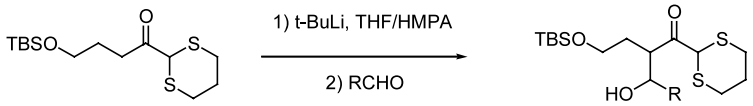
Unexpected reactivity of oxygenated 2-acyl-1,3-dithianes with electrophiles

Tetrahedron Letters 44 (2003) 213

Michael Smietana,[a] Alain Valleix[b] and Charles Mioskowski[a,b,*]

[a]*Laboratoire de Synthèse Bio-organique, CNRS and Université Louis Pasteur, Faculté de Pharmacie, 74 Route du Rhin, 67401 Illkirch, France*
[b]*CEA/Saclay, Service des Molécules Marquées, Bat. 547, Département de Biologie Cellulaire et Moléculaire, 91141 Gif/Yvette cedex, France*

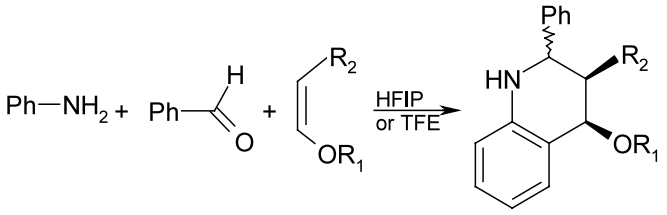


Aza-Diels–Alder reaction in fluorinated alcohols. A one-pot synthesis of tetrahydroquinolines

Tetrahedron Letters 44 (2003) 217

Maria Vittoria Spanedda, Vu Dinh Hoang, Benoit Crousse,* Danièle Bonnet-Delpon* and Jean-Pierre Bégué

BioCIS, Centre d'Etudes Pharmaceutiques rue J.B. Clément, Châtenay-Malabry F-92296 Cedex, France



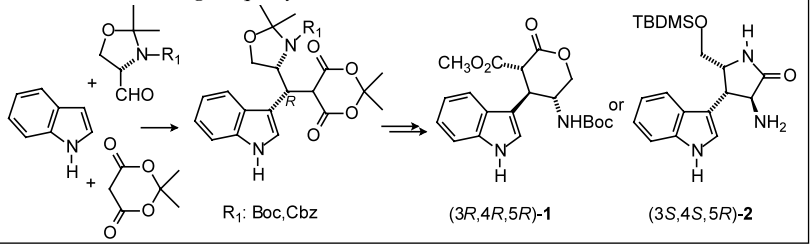
Synthesis of chiral 2′,3′-pyranone(pyrrolidinone)-fused tryptamines

Tetrahedron Letters 44 (2003) 221

Emmanuel Dardennes, Árpád Kovács-Kulyassa, Andrea Renzetti, Janos Sapi* and Jean-Yves Laronze

UMR CNRS 6013 'Isolement, Structure, Transformations et Synthèse de Produits Naturels', IFR 53 'Biomolécules' Faculté de Pharmacie, Université de Reims-Champagne-Ardenne, 51 rue Cognacq-Jay, F-51096 Reims Cedex, France

Heterocycle-fused chiral tryptamines (**1** and **2**) were prepared by a three component reaction, followed by selective functional group transformations.

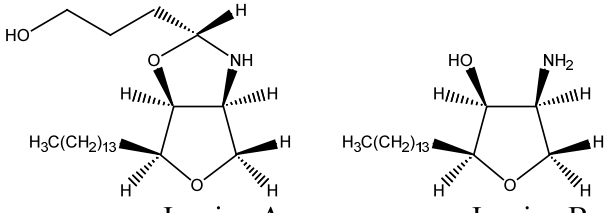


Jaspines A and B: two new cytotoxic sphingosine derivatives from the marine sponge *Jaspis* sp.

Tetrahedron Letters 44 (2003) 225

Véronique Ledroit,[a] Cécile Debitus,[a,*] Catherine Lavaud[b] and Georges Massiot[a]

[a]*CRSN, Pierre Fabre-CNRS, 3, rue Ariane, 31527 Ramonville Saint-Agne, France*
[b]*CNRS-UMR 6013 Laboratoire de Pharmacognosie, CPCBAI-Bât. 18-Moulin de la Housse, BP 1039, 61097 Reims Cedex 2, France*



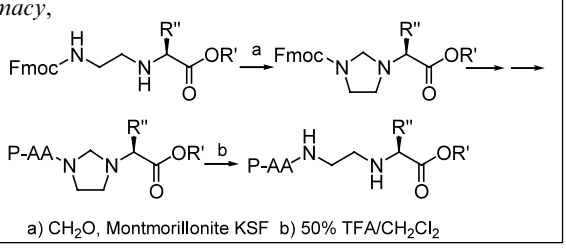
Tetrahedron Letters 44 (2003) 229

Facile synthesis and cleavage of imidazolidines in a novel protection strategy for the preparation of peptides containing a reduced amide bioisostere

Jun Zhao, Vatee Pattaropong, Yongying Jiang and Longqin Hu*

Department of Pharmaceutical Chemistry, Ernest Mario School of Pharmacy, Rutgers, The State University of New Jersey, 160 Frelinghuysen Road, Piscataway, NJ 08854-8020, USA

As a protection strategy in peptide synthesis, imidazolidines were obtained in 75–91% yield by treating monoalkoxycarbonyl diamines with aqueous formaldehyde in the presence of Montmorillonite KSF and efficiently cleaved by 50% TFA in methylene chloride.

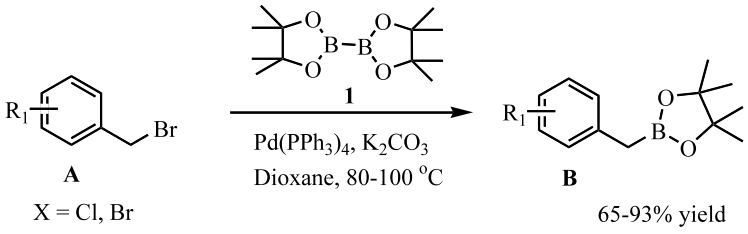


Tetrahedron Letters 44 (2003) 233

Synthesis of benzylic boronates via palladium-catalyzed cross-coupling reaction of bis(pinacolato)diboron with benzylic halides

André Giroux*

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

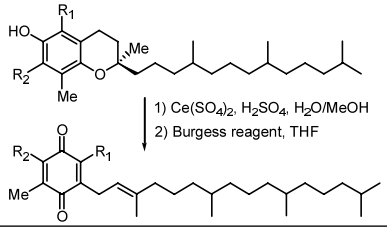


Tetrahedron Letters 44 (2003) 237

Efficient two-step synthesis of methylphytylbenzoquinones: precursor intermediates in the biosynthesis of vitamin E

Satyamaheshwar Peddibhotla,[a] Zigang Cheng,[b] Dean DellaPenna[b] and Jetze J. Tepe[a,*]

[a]*Department of Chemistry, Michigan State University, East Lansing, MI 48824, USA*
[b]*Department of Biochemistry and Molecular Biology, Michigan State University, East Lansing, MI 48824, USA*



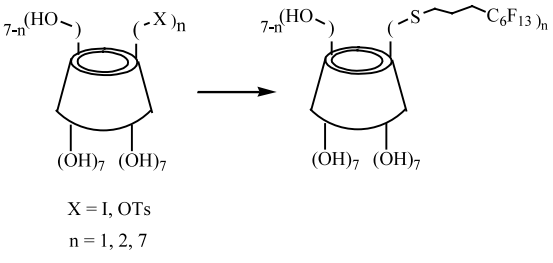
Tetrahedron Letters 44 (2003) 241

Novel fluorinated amphiphilic cyclodextrin derivatives: Synthesis of mono-, di- and heptakis-(6-deoxy-6-perfluoroalkylthio)-β-cyclodextrins

Sandrine Peroche and Hélène Parrot-Lopez*

Synthèse, Reconnaissance et Organisation Moléculaire et Biomoléculaire-UMR CNRS 5078, Université Claude Bernard-Lyon I, Domaine Scientifique de la Doua, Bât. J. Raulin, 43 Bd du 11 Novembre 1918, 69622 Villeurbanne cedex, France

A new series of fluorinated amphiphilic β-cyclodextrin at C-6 position has been synthesized.

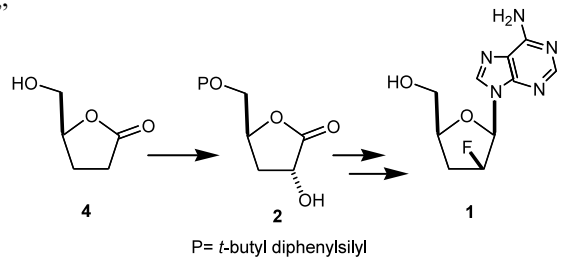


A concise synthesis of anti-viral agent F-ddA, starting from (*S*)-dihydro-5-(hydroxymethyl)-2(3*H*)-furanone

Tetrahedron Letters 44 (2003) 247

Anusuya Choudhury,* Fuqiang Jin, Dengjin Wang, Zhe Wang, Guoyou Xu, Dieu Nguyen, John Castoro, Michael E. Pierce and Pat N. Confalone

Bristol-Myers Squibb Pharma Company, Research & Development, Chambers Works, Deepwater, NJ 08023-0999, USA



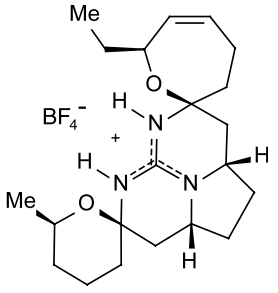
Anti-HIV agent β-F-ddA (**1**) has been synthesized starting from readily available (*S*)-(+)-dihydro-5-(hydroxymethyl)-2-(3*H*)-furanone (**4**). A highly *syn*-stereoselective fluorination of the hydroxy lactone **2** generates the key intermediate fluorolactone **5** in a short and concise synthetic sequence. Glycosylation of **5** and subsequent deprotection generated F-ddA (**1**). Steric bulk of the 5-protecting group has minimal effect on the stereoselectivity of glycosylation.

A synthesis of crambescidin 359

Tetrahedron Letters 44 (2003) 251

Christopher G. Moore,[a] Patrick J. Murphy,[a,*] Harri L. Williams,[a] Alan T. McGown[b] and Nigel K. Smith[b]

[a]*Department of Chemistry, University of Wales, Bangor, Gwynedd LL57 2UW, UK*
[b]*Christie CRC Research Centre, Paterson Institute for Cancer Research, Christie NHS Trust, Wilmslow Road, Manchester M20 4BX, UK*



A potentially biomimetic synthesis of the guanidine-containing marine natural product crambescidin 359 via a double Michael addition of guanidine to a suitably functionalised bis-enone is reported.

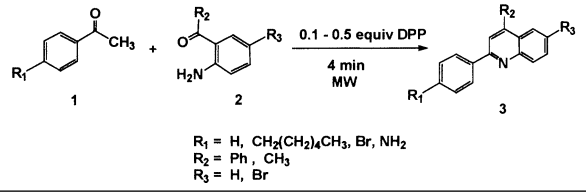
Microwave enhanced solvent-free synthesis of a library of quinoline derivatives

Tetrahedron Letters 44 (2003) 255

Suk Jin Song,[a] Seong Jin Cho,[a] Dong Kyu Park,[a] Tae Woo Kwon[a,*] and Samson A. Jenekhe[b]

[a]*College of Science, Kyungsung University, Busan 608-736, South Korea*
[b]*Department of Chemical Engineering, University of Washington, Seattle, WA 98195-1750, USA*

A minilibrary of 12 quinoline derivatives was synthesized in the presence of 0.1–0.5 equiv. of diphenylphosphate without any solvents. Each compound was obtained with high yield in 4 min of microwave irradiation.

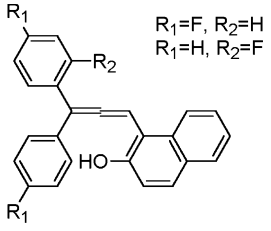


NMR proofs of the involvement of an allenyl-naphthol as a key-intermediate in the photochromic process of [3*H*]-naphthopyrans

Tetrahedron Letters 44 (2003) 259

Stephanie Delbaere* and Gaston Vermeersch

Laboratoire de Physique, UMR CNRS 8009, Faculté de Pharmacie, Université de Lille 2, BP 83, F-59006 Lille cedex, France



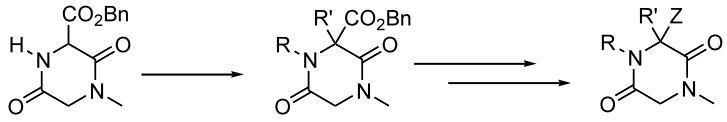
Tetrahedron Letters 44 (2003) 263

Multi-purpose functionality for the structural elaboration of the piperazine-2,5-dione motif

Christina L. L. Chai,* John A. Elix and Paul B. Huleatt

Department of Chemistry, The Faculties, Australian National University, Canberra, ACT 0200, Australia

The use of a benzyloxycarbonyl substituent on a piperazine-2,5-dione ring to enhance and direct reactions as well as to serve as latent functionality to carbon and/or heteroatom substitution is described.



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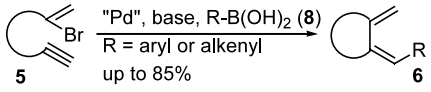
Palladium-catalyzed cascade cyclization-coupling reactions of 2-bromo-1,6-enynes with organoboronic acids

Chang Ho Oh* and Young Mook Lim

Department of Chemistry, Hanyang University, Sungdong-Gu, Seoul 133-791, South Korea

Palladium-catalyzed cyclizations of 2-bromo-1,6-enynes **5** in the presence of organoboronic acids **8** gave the cycloalkylated products **6** in good yields.



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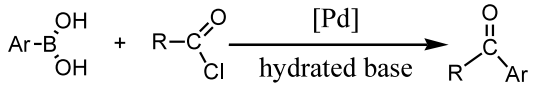
A convenient method for preparing aromatic ketones from acyl chlorides and arylboronic acids via Suzuki–Miyaura type coupling reaction

Yoshio Urawa[a,b,*] and Katsuyuki Ogura[b,*]

[a]*Process Research Laboratories, Eisai Co., Ltd, 22 Sunayama, Hasaki-machi, Kashima-gun, Ibaraki 314-0255, Japan*
[b]*Graduate School of Science and Technology, Chiba University, 1-33 Yayoicho, Inageku, Chiba 263-8522, Japan*



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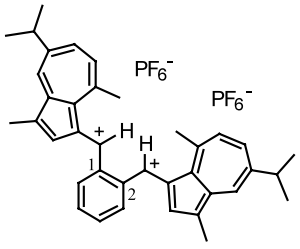
The crystal structure and characteristic chemical property of 1,2-bis(3-guaiazulenylmethylium)benzene bishexafluorophosphate

Masato Sasaki,[a] Masaru Nakamura,[a] Gen Hannita,[a] Hideko Takekuma,[a] Toshie Minematsu,[b] Masakuni Yoshihara[a] and Shin-ichi Takekuma[a,*]

[a]*Department of Applied Chemistry, Faculty of Science and Engineering, Kinki University, 3-4-1 Kowakae, Higashi-Osaka-shi, Osaka 577-8502, Japan*
[b]*School of Pharmaceutical Sciences, Kinki University, 3-4-1 Kowakae, Higashi-Osaka-shi, Osaka 577-8502, Japan*

The crystal structure and characteristic chemical property of the title dicarbocation compound are reported in detail.

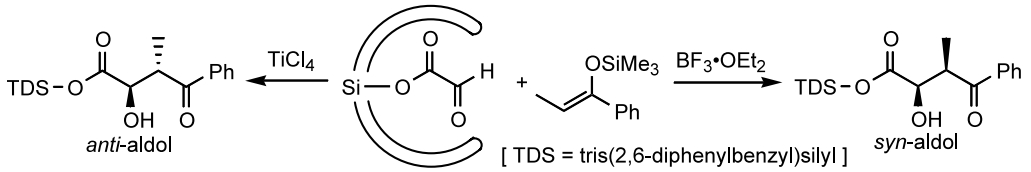


Tetrahedron Letters 44 (2003) 281

Synthetic utility of bowl-shaped tris(2,6-diphenylbenzyl)silyl glyoxylate as a stable glyoxylate: application to highly diastereoselective aldol reactions

Seiji Shirakawa and Keiji Maruoka*

Department of Chemistry, Graduate School of Science, Kyoto University, Kyoto 606-8502, Japan

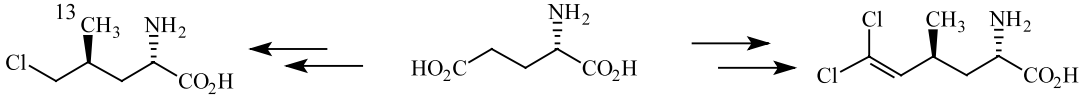


Tetrahedron Letters 44 (2003) 285

[6-^{13}C]-(2*S*,4*S*)-5-Chloroleucine: synthesis and incubation studies with cultures of the cyanobacterium, *Lyngbya majuscula*

William H. Gerwick,[b] Pauline Leslie,[a] G. Cliona Long,[a] Brian L. Marquez[b] and Christine L. Willis[a,*]

[a]*School of Chemistry, University of Bristol, Cantock's Close, Bristol BS8 1TS, UK*
[b]*College of Pharmacy, Oregon State University, Corvallis, OR 97331, USA*



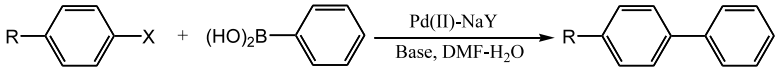
Tetrahedron Letters 44 (2003) 289

Suzuki cross-coupling reactions of aryl halides with arylboronic acids catalysed by Pd(II)-NaY zeolite

Hatice Bulut,[a] Levent Artok[a,*] and Selahattin Yilmaz[b]

[a]*Department of Chemistry, Faculty of Science, Izmir Institute of Technology, Urla 35437 Izmir, Turkey*
[b]*Department of Chemical Engineering, Faculty of Engineering, Izmir Institute of Technology, Urla 35437 Izmir, Turkey*

Pd(II)-exchanged NaY zeolite showed high activity in the Suzuki cross-coupling reactions of aryl bromides and iodides without added ligands. The DMF:water ratio, and the type and amount of base were found to be critical for the efficiency of the reaction. The catalyst is reusable after regeneration.

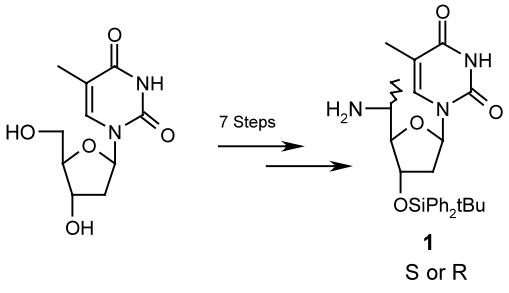


Tetrahedron Letters 44 (2003) 293

New and efficient synthesis of 5′-amino-5′-(*S*)-methyl-2′,5′-dideoxynucleosides

Pierre M. J. Jung,* Renaud Beaudegnies, Alain De Mesmaeker and Sebastian Wendeborn

Syngenta Crop Protection AG, CH-4002 Basel, Switzerland

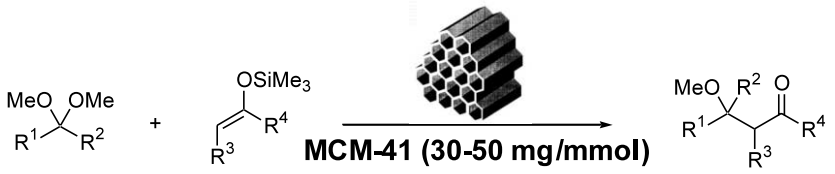


Tetrahedron Letters 44 (2003) 299

Selective aldol reactions of acetals on mesoporous silica catalyst

Haruro Ishitani and Masakazu Iwamoto*

Chemical Resources Laboratory, Tokyo Institute of Technology, 4259 Nagatsuta, Midori-ku, Yokohama 226-8503, Japan



up to 99% yield

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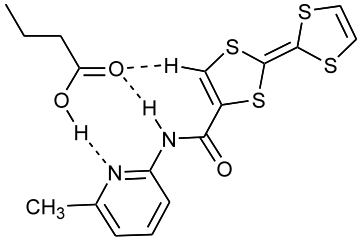
An investigation of the role of the disparate redox states of the tetrathiafulvalene unit in modulating hydrogen bonding interactions in solution

Alan S. F. Boyd,[a] Graeme Cooke,[a,*] Florence M. A. Duclairoir[a] and Vincent M. Rotello[b]

[a]*The Centre for Biomimetic Design and Synthesis, Department of Chemistry, William H. Perkin Building, School of Engineering and Physical Sciences, Heriot-Watt University, Riccarton, Edinburgh EH14 4AS, UK*
[b]*Department of Chemistry, University of Massachusetts at Amherst, Amherst, MA 01002, USA*

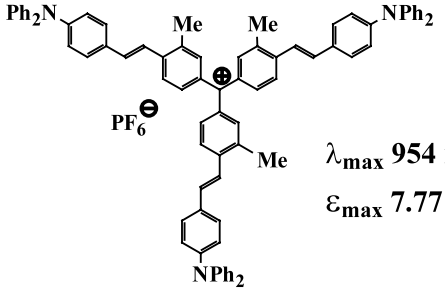


Tetrahedron Letters 44 (2003) 307

An octupolar near-IR dye with triphenylamine donors: preparation and absorption properties

Saumitra Sengupta*

Department of Chemistry, Jadavpur University, Kolkata 700 032, India



λ_{max} **954 nm**

ε_{max} **7.77 x 10^4 Mol^{-1} cm^{-1}**

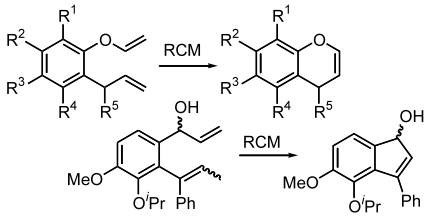
Tetrahedron Letters 44 (2003) 311

Ring-closing metathesis for the synthesis of benzo-fused bicyclic compounds

Willem A. L. van Otterlo,* E. Lindani Ngidi, E. Mabel Coyanis and Charles B. de Koning

Molecular Sciences Institute, School of Chemistry, University of the Witwatersrand, PO Wits, 2050, Johannesburg, South Africa

Ring-closing metathesis (RCM) was used to synthesise five 4*H*-chromenes, a naphthol and an indenol.



Tetrahedron Letters 44 (2003) 315

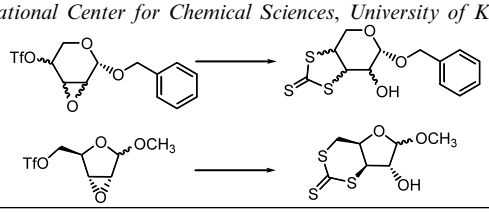
A convenient method for the synthesis of cyclic trithiocarbonates on carbohydrate scaffolds

Muhammad Saeed,[a] Muhammad Abbas,[a] Raid J. Abdel-Jalil,[b] Muhammad Zahid[c] and Wolfgang Voelter[a,*]

[a]*Abteilung für Physikalische Biochemie des Physiologisch-chemischen Institut der Universität, Hoppe-Seyler Strasse-4, D-72076 Tübingen, Germany*

[b]*Chemistry Department, Faculty of Sciences and Arts, Hashmite University, Zarka, Jordan*

[c]*HEJ Research Institute of Chemistry, International Center for Chemical Sciences, University of Karachi, Karachi 75270, Pakistan*

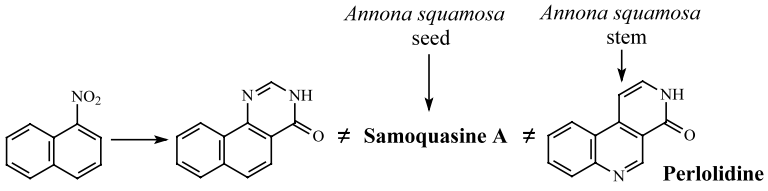


Tetrahedron Letters 44 (2003) 319

Total synthesis of 3,4-dihydrobenzo[*h*]quinazolin-4-one and structure elucidation of perlolidine and samoquasine A

Yu-Liang Yang, Fang-Rong Chang and Yang-Chang Wu*

Graduate Institute of Natural Products, Kaohsiung Medical University, Kaohsiung 807, Taiwan



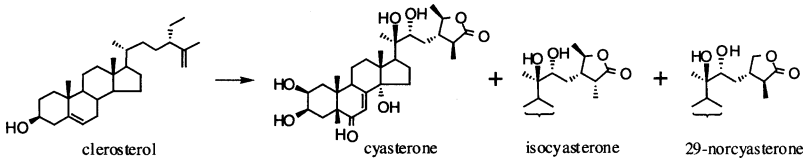
Tetrahedron Letters 44 (2003) 323

Biosynthesis of phytoecdysteroids in *Ajuga* hairy roots: clerosterol as a precursor of cyasterone, isocyasterone and 29-norcyasterone

Keiko Okuzumi,[a] Noriyuki Hara,[a] Yoshinori Fujimoto,[a,*] Junko Yamada,[b] Atsuko Nakamura,[b] Kyoko Takahashi[b] and Masuo Morisaki[b]

[a]*Department of Chemistry and Materials Science, Tokyo Institute of Technology, O-okayama, Meguro-ku, Tokyo 152-8551, Japan*

[b]*Kyoritsu College of Pharmacy, Shibakoen, Minato-ku, Tokyo 105-8512, Japan*



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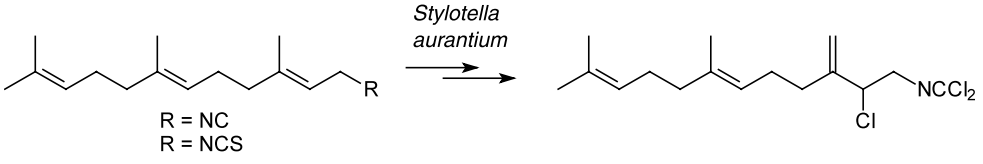
Advanced precursors in marine biosynthetic study. Part 3: The biosynthesis of dichloroimines in the tropical marine sponge *Stylotella aurantium*

Andreas Brust and Mary J. Garson*

Department of Chemistry, The University of Queensland, Brisbane QLD 4072, Australia

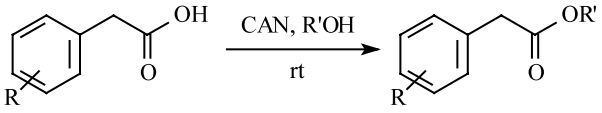


Tetrahedron Letters 44 (2003) 331

New and efficient method for esterification of carboxylic acids with simple primary and secondary alcohols using cerium(IV) ammonium nitrate (CAN)

Wen-Bin Pan,[a,b] Fang-Rong Chang,[a] Li-Mei Wei,[a,b] Ming-Jung Wu[a] and Yang-Chang Wu[a,*]

[a]*Graduate Institute of Natural Products, Kaohsiung Medical University, Kaohsiung 807, Taiwan*
[b]*Fooyin University, Kaohsiung County 831, Taiwan*



R= H, 2-Br, 3-Br, 4-Br, 2-Cl, 3-Cl, 4-Cl, 2-OMe, 3-OMe, 2-NO_2

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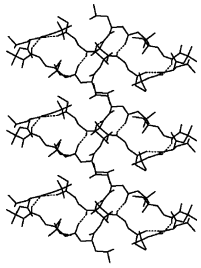
Amyloid-like fibril-forming supramolecular β-sheets from a β-turn forming tripeptide containing non-coded amino acids: the crystallographic signature

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*



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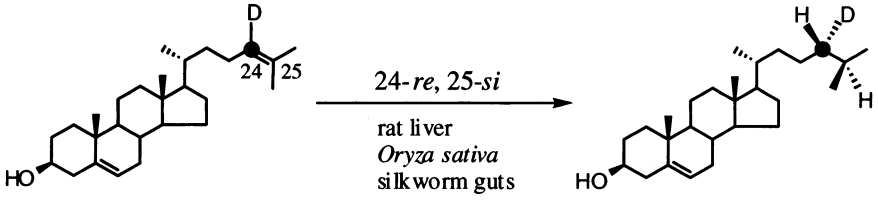
Stereochemistry of reduction of the C-24,25 double bond in the conversion of desmosterol into cholesterol

Kyoko Takahashi,[a] Kenichiro Hashimoto,[a] Ayako Fujiyama,[a] Junko Yamada,[a] Noriko Kobayashi,[a] Masuo Morisaki,[a,*] Sayaka Nakano,[b] Noriyuki Hara[b] and Yoshinori Fujimoto[b]

[a]*Kyoritsu College of Pharmacy, Shibakoen, Minato-ku, Tokyo 105-8512, Japan*
[b]*Department of Chemistry and Materials Science, Tokyo Institute of Technology, Meguro-ku, Tokyo 152-8551, Japan*



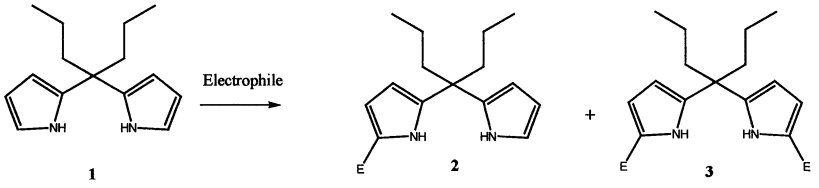
Tetrahedron Letters 44 (2003) 345

Electrophilic substitution reactions of dipyrroheptane

Stefaan Depraetere and Wim Dehaen*

Laboratory of Organic Synthesis, Department of Chemistry, KU Leuven, Celestijnenlaan 200F, B-3001 Leuven, Belgium

Dipyrroheptanes have been reacted with a number of electrophiles to give selectively the mono- or disubstituted derivatives.

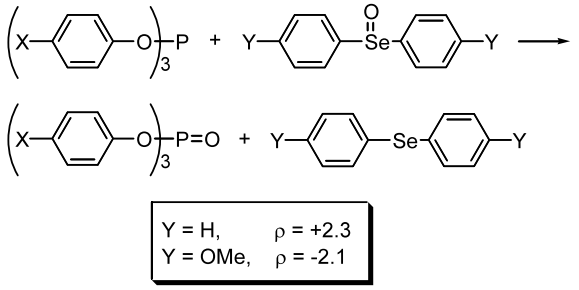


Selective deoxygenation of aryl selenoxides by triaryl phosphites. Evidence for a concerted transformation

Tetrahedron Letters 44 (2003) 349

Manolis Stratakis,* Constantinos Rabalakos and Nikoletta Sofikiti

Department of Chemistry, University of Crete, 71409 Iraklion, Greece

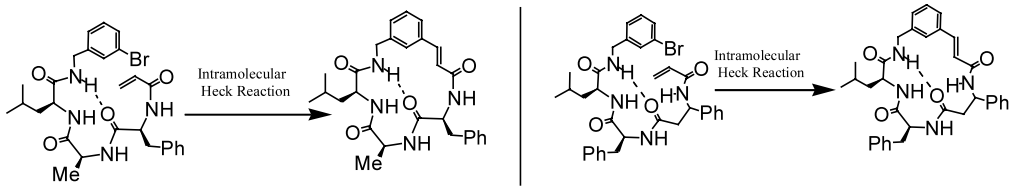


Synthesis of small cyclic peptides via intramolecular Heck reactions

Tetrahedron Letters 44 (2003) 353

P. Rajamohan Reddy,[b] V. Balraju,[b] G. R. Madhavan,[b] Biswadip Banerji[a] and Javed Iqbal[a,b,*]

[a]*Department of Chemistry, Indian Institute of Technology, Kanpur 208 016, India*
[b]*Discovery Research, Dr. Reddy's Laboratories Ltd, Bollaram Road, Miyapur, Hyderabad 500 050, India*



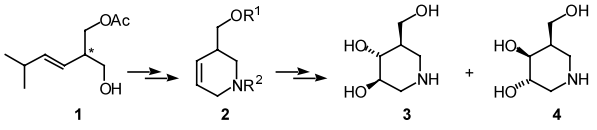
Asymmetrized tris(hydroxymethyl)methane as precursor of iminosugars: application to the synthesis of isofagomine

Tetrahedron Letters 44 (2003) 357

Giuseppe Guanti* and Renata Riva*

Dipartimento di Chimica e Chimica Industriale, Via Dodecaneso 31, I-16146 Genova, Italy

A synthetic equivalent of asymmetrized THYM*, namely **1**, prepared through a chemoenzymatic procedure, has been converted into tetrahydropyridine **2**, using a ring closing metathesis as key step. Compound **3** was transformed into *isofagomine* **3**, a powerful glycosidase inhibitor, and into its stereoisomer **4**.

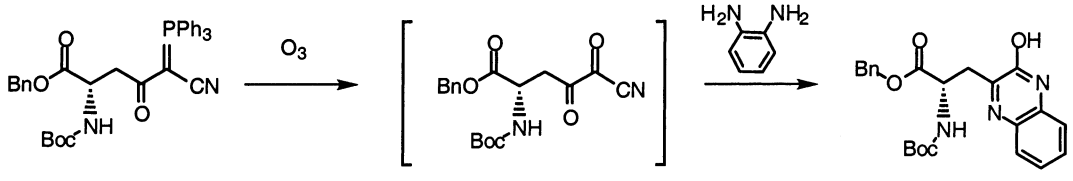


α,β-Diketo nitriles as dielectrophiles. Formation of heterocyclic derivatives of amino acids

Tetrahedron Letters 44 (2003) 361

Harry H. Wasserman,* Yun Oliver Long and Jonathan Parr

Department of Chemistry, Yale University, New Haven, CT 06520-8107, USA



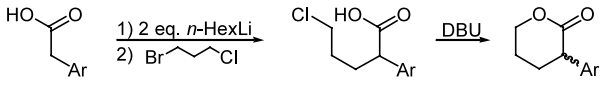
Tetrahedron Letters 44 (2003) 365

A convenient synthesis of 3-aryl-δ-lactones

Jonathan D. Rosen,* Todd D. Nelson, Mark A. Huffman and James M. McNamara

Department of Process Research, Merck Research Laboratories, Merck & Co., Inc., Rahway, NJ 07065, USA

A novel general synthesis of 3-aryl-δ-lactones is presented.



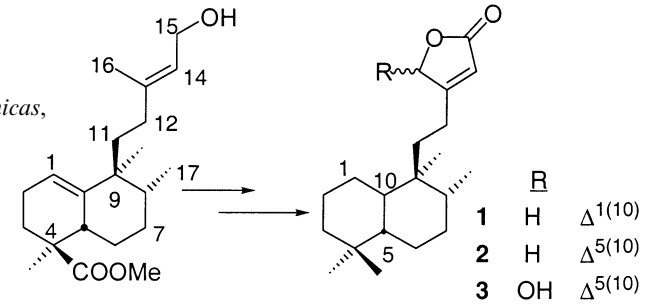
Tetrahedron Letters 44 (2003) 369

Synthesis and absolute configuration of three natural *ent*-halimanolides with biological activity

I. S. Marcos,* A. B. Pedrero, M. J. Sexmero, D. Diez, P. Basabe, F. A. Hernández and J. G. Urones

Departamento de Química Orgánica, Facultad de Ciencias Químicas, Universidad de Salamanca, Plaza de los Caidos 1-5, 37008 Salamanca, Spain

The first three natural *ent*-halimanolides known until now have been synthesized from *ent*-halimic acid. Biological testing have been carried out on these compounds.



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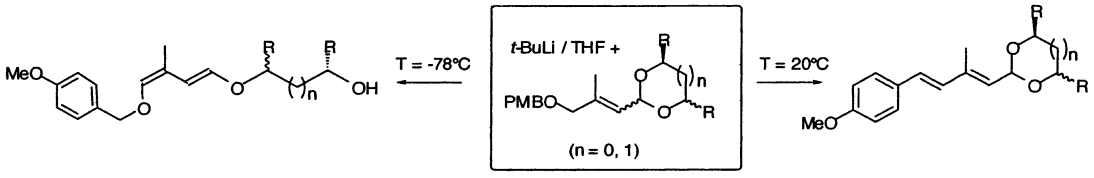
Conjugated elimination versus [1,2]-Wittig rearrangement of unsaturated diox(ol)anes

Loïc Lemiègre,[a] Thomas Regnier,[a] Jean-Claude Combret[b] and Jacques Maddaluno[a,*]

[a]*Laboratoire des Fonctions Azotées & Oxygénées Complexes, IRCOF, Université de Rouen, 76821 Mont St Aignan Cedex, France*

[b]*Laboratoire des Sciences et Méthodes Séparatives, IRCOF, Université de Rouen, 76821 Mont St Aignan Cedex, France*



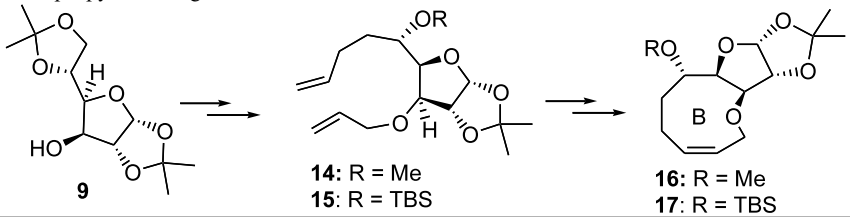
Tetrahedron Letters 44 (2003) 379

A ring-closing metathesis approach to a synthesis of the B ring of eleutherobin

Krishna P. Kaliappan* and Nirmal Kumar

Department of Chemistry, Indian Institute of Technology-Bombay, Powai, 400 076 Mumbai, India

A short and efficient RCM route is reported for the construction of the key nine-membered B ring of eleutherobin starting from the readily available 1,2,5,6-diisopropylidene-D-glucose.

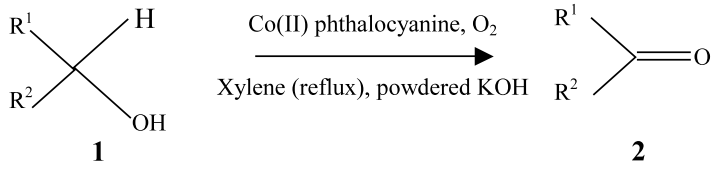


Tetrahedron Letters 44 (2003) 383

Cobalt phthalocyanine catalyzed aerobic oxidation of secondary alcohols: an efficient and simple synthesis of ketones

Vishal B. Sharma, Suman L. Jain and Bir Sain*

Chemical and Biosciences Division, Indian Institute of Petroleum, Dehradun 248005, India



1 **2**

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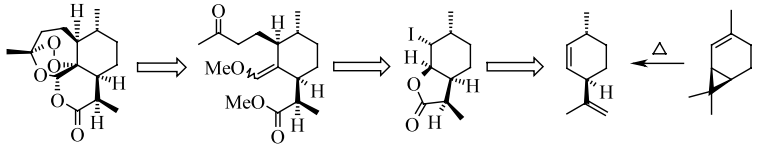
Stereoselective total synthesis of (+)-artemisinin

J. S. Yadav,* R. Satheesh Babu and G. Sabitha

Organic Chemical Sciences, Indian Institute of Chemical Technology, Hyderabad 500 007, India

The total synthesis of the novel antimalarial drug, a sesquiterpene endoperoxide, (+)-artemisinin is described. The use of an intermolecular radical reaction on an intermediate iodolactone and Wittig reaction on a ketone were employed for the synthesis.



1 **2** **3** **4** Δ^2 Carene

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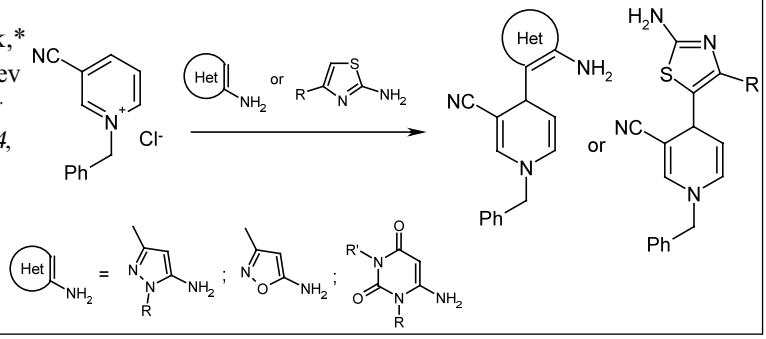
Addition of some aminoheterocycles to *N*-benzyl-3-cyanopyridinium chloride

Dmitriy M. Volochnyuk, Alexandr N. Kostyuk,* Alexandr M. Pinchuk and Andrei A. Tolmachev

Institute of Organic Chemistry, National Academy of Sciences of Ukraine, Murmanskaya 5, Kiev 94, 02094, Ukraine



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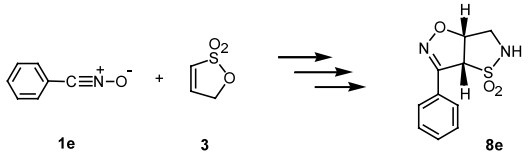
1,3-Dipolar cycloadditions of prop-1-ene-1,3-sultone with nitrile oxides/nitrones

H. Zhang, W. H. Chan,* Albert W. M. Lee* and W. Y. Wong

Department of Chemistry and Central Laboratory of the Institute of Molecular Technology for Drug Discovery and Synthesis, Hong Kong Baptist University, Kowloon Tong, Kowloon, Hong Kong SAR



1e **3** **8e**

$[\alpha]_D^{20}$ = -141.5 (*c* 0.43, CH_2Cl_2)

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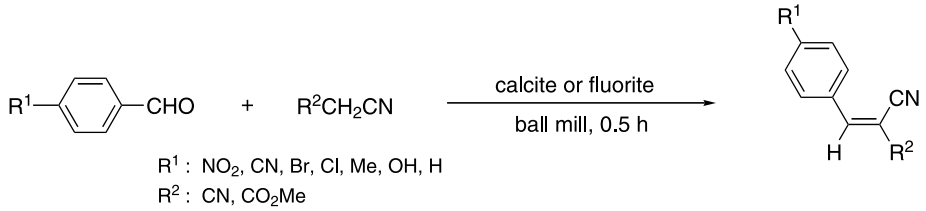
Calcite and fluorite as catalyst for the Knövenagel condensation of malononitrile and methyl cyanoacetate under solvent-free conditions

Shinobu Wada and Hitomi Suzuki*

Department of Chemistry, School of Science and Technology, Kwansei Gakuin University, Gakuen 2-1, Sanda 669-1337, Japan



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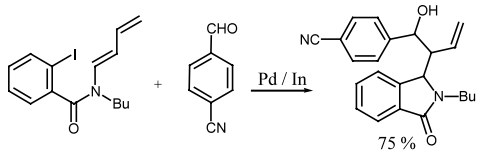
Diastereo- and regioselective palladium–indium bimetallic cyclisation–Barbier-type allylation cascades

Ian R. Cooper,[a] Ronald Grigg,[a,*] William S. MacLachlan,[b] Visuvanathar Sridharan[a] and Mark Thornton-Pett[a]

[a]*Molecular Inovation, Diversity and Automated Synthesis (MIDAS) Centre, School of Chemistry, University of Leeds, Leeds LS2 9JT, UK*
[b]*GlaxoSmithKline, New Frontiers Science Park (North), Third Avenue, Harlow, Essex CM19 5AW, UK*

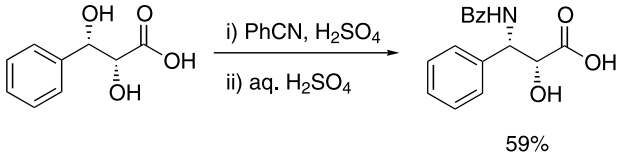


Tetrahedron Letters 44 (2003) 407

Improved large-scale synthesis of phenylisoserine and the taxol C-13 side chain

Michael V. Voronkov,* Alexander V. Gontcharov and Zhi-Min Wang

Lexicon Pharmaceuticals, 279 Princeton-Hightstown Road, East Windsor, NJ 08520, USA



Tetrahedron Letters 44 (2003) 411

Concise asymmetric synthesis of (−)-herbertenediol

Yasuyuki Kita,* Junko Futamura, Yusuke Ohba, Yoshinari Sawama, Jnaneshuwara K. Ganesh and Hiromichi Fujioka

Graduate School of Pharmaceutical Sciences, Osaka University, 1-6 Yamada-oka, Suita, Osaka 565-0871, Japan