

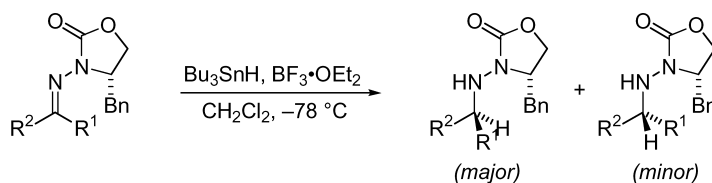
Graphical abstracts

Stereocontrol in hydride addition to ketone-derived chiral *N*-acylhydrazones

Tetrahedron 59 (2003) 6393

Jun Qin and Gregory K. Friestad*

Department of Chemistry, University of Vermont, Cook Physical Sciences Building, Burlington, Vermont 05405 USA



Isolation, structure elucidation and biological activity of hederacine A and B, two unique alkaloids from *Glechoma hederaceae*

Tetrahedron 59 (2003) 6403

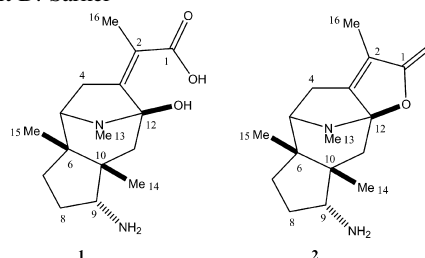
Yashodharan Kumarasamy,^a Philip J. Cox,^a Marcel Jaspars,^b Lutfun Nahar^c and Satyajit D. Sarker^{a*}

^aPhytopharmaceutical Research Laboratory, School of Pharmacy, The Robert Gordon University, Schoolhill, Aberdeen AB10 1FR, UK

^bMarine Natural Products Laboratory, Department of Chemistry, University of Aberdeen, Meston Walk, Old Aberdeen, Aberdeen AB24 3UE, UK

^cJapp Laboratory, Department of Chemistry, University of Aberdeen, Meston Walk, Old Aberdeen, Aberdeen AB24 3UE, UK

Two unique alkaloids, hederacine A (**1**) and hederacine B (**2**), isolated from *Glechoma hederaceae*, showed prominent toxicity in the brine shrimp lethality assay (LC₅₀s=3.2, 14.0 and 2.7 μg/mL, respectively).

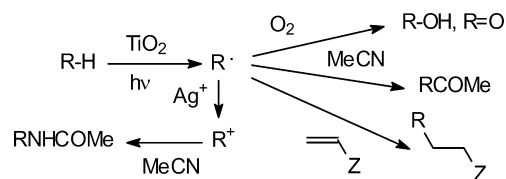


Titanium dioxide photocatalysis of adamantane

Tetrahedron 59 (2003) 6409

Laura Cermenati, Daniele Dondi, Maurizio Fagnoni and Angelo Albini*

Department of Organic Chemistry, University of Pavia, via Taramelli 10, 27100 Pavia, Italy

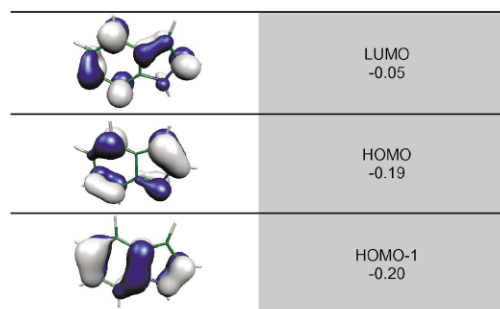


Benzene fused five-membered heterocycles. A theoretical approach

Tetrahedron 59 (2003) 6415

Ana Martínez,* Marco-Vinicio Vázquez, José Luis Carreón-Macedo, Luis E. Sansores and Roberto Salcedo

Instituto de Investigaciones en Materiales, UNAM. Circuito Exterior s/n, Ciudad Universitaria, 04510, Coyoacán, México, DF, Mexico



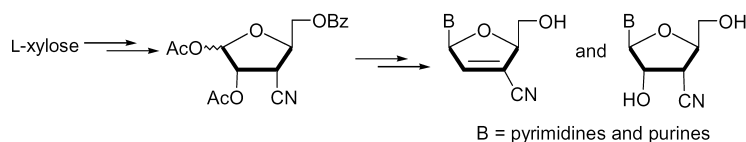
Synthesis and anti-HIV activity of L- β -3'-C-cyano-2',3'-unsaturated nucleosides and L-3'-C-cyano-3'-deoxyribonucleosides

Tetrahedron 59 (2003) 6423

Wei Zhu,^a Giuseppe Gumina,^a Raymond F. Schinazi^b and Chung K. Chu^{a,*}

^aDepartment of Pharmaceutical and Biomedical Sciences, College of Pharmacy, The University of Georgia, Athens, GA 30602-2352, USA

^bEmory University School of Medicine/Veterans Affairs Medical Center, Decatur, GA 30033, USA



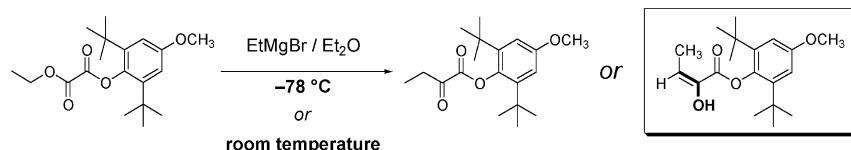
Stable enols from Grignard addition to 1,2-diester: serendipity rules

Tetrahedron 59 (2003) 6433

Olivier J.-C. Nicaise,^{*} Douglas M. Mans, Andrew D. Morrow, Emilio Villa Hefti, Elizabeth M. Palkovacs, Rajesh K. Singh, Malgorzata A. Zukowska and Matthew D. Morin

Department of Chemistry, Saint Louis University, 202 Monsanto Hall, 3501 Laclède Avenue, St Louis, MO 63103-2010, USA

The temperature-dependent generation of a remarkably stable enol from the reaction of a Grignard reagent with a 1,2-diester is reported.

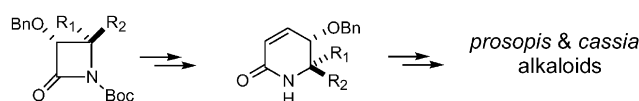


Facile conversion of 2-azetidinones to 2-piperidones: application to a formal synthesis of *Prosopis* and *Cassia* alkaloids

Tetrahedron 59 (2003) 6445

Hyeon Kyu Lee,^{*} Jong Soo Chun and Chwang Siek Pak^{*}

Bio-Organic Science Division, Korea Research Institute of Chemical Technology, P.O. Box 107, Yusong, Taejeon 305-606, South Korea



Synthesis and antiviral activity of scopadulcic acids analogues

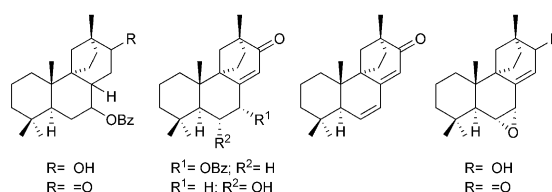
Tetrahedron 59 (2003) 6455

Manuel Arnó,^a Liliana Betancur-Galvis,^b Juan G. Bueno-Sanchez,^b Miguel A. González^{a,*} and Ramón J. Zaragoza^{a,*}

^aDepartamento de Química Orgánica, Universidad de Valencia, E-46100 Burjassot, Valencia, Spain

^bGrupo Infección y Cáncer, Universidad de Antioquia, A.A1226, Medellín, Colombia

The synthesis and antiviral properties of several scopadulcic acid analogues functionalized at C-6/C-7 and C-13 is reported. The preparation of advanced intermediates for the synthesis of scopadulcic acid B/scopadulciol analogues is also described. The biological study revealed the importance of polar groups at C-13, while the stereochemistry at C-8 was not critical for activity.



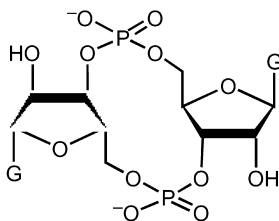
A facile synthesis of cyclic bis(3'→5')diguanilylic acid

Tetrahedron 59 (2003) 6465

Yoshihiro Hayakawa,^{a,b,*} Reiko Nagata,^a Akiyoshi Hirata,^a Mamoru Hyodo^a and Rie Kawai^a

^aLaboratory of Bioorganic Chemistry, Graduate School of Human Informatics, Nagoya University, Chikusa, Nagoya 464-8601, Japan

^bLaboratory of Bioorganic Chemistry, Graduate School of Information Science, Nagoya University, Chikusa, Nagoya 464-8601, Japan



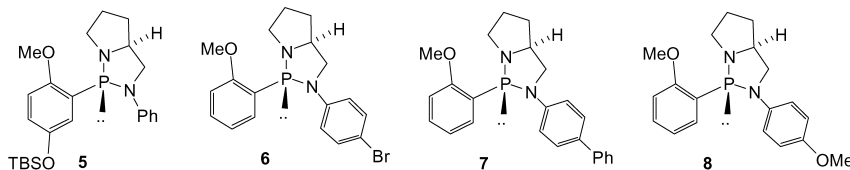
Synthesis and application to asymmetric allylic amination of substituted monodonor diazaphospholidine ligands

Tetrahedron 59 (2003) 6473

Christopher W. Edwards,^a Mark R. Shipton,^b Nathaniel W. Alcock,^a Howard Clase^a and Martin Wills^{a,*}

^aDepartment of Chemistry, University of Warwick, Gibbit Hill Road, Coventry CV4 7AL, UK

^bGlaxoSmithKline Pharmaceuticals PLC, Medicines Research Centre, Gunnels Wood Road, Stevenage, Herts SG1 2NY, UK



A convenient procedure for the synthesis of tetrathia-[7]-helicene and the selective α -functionalisation of terminal thiophene ring

Tetrahedron 59 (2003) 6481

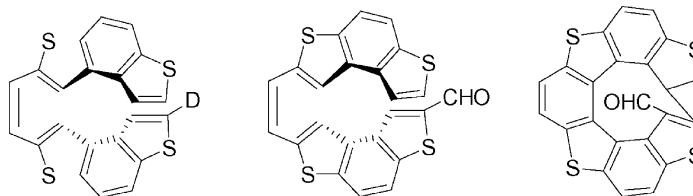
Stefano Maiorana,^{a,*} Antonio Papagni,^b Emanuela Licandro,^a Rita Annunziata,^a Piero Paravidino,^c Dario Perdicchia,^a Clelia Giannini,^a Marco Bencini,^a Koen Clays^d and André Persoons^d

^aDipartimento di Chimica Organica e Industriale, Università degli Studi di Milano, Via C. Golgi 19, 20133 Milano, Italy

^bDipartimento di Scienza dei Materiali, Università degli Studi di Milano 'Bicocca', Via Cozzi 53, 20125 Milano, Italy

^cIsagro Ricerca (Istituto Donegani), Via Fauser 4, 28100 Novara, Italy

^dDepartment of Chemistry, University of Leuven, Celestijnenlaan 200D, B-3001 Leuven, Belgium

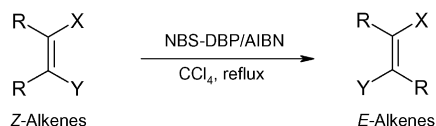


N-Bromosuccinimide-dibenzoyl peroxide/azobisisobutyronitrile: a reagent for Z- to E-alkene isomerization

Tetrahedron 59 (2003) 6489

Md. Merajuddin Baag, Anirban Kar and Narshinha P. Argade*

Division of Organic Chemistry (Synthesis), National Chemical Laboratory, Pashan, Pune 411 008, India



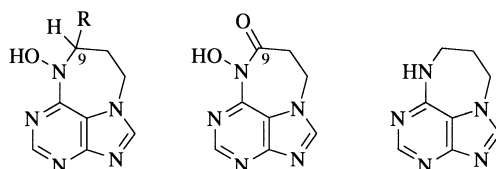
R = H, CO₂H, CO₂Me; X/Y = H, Me, Alkyl, CH₂Br, CHBr₂, Ph, Aryl, CO₂Me, CONHAr

Synthesis of 9-substituted tetrahydrodiazepinopurines— asmarine A analogues

Doron Pappo and Yoel Kashman*

School of Chemistry, Tel-Aviv University, Ramat Aviv 69978, Israel

Tetrahedron 59 (2003) 6493



Stereocontrolled synthesis of imidazo[1,5]hexo- piperidinoses and imidazol-4(5)-yl-C-glycosides

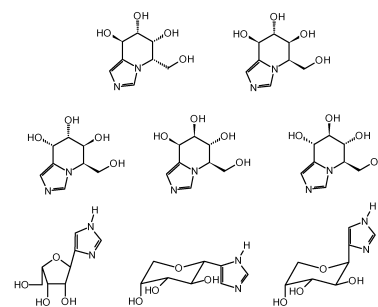
Andrzej Frankowski,^{a,*} Dariusz Deredas,^a Estelle Dubost,^b François Gessier,^b
Stefan Jankowski,^a Markus Neuburger,^c Czesława Seliga,^a Théophile Tschamber^b
and Kamil Weinberg^a

^aInstitute of Organic Chemistry, Technical University of Lodz, ul. Zwirki 36, 90924 Lodz, Poland

^bEcole Nationale Supérieure de Chimie, Université de Haute-Alsace, 3 rue Alfred Werner,
68093 Mulhouse, France

^cInstitut für anorganische Chemie, Universität Basel, Spitalstrasse 51, CH-4056 Basel, Switzerland

Tetrahedron 59 (2003) 6503

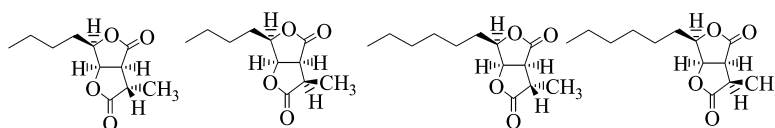


Radical cyclisation approach for the synthesis of (+)-dihydrocanadensolide, (+)-dihydrosporothriolide and their C-3 epimers from D-xylose

G. V. M. Sharma* and T. Gopinath

D-211, Discovery Laboratory, Organic Chemistry Division-III, Indian Institute of Chemical Technology, Hyderabad 500 007, India

Tetrahedron 59 (2003) 6521

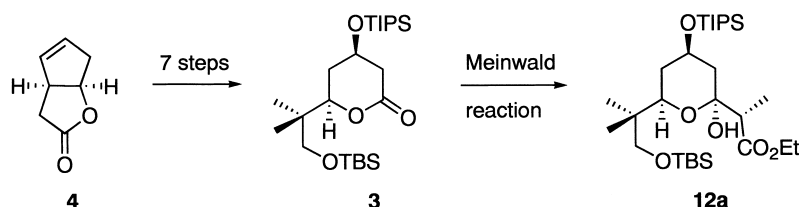


The Meinwald reaction of alkyl propionates. Synthesis of the C1–C9 fragment of aurisides

María-Yolanda Ríos, Francisco Velázquez and Horacio F. Olivo*

Division of Medicinal and Natural Products Chemistry, College of Pharmacy, The University of Iowa, Iowa City, IA 52242, USA

Tetrahedron 59 (2003) 6531



Novel alkaloids of the aptamine class from an Indonesian marine sponge of the genus *Xestospongia*

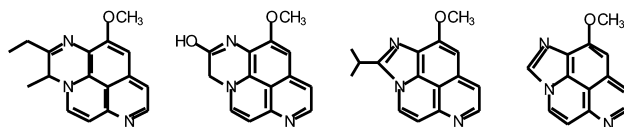
Tetrahedron 59 (2003) 6539

Laurent Calcul,^a Arlette Longeon,^a Ali Al Mourabit,^b Michèle Guyot^a and Marie-Lise Bourguet-Kondracki^{a,*}

^aLaboratoire de Chimie, associé au CNRS, Muséum National d'Histoire Naturelle, 63 rue Buffon, 75005 Paris, France

^bICSN-CNRS, Avenue de la Terrasse, 91198 Gif-sur-Yvette, France

Four novel alkaloids of the aptamine class have been isolated from a *Xestospongia* sp.

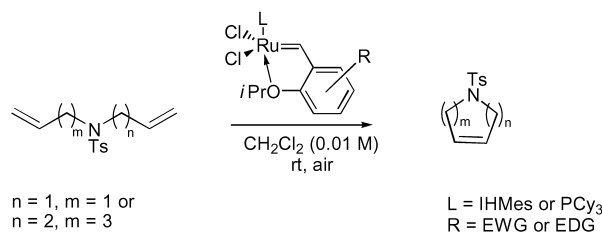


Ruthenium olefin metathesis catalysts with modified styrene ethers: influence of steric and electronic effects

Tetrahedron 59 (2003) 6545

Mirko Zaja, Stephen J. Connon, Aileen M. Dunne, Michael Rivard, Nicole Buschmann, Jan Jiricek and Siegfried Blechert*

Institut für Chemie, Technische Universität Berlin, Strasse des 17 Juni 135, 10623 Berlin, Germany



Rhodium-catalyzed highly selective thioformylation of acetylenes with thiols and carbon monoxide

Tetrahedron 59 (2003) 6559

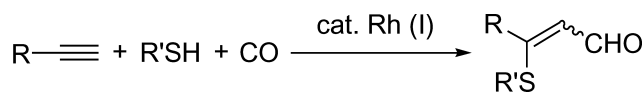
Jun-ichi Kawakami,^a Mitsuhiro Takeba,^b Ikuyo Kamiya,^c Noboru Sonoda^d and Akiya Ogawa^{c,*}

^aChemical Development Laboratories, Takeda Chemical Industries, Ltd., 2-17-85 Jusohonmachi, Yodogawa-ku, Osaka 532-8686, Japan

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

^cDepartment of Chemistry, Faculty of Science, Nara Women's University, Kitauoyanishi-machi, Nara 630-8506, Japan

^dDepartment of Applied Chemistry, Faculty of Engineering, Kansai University, Suita, Osaka 564-0073, Japan



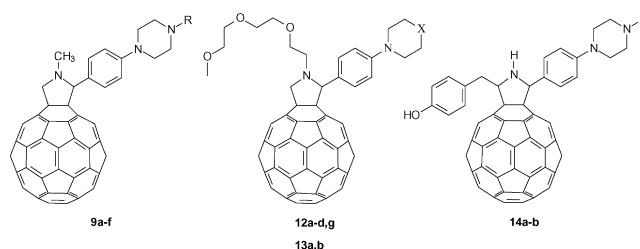
Synthesis of water soluble fulleropyrrolidines bearing biologically active arylpiperazines

Tetrahedron 59 (2003) 6569

Beatriz M. Illescas,^a Roberto Martínez-Alvarez,^a Javier Fernández-Gadea^b and Nazario Martín^{a,*}

^aDepartamento de Química Orgánica, Facultad de Química, Universidad Complutense de Madrid, E-28040 Madrid, Spain

^bDepartamento de Investigación Básica, Janssen-Cilag S.A., C/Jarama s/n, Polígono Industrial, E-45007 Toledo, Spain



Total synthesis of mycothiazole, a polyketide heterocycle from marine sponges

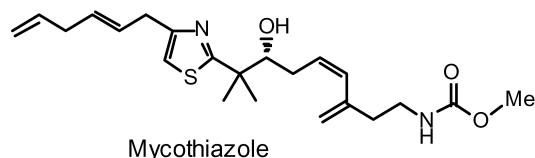
Tetrahedron 59 (2003) 6579

Hideyuki Sugiyama,^a Fumiaki Yokokawa^a and Takayuki Shioiri^{b,*}

^aGraduate School of Pharmaceutical Sciences, Nagoya City University, Tanabe-dori, Mizuho-ku, Nagoya 467-8603, Japan

^bGraduate School of Environmental and Human Sciences, Meijo University, Shiogamaguchi, Tempaku, Nagoya 468-8502, Japan

(*R*) and (*S*)-Mycothiazoles have been efficiently synthesized utilizing the thiazole synthesis by dehydrogenation of the thiazolidine with chemical manganese dioxide (CMD), the Stille coupling, and the Nagao asymmetric acetate aldol reaction using the chiral 1,3-thiazolidine-2-thione as key steps. This synthesis clearly established the absolute configuration of natural mycothiazole to be (*R*).



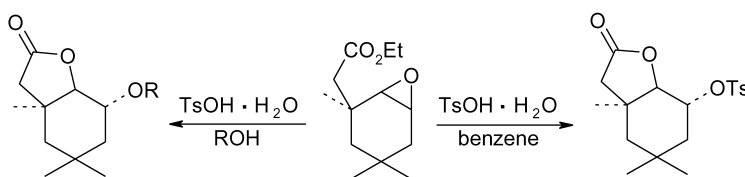
Lactones. Part 16: Lactonization of γ,δ -epoxy esters with *p*-toluenesulfonic acid monohydrate

Tetrahedron 59 (2003) 6595

Czesław Wawrzeńczyk,^{a,*} Małgorzata Grabarczyk,^a Agata Białońska^b and Zbigniew Ciunik^b

^aDepartment of Chemistry, Agricultural University, Norwida 25, 50-375 Wrocław, Poland

^bFaculty of Chemistry, University of Wrocław, F. Joliot-Curie 14, 50-383 Wrocław, Poland



Four new andrographolide metabolites in rats

Tetrahedron 59 (2003) 6603

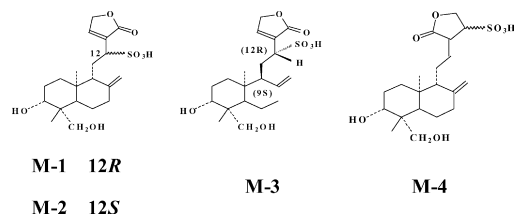
Xiangjiu He,^a Jiankuan Li,^a Hao Gao,^a Feng Qiu,^a Ke Hu,^b Xiangmin Cui^c and Xinsheng Yao^{a,*}

^aDepartment of Natural Products Chemistry, Shenyang Pharmaceutical University, Shenyang 110016, People's Republic of China

^bDepartment of Pharmaceutical Sciences, School of Pharmacy and Pharmaceutical Sciences, State University of New York, Buffalo, USA

^cPan-Pacific Pharmaceutical Company Ltd., Lincoln, USA

Four new sulfonate metabolites of andrographolide were isolated from urine and feces in rats. They were formed through a new metabolic reaction and were new compounds.

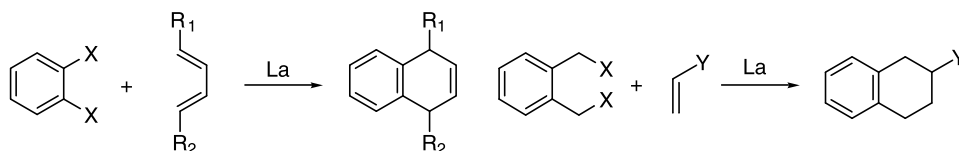


Dehalogenation of *o*-dihalogen substituted arenes and α,α' -dihalogen substituted *o*-xylenes with lanthanum metal

Tetrahedron 59 (2003) 6609

Yutaka Nishiyama,^{*} Hiroshi Kawabata, Toshiki Nishino, Kouji Hashimoto and Noboru Sonoda^{*}

Department of Applied Chemistry, Faculty of Engineering, Kansai University, Suita, Osaka 564-8680, Japan

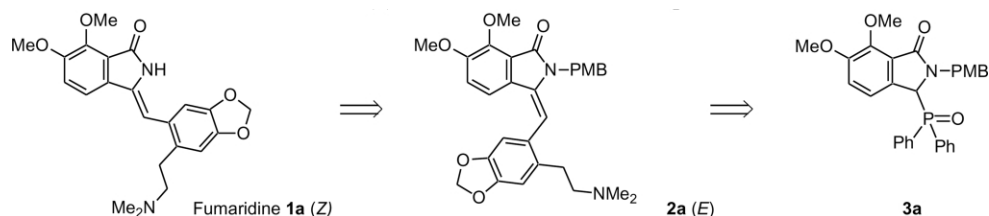


First total synthesis of fumaridine

Tetrahedron 59 (2003) 6615

Véronique Rys, Axel Couture,* Eric Deniau and Pierre Grandclaoudon

Laboratoire de Chimie Organique Physique, UMR 8009 Chimie Organique et Macromoléculaire, Université des Sciences et Technologies de Lille, Bâtiment C3(2), 59655 Villeneuve d'Ascq Cédex, France

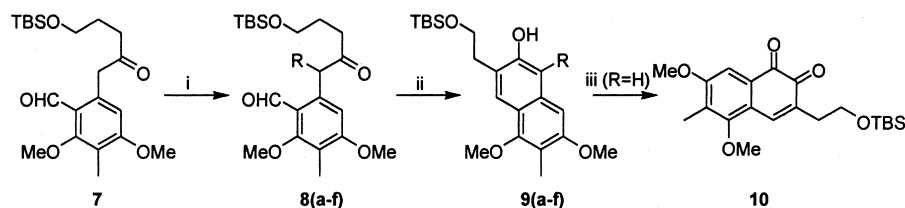


A practical procedure for multisubstituted β -naphthols and their derivatives

Tetrahedron 59 (2003) 6621

Wan-Guo Wei and Zhu-Jun Yao*

State Key Laboratory of Bioorganic and Natural Products Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Road, Shanghai 200032, People's Republic of China

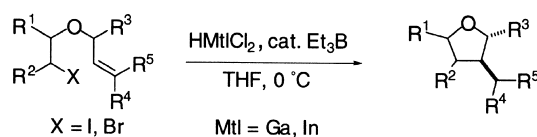


Triethylborane-induced radical reactions with gallium- and indium hydrides

Tetrahedron 59 (2003) 6627

Kazuaki Takami, Satoshi Mikami, Hideki Yorimitsu, Hiroshi Shinokubo and Koichiro Oshima*

Department of Material Chemistry, Graduate School of Engineering, Kyoto University, Yoshida, Sakyo-ku, Kyoto 606-8501, Japan



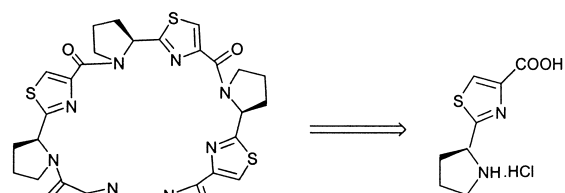
Synthesis of novel proline-thiazole based cyclic hexa- and octapeptides

Tetrahedron 59 (2003) 6637

Sarva Jayaprakash, Gerald Pattenden,* Murray S. Viljoen and Claire Wilson

School of Chemistry, The University of Nottingham, University Park, Nottingham NG7 2RD, UK

Novel proline-thiazole based cyclopeptides were produced by cyclooligomerisation of an *L*-proline thiazole amino acid HCl in the presence of pentafluorophenyl diphenylphosphinate or diphenyl phosphorazidate.



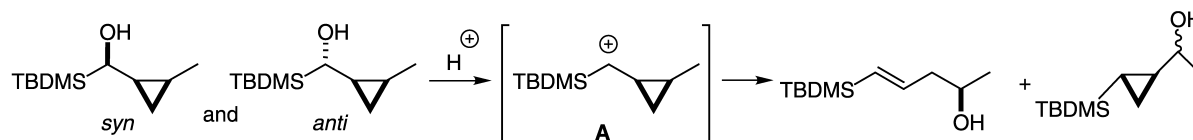
Acid-catalyzed rearrangement of α -hydroxytrialkylsilanes

Tetrahedron 59 (2003) 6647

Kazuhiko Sakaguchi*, Masato Higashino and Yasufumi Ohfuné*

Department of Material Science, Graduate School of Science, Osaka City University, Sugimoto, Sumiyoshi, Osaka 558-8585, Japan

Treatment of both optically active *syn*- and *anti*- α -hydroxycyclopropylsilanes under aqueous H_2SO_4 underwent rearrangement via a common α -silyl cation intermediate **A** to give a mixture of the ring-opened vinylsilane and silylcyclopropanes in an optically active form. The reactivities of some other α -substituted- α -hydroxysilanes under acidic conditions are also disclosed.



Synthesis of 4-substituted azepino[3,4-*b*]indole-1,5-diones

Tetrahedron 59 (2003) 6659

Julien Perron,^a Benoît Joseph^b and Jean-Yves Méroux^{a,*}

^a*Institut de Chimie Organique et Analytique, UMR-CNRS 6005, Université d'Orléans, BP 6759, 45067 Orléans Cedex 2, France*

^b*Laboratoire de Chimie Organique 1, Université Claude Bernard-Lyon 1, UMR-CNRS 5622, CPE-Bâtiment 308, 43 Boulevard du 11 Novembre 1918, 69622 Villeurbanne Cedex, France*

