Graphical abstracts

Synthesis of an arabinogalactan-type octa- and two isomeric nonasaccharides. Suitable tuning of protecting groups

Tetrahedron Letters 44 (2003) 631

Magdolna Csávás,[a] Anikó Borbás,[a] Lóránt Jánossy[b] and András Lipták[a,b,*]

[a]*Research Group for Carbohydrates of the Hungarian Academy of Sciences, PO Box 55, Debrecen H-4010, Hungary*
[b]*Department of Biochemistry, University of Debrecen, PO Box 55, Debrecen H-4010, Hungary*

Structures of the arabinogalactan-type oligosaccharides synthesized.

ß-D-Gal*p*-(1→6)- ß-D-Gal*p*-(1→6)- ß-D-Gal*p*-(1→6)- ß-D-Gal*p*-(1→6)- ß-D-Gal*p*-(1→6)- D-Gal

2 2
↑ ↑
1 1
R' R"

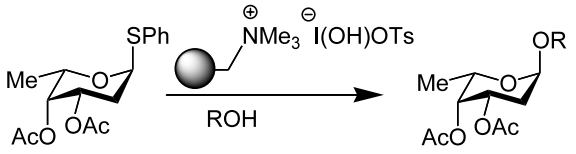
1 R'=R"=α-L-Ara*f*-
2 R'=α-L-Ara*f* R"= α-L-Ara*f*-(1→5)-α-L-Ara*f*-
3 R'=α-L-Ara*f*-(1→5)-α-L-Ara*f*- R"= α-L-Ara*f*

Anomeric activation of thioglycosides and preparation of deoxyglycosides using polymer-bound iodate(I) complexes

Tetrahedron Letters 44 (2003) 637

Janis Jaunzems, Georgia Sourkouni-Argirusi, Martin Jesberger and Andreas Kirschning*

Institut für Organische Chemie der Universität Hannover, Schneiderberg 1B, D-30167 Hannover, Germany



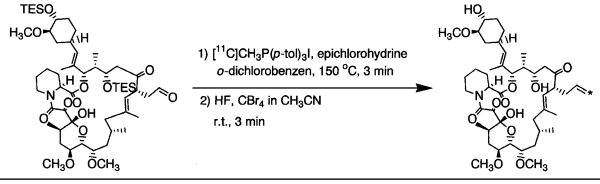
63 - 90 %, only α

Rapid synthesis of ^{11}C-labeled FK506 for positron emission tomography

Tetrahedron Letters 44 (2003) 641

Yoshihiro Murakami,[a,b,*] Akio Kuroda,[c] Kazuhiko Osoda[a,b] and Shintaro Nishimura[a,b]

[a]*Advanced Technology Platform Research Laboratory, Fujisawa Pharmaceutical Co. Ltd, 5-2-3, Tokodai, Tsukuba, Ibaraki 300-2698, Japan*
[b]*The Medical and Pharmacological Research Center Foundation, Wo32, Inoyama-cho, Hakui, Ishikawa 925-0613, Japan*
[c]*Medicinal Chemistry Research Laboratories, Fujisawa Pharmaceutical Co. Ltd, 5-2-3, Tokodai, Tsukuba, Ibaraki 300-2698, Japan*



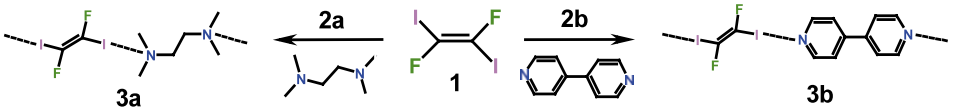
Halogen bonding driven self-assembly of (*E*)-1,2-diiodo-1,2-difluoroethene with nitrogen substituted hydrocarbons

Tetrahedron Letters 44 (2003) 645

Donald D. Burton,[a] Francesca Fontana,[b] Pierangelo Metrangolo,[c,*] Tullio Pilati[d] and Giuseppe Resnati[c,*]

[a]*Department of Chemistry, University of Iowa, Iowa City, IA 52242, USA*
[b]*Department of Engineering, University of Bergamo, Viale A. Marconi 5, 24044 Dalmine (BG), Italy*
[c]*Department of Chemistry, Materials, and Chemical Engineering 'G. Natta', Polytechnic of Milan, Via L. Mancinelli 7, 20131 Milan, Italy*
[d]*C.N.R.-Institute of Molecular Science and Technology, University of Milan, Via C. Golgi 19, 20133 Milan, Italy*

1 and **2a**,**b** self-assemble via halogen bonding giving rise to infinite chains **3a**,**b**.

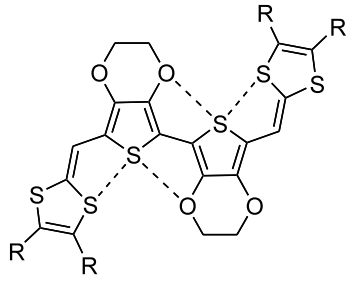


Tetrahedron Letters 44 (2003) 649

Strong π-electron donors based on a self-rigidified 2,2′-bi(3,4-ethylenedioxy)thiophene–tetrathiafulvalene hybrid π-conjugated system

Philippe Leriche,[a] Mathieu Turbiez,[a] Vincent Monroche,[a] Pierre Frère,[a,*] Philippe Blanchard,[a] Peter J. Skabara[b] and Jean Roncali[a,*]

[a]*Groupe Systèmes Linéaires Conjugués, IMMO CNRS UMR 6501, 2 Boulevard Lavoisier, 49045 Angers, France*
[b]*Department of Chemistry, University of Manchester, Oxford Road, Manchester M13 9PL, UK*

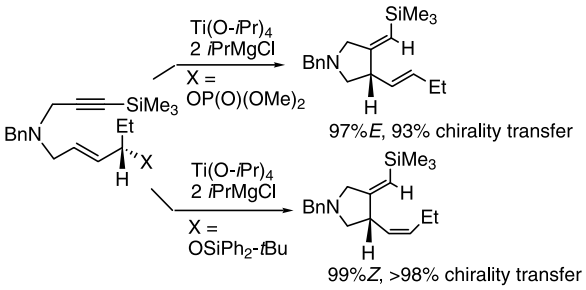


Tetrahedron Letters 44 (2003) 653

An efficient synthesis of optically active five- and six-membered cyclic compounds with selectable stereo-controls by a Ti(II)-mediated cyclization of chiral secondary 2,7- and 2,8-enyn-1-ol derivatives

Yongcheng Song, Yuuki Takayama, Sentaro Okamoto and Fumie Sato*

Department of Biomolecular Engineering, Tokyo Institute of Technology, 4259 Nagatsuta-cho, Midori-ku, Yokohama, Kanagawa 226-8501, Japan



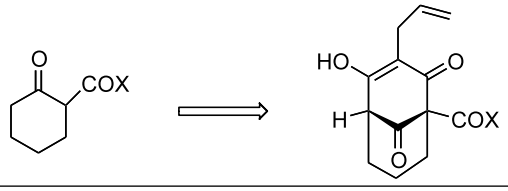
Tetrahedron Letters 44 (2003) 659

Synthesis of the core bicyclic system of hyperforin and nemorosone

George A. Kraus,* Tuan H. Nguyen and Insik Jeon

Department of Chemistry, Iowa State University, Ames, IA 50011, USA

A direct synthesis of analogs of hyperforin and nemorosone containing the key bicyclic unit was accomplished from 2-carboxyethylcyclohexanone and benzoylcyclohexanone. Key steps included a manganic acetate-mediated cyclization and the formation of the beta-bromo enone.



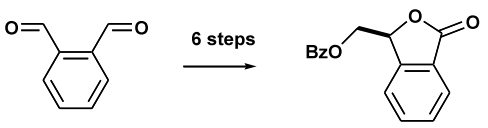
Tetrahedron Letters 44 (2003) 663

Asymmetric synthesis of (3*S*) 3-benzoyloxymethylisobenzofuranone and its 3*R* enantiomer as analogues of α,β-butenolides

Christophe Len,[a,*] Abdelmajid Sélouane,[a,b] Asa Weiling,[a] Fabien Coicou[a] and Denis Postel[a]

[a]*Laboratoire des Glucides, Université de Picardie-Jules Verne, 33 rue Saint Leu, 80039 Amiens, France*
[b]*Université IBN Tofail, Kénitra, Morocco*

An asymmetric dihydroxylation was used starting from achiral phtalaldehyde to obtain chiral butenolide derivatives.

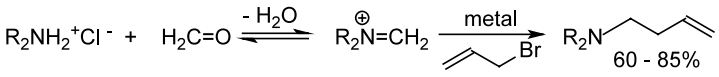


Tetrahedron Letters 44 (2003) 667

Barbier-type allylation of iminium ions generated in situ in aqueous medium

Idália H. S. Estevam[a,b] and Lothar W. Bieber[a,*]

[a]*Departamento de Química Fundamental, Universidade Federal de Pernambuco, Cidade Universitária, Recife-PE 50670-901, Brazil*
[b]*Departamento de Ciências Exatas e da Terra, Universidade do Estado da Bahia, Cabula, Salvador-BA 40000-000, Brazil*



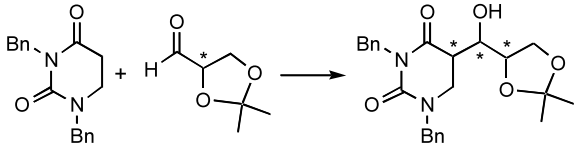
Tetrahedron Letters 44 (2003) 671

Use of 1,3-dibenzyl-dihydrouracil in the chain extension of 2,3-*O*-isopropylidene-D-glyceraldehyde

Fausta Ulgheri,[a] John Bacsa,[b] Luigi Nassimbeni[b] and Pietro Spanu[a,*]

[a]*Istituto di Chimica Biomolecolare CNR, Sezione di Sassari Trav. La Crucca 3, Baldinca, 07040 Li Punti Sassari, Italy*
[b]*Department of Chemistry, University of Cape Town, Rondebosch 7701, South Africa*

The aldol-type addition of 1,3-dibenzyl-dihydrouracil to 2,3-*O*-isopropylidene-D-glyceraldehyde was examined in different solvents and under Lewis acid catalysis. A stereodivergent synthesis of 5-trihydroxypropyl-dihydrouracil derivatives was realized.



Tetrahedron Letters 44 (2003) 677

Alkyne and ketone induced novel cleavage of a C–C bond and a C–Si bond in zirconacyclobutene–silacyclobutene fused ring compounds

Tao Yu,[a] Liang Deng,[a] Changjia Zhao,[a] Zhiping Li[a] and Zhenfeng Xi[a,b,*]

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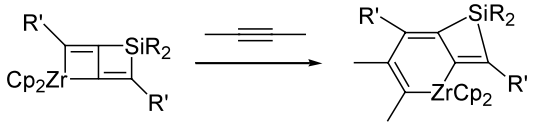
[b]*State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai 200032, China*



Tetrahedron Letters 44 (2003) 681

Synthesis of novel simplified eleutheside analogues with potent microtubule-stabilizing activity, using ring-closing metathesis as the key-step

Raphael Beumer,[a] Pau Bayón,[a] Piergiuliano Bugada,[a] Sylvie Ducki,[b] Nicola Mongelli,[b] Federico Riccardi Sirtori,[b] Joachim Telser[a] and Cesare Gennari[a,*]

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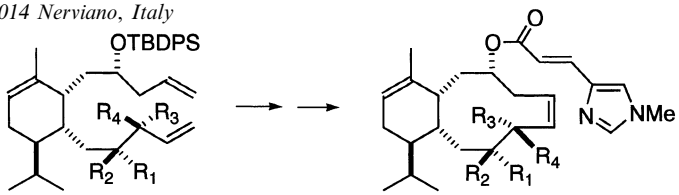
[b]*Pharmacia, viale Pasteur 10, I-20014 Nerviano, Italy*

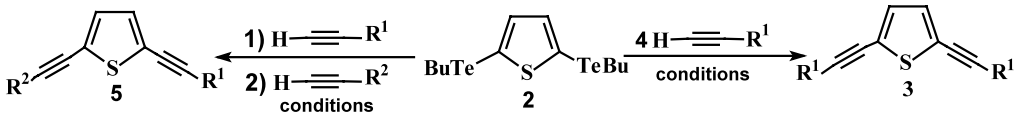


2,5-Bis-(butyltelluro) thiophene as a convenient precursor for the synthesis of 2,5-bis-(acetylenic) thiophenes

Tetrahedron Letters 44 (2003) 685

Gilson Zeni,[a,*] Cristina W. Nogueira,[a] Dagoberto O. Silva,[a] Paulo H. Menezes,[b] Antonio L. Braga,[a] Hélio A. Stefani[c] and João B. T. Rocha[a]

[a]*Departamento de Química, Laboratório de Bioquímica Toxicológica, UFSM 97105-900, Santa Maria, RS, Brazil*
[b]*Departamento de Química Fundamental, Universidade Federal de Pernambuco, Recife, PE 50670-901, Brazil*
[c]*Faculdade de Ciências Farmacêuticas, USP, São Paulo, SP, Brazil*

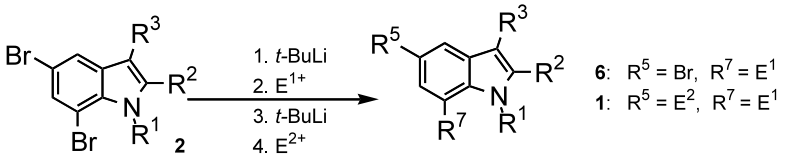


A facile approach to the synthesis of 5,7-disubstituted indoles via a highly selective lithium–bromine exchange of 5,7-dibromoindoles

Tetrahedron Letters 44 (2003) 689

Lianhai Li* and Andrew Martins

Department Of Medicinal Chemistry, Merck Frosst Centre for Therapeutic Research, PO Box 1005, Pointe-Claire-Dorval, Quebec, Canada H9R 4P8



Synthesis of 2,2′-bipyridyl derivatives using aza Diels–Alder methodology

Tetrahedron Letters 44 (2003) 693

Stephen P. Stanforth,[a,*] Brian Tarbit[b] and Michael D. Watson[a]

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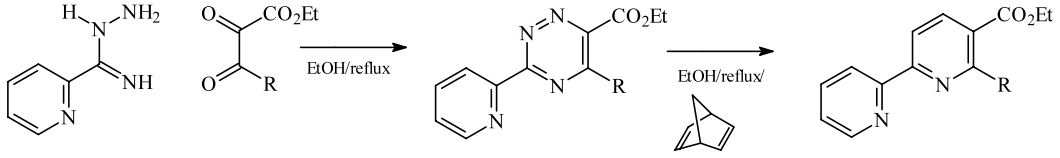
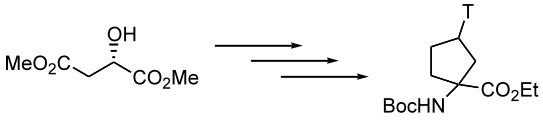


Synthesis of the four diastereoisomers of 3-thymine-1-(′butoxycarbonyl)aminocyclopentane-1-carboxylic acid

Tetrahedron Letters 44 (2003) 695

Nicola M. Howarth,[a,*] Laurence P. G. Wakelin[b] and David M. Walker[a]

[a]*Chemistry, School of Engineering & Physical Sciences, William H. Perkin Building, Heriot-Watt University, Riccarton, Edinburgh EH14 4AS, UK*
[b]*School of Medical Sciences, University of New South Wales, Sydney 2052, Australia*



T = Thymine

Tetrahedron Letters 44 (2003) 699

Supramolecular peptide helix from a novel double turn forming peptide containing a β-amino acid

Arijit Banerjee,[a] Samir Kumar Maji,[a] Michael G. B. Drew,[b] Debasish Haldar[a] and Arindam Banerjee[a,*]

[a]*Department of Biological Chemistry, Indian Association for the Cultivation of Science, Jadavpur, Calcutta 700 032, India*

[b]*Department of Chemistry, The University of Reading, Whiteknights, Reading RG6 6AD, UK*

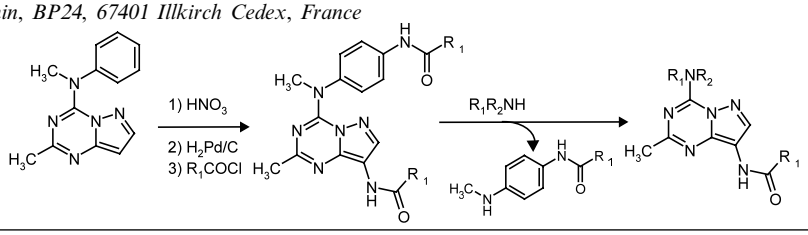
Tetrahedron Letters 44 (2003) 703

A general approach toward the synthesis of 8-acylamido-pyrazolo[1,5-*a*]-1,3,5-triazines

Pierre Raboisson,[a,*] Dominique Schultz,[a] Claire Lugnier,[b] Romain Mathieu[a] and Jean-Jacques Bourguignon[a]

[a]*Laboratoire de Pharmacochimie de la Communication Cellulaire (CNRS, UMR 7081), Faculté de Pharmacie, 74 route du Rhin, BP24, 67401 Illkirch Cedex, France*

[b]*Laboratoire de Pharmacologie et de Physico-Chimie des Interactions Cellulaires et Moléculaires (CNRS, UMR 7034), Faculté de Pharmacie, 74 route du Rhin, BP24, 67401 Illkirch Cedex, France*



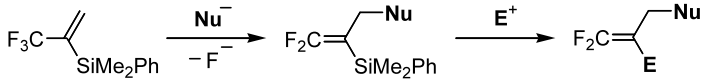
Tetrahedron Letters 44 (2003) 707

A novel synthesis of functionalized 1,1-difluoro-1-alkenes via isolable 2,2-difluorovinylsilanes

Junji Ichikawa,* Yuichiro Ishibashi and Hiroki Fukui

Department of Chemistry, Graduate School of Science, The University of Tokyo, Hongo, Bunkyo-ku, Tokyo 113-0033, Japan

Various 1,1-difluoro-1-alkenes are prepared in two simple steps from 1-trifluoromethylvinylsilane.

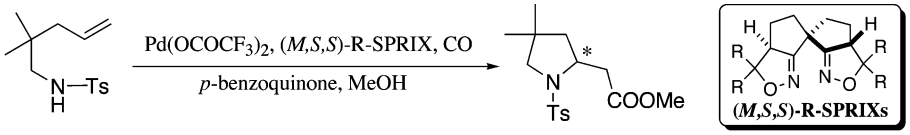


Tetrahedron Letters 44 (2003) 711

The first enantioselective intramolecular aminocarbonylation of alkenes promoted by Pd(II)-spiro bis(isoxazoline) catalyst

Toshio Shinohara, Midori A. Arai, Kazuhiko Wakita, Takayoshi Arai and Hiroaki Sasai*

The Institute of Scientific and Industrial Research (ISIR), Osaka University, Mihogaoka, Ibaraki, Osaka 567-0047, Japan



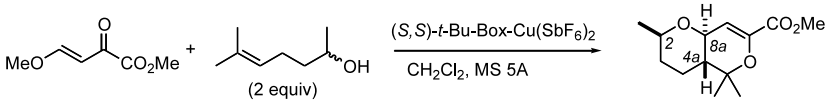
Tetrahedron Letters 44 (2003) 715

A new strategy in enantioselective intramolecular hetero Diels–Alder reaction: catalytic double asymmetric induction during the tandem transetherification–intramolecular hetero Diels–Alder reaction of methyl (*E*)-4-methoxy-2-oxo-3-butenoate with *rac*-6-methyl-5-hepten-2-ol

Hidetaka Koga[a] and Eiji Wada[b,*]

[a]*Department of Molecular and Material Science, Graduate School of Engineering Sciences, Kyushu University, 6-1 Kasugakoen, Kasuga 816-8580, Japan*
[b]*Institute of Advanced Material Study, Kyushu University, 6-1 Kasugakoen, Kasuga 816-8580, Japan*

Kinetic resolution: up to $R/S = 95/5$; diastereoselectivity of cycloadduct: up to 92% de; enantioselectivity of (2*R*,4a*S*,8a*R*)-cycloadduct: up to 97% ee.

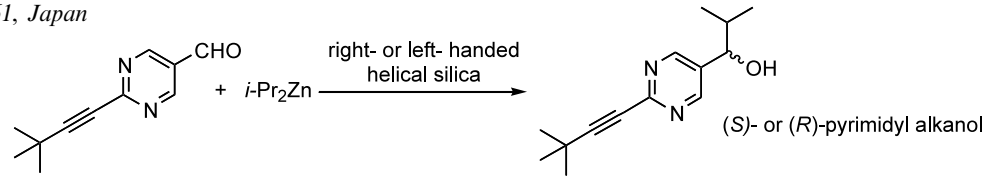


Tetrahedron Letters 44 (2003) 721

Highly enantioselective synthesis of organic compound using right- and left-handed helical silica

Itaru Sato,[a] Kousuke Kadowaki,[a] Hiroki Urabe,[a] Jong Hwa Jung,[b] Yoshiyuki Ono,[b] Seiji Shinkai[b] and Kenso Soai[a,*]

[a]*Department of Applied Chemistry, Faculty of Science, Tokyo University of Science, Kagurazaka, Shinjuku-ku, Tokyo 162-8601, Japan*
[b]*Chemotransfiguration Project, Japan Science and Technology Corporation (JST), 2432 Aikawa, Kurume, Fukuoka 839-0861, Japan*

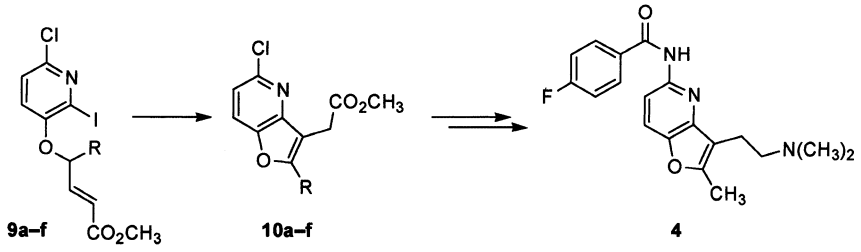


Tetrahedron Letters 44 (2003) 725

A general method for the preparation of 2,3,5-trisubstituted-furo[3,2-*b*]pyridines

Brian M. Mathes and Sandra A. Filla*

Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, IN 46285, USA

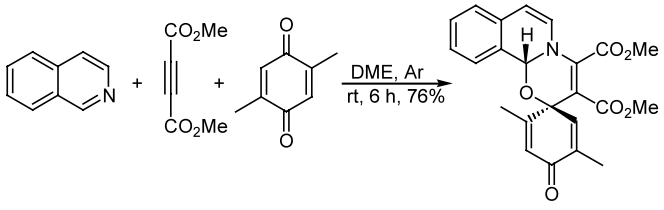


Tetrahedron Letters 44 (2003) 729

The reaction of isoquinoline and dimethyl acetylenedicarboxylate with 1,2- and 1,4-benzoquinones: a novel synthesis of spiro[1,3]oxazino[2,3-*a*]isoquinolines

Vijay Nair,[a,*] A. R. Sreekanth,[a] A. T. Biju[a] and Nigam P. Rath[b]

[a]*Organic Chemistry Division, Regional Research Laboratory (CSIR), Trivandrum 695 019, India*
[b]*Department of Chemistry, University of Missouri, St. Louis, MI 63121-4499, USA*



A novel three component reaction of isoquinoline and dimethyl acetylenedicarboxylate with 1,2- and 1,4-benzoquinones, afford spiro[1,3]oxazino[2,3-*a*]isoquinoline derivatives in high yields.

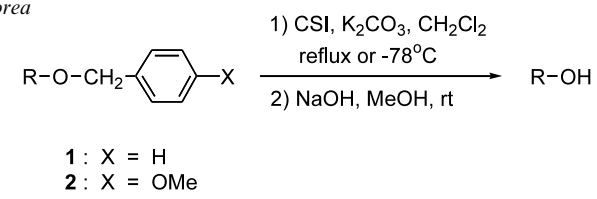
Tetrahedron Letters 44 (2003) 733

Deprotection of benzyl and *p*-methoxybenzyl ethers by chlorosulfonyl isocyanate–sodium hydroxide

Ji Duck Kim,[a] Gyoonhee Han,[b] Ok Pyo Zee[a] and Young Hoon Jung[a,*]

[a]*College of Pharmacy, Sungkyunkwan University, Suwon 440-746, South Korea*
[b]*Korea Research Institute of Bioscience and Biotechnology, Taejon 305-333, South Korea*

CSI–NaOH procedure provided a new and mild methodology for the deprotection of benzyl and *p*-methoxybenzyl ethers without affecting the other functional groups under similar reaction conditions.

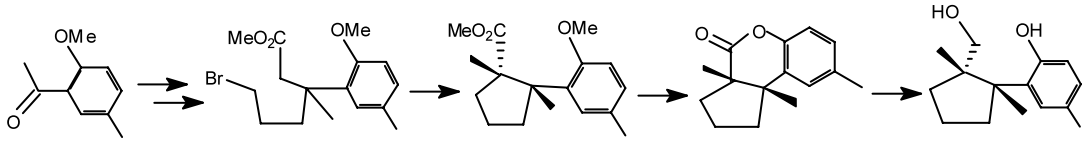


Tetrahedron Letters 44 (2003) 737

Stereoselective total syntheses of (±)-1,14-herbertenediol and (±)-tochuinyl acetate and facile total syntheses of (±)-α-herbertenol, (±)-β-herbertenol and (±)-1,4-cuparenediol

Tapas Paul, Ashutosh Pal, Pranab Dutta Gupta and Debabrata Mukherjee*

Department of Organic Chemistry, Indian Association for the Cultivation of Science, Kolkata 700 032, India

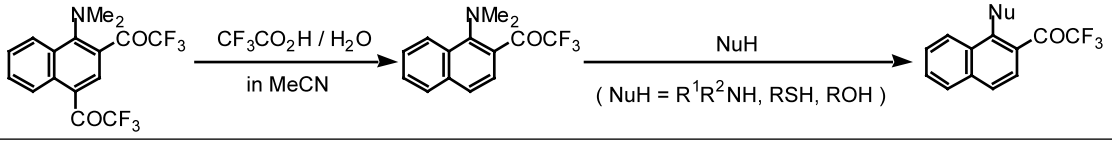


Tetrahedron Letters 44 (2003) 741

Synthesis and aromatic nucleophilic *N–N*, *N–S* and *N–O* exchange reactions of *N,N*-dimethyl-2-trifluoroacetyl-1-naphthylamine

Etsuji Okada,[a,*] Yoshihiro Otsuki,[a] Megumi Shinohara,[a] Maurice Médebielle,[b] Yuhei Shimizu[a] and Hiroshi Takeuchi[a]

[a]*Department of Chemical Science and Engineering, Faculty of Engineering, Kobe University, Rokkodai-cho, Nada-ku, Kobe 657-8501, Japan*
[b]*Universite Claude Bernard-Lyon 1, Laboratoire de Synthese, Electrosynthese et Reactivite des Composes Organiques Fluores (SERCOF), UMR CNRS 5622, Batiment E. Chevreul, 43 Bd du 11 Novembre 1918, F-69622 Villeurbanne Cedex, France*

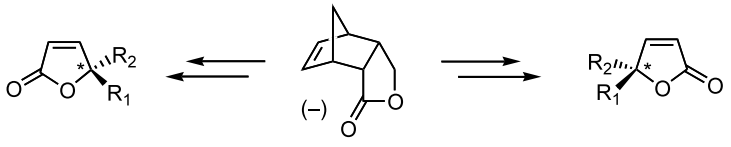


Tetrahedron Letters 44 (2003) 745

Enantiodivergent syntheses of γ-substituted butenolides with tertiary and quaternary asymmetric centers

Katsufumi Suzuki and Kohei Inomata*

Tohoku Pharmaceutical University, 4-4-1 Komatsushima, Aoba-ku, Sendai 981-8558, Japan

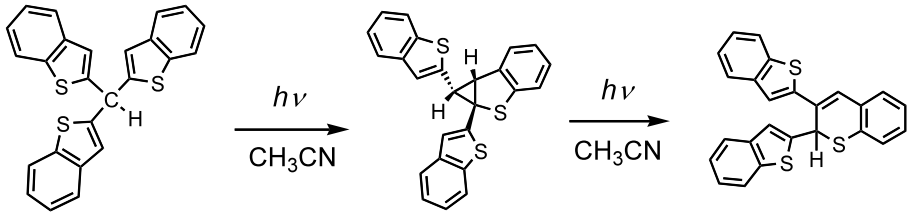


Tetrahedron Letters 44 (2003) 751

The di-π-methane rearrangement induced in tris(2-benzo[*b*]-thienyl)methane

Naoki Tanifuji, Honghua Huang, Yoko Shinagawa and Keiji Kobayashi*

Department of Chemistry, Graduate School of Arts and Sciences, The University of Tokyo, Komaba, Meguro-ku, Tokyo 153-8902, Japan

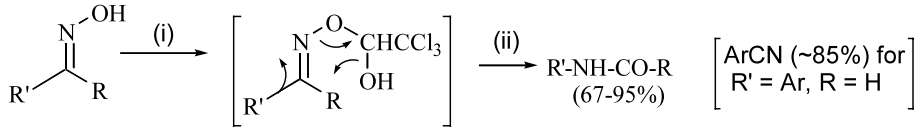


Tetrahedron Letters 44 (2003) 755

Beckmann reaction of oximes catalysed by chloral: mild and neutral procedures

Sosale Chandrasekhar* and Kovuru Gopalaiah

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



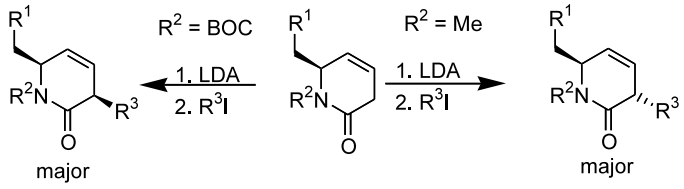
(i) $Cl_3CCH(OH)_2$/130 °C/10-760 Torr/1-6 h (ii) -(Cl_3CCHO)

Tetrahedron Letters 44 (2003) 757

Diastereoselective synthesis of 3,6-disubstituted 3,6-dihydropyridin-2-ones

Thomas F. Anderson, Julian G. Knight* and Kirill Tchabanenko

School of Natural Sciences, Bedson Building, Newcastle University, Newcastle upon Tyne NE1 7RU, UK



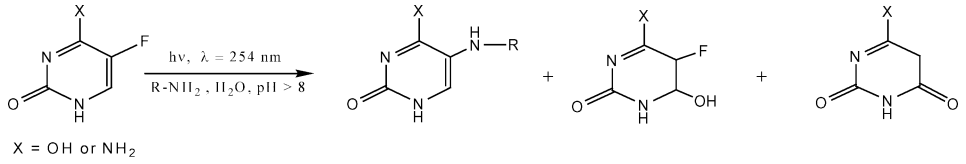
Tetrahedron Letters 44 (2003) 761

Photochemical reactions of 5-fluoropyrimidine bases with selected alkylamines

Anna Kanciurzewska, Mateusz Raczkowski, Krzysztof Ciszewski and Lech Celewicz*

Faculty of Chemistry, A. Mickiewicz University, Grunwaldzka 6, 60-780 Poznan, Poland

Photochemical reactions of 5-fluorouracil and 5-fluorocytosine with primary alkylamines are described.



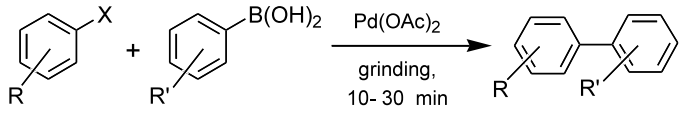
Tetrahedron Letters 44 (2003) 765

Ligand-free palladium catalysis of aryl coupling reactions facilitated by grinding

Liane M. Klingensmith and Nicholas E. Leadbeater*

Department of Chemistry, King's College London, Strand, London WC2R 2LS, UK

Palladium-catalysed Suzuki coupling reactions and homo-couplings of boronic acids have been facilitated by grinding.



X = Br, R' = H; X = B(OH)$_2$, R = R'

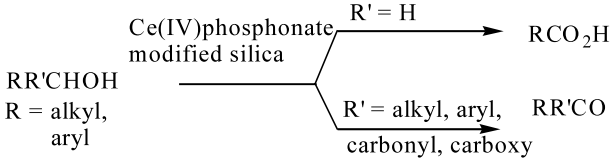
Tetrahedron Letters 44 (2003) 769

Oxidation of alcohols using cerium(IV) alkyl phosphonate modified silica

Nazli Al-Haq, Alice C. Sullivan* and John R. H. Wilson

Chemistry Department, Queen Mary, University of London, Mile End Road, London E14NS, UK

The oxidation of a range of alcohols to ketones or carboxylic acids proceeds in good yield using catalytic quantities of cerium(IV) phosphonate modified silica and sodium bromate as the re-oxidant.



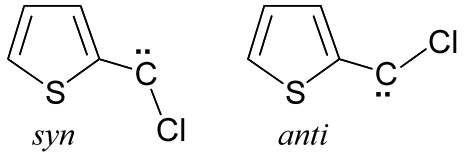
Tetrahedron Letters 44 (2003) 773

2-Thienylchlorocarbene: reactivity toward alkenes

Robert A. Moss,* Xiaolin Fu, Yan Ma and Ronald R. Sauers*

Department of Chemistry and Chemical Biology, Rutgers, The State University of New Jersey, New Brunswick, NJ 08903, USA

Absolute rate constants for the additions of *syn*- and *anti*-2-thienylchlorocarbenes to various alkenes were measured and analyzed.

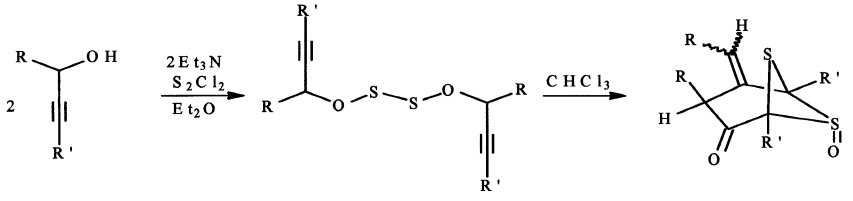


Tetrahedron Letters 44 (2003) 777

Tandem sigmatropic rearrangements and cyclizations of propargylic dialkoxy disulfides

Samuel Braverman,* Tatiana Pechenick and Hugo E. Gottlieb

Department of Chemistry, Bar-Ilan University, Ramat-Gan 52900, Israel

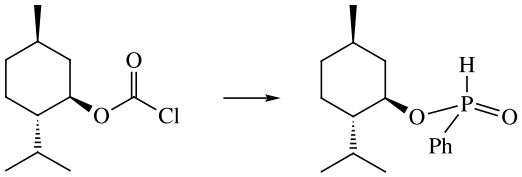


Tetrahedron Letters 44 (2003) 781

Hewitt reaction revisited

Kamyar Afarinkia* and Hiu-wan Yu

Department of Chemistry, King's College, Strand, London WC2R 2LS, UK

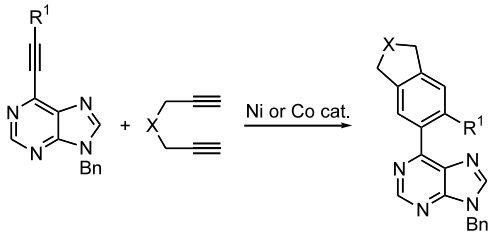


Tetrahedron Letters 44 (2003) 785

[2+2+2]-Co-cyclotrimerization 6-alkynylpurines with diynes: a method for preparation of 6-arylpurines

Pavel Turek,[a] Martin Kotora,[a,*] Michal Hocek[b,*] and Ivana Císařová[c]

[a]*Department of Organic and Nuclear Chemistry, Faculty of Science, Charles University, Albertov 2030, 128 43 Prague, Czech Republic*
[b]*Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Flemingovo nám. 2, 166 10 Prague 6, Czech Republic*
[c]*Department of Inorganic Chemistry, Faculty of Science, Charles University, Albertov 2030, 128 43 Prague, Czech Republic*

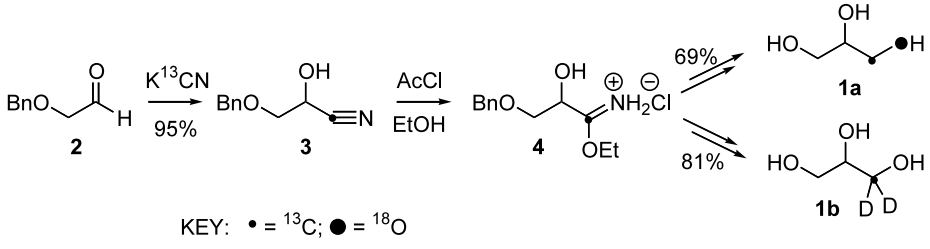


Tetrahedron Letters 44 (2003) 789

A highly efficient synthesis of [1-^{13}C, ^{18}O]- and [1-^{13}C, $^{2}H_2$]-glycerol for the elucidation of biosynthetic pathways

Alexandros P. Siskos and Alison M. Hill*

Department of Chemistry, King's College London, Strand, London WC2R 2LS, UK

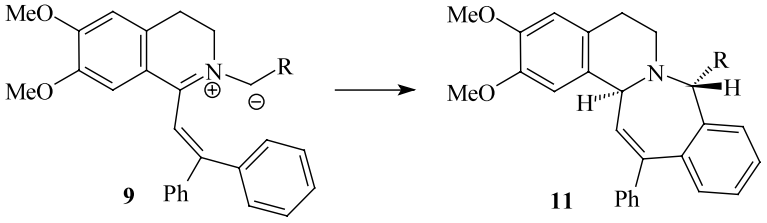


Tetrahedron Letters 44 (2003) 793

1,7-Electrocyclisations of stabilised azomethine ylides

Miklós Nyerges,* Andrea Virányi, Áron Pintér and László Tőke

Research Group of the Hungarian Academy of Sciences, Department of Organic Chemical Technology, Technical University of Budapest, H-1521 Budapest P.O.B. 91, Hungary

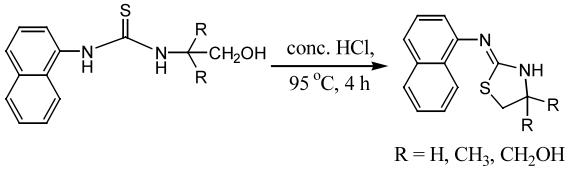


Tetrahedron Letters 44 (2003) 795

Promoting effects of the hydroxymethyl group on the fluorescent signaling recognition of anions by thioureas

Xuhong Qian[b,*] and Fengyu Liu[a]

[a]*Shanghai Key Lab. of Chemical Biology, Institute of Pesticides and Pharmarceuticals, East China University of Science and Technology, Shanghai 200237, China*
[b]*State Key Lab. of Fine Chemicals, Dalian University of Technology, Dalian 116012, China*



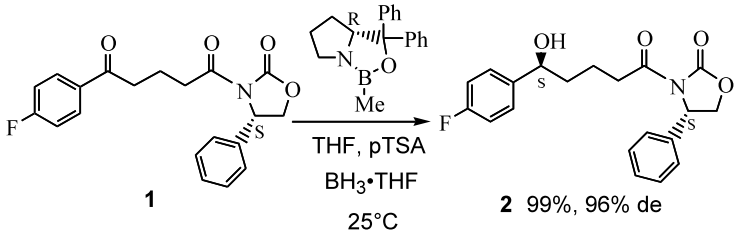
Tetrahedron Letters 44 (2003) 801

Process for preparing Ezetimibe intermediate by an acid enhanced chemo- and enantioselective CBS catalyzed ketone reduction

Xiaoyong Fu,* Timothy L. McAllister, T. K. Thiruvengadam, Chou-Hong Tann and Dan Su

Synthetic Chemistry Department, Schering-Plough Research Institute, 1011 Morris Ave., Union, NJ 07083, USA

The chemo- and enantioselectivity of the (*R*)-MeCBS catalyzed reduction of (**1**) to (**2**) was dramatically enhanced by using an acid as a scavenger of the stabilizer (sodium borohydride) present in the commercially supplied, pure BTHF.



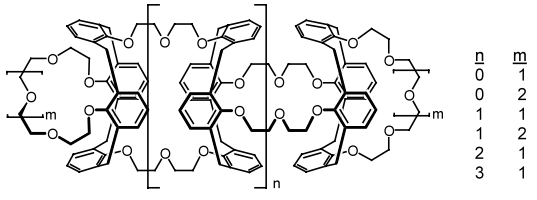
Tetrahedron Letters 44 (2003) 805

Modular chemistry. Double- and multi-1,3-alternate-calixcrowns

Sung Kuk Kim,[a] Wonbo Sim,[a] Jacques Vicens[b,*] and Jong Seung Kim[a,*]

[a]*Department of Chemistry, Konyang University, Nonsan 320-711, South Korea*
[b]*ECPM, Becquerel, F-67087 Strasbourg, Cédex 2, France*

Double- and multi-1,3-alternate-calixcrowns were prepared by multistep syntheses.

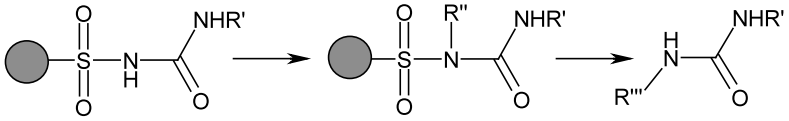


Tetrahedron Letters 44 (2003) 811

Solid-phase synthesis of unsymmetrical ureas through the use of Kenner safety-catch linker

Daniela Fattori,* Piero D'Andrea and Marina Porcelloni

Chemistry Department, Menarini Ricerche, S.p.A., Via Tito Speri 10, 00040 Pomezia, (Rome), Italy

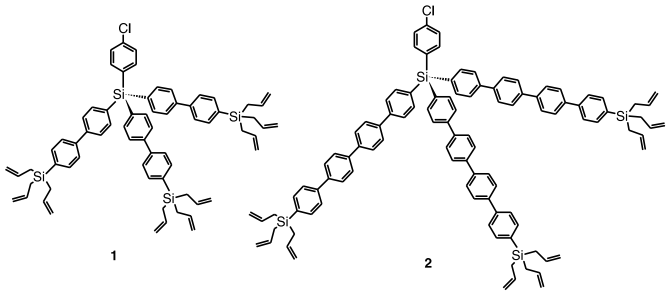


Tetrahedron Letters 44 (2003) 815

Synthesis of tripod-shaped oligo(phenylene)s with multiple ethenyl groups at the bases for chemisorption on hydrogen-terminated silicon surfaces

Xiaobin Deng and Chengzhi Cai*

Department of Chemistry, University of Houston, Houston, TX 77204-5003, USA

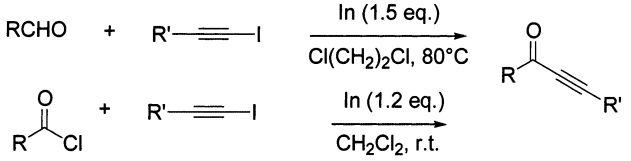


Tetrahedron Letters 44 (2003) 819

Indium-mediated formation of propargyl ketones from aldehydes or acyl chlorides

Jacques Augé,* Nadège Lubin-Germain and Latifa Seghrouchni

UMR 8123 CNRS-UCP-ESCOM, 5 mail Gay-Lussac, Neuville sur Oise, 95031 Cergy-Pontoise, France

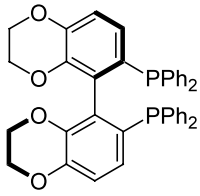


Tetrahedron Letters 44 (2003) 823

SYNPHOS®, a new chiral diphosphine ligand: synthesis, molecular modeling and application in asymmetric hydrogenation

Sébastien Duprat de Paule,[a] Séverine Jeulin,[a] Virginie Ratovelomanana-Vidal,[a] Jean-Pierre Genêt,[a,*] Nicolas Champion[b] and Philippe Dellis[b]

[a]*Laboratoire de Synthèse Sélective Organique et Produits Naturels, UMR 7573, Paris, France*
[b]*SYNKEM S.A.S., Chenôve, France*



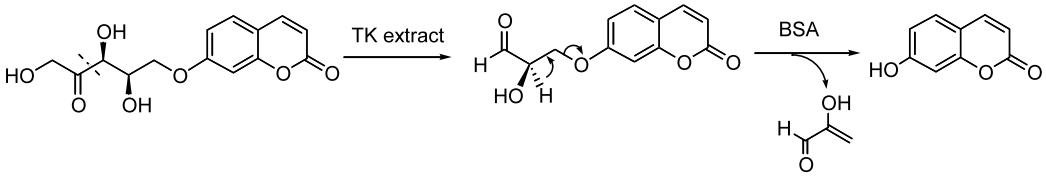
(*R*)-SYNPHOS®

Tetrahedron Letters 44 (2003) 827

A fluorogenic assay for transketolase from *Saccharomyces cerevisiae*

Aurélie Sevestre,[a] Virgil Hélaine,[a] Ghislain Guyot,[b] Christine Martin[c] and Laurence Hecquet[a,*]

[a]*Université Blaise Pascal, Laboratoire de Synthèse et Etude de Systèmes à Intérêt Biologique, UMR 6504, 63177 Aubière Cedex, France*
[b]*Université Blaise Pascal, Laboratoire de Photochimie Moléculaire et Macromoléculaire, UMR 6505, 63177 Aubière Cedex, France*
[c]*Laboratoire de Microbiologie, INRA, 63200 Theix, France*



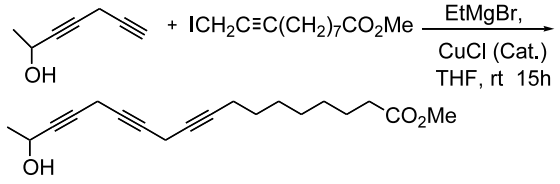
Synthesis of hydroxy-substituted unsaturated fatty acids and the amino-acid insect-derivative volicitin

Tetrahedron Letters 44 (2003) 831

Han-Xun Wei, Christopher L. Truitt and Paul W. Paré*

Department of Chemistry and Biochemistry, Texas Tech University, Lubbock, TX 79409, USA

Synthesis of *N*-(17*S*-hydroxylinolenyl)-L-glutamine, a chemical elicitor referred to as volicitin, is presented based on a cuprous chloride-catalyzed coupling of (*S*)-3,6- heptadiyne-2-ol with a C-8 propargylic iodine methyl ester to form the 17-hydroxylinolenate skeleton and a series of chemical analogues.

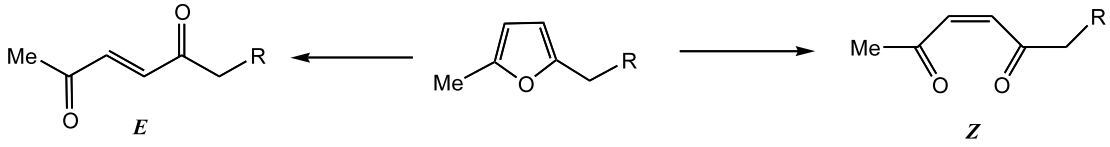


$Mo(CO)_6$-Catalyzed oxidation of furan derivatives to *E*- and *Z*-enediones by cumyl hydroperoxide

Tetrahedron Letters 44 (2003) 835

Antonio Massa, Maria Rosaria Acocella, Margherita De Rosa, Annunziata Soriente, Rosaria Villano and Arrigo Scettri*

Dipartimento di Chimica, Università di Salerno, 84081 Baronissi (Salerno), Italy



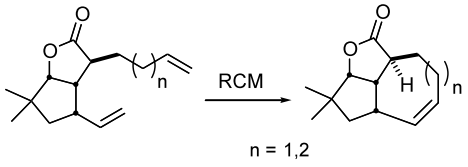
Synthesis of 'inside–outside' medium-sized rings via ring-closing metathesis

Tetrahedron Letters 44 (2003) 839

Marie E. Krafft,[a,*] Y. Y. Cheung,[a] Sean A. Kerrigan[a] and Khalil A. Abboud[b]

[a]*Department of Chemistry and Biochemistry, Florida State University, Tallahassee, FL 32306-4390, USA*
[b]*Department of Chemistry, University of Florida, Gainesville, FL 32611-7200, USA*

Dienes tethered to an oxabicyclo[3.3.0]octane template undergo RCM to yield seven- and eight-membered rings in high yield.

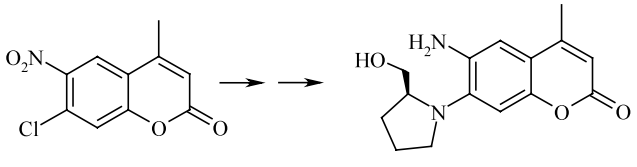


7-Chloro-4-methyl-6-nitro-2*H*-chromen-2-one: a novel type of reagent for fluorescence analysis

Tetrahedron Letters 44 (2003) 845

Christian R. Noe,[a,*] Spyridon Kornilios[b] and Bodo Lachmann[a]

[a]*Institute of Pharmaceutical Chemistry, University of Vienna, Althanstraße 14, A-1090 Vienna, Austria*
[b]*Institute of Organic Chemistry, Technical University of Vienna, Getreidemarkt 9, A-1060 Vienna, Austria*

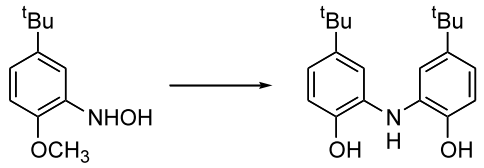


Tetrahedron Letters 44 (2003) 849

Condensations of *N*-arylhydroxylamines for the preparation of 5,5′-di-*tert*-butyl-2,2′-dihydroxydiphenylamine

John D. Spence,* Ashley E. Raymond and Dianne E. Norton

Department of Chemistry, Trinity University, 715 Stadium Dr., San Antonio, TX 78212, USA

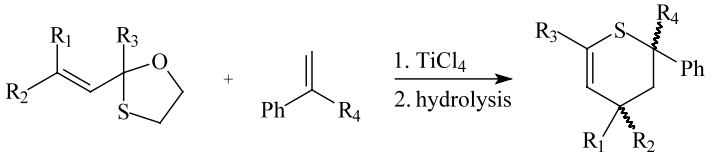


Tetrahedron Letters 44 (2003) 853

α,β-Unsaturated 1,3-oxathiolanes as masked heterodienes in the thio Diels–Alder reaction with styrene derivatives

Sébastien Kerverdo,[a] Louisette Lizzani-Cuvelier[a] and Elisabet Duñach[b,*]

[a]*Laboratoire Arômes, Synthèses et Interactions, Université de Nice-Sophia Antipolis, 06108 Nice Cedex 2, France*
[b]*Laboratoire de Chimie Bio-Organique, UMR CNRS 6001, Université de Nice-Sophia Antipolis, 06108 Nice Cedex 2, France*

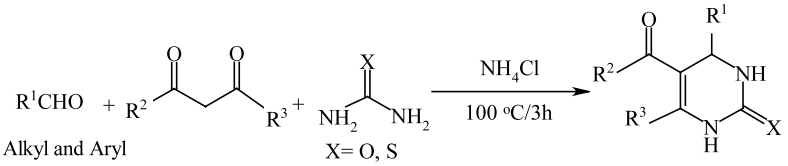


Tetrahedron Letters 44 (2003) 857

Ammonium chloride-catalyzed one-pot synthesis of 3,4-dihydropyrimidin-2-(1*H*)-ones under solvent-free conditions

Ahmad Shaabani,* Ayoob Bazgir and Fatemeh Teimouri

Department of Chemistry, Shahid Beheshti University, PO Box 19396-4716, Tehran, Iran



R^1= Alkyl and Aryl
R^2=Alkyl-O, Alkyl
R^3=Methyl, Phenyl and 2-Thienyl

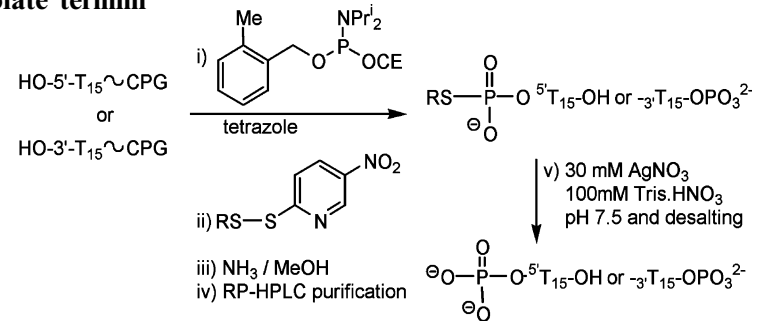
X= O, S

Tetrahedron Letters 44 (2003) 861

Novel methodology for the preparation and purification of oligonucleotides incorporating phosphorothiolate termini

Simone Battaggia and Joseph S. Vyle*

School of Chemistry, The Queen's University of Belfast, David Keir Building, Stranmillis Road, Belfast BT9 5AG, UK



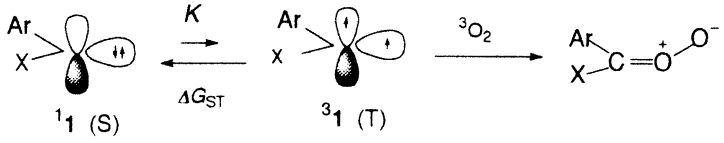
Spin selectivity in the oxygenation of singlet phenylhalocarbenes with oxygen

Tetrahedron Letters 44 (2003) 865

Taiki Makihara, Takayuki Nojima, Katsuya Ishiguro and Yasuhiko Sawaki*

Department of Applied Chemistry, Graduate School of Engineering, Nagoya University, Chikusa-ku, Nagoya 464-8603, Japan

Phenylhalocarbenes are shown to react with oxygen via the triplet state equilibrated with ground-state singlet, the singlet–triplet energy gaps being estimated.



Oxidation of amines catalyzed by cyclohexanone monooxygenase

Tetrahedron Letters 44 (2003) 869

Stefano Colonna,[a,*] Vincenza Pironti,[a] Piero Pasta[b] and Francesca Zambianchi[b]

[a]*Istituto di Chimica Organica, Facoltà di Farmacia, via Venezian 21, 20133 Milano, Italy*

[b]*Istituto di Chimica del Riconoscimento Molecolare, CNR, via Mario Bianco 9, 20131 Milano, Italy*

Cyclohexanone monooxygenase catalyzed the oxidation of tertiary, secondary and hydroxylamines to *N*-oxides, hydroxylamines and nitrones respectively.