha,* S. V. Bhosale and A. M. Hashmi

School of Chemical Sciences, SRTM University, Nanded 431606, India

Aryl TBS ethers can be cleaved selectively in high yields in the presence of alkyl TBS ethers employing triethylamine *N*-oxide.



Carbonyl ylide 1,3-dipolar cycloadditions with porphyrins

Jeffery Flemming and David Dolphin*

Department of Chemistry, The University of British Columbia, 2036 Main Mall, Vancouver, B.C., Canada V6T 1Z1

