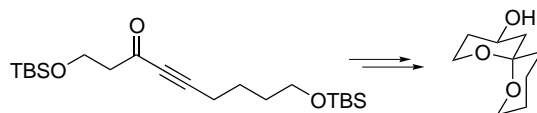


Application of the double intramolecular hetero-Michael addition (DIHMA) approach in spiroketal synthesis: total synthesis of (\pm)-(4*S,6*S**)-4-hydroxy-1,7-dioxaspiro[5.5]undecane, a *Dacus oleae* olive fly pheromone**

Junliang Hao and Craig J. Forsyth*

Department of Chemistry, University of Minnesota, Minneapolis, MN 55455, USA

Tetrahedron Letters 43 (2002) 1



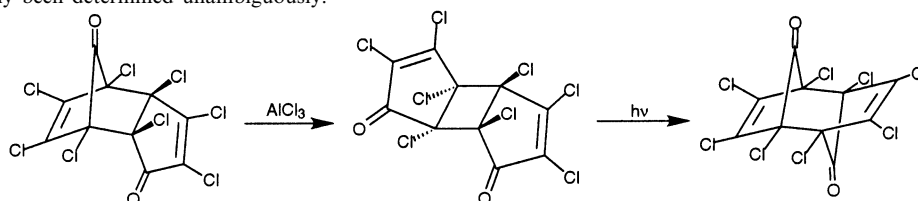
Lewis acid-induced rearrangement of the Diels–Alder dimer of tetrachlorocyclopentadienone: structure reassignments

Philip E. Eaton,^{a,*} Datong Tang^a and Richard Gilardi^b

^aDepartment of Chemistry, University of Chicago, 5735 S Ellis Ave., Chicago, IL 60637, USA

^bLaboratory for the Structure of Matter, Naval Research Laboratory, Washington, DC 20375, USA

The structures of various perhalodiones available by isomerization of the Diels–Alder dimers of tetrachloro- and tetrabromocyclopentadienone have finally been determined unambiguously.



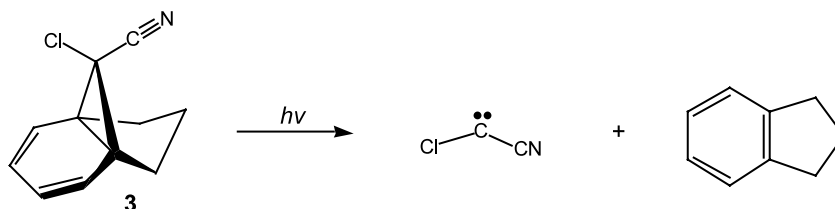
Tetrahedron Letters 43 (2002) 3

Pyridine trapping of chlorocyanocarbene

Ying Sun, Igor Likhovorik and Matthew S. Platz*

Department of Chemistry, The Ohio State University, 100 W. 18th Avenue, Columbus, OH 43210, USA

Laser flash photolysis of **3** (308 nm) produces chlorocyanocarbene which is trapped by pyridine to form an ylide.



Tetrahedron Letters 43 (2002) 7

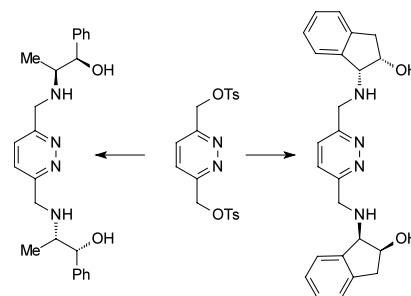
C₂-chiral dinucleating ligands with a 3,6-disubstituted pyridazine core

Alexandre Picot and François P. Gabbaï*

Chemistry Department, Texas A&M University, 3255 TAMU, College Station, TX 77843-3255, USA

The synthesis of C₂-chiral dinucleating ligands containing a 3,6-disubstituted pyridazine core flanked by aminoalcohol pendant arms are reported along with their binding properties toward copper(II) cations.

Tetrahedron Letters 43 (2002) 11



Novel ring-opening of epoxides and oxetanes with POCl₃ or PCl₃ in the presence of DMAP

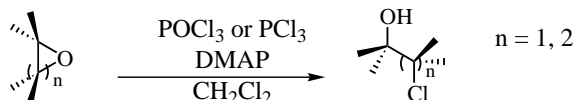
Tetrahedron Letters 43 (2002) 15

Fernando Sartillo-Piscil,^{a,*} Leticia Quintero,^{a,*} Clarisa Villegas,^a Ericka Santacruz-Juárez^b and Cecilia Anaya de Parrodi^{b,*}

^aCentro de Investigación de la Facultad de Ciencias Químicas, Universidad Autónoma de Puebla, 72570 Puebla, Puebla, Mexico

^bDepartamento de Química y Biología, Universidad de las Américas-Puebla, 72820 Santa Catarina Mártir, Puebla, Mexico

Efficient synthesis of chlorohydrins by cleavage of oxiranes and oxetanes using POCl₃ or PCl₃ in the presence of DMAP (4-*N,N*-dimethylaminopyridine) has been studied.



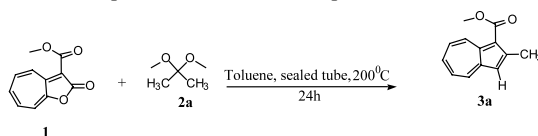
Intermolecular [8+2] cycloaddition reactions of 2*H*-3-methoxycarbonylcyclohepta[*b*]furan-2-one with vinyl ethers: an approach to bicyclo[5.3.0]azulene derivatives

Tetrahedron Letters 43 (2002) 19

Wellington Pham, Ralph Weissleder and Ching-Hsuan Tung*

Center for Molecular Imaging Research, Massachusetts General Hospital, Harvard Medical School, 149 13th Street, Charlestown, MA 02129, USA

[8+2] Cycloaddition reactions of 2*H*-3-methoxycarbonylcyclohepta[*b*]furan-2-one with vinyl ether—an acetal decomposition product—are described. The reactions were found to be temperature and solvent dependent.

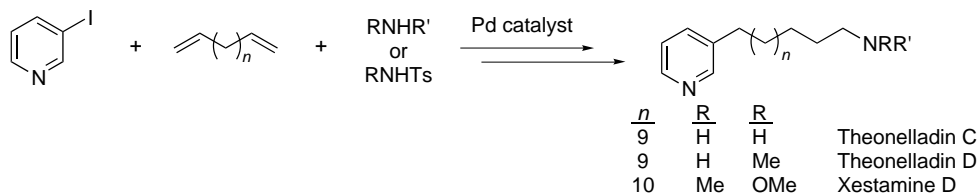


Synthesis of pyridine alkaloids via Pd-catalyzed coupling of 3-iodopyridine, 1,ω-dienes and nitrogen nucleophiles

Tetrahedron Letters 43 (2002) 21

Richard C. Larock* and Yao Wang

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



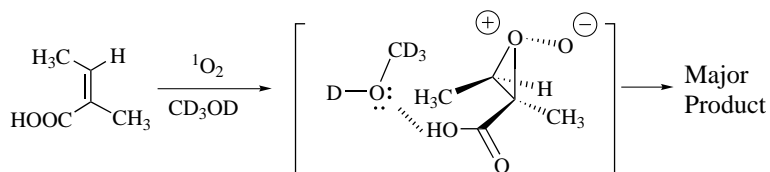
Novel solvent hydrogen-bonding effects in the singlet oxygen ene reaction: a comparison of α,β -unsaturated esters and acids

Tetrahedron Letters 43 (2002) 25

Kristina L. Stensaas,* Jason A. Payne, Alexa N. Ivancic and Anisha Bajaj

Department of Chemistry, Millsaps College, 1701 N. State Street, Jackson, MS 39210, USA

The product distributions of the singlet oxygen ene reactions of α,β -unsaturated acids are affected by a hydrogen-bonding interaction between the acid group and the solvent.

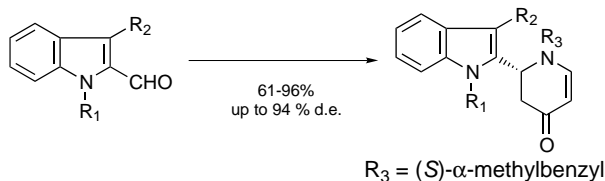


Asymmetric aza-Diels–Alder reactions of indole 2-carboxaldehydes

Tetrahedron Letters 43 (2002) 29

Jeffrey T. Kuethe,* Ian W. Davies, Peter G. Dormer, Robert A. Reamer,
David J. Mathre and Paul J. Reider

Department of Process Research, Merck & Co. Inc., PO Box 2000, Rahway, NJ 07065, USA



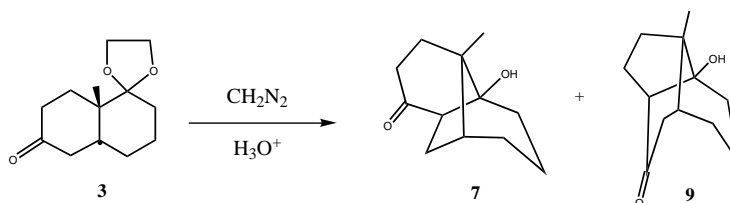
Tandem ring expansion/aldol cyclization of bicyclo[5.4.0^{1,7}]-undecanediones

Tetrahedron Letters 43 (2002) 33

Sasan Karimi,* Dora Carrico and Sadia Anwar

Department of Chemistry, Queensborough Community College, CUNY, Bayside, NY 11364, USA

Diazomethane ring expansion of **3** followed by deketalization led to the formation of tricyclic adducts **7** and **9** in a 1:1 ratio.

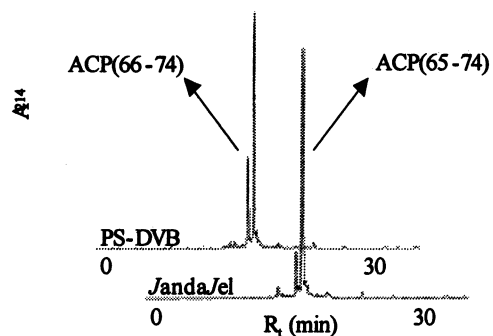


Solid phase peptide synthesis on JandaJel™ resin

Tetrahedron Letters 43 (2002) 37

Jason A. Moss, Tobin J. Dickerson and Kim D. Janda*

*Department of Chemistry, The Scripps Research Institute and
The Skaggs Institute for Chemical Biology,
10550 N. Torrey Pines Road, La Jolla, CA 92037, USA*



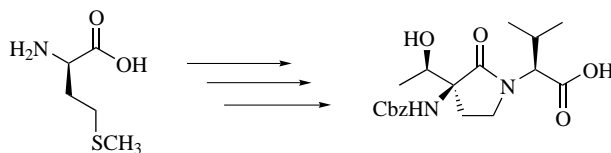
Synthesis of a conformationally constrained threonine–valine dipeptide mimetic: design of a potential inhibitor of plasminogen activator inhibitor-1

Tetrahedron Letters 43 (2002) 41

Peter R. Guzzo,^{a,*} Michael P. Trova,^a Tord Inghardt^b and Marcel Linschoten^b

^a*Albany Molecular Research, Inc., 21 Corporate Circle, PO 15098, Albany, NY 12212-5098, USA*

^b*AstraZeneca R&D, Dept. of Medicinal Chemistry, S-431 83 Mölndal, Sweden*



A novel way to prepare *n*-butylparaben under microwave irradiation

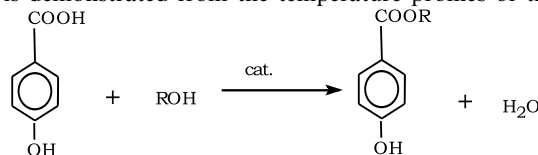
Tetrahedron Letters 43 (2002) 45

Xiangjun Liao,^a G. S. V. Raghavan^{a,*} and V. A. Yaylayan^b

^aDepartment of Agricultural & Biosystems Engineering, Macdonald Campus of McGill University, 21,111 Lakeshore Road, Ste-Anne-de-Bellevue, Canada QC H9X 3V9

^bDepartment of Food Science and Agricultural Chemistry, Macdonald Campus of McGill University, 21,111 Lakeshore Road, Ste-Anne-de-Bellevue, Canada QC H9X 3V9

The synthesis of *n*-butylparaben under microwave irradiation using ZnCl₂ is reported. The advantage of using microwave irradiation for this reaction is demonstrated from the temperature profiles of this reaction.

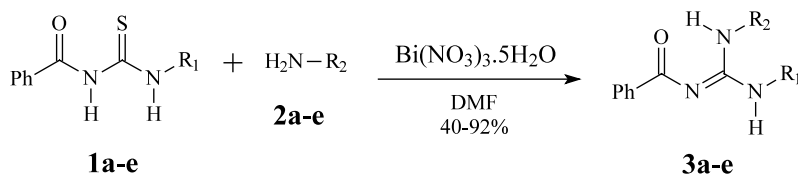


Bismuth nitrate pentahydrate: a new and environmentally benign reagent for guanidylation of *N*-benzoylthioureas

Tetrahedron Letters 43 (2002) 49

Silvio Cunha,* Byanka R. de Lima and Aparecido R. de Souza

Instituto de Química, Universidade Federal de Goiás, CP 131, Goiânia, GO 74001-970, Brazil

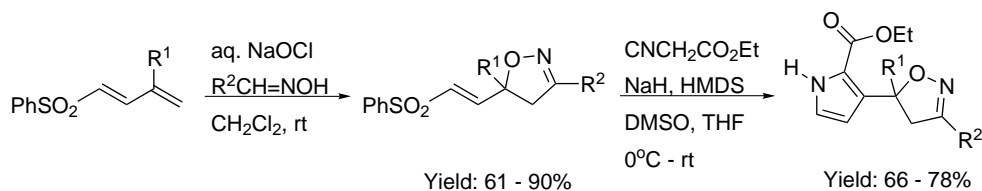


1,3-Dipolar cycloaddition of nitrile oxides to 1-phenylsulfonyl-1,3-butadienes: synthesis of 3-(4,5-dihydroisoxazol-5-yl)pyrroles

Tetrahedron Letters 43 (2002) 53

Sung Hee Hwang and Mark J. Kurth*

Department of Chemistry, University of California, One Shields Avenue, Davis, CA 95616-5295, USA

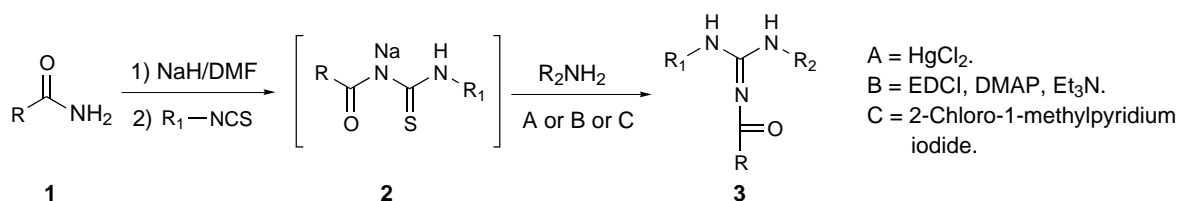


One-pot synthesis of *N,N'*-disubstituted acylguanidines

Tetrahedron Letters 43 (2002) 57

Jing Zhang, Yan Shi,* Philip Stein, Karnail Atwal and Chi Li

The Bristol-Myers Squibb Pharmaceutical Research Institute, PO Box 4000, Princeton, NJ 08543-4000, USA



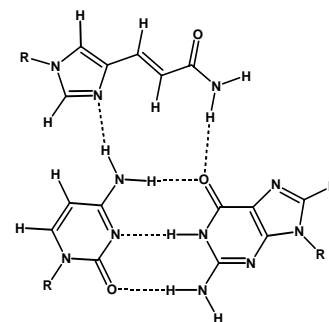
Nucleosides derived from urocanic acid: potential ligands for CG base pairs

Maria G. M. Purwanto, David Lengeler and Klaus Weisz*

Institut für Chemie der Freien Universität Berlin, Takustraße 3, D-14195 Berlin, Germany

Novel nucleosides with an imidazole-4-acrylamide moiety have been synthesized for binding to a CG Watson–Crick base pair. ^1H NMR experiments in aprotic solvents establish specific complex formation through two hydrogen bonds.

Tetrahedron Letters 43 (2002) 61

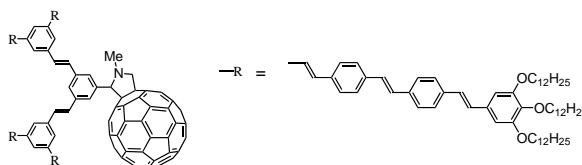


Functionalization of [60]fullerene with new light-collecting oligophenylenevinylene-terminated dendritic wedges

Gianluca Accorsi,^a Nicola Armaroli,^{a,*} Jean-François Eckert^b and Jean-François Nierengarten^{b,*}

^a*Istituto di Fotochimica e Radiazioni d'Alta Energia del CNR, via Gobetti 101, I-40129 Bologna, Italy*

^b*Groupe des Matériaux Organiques, Institut de Physique et Chimie des Matériaux de Strasbourg, Université Louis Pasteur et CNRS, 23 rue du Loess, F-67037 Strasbourg Cedex, France*



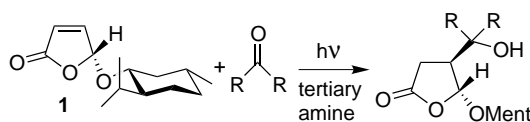
Tetrahedron Letters 43 (2002) 65

Stereoselective intermolecular addition of ketyl radicals generated from ketones by photoinduced electron transfer

Cédric Brulé and Norbert Hoffmann*

Laboratoire des Réactions Sélectives et Applications, UMR CNRS et Université de Reims Champagne-Ardenne, UFR Sciences, BP 1039, F-51687 Reims Cedex 02, France

Tetrahedron Letters 43 (2002) 69



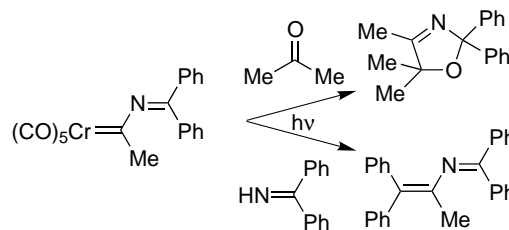
Photochemical reactions of chromium imine–carbene complexes with heteroatom-containing double bonds

Pedro J. Campos,* Diego Sampedro and Miguel A. Rodríguez*

Departamento de Química, Universidad de La Rioja, Grupo de Síntesis Química de La Rioja, Unidad Asociada al CSIC, Madre de Dios, 51, E-26006 Logroño, Spain

The irradiation of chromium imine–carbene complexes in the presence of heteroatom-containing double bonds leads to the formation of azadienes through a metathesis process and/or heterocycles through a formal [3+2] cyclization.

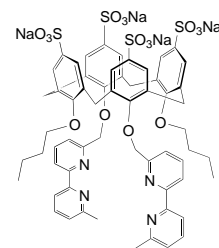
Tetrahedron Letters 43 (2002) 73



A new water-soluble calix[4]arene podand incorporating *p*-sulphonate groups and 2,2'-bipyridine chelating units

Nicolas Psychogios and Jean-Bernard Regnouf-de-Vains*

GEVSM, UMR 7565 CNRS-UHP, Faculté de Pharmacie, 5, rue Albert Lebrun, F-54001 Nancy, France



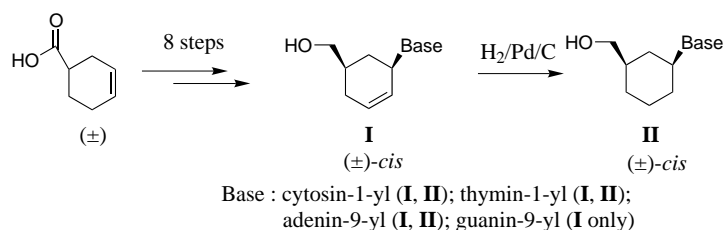
Synthesis of (±) *cis*-substituted cyclohexenyl and cyclohexanyl nucleosides via a double Mitsunobu-type reaction

Karine Barral,^a Philippe Halfon,^b Gérard Pèpe^a and Michel Camplo^{a,*}

^aGroupe de Chimie Organique et des Matériaux Moléculaires (UMR-CNRS 6114), Faculté des Sciences de Luminy, case 901, F-288 Marseille cedex 09, France

^bGenoScience, Marseille, France

(±) *cis*-Substituted cyclohexenyl and cyclohexanyl nucleosides of formula **I** and **II**. The synthesis features the use of a Mitsunobu reaction for the sugar–base coupling.

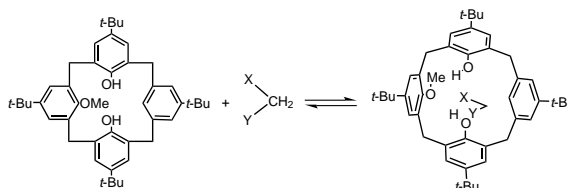


Dynamic structure of inclusion complexes of monodeoxycalix[4]-arene with small organic guests in solution

Hajime Iwamoto,^a Masaki Hirakata,^a Shuji Usui,^b Takeharu Haino^a and Yoshimasa Fukazawa^{a,*}

^aDepartment of Chemistry, Graduate School of Science, Hiroshima University, Higashi-Hiroshima 739-8526, Japan

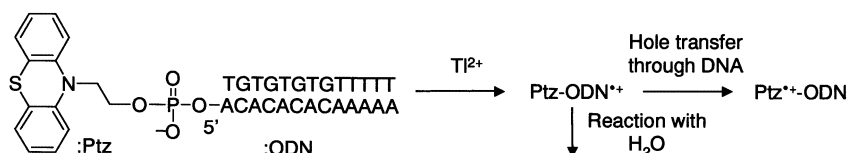
^bDepartment of Clinical Radiology, Faculty of Health Sciences, Hiroshima International University, 555-36 Gakuendai, Kurose, Hiroshima 724-0695, Japan



Hole transfer through DNA monitored by transient absorption of phenothiazine radical cation

Kiyohiko Kawai,* Tadao Takada, Sachiko Tojo and Tetsuro Majima*

The Institute of Scientific and Industrial Research (SANKEN), Osaka University, Mihogaoka 8-1, Ibaraki, Osaka 567-0047, Japan

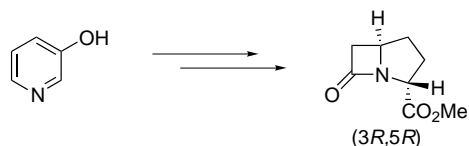


Diastereoselective synthesis of 3,5-*trans*-(+)-(3*R*,5*R*)-3-carbo-methoxycarbapenam from 3-hydroxypyridine: questioning the stereochemical assignment of the natural product

Tetrahedron Letters 43 (2002) 93

Hideyuki Tanaka, Hideki Sakagami and Kunio Ogasawara*

Pharmaceutical Institute, Tohoku University, Aobayama, Sendai 980-8578, Japan

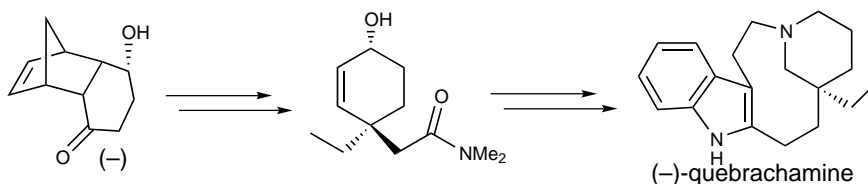


Diastereocontrolled synthesis of an enantiopure 4,4-disubstituted cyclohex-2-en-ol: a new route to (+)-quebrachamine

Tetrahedron Letters 43 (2002) 97

Takashi Fujimura, Hiromi Nakashima, Hideki Sakagami, Takahiko Taniguchi and Kunio Ogasawara*

Pharmaceutical Institute, Tohoku University, Aobayama, Sendai 980-8578, Japan

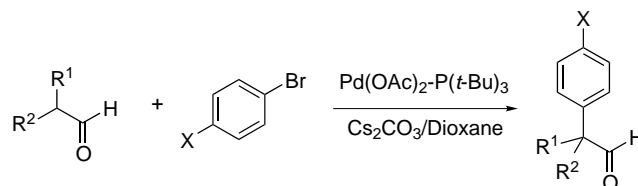


Palladium-catalyzed α -arylation of aldehydes with aryl bromides

Tetrahedron Letters 43 (2002) 101

Yoshito Terao, Yuichi Fukuoka, Tetsuya Satoh, Masahiro Miura* and Masakatsu Nomura

Department of Applied Chemistry, Faculty of Engineering, Osaka University, Suita, Osaka 565-0871, Japan

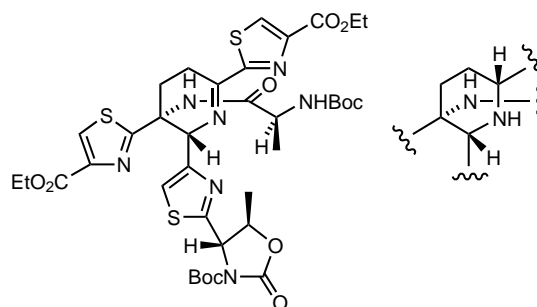


Synthetic studies on the thiostrepton family of peptide antibiotics: synthesis of the tetrasubstituted dehydropiperidine and piperidine cores

Tetrahedron Letters 43 (2002) 105

Syuhei Higashibayashi, Kimiko Hashimoto* and Masaya Nakata

Department of Applied Chemistry, Faculty of Science and Technology, Keio University, 3-14-1 Hiyoshi, Kohoku-ku, Yokohama 223-8522, Japan

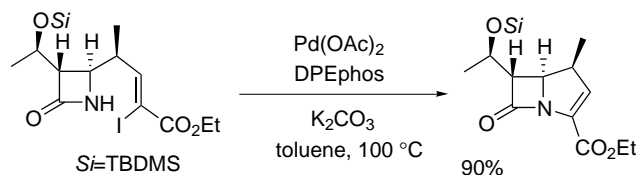


Synthesis of 3-alkoxycarbonyl-1 β -methylcarbapenem using palladium-catalyzed amidation of vinyl halide

Tetrahedron Letters 43 (2002) 111

Yuji Kozawa and Miwako Mori*

Graduate School of Pharmaceutical Sciences, Hokkaido University, Sapporo 060-0812, Japan

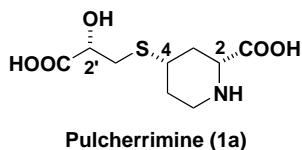


Synthesis of all isomers of pulcherrimine, a bitter principle in the sea urchin ovary

Tetrahedron Letters 43 (2002) 115

Noriko U. Sata,* Ryuji Kuwahara and Yuko Murata

Marine Biochemistry Division, National Research Institute of Fisheries Science, Fisheries Research Agency, 2-12-4, Fukuura, Kanazawa-ku, Yokohama 236-8648, Japan

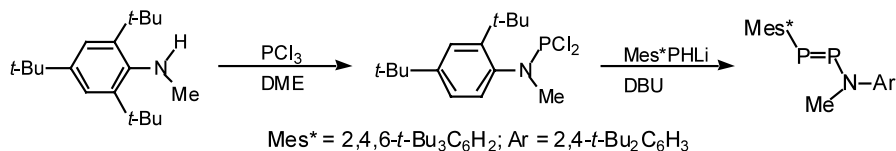


Preparation and reaction of sterically crowded *N*-(2,4-di-*t*-butylphenyl)-*N*-methylaminodichlorophosphine

Tetrahedron Letters 43 (2002) 119

François Rivière, Shigekazu Ito and Masaaki Yoshifuji*

Department of Chemistry, Graduate School of Science, Tohoku University, Aoba, Sendai 980-8578, Japan



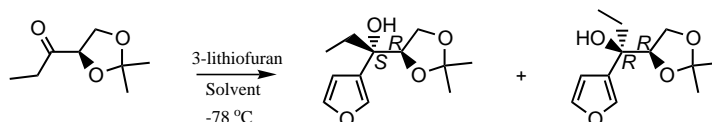
On the diastereocontrol in the formation of (2*R*,3*S*)-3-(3'-furyl)-1,2-*O*-isopropylidenedioxy-3-pentanol and its (2*R*,3*R*)-diastereomer

Tetrahedron Letters 43 (2002) 123

Chi Wai Hui, Hing Ken Lee and Henry N. C. Wong*

Department of Chemistry and Central Laboratory of the Institute of Molecular Technology for Drug Discovery and Synthesis, The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong SAR, China

The diastereomeric ratio can be controlled by solvent systems.



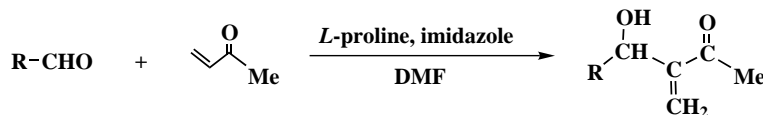
Lewis base and L-proline co-catalyzed Baylis–Hillman reaction of arylaldehydes with methyl vinyl ketone

Tetrahedron Letters 43 (2002) 127

Min Shi,* Jian-Kang Jiang and Chao-Qun Li

State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, China

The Baylis–Hillman reaction can be co-catalyzed by imidazole and L-proline under mild reaction conditions.



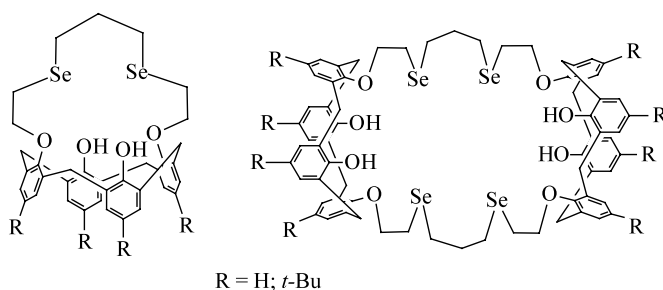
The first synthesis of a calix[4](diseleno)crown ether as a sensor for ion-selective electrodes

Tetrahedron Letters 43 (2002) 131

Xianshun Zeng,^{a,*} Xinxin Han,^a Langxing Chen,^b Qingshan Li,^a Fengbo Xu,^a Xiwen He^b and Zheng-Zhi Zhang^{a,*}

^aState Key Laboratory of Elemento-Organic Chemistry, Nankai University, Tianjin 300071, PR China

^bDepartment of Chemistry, Nankai University, Tianjin 300071, PR China



A new protecting-group strategy for indoles

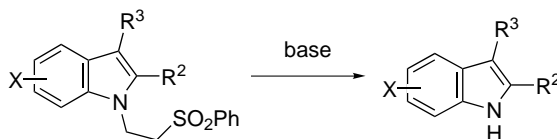
Tetrahedron Letters 43 (2002) 135

Katherine E. Bashford,^a Anthony L. Cooper,^b Peter D. Kane^b and Christopher J. Moody^{a,*}

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

^bTripes Receptor Research Ltd., Bude-Stratton Business Park, Bude, Cornwall EX23 8LY, UK

The 2-phenylsulfonyl ethyl group is a useful alkyl protecting group for nitrogen during indole synthesis; it is readily removed from the indole nitrogen under basic conditions.



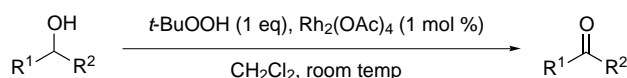
Dirhodium(II) carboxylate-catalysed oxidation of allylic and benzylic alcohols

Tetrahedron Letters 43 (2002) 139

Christopher J. Moody* and Francine N. Palmer

School of Chemistry, University of Exeter, Stocker Road, Exeter EX4 4QD, UK

Allylic and benzylic alcohols are oxidised to the corresponding carbonyl compounds using *tert*-butyl hydroperoxide and dirhodium(II) tetraacetate as catalyst (1 mol%) in CH₂Cl₂ at room temperature.

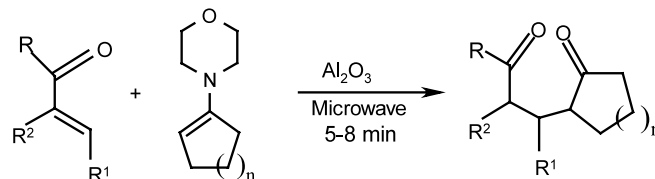


Alumina-promoted fast solid-phase Michael addition of enamines with conjugated enones under microwave irradiation

Tetrahedron Letters 43 (2002) 143

Utpal Sharma, Utpal Bora, Romesh C. Boruah* and Jagir S. Sandhu

Organic Chemistry Division, Regional Research Laboratory, Jorhat 785006, India

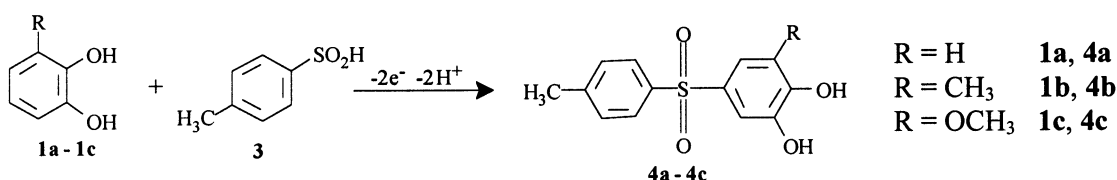


Electrochemical synthesis of *p*-tolylsulfonylbenzenediols

Tetrahedron Letters 43 (2002) 147

Davood Nematollahi* and Ramazanali Rahchamani

Department of Chemistry, Faculty of Science, University of Bu-Ali-Sina, Hamadan, 65174, Iran

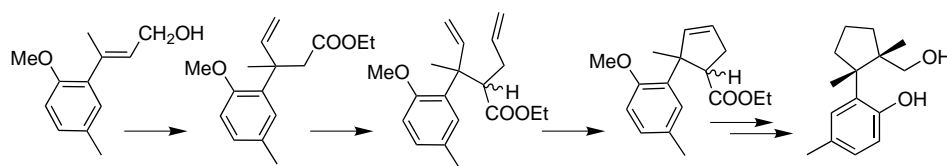


A simple, ring-closing metathesis reaction based approach to (\pm)-1,14-herbertenediol and (\pm)-11-*epi*-herbertenolide

Tetrahedron Letters 43 (2002) 151

A. Srikrishna* and M. Srinivasa Rao

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



An efficient method for the synthesis of *N,N'*-dimethyl-1,2-diamines

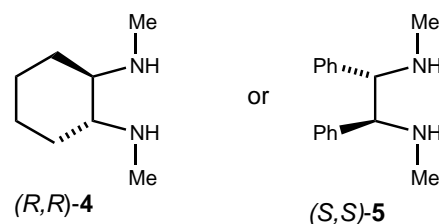
Tetrahedron Letters 43 (2002) 155

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A new method for the efficient *N,N'*-dimethylation of 1,2-diamines is described.

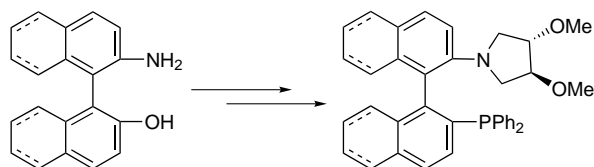


The synthesis of a new generation of MAP ligands containing two types of chiral elements for asymmetric catalysis

Tetrahedron Letters 43 (2002) 159

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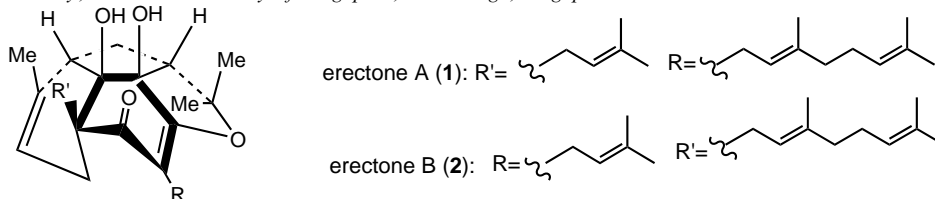
Erectones A and B, two dome-shaped polyprenylated phloroglucinol derivatives, from *Hypericum erectum*

Tetrahedron Letters 43 (2002) 163

Tian-ying An,^a Li-hong Hu,^{a,*} Zhong-liang Chen^a and Keng-Yeow Sim^{b,*}

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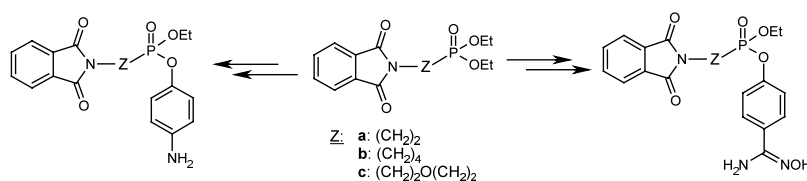
A general synthesis of ethyl 4-amino and ethyl 4-[amino-(hydroxyimino)methyl]phenyl phosphonates

Tetrahedron Letters 43 (2002) 167

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Synthesis of an aminoalcohol hapten for the generation of catalytic antibodies

Tetrahedron Letters 43 (2002) 171

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