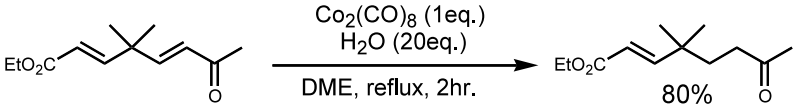
Tetrahedron Letters 44 (2003) 2775

Selective 1,4-reduction of unsaturated carbonyl compounds using $Co_2(CO)_8-H_2O$

Hee-Yoon Lee* and Mihyun An

Center for Molecular Design and Synthesis, Department of Chemistry & BK21 School of Molecular Science, Korea Advanced Institute of Science and Technology, Daejon, 305-701, Republic of Korea

α,β-Unsaturated ketones and aldehydes were selectively reduced to the corresponding saturated carbonyl compounds by $Co_2(CO)_8-H_2O$ system. The current reducing system also offered a chemoselective reduction of less substituted unsaturated carbonyl groups.



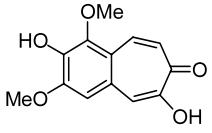
Tetrahedron Letters 44 (2003) 2779

Biotransformation of sinapic acid by the green algae *Stichococcus bacillaris* 155LTAP and *Ankistrodesmus braunii* C202.7a

Marina DellaGreca,[a] Gabriele Pinto,[b] Antonino Pollio,[b] Lucio Previtera[a] and Fabio Temussi[a,*]

[a]*Dipartimento di Chimica Organica e Biochimica, Università Federico II, Via Cynthia 4, 1-80 126 Napoli, Italy*
[b]*Dipartimento di Biologia Vegetale, Università Federico II, Via Foria 223, 1-80 139 Napoli, Italy*

Ankistrodesmus braunii bioconverted thomasidioic acid, the primary oxidative product of sinapic acid, into benzotropolone.

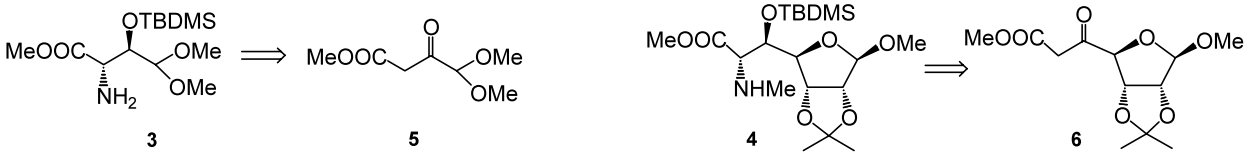


Tetrahedron Letters 44 (2003) 2781

Diastereoselective syntheses of α-amino-β-hydroxyesters precursors of the ribosyl-diazepanone core of the liposidomycins

Bruno Drouillat, Olivia Poupardin, Yann Bourdreux and Christine Greck*

Laboratoire SIRCOB, UMR CNRS 8086, Université de Versailles Saint-Quentin-en-Yvelines, 45 avenue des Etats-Unis, 78035 Versailles Cédex, France

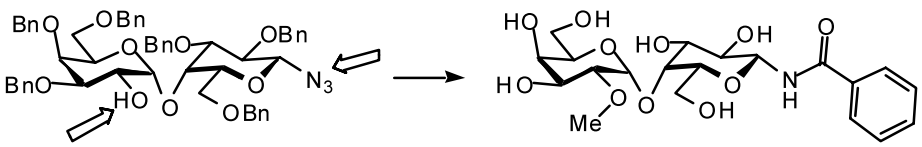


Tetrahedron Letters 44 (2003) 2785

A galabiose-based two-dimensional scaffold for the synthesis of inhibitors targeting P^k- and P-antigen binding proteins

Jörgen Ohlsson and Ulf J. Nilsson*

Bioorganic Chemistry, Lund University, PO Box 124, SE-221 00 Lund, Sweden

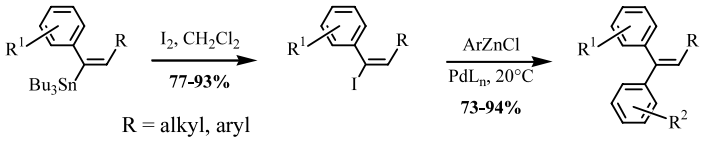


Palladium-catalyzed stereoselective synthesis of *E*- and *Z*-1,1-diaryl or triarylolefins

Tetrahedron Letters 44 (2003) 2789

Frédéric Liron, Marina Gervais, Jean-François Peyrat, Mouâd Alami* and Jean-Daniel Brion

Laboratoire de Chimie Thérapeutique, BioCIS-CNRS (UMR 8076), Université Paris-Sud, Faculté de Pharmacie, rue J.B. Clément 92296 Châtenay-Malabry Cedex, France



R = alkyl, aryl

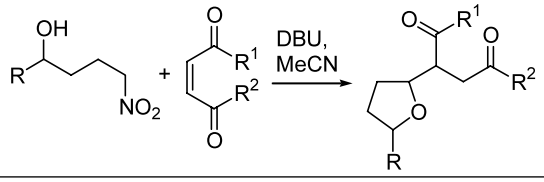
R^1, R^2 = H, Me, Br, CH_2OH, COOMe, NO_2, OMe, NMe_2

δ-Nitroalkanols as precursors for the one-pot synthesis of substituted tetrahydrofurans

Tetrahedron Letters 44 (2003) 2795

Roberto Ballini,[a,*] Dennis Fiorini,[a] Maria Victoria Gil,[a] Alessandro Palmieri,[a] Emilio Román[b] and José Antonio Serrano[b]

[a]*Dipartimento di Scienze Chimiche dell'Università, Via S. Agostino 1, 62032 Camerino, Italy*
[b]*Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Extremadura, 06071 Badajoz, Spain*



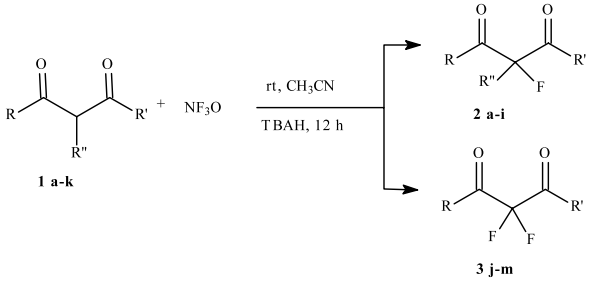
Reactions of trifluoroamine oxide: a new method for selective fluorination of 1,3-diketones and β-ketoesters

Tetrahedron Letters 44 (2003) 2799

Om D. Gupta and Jean'ne M. Shreeve*

Department of Chemistry, University of Idaho, Moscow, ID 83844-2343, USA

Fluorination of 1,3-diketones and β-ketoesters with trifluoroamine oxide in the presence of tetrabutylammonium hydroxide (TBAH) provides a one step route to mono- and difluoro-products selectively fluorinated at the α-position in good yields.



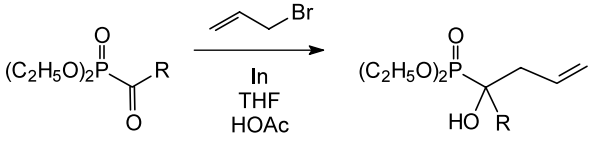
Addition of allylindium reagents to acyl phosphonates: synthesis of tertiary α-hydroxy alkylphosphonates

Tetrahedron Letters 44 (2003) 2803

Dae Young Kim and David F. Wiemer*

Department of Chemistry, University of Iowa, Iowa City, IA 52242-1294, USA

Treatment of acyl phosphonates with allylindium reagents in the presence of acetic acid afforded the corresponding α-hydroxy alkylphosphonates in good yields under mild reaction conditions.

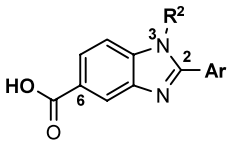


Tetrahedron Letters 44 (2003) 2807

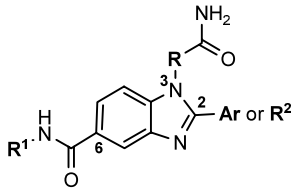
Solid-phase synthesis of benzimidazole libraries biased for RNA targets

Dionisios Vourloumis,[a,*] Masayuki Takahashi,[a] Klaus B. Simonsen,[a] Benjamin K. Ayida,[a] Sofia Barluenga,[a] Geoffrey C. Winters[a] and Thomas Hermann[b]

[a]*Department of Medicinal Chemistry, Anadys Pharmaceuticals, Inc., 9050 Camino Santa Fe, San Diego, CA 92121, USA*
[b]*Department of Computational Chemistry & Structure, Anadys Pharmaceuticals, Inc., 9050 Camino Santa Fe, San Diego, CA 92121, USA*



1(x,y)



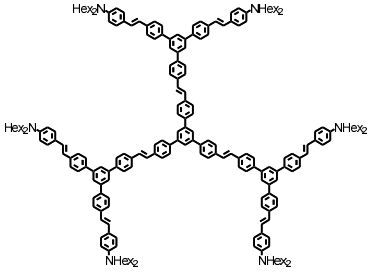
2-Ar(x,y,z) or 2-R^2(x,y,w)

Tetrahedron Letters 44 (2003) 2813

Synthesis and two-photon absorption of triphenylbenzene-cored dendritic chromophores

Olivier Mongin,[a,*] Jérémie Brunel,[b] Laurent Porrès[a] and Mireille Blanchard-Desce[a,*]

[a]*Synthèse et ElectroSynthèse Organiques (CNRS, UMR 6510), Université de Rennes 1, Institut de Chimie, Campus Scientifique de Beaulieu, Bât 10A, F-35042 Rennes, France*
[b]*Département de Chimie (CNRS, UMR 8640), Ecole Normale Supérieure, 24 rue Lhomond, F-75231 Paris Cedex 05, France*



λ_{abs} = 375 nm; λ_{em} = 442 nm; ϕ_F = 0.37

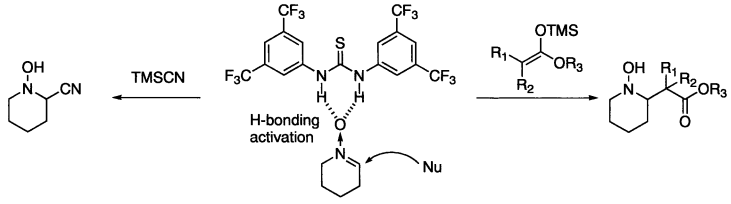
σ_2 = 798 x 10^{-50} cm^4.s.$photon^{-1}$

Tetrahedron Letters 44 (2003) 2817

Thiourea-catalyzed nucleophilic addition of TMSCN and ketene silyl acetals to nitrones and aldehydes

Tomotaka Okino, Yasutaka Hoashi and Yoshiji Takemoto*

Department of Chemistry, Graduate School of Pharmaceutical Sciences, Kyoto University, Yoshida, Sakyo-ku, Kyoto 606-8501, Japan

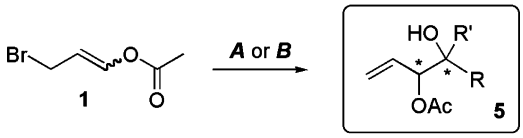


Tetrahedron Letters 44 (2003) 2823

3-Bromo-propenyl acetate in organic synthesis. The zinc-promoted α-hydroxyallylation of ketones

Marco Lombardo,* Stefano Morganti, Francesca d'Ambrosio and Claudio Trombini*

Dipartimento di Chimica 'G. Ciamician', Università di Bologna, via Selmi 2, I-40126 Bologna, Italy



A: i) Zn, NH_4Cl/H_2O/THF, RCOR'

B: i) Zn, THF/DMSO, ii) RCOR'

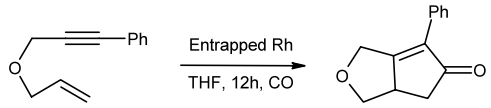
Pauson–Khand reactions catalyzed by entrapped rhodium complexes

Tetrahedron Letters 44 (2003) 2827

Kang Hyun Park, Seung Uk Son and Young Keun Chung*

School of Chemistry and Center for Molecular Catalysis, Seoul National University, Seoul 151-747, South Korea

An entrapped Rh complex prepared by a sol–gel process has been used as a catalyst in the Pauson–Khand reaction under mild reaction conditions; the catalyst is easily recovered and reused at least 10 times without losing catalyst activity.



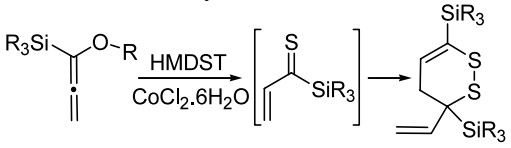
An easy access to α,β-unsaturated thioacylsilanes: a useful route to silylated 1,2-dithiins

Tetrahedron Letters 44 (2003) 2831

Antonella Capperucci,* Alessandro Degl'Innocenti,* Simona Biondi, Tiziano Nocentini and Giuseppe Rinaudo

Dipartimento di Chimica Organica, ICCOM, via della Lastruccia 13, I-50019 Sesto Fiorentino (FI), Italy

Reaction of silylated allenes with HMDST affords the generation of unsubstituted thiopropenoylsilanes, which undergo a self-dimerization reaction to silylated 1,2-dithiins.

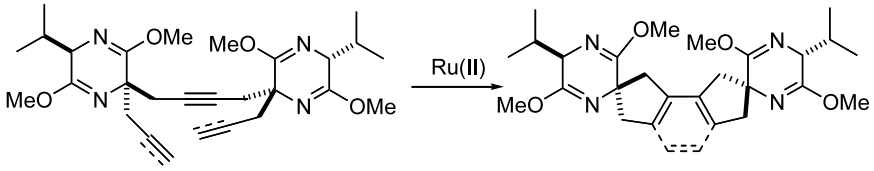


High temperature microwave-accelerated ruthenium-catalysed domino RCM reactions

Tetrahedron Letters 44 (2003) 2837

Jon Efskind and Kjell Undheim*

Department of Chemistry, University of Oslo, N-0315 Oslo, Norway

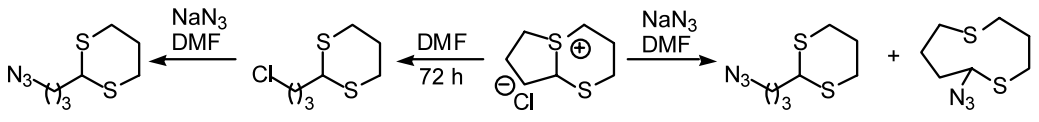


Controlling neighbouring group participation from thioacetals

Tetrahedron Letters 44 (2003) 2841

Mairi Gibson,[a] Jonathan M. Goodman,[b] Louis J. Farrugia[a] and Richard C. Hartley[a,*]

[a]*Department of Chemistry, University of Glasgow, Glasgow G12 8QQ, UK*
[b]*Department of Chemistry, University of Cambridge, Lensfield Road, Cambridge CB2 1EW, UK*

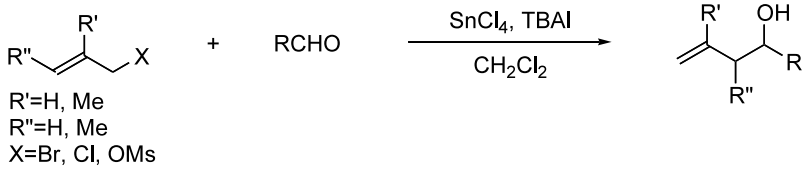


Tetrahedron Letters 44 (2003) 2845

Carbonyl allylations by 3-halopropenes or 2-propenyl mesylate with tin(IV) chloride and tetrabutylammonium iodide

Yoshiro Masuyama,* Takanori Suga, Akiko Watabe and Yasuhiko Kurusu

Department of Chemistry, Sophia University, 7-1 Kioicho, Chiyoda-ku, Tokyo 102-8554, Japan

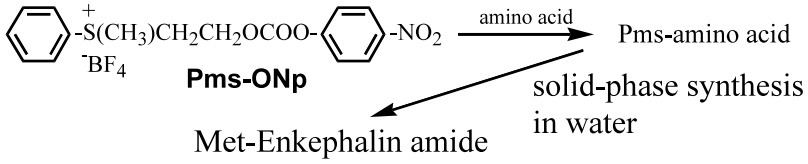


Tetrahedron Letters 44 (2003) 2849

A new reagent, 2-[phenyl(methyl)sulfonio]ethyl-4-nitrophenylcarbonate tetrafluoroborate (Pms-ONp), for preparing water-soluble *N*-protected amino acids

Keiko Hojo, Mitsuko Maeda, Yuka Takahara, Sachiko Yamamoto and Koichi Kawasaki*

Faculty of Pharmaceutical Sciences, Kobe Gakuin University, Nishi-ku, Kobe 651-2180, Japan



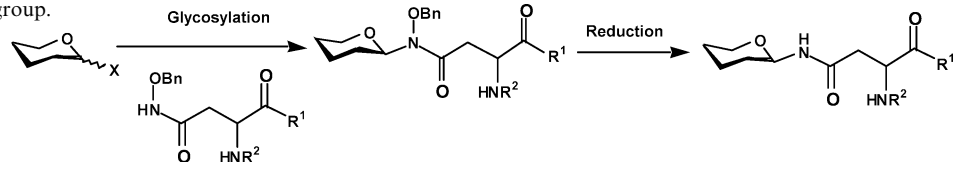
Tetrahedron Letters 44 (2003) 2853

A novel method for the formation of *N*-glycosides using hydroxamate

Jun Nakano,[a,b] Tsuyoshi Ichiyanagi,[a] Hiromichi Ohta[b] and Yukishige Ito[a,c,*]

[a]*RIKEN (The Institute of Physical and Chemical Research), 2-1 Hirosawa, Wako-shi, Saitama 351-0198, Japan*
[b]*Department of Chemistry, Keio University, 3-14-1 Hiyoshi, Kohoku-ku, Yokohama 223-0061, Japan*
[c]*CREST, JST, Kawaguchi, Saitama 332-0012, Japan*

Glycosylation using hydroxamate with glycosyl fluoride afforded *N*-glycoside that was transformed to glycosyl asparagin after reductive removal of a BnO group.

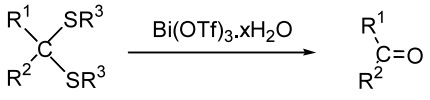


Tetrahedron Letters 44 (2003) 2857

An efficient catalytic deprotection of thioacetals employing bismuth triflate: synthesis of pyrrolo[2,1-*c*] [1,4] benzodiazepines

Ahmed Kamal,* P. S. M. M. Reddy and D. Rajasekhar Reddy

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



R^1=H; R^2= aryl; R^3=CH_3 -CH_2 -

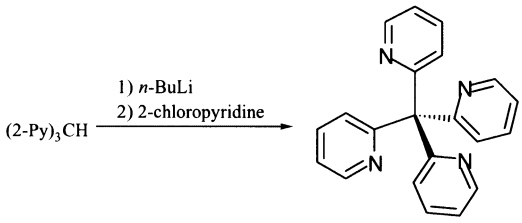
Tetrahedron Letters 44 (2003) 2861

Synthesis of tetrakis(2-pyridyl)methane: the first tetrapyridylmethane

Kouzou Matsumoto, Masaki Kannami and Masaji Oda*

Department of Chemistry, Graduate School of Science, Osaka University, Toyonaka 560-0043, Japan

Tetrakis(2-pyridyl)methane is synthesized, as the first member of tetrapyridylmethane family, by nucleophilic aromatic substitution of tris(2-pyridyl)methyl anion on 2-chloropyridine.

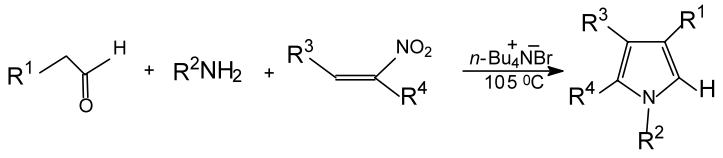


Tetrahedron Letters 44 (2003) 2865

An efficient synthesis of pyrroles by a one-pot, three-component condensation of a carbonyl compound, an amine and a nitroalkene in a molten ammonium salt

Brindaban C. Ranu* and Suvendu S. Dey

Department of Organic Chemistry, Indian Association for the Cultivation of Science, Jadavpur, Calcutta-700 032, India

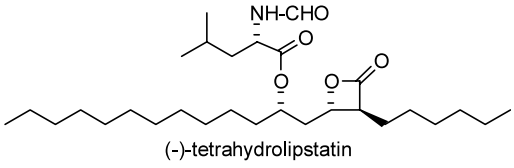


Tetrahedron Letters 44 (2003) 2869

The total synthesis of (−)-tetrahydrolipstatin

Jennifer A. Bodkin, Edward J. Humphries and Malcolm D. McLeod*

School of Chemistry, F11, University of Sydney, Camperdown, NSW 2006, Australia



(-)-tetrahydrolipstatin

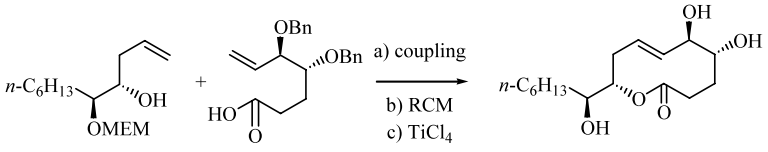
Tetrahedron Letters 44 (2003) 2873

Total synthesis of microcarpalide

Mukund K. Gurjar,* Ravi Nagaprasad and C. V. Ramana

National Chemical Laboratory, Pune 411 008, India

A total synthesis of microcarpalide has been described using ring closing metathesis as the key step.



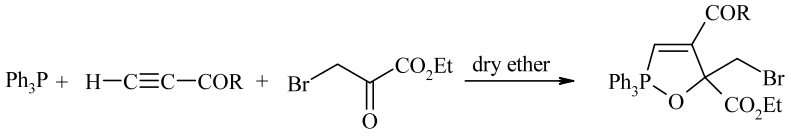
2 **3** Microcarpalide (**1**)

Tetrahedron Letters 44 (2003) 2877

Efficient synthesis of functionalized 2,5-dihydro-1,2-oxaphospholes

Issa Yavari,* Abdolali Alizadeh and Mohammad Anary-Abbasinejad

Department of Chemistry, University of Tarbiat Modarres, PO Box 14115-175, Tehran, Iran

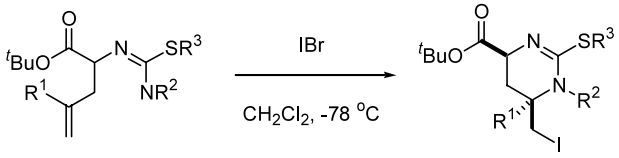


Tetrahedron Letters 44 (2003) 2881

Diastereoselective isothiourea iodocyclization for manzacidin synthesis

Jacqueline C. S. Woo and D. Bruce MacKay*

Merck Frosst Centre for Therapeutic Research, 16711 TransCanada Highway, Kirkland, QC, Canada H9H 3L1



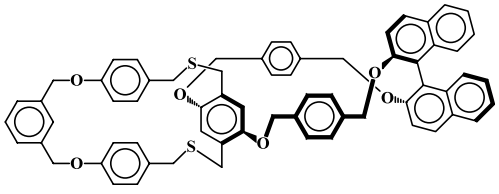
Tetrahedron Letters 44 (2003) 2885

Synthesis of an annularly linked bicyclic chiral cyclophane by pre-organization of a dibromide

Perumal Rajakumar* and Muthialu Srisailas

Department of Organic Chemistry, University of Madras, Guindy Campus, Chennai 600 025, India

An annularly linked bicyclic chiral cyclophane was synthesized from a suitable pre-organized chiral dibromide.



Tetrahedron Letters 44 (2003) 2889

Silica sulfuric acid: an efficient and reusable catalyst for the one-pot synthesis of 3,4-dihydropyrimidin-2(1*H*)-ones

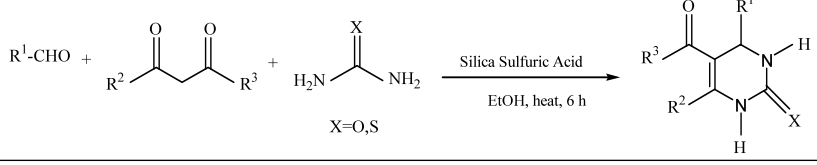
Peyman Salehi,[a,*] Minoo Dabiri,[b] Mohammad Ali Zolfigol[c] and Mohammad Ali Bodaghi Fard[b]

[a]*Department of Phytochemistry, Aromatic and Medicinal Plants and Drug Research Institute, Shahid Beheshti University, Evin, Tehran 1983963113, Iran*

[b]*Department of Chemistry, Faculty of Science, Shahid Beheshti University, Evin, Tehran 1983963113, Iran*

[c]*Department of Chemistry, Faculty of Science, Bu-Ali Sina University, Hamadan 65174, Iran*

Silica sulfuric acid efficiently catalyzes a one-pot synthesis of dihydropyrimidinones in high yields.

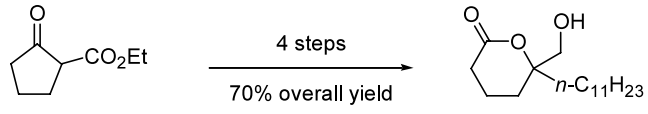


Tetrahedron Letters 44 (2003) 2893

A new synthesis of tanikolide

Hongbin Zhai,[a,*] Qingshou Chen,[a] Jingrui Zhao,[a,b] Shengjun Luo[a] and Xueshun Jia[b]

[a]*Laboratory of Modern Synthetic Organic Chemistry and State Key Laboratory of Bio-Organic and Natural Products Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai 200032, China*
[b]*Department of Chemistry, Shanghai University, Shanghai 200436, China*



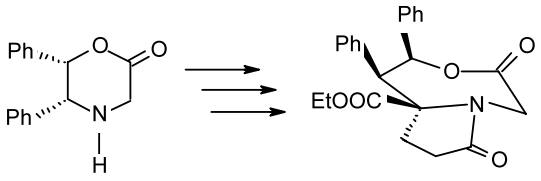
tanikolide

Tetrahedron Letters 44 (2003) 2895

Stereospecific [1,2]-rearrangement of a spirocyclic ammonium ylide with ring expansion sequence

Antonio Saba*

Dipartimento di Chimica, Facoltà di Scienze, Via Vienna 2, I-07100 Sassari, Italy

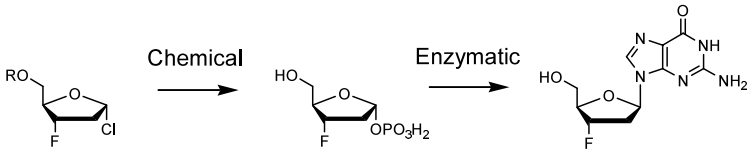


Tetrahedron Letters 44 (2003) 2899

Chemo-enzymatic synthesis of 2′,3′-dideoxy-3′-fluoro-β-D-guanosine via 2,3-dideoxy-3-fluoro-α-D-ribose 1-phosphate

Hironori Komatsu[a,*] and Tadashi Araki[b]

[a]*Catalysis Science Laboratory, Mitsui Chemicals, Inc., 580-32 Nagaura, Sodegaura-shi, Chiba 299-0265, Japan*
[b]*Life Science Laboratory, Mitsui Chemicals, Inc., 1144 Togo, Mobara-shi, Chiba 297-0017, Japan*

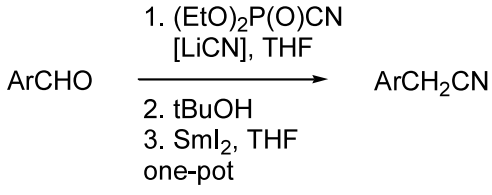


Tetrahedron Letters 44 (2003) 2903

An improved method for direct conversion of heteroaryl-aldehydes to heteroaryl-acetonitriles

Thomas A. Engler,* Kelly Furness, Sushant Malhotra, Clive Diefenbacher and Joshua R. Clayton

Discovery Chemistry Research and Technologies, Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, IN 46285, USA



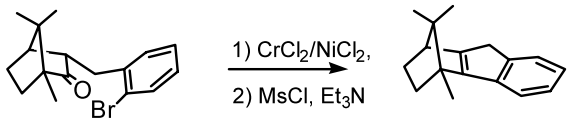
Tetrahedron Letters 44 (2003) 2907

Preparation of chiral annulated indenes derived from nopinone, verbenone and menthone

Ronald L. Halterman* and Lisa D. Crow*

Department of Chemistry and Biochemistry, University of Oklahoma, 620 Parrington Oval, Norman, OK 73019, USA

A three-step procedure for the synthesis of chiral annulated indenes is described in which nopinone, verbenone and menthone are converted to their enolate form, alkylated with 2-bromomethylbromobenzene, ring-closed with $CrCl_2$/cat. $NiCl_2$ and dehydrated.

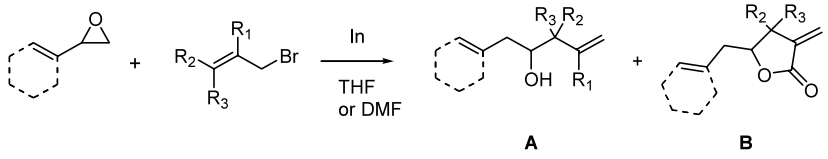


Tetrahedron Letters 44 (2003) 2911

Indium-mediated consecutive 1,2-shift reaction and regioselective allylation of vinyl epoxides

Byung Kyu Oh, Joo Hwan Cha, Yong Seo Cho, Kyung Il Choi, Hun Yeong Koh, Moon Ho Chang and Ae Nim Pae*

Biochemicals Research Center, Korea Institute of Science and Technology, PO Box 131 Cheongryang, Seoul 130-650, Republic of Korea



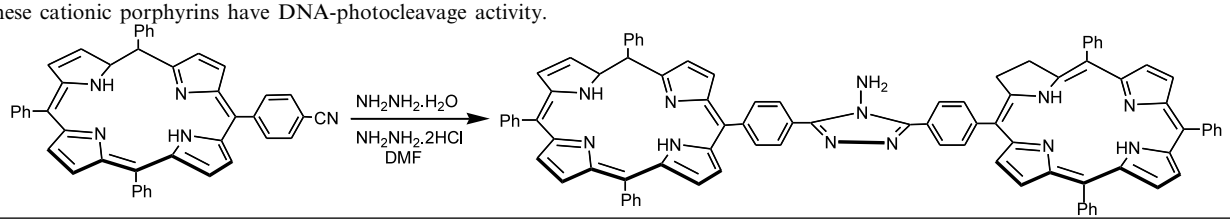
Tetrahedron Letters 44 (2003) 2915

Synthesis of triazole- and pyridine-bridged porphyrin–chlorin and porphyrin dimers

Afaf R. Genady* and Detlef Gabel

Department of Chemistry, University of Bremen, PO Box 330440, D-28334 Bremen, Germany

A new series of 4-amino-1,2,4-triazole linked porphyrin–chlorin dimer, porphyrin dimer, and cationic porphyrin dimers was synthesized. The interaction of plasmid DNA with the synthesized cationic bisporphyrins was studied by UV–vis and RLS experiments. Some of these cationic porphyrins have DNA-photocleavage activity.



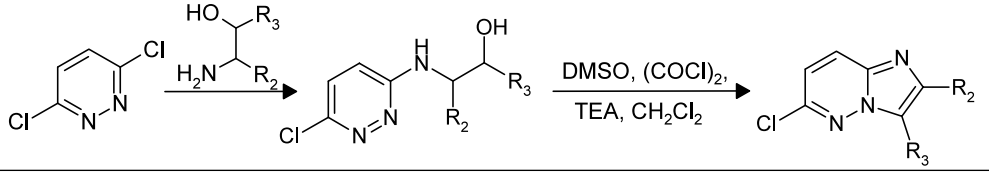
Tetrahedron Letters 44 (2003) 2919

Efficient preparation of imidazo[1,2-*b*]pyridazines under Swern oxidative conditions

Pierre Raboisson, Belew Mekonnen* and Norton P. Peet

Department of Lead Optimization, ArQule Inc., 19 Presidential Way, Woburn, MA 01801, USA

An efficient synthesis of new imidazo[1,2-*b*]pyridazine derivatives (**3**) was accomplished by treating 3,6-dichloropyridazine (**4**) with various 2-hydroxyethylamines followed by imidazole ring formation under Swern oxidative conditions.

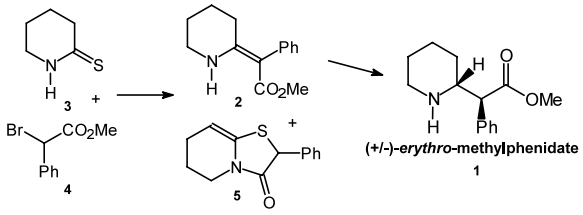


Tetrahedron Letters 44 (2003) 2923

A concise and stereoselective synthesis of (+/−)-*erythro*-methylphenidate

Dennis Russowsky* and Brenno Amaro da Silveira Neto

Instituto de Química, Universidade Federal do Rio Grande do Sul, Av. Bento Gonçalves, 9500, 91501-970 Porto Alegre, Brazil

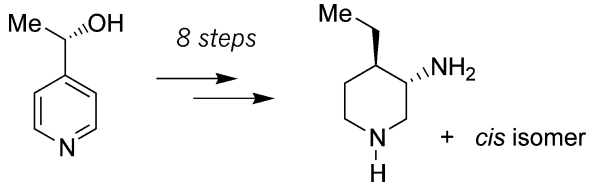


Tetrahedron Letters 44 (2003) 2927

Concise, enantiospecific synthesis of (3*S*,4*R*)-3-amino-4-ethylpiperidine as partner to a non-fluoroquinolone nucleus

Michael Reilly,* Donald R. Anthony and Corey Gallagher

Chemical Development, Procter & Gamble Pharmaceuticals, Woods Corners, PO Box 191, Norwich, NY 13815, USA

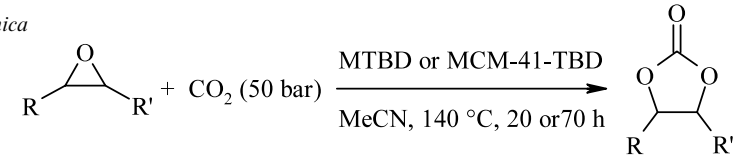


Tetrahedron Letters 44 (2003) 2931

Cycloaddition of CO_2 to epoxides over both homogeneous and silica-supported guanidine catalysts

Alessandro Barbarini,[a] Raimondo Maggi,[a] Alessandro Mazzacani,[a] Giovanni Mori,[b] Giovanni Sartori[a,*] and Raffaella Sartorio[a]

[a]*Clean Synthetic Methodologies Group, Dipartimento di Chimica Organica e Industriale dell'Università, Parco Area delle Scienze 17/A, I-43100 Parma, Italy*
[b]*Dipartimento di Chimica Generale ed Inorganica, Chimica Analitica, Chimica Fisica, Parco Area delle Scienze 17/A, I-43100 Parma, Italy*



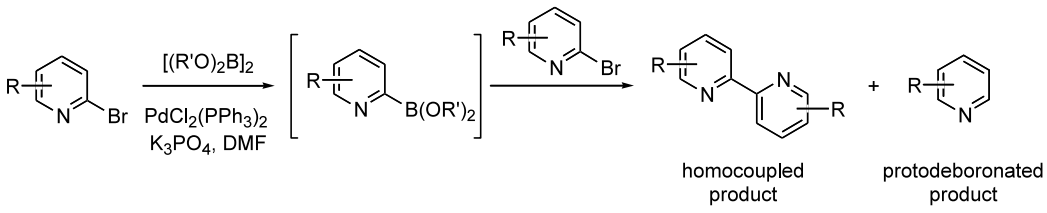
The synthesis of cyclic carbonates by CO_2 insertion into epoxides catalysed by both homogeneous MTBD and TDB supported on MCM-41 mesoporous silica is reported.

Tetrahedron Letters 44 (2003) 2935

In situ formation and reaction of 2-pyridylboronic esters

Amelia A. Fuller, Heidi R. Hester, Eric V. Salo and Erland P. Stevens*

Department of Chemistry, Davidson College, PO Box 7120, Davidson, NC 28036, USA



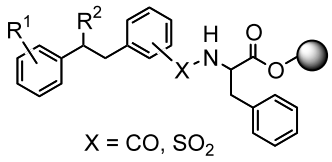
Tetrahedron Letters 44 (2003) 2939

Development of a 9-borabicyclo[3.3.1]nonane-mediated solid-phase Suzuki coupling for the preparation of dihydrostilbene analogs

Ron D. Ferguson, Ning Su and Roger A. Smith*

Department of Chemistry Research, Bayer Research Center, 400 Morgan Lane, West Haven, CT 06516, USA

A novel 9-borabicyclo[3.3.1]nonane-mediated solid-phase Suzuki coupling was developed to generate dihydrostilbenes (bibenzyls) and related compounds. Using optimized conditions (20 mol% $PdCl_2$(dppf), 10 equiv. Et_3N, and 10 equiv. olefin/9-BBN, in 9:1 DMF/H_2O, 50°C, 18 h), high conversions to desired products were generally obtained. A small combinatorial library of derivatives was successfully prepared via radiofrequency tagging and directed sorting techniques.



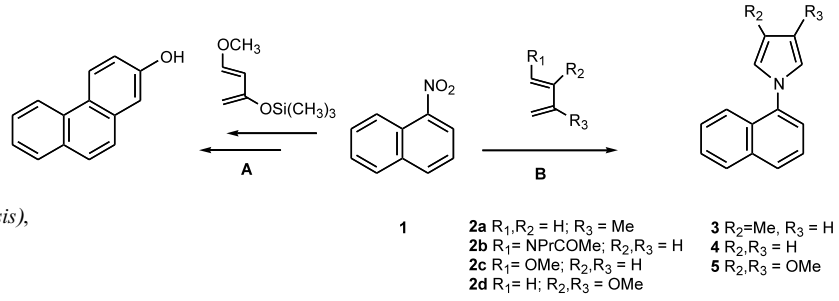
Tetrahedron Letters 44 (2003) 2943

Reactivity of 1-nitronaphthalene and 1,3-dinitronaphthalene with conjugated dienes. An easy access to *N*-naphthylpyrroles

Elisa Paredes,[a] María Kneeteman,[a] Manuel Gonzalez-Sierra[b] and Pedro M. E. Mancini[a,*]

[a]*Área de Química Orgánica, Departamento de Química, Facultad de Ingeniería Química, Universidad Nacional del Litoral, Santiago del Estero 2829, 3000 Santa Fe, Argentina*

[b]*IQUIOS (Instituto de Química Orgánica de Síntesis), Facultad de Ciencias Bioquímicas y Farmacéuticas, Universidad Nacional de Rosario, Suipacha 531, 2000 Rosario, Santa Fe, Argentina*

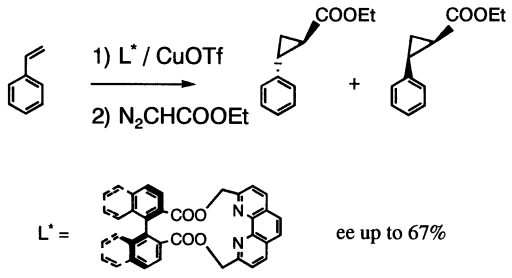


Tetrahedron Letters 44 (2003) 2947

Enantiomerically pure phenanthroline or bipyridine containing macrocycles: a new class of ligands for asymmetric catalysis

Alessandra Puglisi, Maurizio Benaglia,* Rita Annunziata and Alberto Bologna

Dipartimento di Chimica Organica e Industriale, Università degli Studi di Milano, via Golgi 19, 20133 Milano, Italy

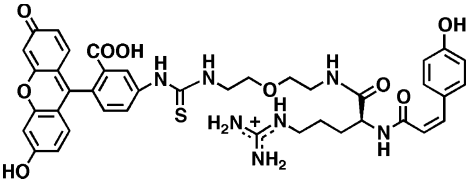


Tetrahedron Letters 44 (2003) 2953

Fluorescence studies on nyctinasty using fluorescence labeled *cis-p*-coumaroylagmatine, a leaf-opening substance of *Albizzia* plants: existence of genus-specific receptor for leaf-movement factor

Hideharu Nagano, Eisuke Kato, Shosuke Yamamura and Minoru Ueda*

Laboratory of Natural Products Chemistry, Department of Chemistry, Faculty of Science and Technology, Keio University, Hiyoshi, Yokohama 223-8522, Japan

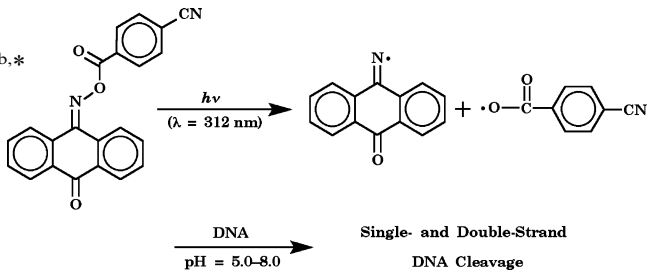


Tetrahedron Letters 44 (2003) 2957

Oxime esters of anthraquinone as photo-induced DNA-cleaving agents for single- and double-strand scissions

Jih Ru Hwu[a,*] Shwu-Chen Tsay,[a] Shih Chin Hong,[a] Yi-Jing Leu,[a] Chih-Fen Liu[b] and Shang-Shing P. Chou[b,*]

[a]*Department of Chemistry, National Tsing Hua University, Hsinchu, Taiwan 30013, ROC*
[b]*Department of Chemistry, Fu Jen Catholic University, Taiwan 24205, ROC*

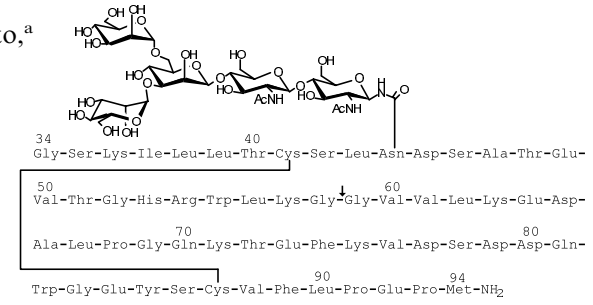


Tetrahedron Letters 44 (2003) 2961

The first synthesis of peptide thioester carrying *N*-linked core pentasaccharide through modified Fmoc thioester preparation: synthesis of an *N*-glycosylated Ig domain of emmprin

Hironobu Hojo,[a,*] Eiichiro Haginoya,[a] Yoshiyuki Matsumoto,[a] Yoshiaki Nakahara,[a] Kazuki Nabeshima,[b] Bryan P. Toole[c] and Yasushi Watanabe[d]

[a]*Department of Applied Biochemistry, Tokai University, Kanagawa, 259-1292, Japan*
[b]*Department of Pathology, Fukuoka University Hospital and School of Medicine, Fukuoka 814-0180, Japan*
[c]*Department of Anatomy and Cellular Biology, Tufts University School of Medicine, Medford, MA 02111, USA*
[d]*National Food Research Institute, Protein Laboratory, Ibaraki 305-8642, Japan*



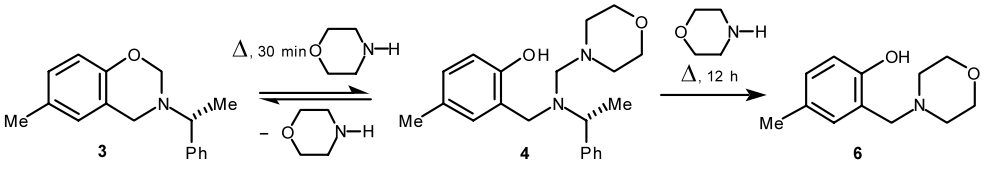
Ig domain of emmprin carrying pentasaccharide was synthesized.

Tetrahedron Letters 44 (2003) 2965

Retro-Mannich reactions of 3-alkyl-3,4-dihydro-2*H*-1,3-benz[*e*]-oxazines and the synthesis of axially chiral resorcinarenes

Philip C. Bulman Page, Harry Heaney,* Matthew J. McGrath, Edward P. Sampler and Robert F. Wilkins

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

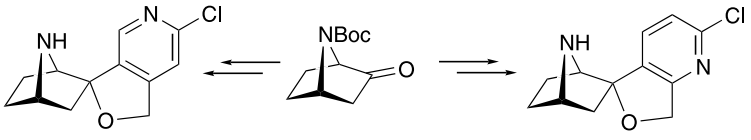


Tetrahedron Letters 44 (2003) 2971

Synthesis of conformationally constrained spirodihydrofuropyridine analogues of epibatidine

Hideki Abe, Yumiko Arai, Sakae Aoyagi and Chihiro Kibayashi*

School of Pharmacy, Tokyo University of Pharmacy and Life Science, Horinouchi, Hachioji, Tokyo 192-0392, Japan

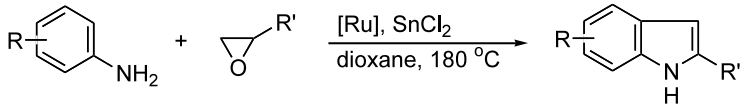


Tetrahedron Letters 44 (2003) 2975

Ruthenium-catalyzed regioselective synthesis of 2-substituted indoles via ring-opening of epoxides by anilines

Chan Sik Cho,[a,*] Jun Ho Kim,[b] Heung-Jin Choi,[b] Tae-Jeong Kim[b] and Sang Chul Shim[b,*]

[a]*Research Institute of Industrial Technology, Kyungpook National University, Taegu 702-701, South Korea*
[b]*Department of Industrial Chemistry, Kyungpook National University, Taegu 702-701, South Korea*

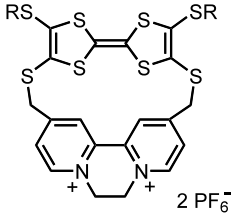


Tetrahedron Letters 44 (2003) 2979

Ultra-high pressure synthesis of a tetrathiafulvalene-diquat cyclophane

Ane Ploug-Sørensen, Mogens Brøndsted Nielsen* and Jan Becher

Department of Chemistry, University of Southern Denmark, DK-5230 Odense M, Denmark



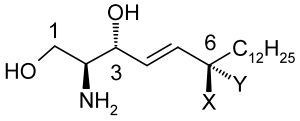
Tetrahedron Letters 44 (2003) 2983

The first total synthesis of the 6-hydroxy-4*E*-sphingenines

J. S. Yadav,* V. Geetha, A. Krishnam Raju, D. Gnaneshwar and S. Chandrasekhar

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

A total synthesis of 6-hydroxy-4*E*-sphingenines has been achieved.



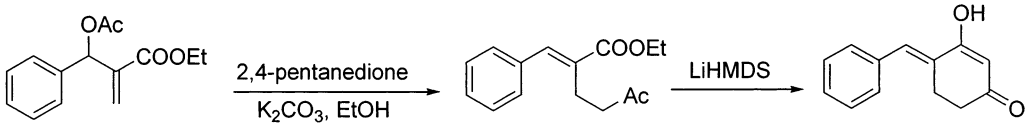
2: X = H, Y = OH
3: X = OH, Y = H

Tetrahedron Letters 44 (2003) 2987

Synthesis of 4-arylidenecyclohexane-1,3-diones from the Baylis–Hillman acetates

Yang Jin Im,[a] Chang Gon Lee,[a] Hyoung Rae Kim[b] and Jae Nyoung Kim[a,*]

[a]*Department of Chemistry and Institute of Basic Science, Chonnam National University, Gwangju 500-757, Republic of Korea*
[b]*Medicinal Science Division, Korea Research Institute of Chemical Technology, P.O. Box 107, Yusong, Taejon 305-600, Republic of Korea*



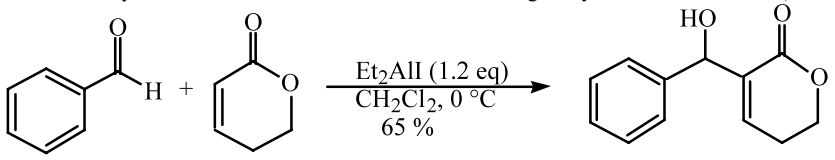
A novel approach to Morita–Baylis–Hillman (MBH) lactones via the Lewis acid-promoted couplings of α,β-unsaturated lactone with aldehydes

Tetrahedron Letters 44 (2003) 2991

Subramanian Karur, Justin Hardin, Allan Headley* and Guigen Li*

Department of Chemistry and Biochemistry, Texas Tech University, Lubbock, TX 79409-1061, USA

The Morita–Baylis–Hillman (MBH)-type reaction of α,β unsaturated δ-lactones with various aldehydes has been achieved without the direct use of a Lewis base. The new MBH process can be conveniently carried out by the slow addition of the diethylaluminum iodide into the solution of lactone and aldehyde in dichloromethane at 0°C. Modest to good yields were obtained (50–65 %) for eight examples.

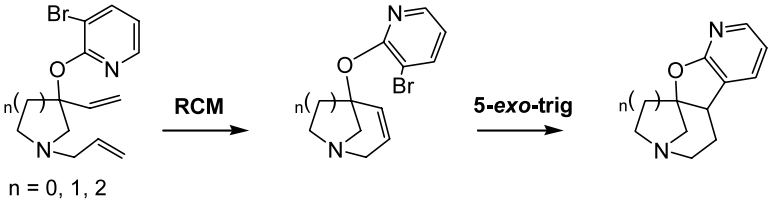


Synthesis of pyridine fused polycyclic amines using sequential ring-closing metathesis and radical cyclisation reactions

Tetrahedron Letters 44 (2003) 2995

S. Richard Baker, Manuel Cases,* Martine Keenan, Richard A. Lewis and Paul Tan

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



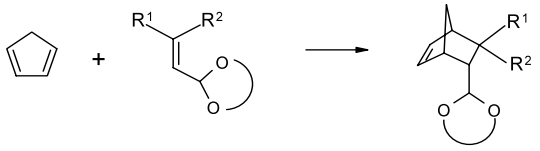
I_2 as an efficient catalyst in ionic Diels–Alder reactions of α,β-unsaturated acetals

Tetrahedron Letters 44 (2003) 3001

Subhash P. Chavan,* Pallavi Sharma, G. Rama Krishna and Mahesh Thakkar

Division Of Organic Chemistry: Technology, National Chemical Laboratory, Pune-411008, India

A variety of protected and unprotected α,β-unsaturated aldehydes react with 1,3-dienes in the presence of I_2 to give the corresponding cycloadducts in good yield with high *endo* selectivities.



A convenient synthesis of unsymmetrically substituted terphenyls of biologically active stilbenes via a double Suzuki cross coupling protocol

Tetrahedron Letters 44 (2003) 3005

Daniele Simoni,[a,*] Giuseppe Giannini,[b] Pier Giovanni Baraldi,[a] Romeo Romagnoli,[a] Marinella Roberti,[c] Riccardo Rondanin,[a] Riccardo Baruchello,[a] Giuseppina Grisolia,[a] Marcello Rossi,[a] Danilo Mirizzi,[a] Francesco Paolo Invidiata,[d] Stefania Grimaudo[e] and Manlio Tolomeo[e]

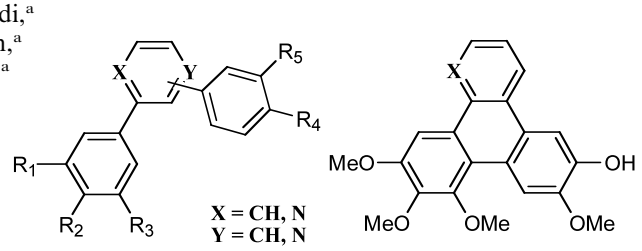
[a]*Dipartimento di Scienze Farmaceutiche, Via Fossato di Mortara 17-19, Università di Ferrara, 44100 Ferrara, Italy*

[b]*Sigma Tau, Via Pontina, Pomezia, Roma, Italy*

[c]*Dipartimento di Scienze Farmaceutiche, Università di Bologna, Italy*

[d]*Dipartimento Farmacochimico Tossicologico e Biologico, Università di Palermo, Italy*

[e]*Divisione di Ematologia e Servizio AIDS, Policlinico di Palermo, Italy*



A double Suzuki cross-coupling protocol has been devised as a practical route to a variety of terphenyls and triphenylenes.

A simple method for the preparation and selective functionalization of 4,5-diaminopyrazoles

Tetrahedron Letters 44 (2003) 3009

Benjamin E. Blass,[a,*] Anil Srivastava,[b] Keith R. Coburn,[a] Amy L. Faulkner[a] and William L. Seibel[a]

[a]*Procter & Gamble Pharmaceuticals, Health Care Research Center, 8700 Mason Montgomery Road, Mason, OH 45040, USA*

[b]*Chembiotek Research International, Salt Lake, Block BN, Sector V, Kolkata-700091, India*

A simple procedure for the synthesis and further functionalization of 4,5-diaminopyrazoles using mild conditions is reported herein. The desired products were obtained in good yield, and the structures have been confirmed by X-ray crystallography.