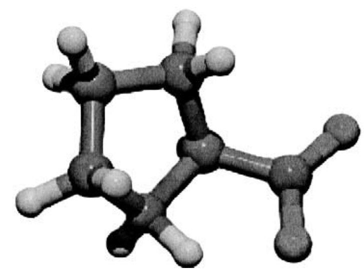
Graphical abstracts

Proline-catalyzed asymmetric reactions

Tetrahedron 58 (2002) 5573

Benjamin List

Department of Molecular Biology, The Scripps Research Institute, 10550 N. Torrey Pines Rd., La Jolla, CA 92037, USA



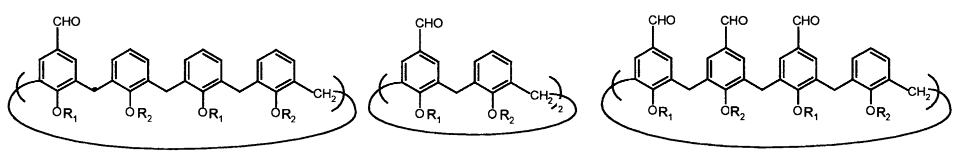
Synthesis of selectively formylated calixarene ethers

Tetrahedron 58 (2002) 5591

Vandna Arora, H. M. Chawla* and Anuradha Santra

Department of Chemistry, Indian Institute of Technology, Hauz Khas, New Delhi 110016, India

Several selectively formylated calix[4]arene ethers have been synthesized.

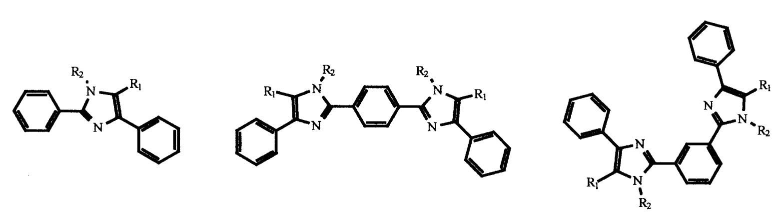


Facile two-pot syntheses of novel alternating benzene/imidazole systems

Tetrahedron 58 (2002) 5599

Kuangsen Sung,* Shu-Hwa Wu and Phon-I Chen

Department of Chemistry, National Cheng Kung University, Tainan 70101, Taiwan, ROC

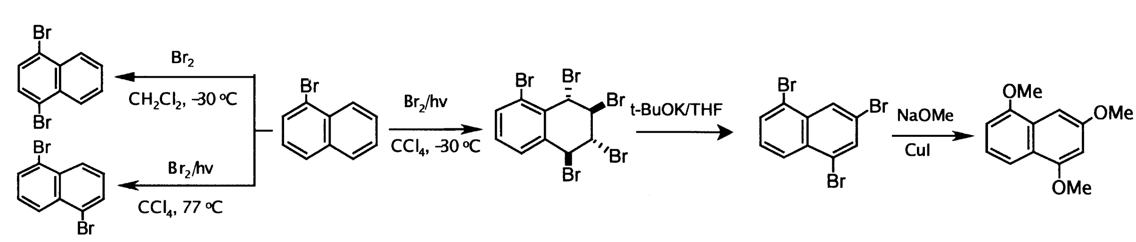


Selective bromination of 1-bromonaphthalene: efficient synthesis of bromonaphthalene derivatives

Tetrahedron 58 (2002) 5603

Osman Cakmak,* Ibrahim Demirtas and Halis T. Balaydin

Department of Chemistry, Faculty of Science, Gaziosmanpasa University, 60240 Tokat, Turkey

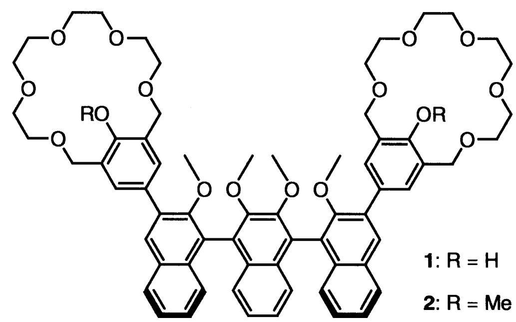


Use of *meso*-ternaphthalene derivatives: linear recognition of the α,ω-diamines by homoditopic receptors

Tetrahedron 58 (2002) 5611

Kazunori Tsubaki,[a,*] Hiroyuki Tanaka,[a] Takumi Furuta,[a] Kiyoshi Tanaka,[a] Takayoshi Kinoshita[b] and Kaoru Fuji[a,*]

[a]*Institute for Chemical Research, Kyoto University, Uji, Kyoto 611-0011, Japan*
[b]*Exploratory Research Laboratories, Fujisawa Pharmaceutical Co., Ltd., Tokodai, Tsukuba, Ibaragi 300-2698, Japan*



1: R = H
2: R = Me

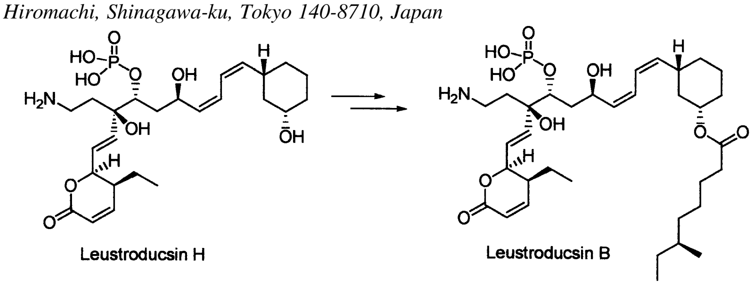
Chemical transformation of Leustroducsins: synthesis of Leustroducsin B

Tetrahedron 58 (2002) 5619

Hayao Matsuhashi* and Kousei Shimada

Medicinal Chemistry Research Laboratories, Sankyo Co. Ltd, Hiromachi, Shinagawa-ku, Tokyo 140-8710, Japan

Chemical transformation of Leustroducsins is studied to synthesize Leustroducsin B from a key intermediate Leustroducsin H.



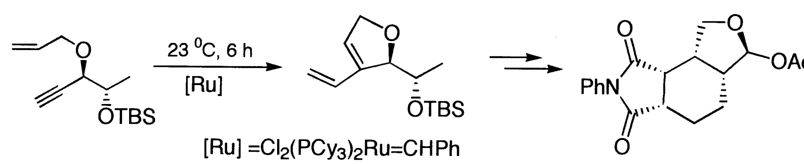
Synthesis of chiral oxacyclic dienes via ruthenium-catalyzed enyne metathesis: useful building blocks for chiral tricyclic oxygen derivatives

Tetrahedron 58 (2002) 5627

Hongyun Guo,[a] Reniguntala J. Madhushaw,[a] Fwu-Ming Shen[b] and Rai-Shung Liu[a,*]

[a]*Department of Chemistry, National Tsing-Hua University, Hsinchu 30043 Taiwan, ROC*
[b]*Department of Medical Technology, Yuanpei Institute of Science and Technology, Hsinchu, Taiwan, ROC*

Various chiral oxacyclic dienes were prepared via ruthenium-catalyzed enyne metathesis and these dienes are useful building blocks for enantiopure tricyclic furan derivatives.

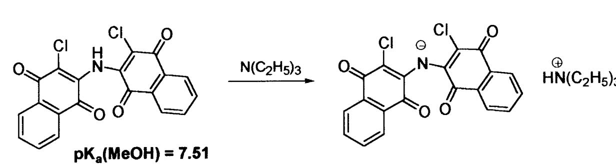


Acidic properties of *N*,*N*-naphthoquinonylamines

Tetrahedron 58 (2002) 5639

Galina Temtsin, Sofia Gorohovsky and Shmuel Bittner*

Department of Chemistry, Ben-Gurion University of the Negev, Beer Sheva 84105, Israel



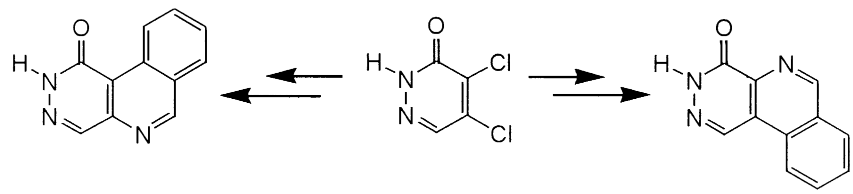
λ_{max}= 456 nm (orange) λ_{max}= 608 nm (blue)

Synthesis of new pyridazino[4,5-*c*]isoquinolinones by Suzuki cross-coupling reaction

Tetrahedron 58 (2002) 5645

Zsuzsanna Riedl,[a] Bert U. W. Maes,[b] Katrien Monsieurs,[b] Guy L. F. Lemière,[b] Péter Mátyus[c] and György Hajós[a,*]

[a]*Institute of Chemistry, Chemical Research Center, Hungarian Academy of Sciences, P.O. Box 17, H-1525 Budapest, Hungary*
[b]*Department of Chemistry, University of Antwerp (RUCA), Groenenborgerlaan 171, B-2020 Antwerpen, Belgium*
[c]*Institute of Organic Chemistry, Semmelweis University, H-1092 Budapest, Hőgyes E. u. 7., Hungary*

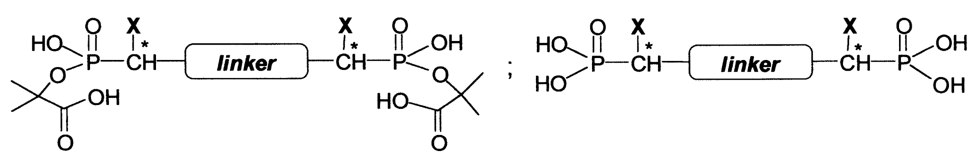


Efficient synthesis of bolaform- and gemini-type alkyl-bis-[(α-amino)phosphonocarboxylic or phosphonic acid] surfactants

Tetrahedron 58 (2002) 5651

Karine Vercruysse-Moreira, Christophe Déjugnat* and Guita Etemad-Moghadam

Laboratoire des IMRCP (UMR 5623), Université Paul Sabatier, 118 route de Narbonne-Bât. 2R1, 31062 Toulouse cedex 04, France



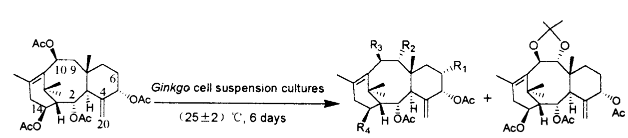
Regio- and stereo-selective biotransformation of 2α,5α,10β,14β-tetra-acetoxy-4(20), 11-taxadiene by *Ginkgo* cell suspension cultures

Tetrahedron 58 (2002) 5659

Jungui Dai,[a] Min Ye,[a] Hongzhu Guo,[a] Weihua Zhu,[b] Dayong Zhang,[b] Qiu Hu,[b] Junhua Zheng[a] and Dean Guo[a,*]

[a]*The State Key Laboratory of Natural and Biomimetic Drugs, School of Pharmaceutical Sciences, Peking University, Xueyuan Road #38, Beijing 100083, People's Republic of China*
[b]*Institute of Materia Medica, Chinese Academy of Medical Sciences and Peking Union Medical College, Xiannong Tan Street #1, Beijing 100050, People's Republic of China*

2α,5α,10β,14β-Tetra-acetoxy-4(20),11-taxadiene was regio- and stereo-selectively biotransformed by *Ginkgo* cell suspension cultures, and eight products were obtained, among which five are new compounds.



sinenxan A

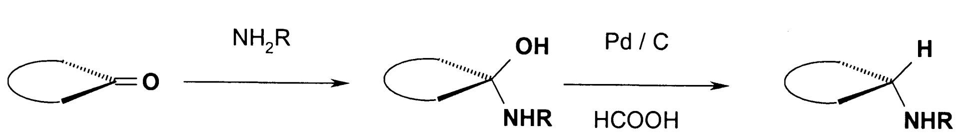
A modified palladium catalysed reductive amination procedure

Tetrahedron 58 (2002) 5669

Valerio Berdini,[a] Maria C. Cesta,[b] Roberto Curti,[b] Gaetano D'Anniballe,[b] Nicoletta Di Bello,[b] Giuseppe Nano,[b] Luca Nicolini,[b] Alessandra Topai[b] and Marcello Allegretti[b,*]

[a]*Astex Technology, 250 Cambridge Science Park, Milton Road, Cambridge CB4 0WE, UK*
[b]*Chemistry Department, Dompé S.p.A. Research and Development Centre, V. Campo di Pile, 67100 L'Aquila, Italy*

New, extended applications of a modified palladium catalysed reductive amination procedure are described; a mechanistic hypothesis alternative to the common imine pathway is proposed.

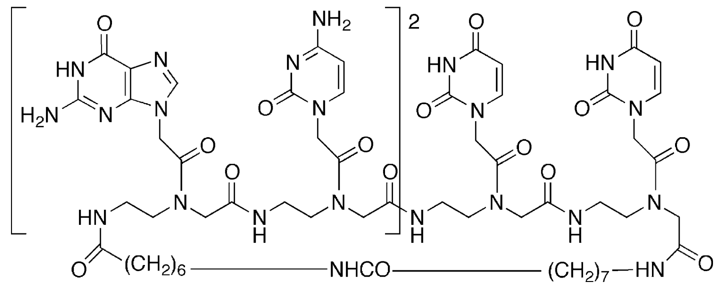


Cyclic PNA hexamer-based compound: modelling, synthesis and inhibition of the HIV-1 RNA dimerization process

Tetrahedron 58 (2002) 5675

Caroline Schwergold,[a] Geoffrey Depecker,[a] Christophe Di Giorgio,[a] Nadia Patino,[a] Fabrice Jossinet,[b] Bernard Ehresmann,[b] Raphael Terreux,[c] Daniel Cabrol-Bass[c] and Roger Condom[a,*]

[a]*Laboratoire de Chimie Bio-organique, Université de Nice-Sophia Antipolis, UMR UNSA-CNRS 6001, F-06108 Nice cedex 2, France*
[b]*Institut de Biologie Moléculaire et Cellulaire, CNRS UPR 9002, 15 rue Descartes, F-64084 Strasbourg cedex, France*
[c]*Laboratoire A.S.I. Equipe Chimiométrie et Modélisation, Université de Nice-Sophia Antipolis, F-06108 Nice cedex 2, France*

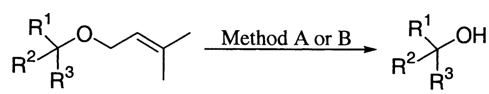


The prenyl group: a versatile hydroxy protecting group, removable chemoselectively under mild conditions

Tetrahedron 58 (2002) 5689

Jean-Michel Vatèle

Laboratoire de Chimie Organique 1, UMR 5622 CNRS, Domaine Scientifique de la Doua, CPE 3 rue Victor Grignard, 69616 Villeurbanne cedex, France



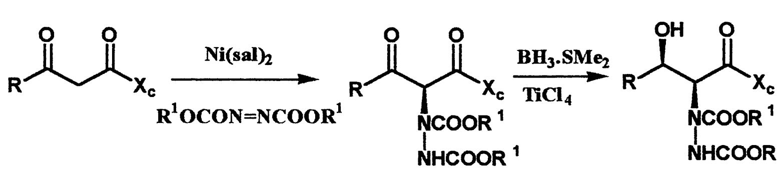
Method A: I_2, CH_2Cl_2, 3Å molecular sieves
Method B: DDQ, CH_2Cl_2-H_2O (9:1)

Ni(II)-catalyzed Michael additions. Part 2: Dynamic kinetic resolution in the reduction of chiral α-hydrazino-β-ketoacid derivatives

Tetrahedron 58 (2002) 5699

Caroline Marchi,[a] Elisenda Trepat,[a] Marcial Moreno-Mañas,[a] Adelina Vallribera[a,*] and Elies Molins[b]

[a]*Department of Chemistry, Universitat Autònoma de Barcelona, Cerdanyola, 08193 Barcelona, Spain*
[b]*Institut de Ciència de Materials de Barcelona (CSIC), Campus de la UAB, E-08193 Cerdanyola, 08193 Barcelona, Spain*



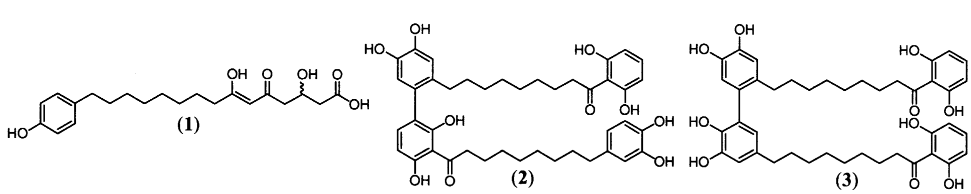
Novel cytotoxic acylphenol dimers of *Myristica gigantea*; enzymatic synthesis of giganteones A and B

Tetrahedron 58 (2002) 5709

Van Cuong Pham,[a] Akino Jossang,[a] Thierry Sévenet[b] and Bernard Bodo[a,*]

[a]*Laboratoire de Chimie des Substances Naturelles, ESA 8041 CNRS, Muséum National d'Histoire Naturelle, 63 rue Buffon, 75005 Paris, France*
[b]*Institut de Chimie des Substances Naturelles, 1206 CNRS, 91198 Gif sur Yvette Cedex, France*

The structure determination of **1**, alkylphenol precursor of malabaricone, and of **2** and **3**, acyphenol dimers is described. An enzymatic synthesis of **2** and **3** from malabaricone C was performed.



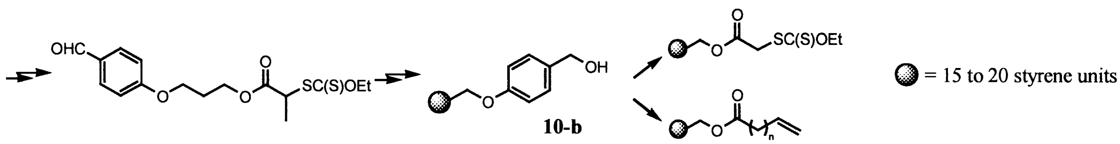
Xanthates and solid-phase chemistry. A new soluble polymer analogue of Wang resin

Tetrahedron 58 (2002) 5715

Anne-Claude Dublanchet,[a] Marie Lusinchi[a,b,*] and Samir Z. Zard[b]

[a]Department of Chemistry, Pfizer Global Research and Development, Fresnes Laboratories, 3-9 rue de la loge, F-94265 Fresnes, France
[b]Laboratoire de synthèse Organique associé au CNRS, Ecole Polytechnique, 91128 Palaiseau Cedex, France

Inter-molecular radical additions of xanthates onto olefins were performed with the new resin **10-b** in comparison with the classical Wang resin.

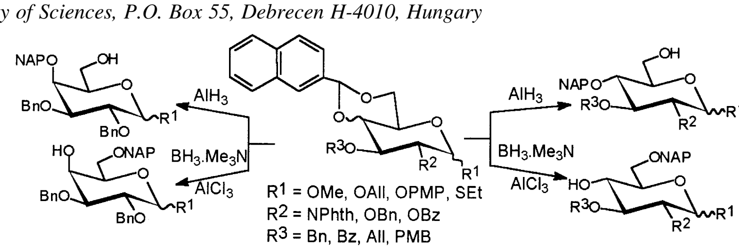


Dioxane-type (2-naphthyl)methylene acetals of glycosides and their hydrogenolytic transformation into 6-*O*- and 4-*O*-(2-naphthyl)methyl (NAP) ethers

Tetrahedron 58 (2002) 5723

Anikó Borbás,[a] Zoltán B. Szabó,[a] László Szilágyi,[b] Attila Bényei[c] and András Lipták[a,d,*]

[a]Research Group for Carbohydrates of the Hungarian Academy of Sciences, P.O. Box 55, Debrecen H-4010, Hungary
[b]Department of Organic Chemistry, Faculty of Science, University of Debrecen, P.O. Box 20, Debrecen H-4010, Hungary
[c]Faculty of Science, Institute of Physical Chemistry, University of Debrecen, P.O. Box 7, Debrecen H-4010, Hungary
[d]Department of Biochemistry, Faculty of Science, University of Debrecen, P.O. Box 55, Debrecen H-4010, Hungary

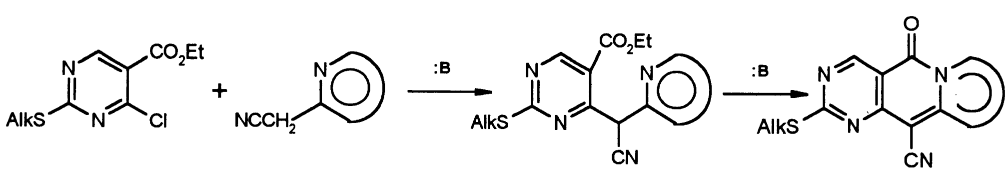


Reaction of 2-hetarylacetonitriles with ethyl 2-alkylsulfanyl-4-chloro-5-pyrimidinecarboxylates. Synthesis of new condensed pyrimidines

Tetrahedron 58 (2002) 5733

E. V. Blyumin,[a] Yu. M. Volovenko,[a] Hans Neunhoeffer,[b,*] S. V. Shishkina,[c] R. A. Zubatyuk[c] and Oleg V. Shishkin[c]

[a]Chemical Department, Kiev Taras Schevchenko University, Volodymyrska 64, Kiev 01033, Ukraine
[b]Institute of Organic Chemistry, Darmstadt University of Technology, Petersenstraße 22, D-64287 Darmstadt, Germany
[c]Scientific Research Department of Alkali Halide Crystals, National Academy of Sciences of Ukraine, 60 Lenina ave., Khar'kov 310001, Ukraine



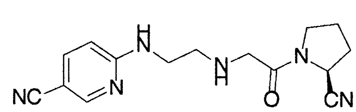
Solid and solution phase syntheses of the 2-cyanopyrrolidide DPP-IV inhibitor NVP-DPP728

Tetrahedron 58 (2002) 5741

Nicolas Willand,[a] Jurgen Joossens,[a] Jean-Claude Gesquière,[a] André L. Tartar,[a] D. Michael Evans[b] and Michael B. Roe[b,*]

[a]Laboratoire de chimie organique, UMR 8525, Faculté des sciences pharmaceutiques et biologiques, 3 rue du Pr. Laguesse, F-59006 Lille Cedex, France
[b]Ferring Research Limited, Chilworth Research Centre, Southampton SO16 7NP, UK

Alternative synthetic approaches to NVP-DPP728 are reported.



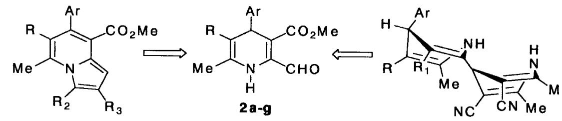
Conformationally constrained 1,4-DHPs. A convenient route to bis-1,4-DHPs as a novel class of nitrogen compounds

Tetrahedron 58 (2002) 5747

Štefan Marchalín,[a] Miloslav Chudík,[a] Katarína Cvopová,[a] Jozef Kozíšek,[b] Ján Leško[c] and Adam Daïch[d,*]

[a]*Department of Organic Chemistry, Faculty of Chemical Technology, Slovak University of Technology, SK-812 37 Bratislava, Slovak Republic*
[b]*Department of Physical Chemistry and Central Laboratory, Faculty of Chemical Technology, Slovak University of Technology, SK-812 37 Bratislava, Slovak Republic*
[c]*Central Laboratory, Faculty of Chemical Technology, Slovak University of Technology, SK-812 37 Bratislava, Slovak Republic*
[d]*Laboratoire de Chimie de l'Université du Havre, Faculté des Sciences and Techniques, URCOM, EA 3221, 25 rue Philippe Lebon, B.P: 540, F-76058 Le Havre Cedex, France*

Various functionalised indolizines and corresponding bis-1,4-DHPs were synthesised efficiently in an acidic medium from 2-formyl-1,4-DHP derivatives **2** in one pot procedure.



R = CO_2iPr, CO_2Me, CN, Ac; R_1 = CO_2Me; R_2 = Me, Ph; R_3 = CN, CO_2Me