Graphical abstracts

Proazaphosphatranes: a synthesis methodology trip from their discovery to vitamin A

Tetrahedron 59 (2003) 7819

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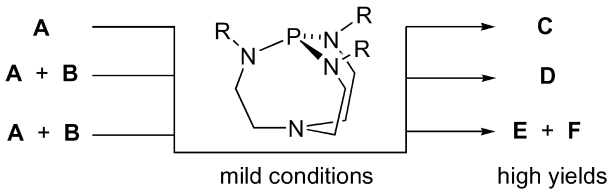
[b]*Syracuse Research Center, Albany Molecular Research Inc., 7001 Performance Drive, North Syracuse, NY 13212, USA*



Rapid and diverse route to natural product-like biaryl ether containing macrocycles

Tetrahedron 59 (2003) 7859

Pierre Cristau,[a] Jean-Pierre Vors[b] and Jieping Zhu[a,*]

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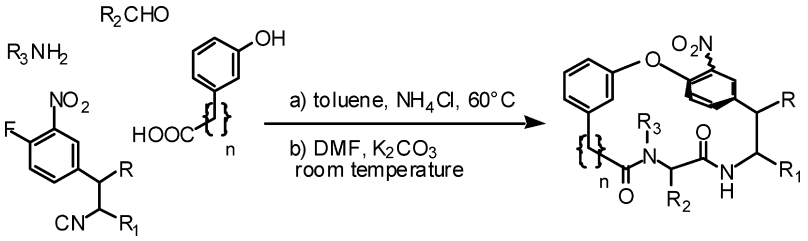
[b]*Bayer CropScience, 14-20 Rue Pierre Baizet, Lyon 69009, France*

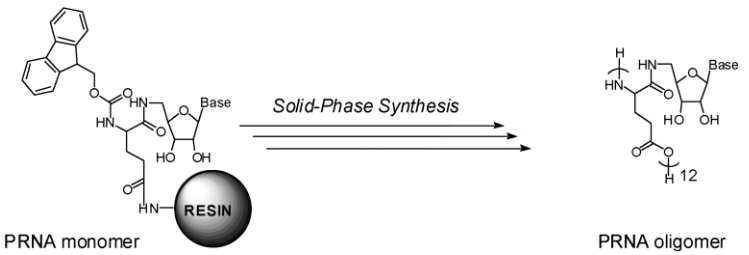


Solid-phase synthesis of peptide ribonucleic acids (PRNA)

Tetrahedron 59 (2003) 7871

Hirofumi Sato,[a] Yusuke Hashimoto,[a] Takehiko Wada[a,*] and Yoshihisa Inoue[a,b,*]

[a]*Department of Molecular Chemistry, Graduate School of Engineering, Osaka University, 2-1 Yamada-oka, Suita Osaka 565-0871, Japan*
[b]*ICORP Entropy Control Project, JST, 4-6-3 Kamishinden, Toyonaka 565-0085, Japan*

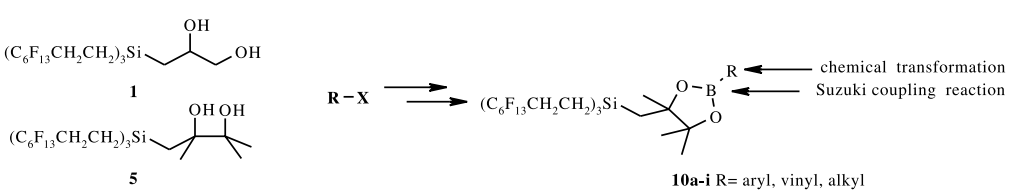


Preparation, properties and synthetic potentials of fluorous boronates

Tetrahedron 59 (2003) 7879

Yangen Huang,[a] Dajun Chen[a] and Feng-Ling Qing[a,b,*]

[a]*Key Laboratory of Organofluorine Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, People's Republic of China*
[b]*College of Chemistry and Chemistry Engineering, Donghua University, 1882 West Yanan Lu, Shanghai 200051, People's Republic of China*

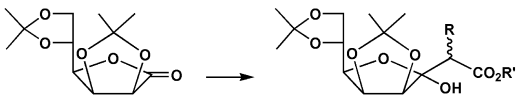


Synthesis of α-substituted 3-ulosonic acids from aldonolactones

Tetrahedron 59 (2003) 7887

René Csuk,[a,*] Ulrike Franke (nee Höring),[a] Zhong Hu[a] and Claus Krieger[b]

[a]*Institut für Organische Chemie, Martin-Luther-Universität Halle-Wittenberg, Kurt-Mothes-Str. 2, D-06120 Halle (Saale), Germany*
[b]*Max-Planck-Institut für Medizinische Forschung, Jahnstraße 29, D-69120 Heidelberg, Germany*



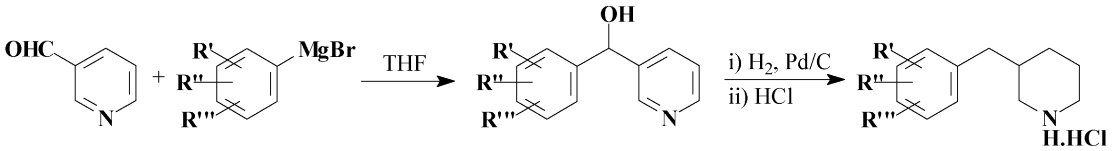
A facile synthesis of 3-(substituted benzyl)piperidines

Tetrahedron 59 (2003) 7897

Béla Ágai,[a] Adrienn Nádor,[a] Ágnes Proszenyák,[a] Gábor Tárkányi[b] and Ferenc Faigl[a,*]

[a]*Department of Organic Chemical Technology, Budapest University of Technology and Economics and Research Group of Hungarian Academy of Sciences, Műegyetem rkp. 3, 1111 Budapest, Hungary*
[b]*Gedeon Richter Ltd., Gyömrői út 19-21, H-1475 Budapest, Hungary*

A convenient method has been developed for preparation a series of new 3-(substituted benzyl)piperidines.

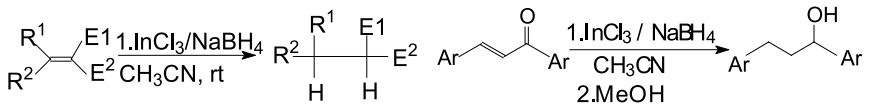


Reduction of activated conjugated alkenes by the $InCl_3$–$NaBH_4$ reagent system

Tetrahedron 59 (2003) 7901

Brindaban C. Ranu* and Sampak Samanta

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

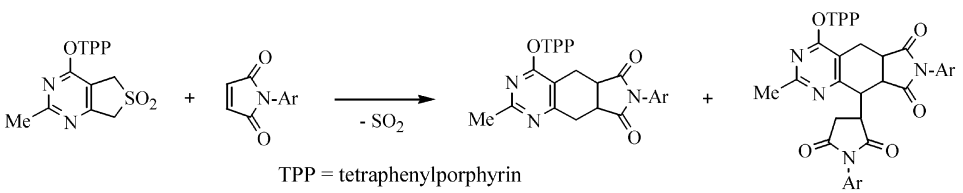


Novel porphyrin–quinazoline conjugates via the Diels–Alder reaction

Tetrahedron 59 (2003) 7907

João P. C. Tomé,[a] Augusto C. Tomé,[a] Maria G. P. M. S. Neves,[a] Filipe A. Almeida Paz,[b] Paul J. Gates,[b] Jacek Klinowski[b] and José A. S. Cavaleiro[a,*]

[a]*Department of Chemistry, University of Aveiro, 3810-193 Aveiro, Portugal*
[b]*Department of Chemistry, University of Cambridge, Lensfield Road, Cambridge CB2 1EW, UK*



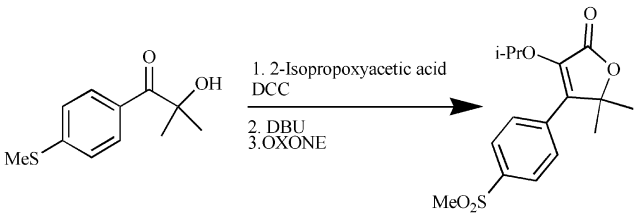
TPP = tetraphenylporphyrin

An improved and practical synthesis of 5,5-dimethyl-3-(2-propoxy)-4-(4-methanesulfonylphenyl)-2-(5*H*)-furanone (DFP—a selective inhibitor of cyclooxygenase-2)

Tetrahedron 59 (2003) 7915

Srinivas Padakanti, Manojit Pal* and Koteswar Rao Yeleswarapu*

Chemistry-Discovery Research, Dr. Reddy's Laboratories Ltd., Bollaram Road, Miyapur, Hyderabad 500 050, India



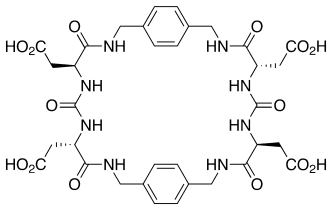
Synthesis of chiral, amphiphilic, and water-soluble macrocycles via urea formation

Tetrahedron 59 (2003) 7921

Tapes Bhattacharyya, Anders Sundin and Ulf J. Nilsson*

Organic and Bioorganic Chemistry, Lund University, POB 124, SE-221 00 Lund, Sweden

Chiral, amphiphilic, and water-soluble macrocycles were synthesized by *p*-nitrophenyl chloroformate-mediated cross-linking of *p*-xylylenediamine derivatives acylated with amino acids. Two aspartic acid-containing macrocycles bound L-arginine and L-arginine methyl ester in PBS buffer.

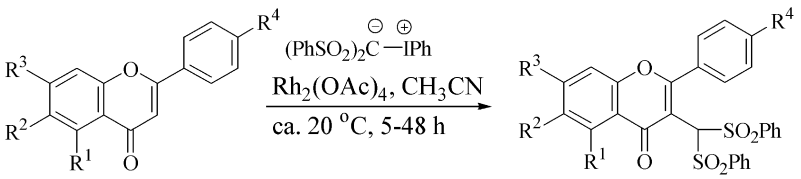


Alkenyl C–H insertion of a β-disulfone iodonium ylide into flavones

Tetrahedron 59 (2003) 7929

Waldemar Adam,[a] Efstathios P. Gogonas[a,b] and Lazaros P. Hadjiarapoglou[b,*]

[a]*Institute of Organic Chemistry, University of Würzburg, Am Hubland, D-97074 Würzburg, Germany*
[b]*Section of Organic Chemistry and Biochemistry, Department of Chemistry, University of Ioannina, Ioannina GR-45110, Greece*

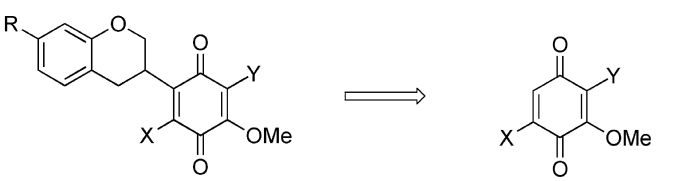


A direct route to isoflavan quinones. The synthesis of colutequinones A and B

Tetrahedron 59 (2003) 7935

George A. Kraus* and Ikyon Kim

Department of Chemistry, Iowa State University, 2759 Gilman Hall, Ames, IA 50011, USA



1: R,Y = OMe, X = H
2: R,X = OMe, Y = H
3: R = OH, X,Y = H

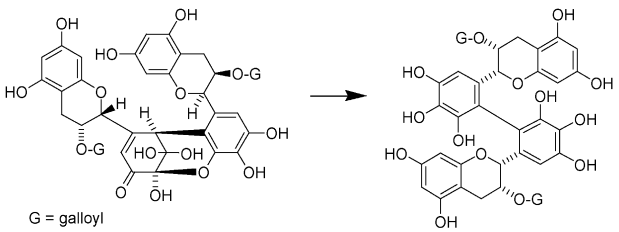
4: X = OMe, Y = H
5: X = H, Y = OMe

Production of theasinensins A and D, epigallocatechin gallate dimers of black tea, by oxidation–reduction dismutation of dehydrotheasinensin A

Tetrahedron 59 (2003) 7939

Takashi Tanaka, Sayaka Watarumi, Yosuke Matsuo, Midori Kamei and Isao Kouno*

Department of Molecular Medicinal Sciences, Graduate School of Biomedical Sciences, Nagasaki University, Bunkyo Machi 1-14, Nagasaki 852-8521, Japan

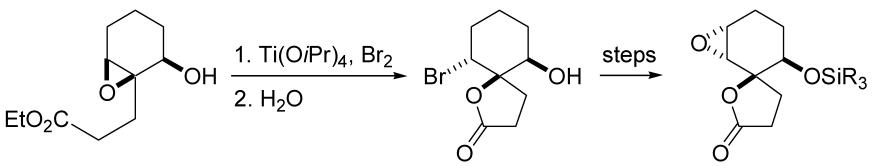


Use of epoxidation and epoxide opening reactions for the synthesis of highly functionalized 1-oxaspiro[4.5]decan-2-ones and related compounds

Tetrahedron 59 (2003) 7949

Martin Eipert,[a] Cäcilia Maichle-Mössmer[b] and Martin E. Maier[a,*]

[a]*Institut für Organische Chemie, Universität Tübingen, Auf der Morgenstelle 18, 72076 Tübingen, Germany*
[b]*Institut für Anorganische Chemie, Universität Tübingen, Auf der Morgenstelle 18, 72076 Tübingen, Germany*

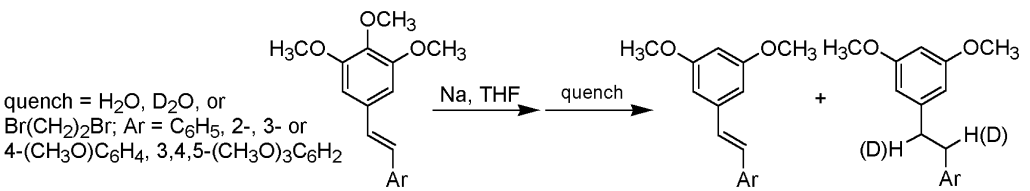


Regioselective reductive demethoxylation of 3,4,5-trimethoxystilbenes

Tetrahedron 59 (2003) 7961

Ugo Azzena,* Giovanna Dettori, Maria Vittoria Idini, Luisa Pisano and Grazia Sechi

Dipartimento di Chimica, Università di Sassari, via Vienna 2, I 07100 Sassari, Italy



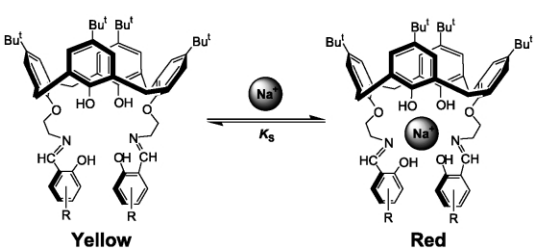
Synthesis of novel *p-tert*-butyl-calix[4]arene derivatives and their cation binding ability: chromogenic effect upon side arms binding

Tetrahedron 59 (2003) 7967

Yu Liu,* Hao Wang, Li-Hua Wang, Zhe Li, Heng-Yi Zhang and Qiang Zhang

Department of Chemistry, State Key Laboratory of Elemento-Organic Chemistry, Nankai University, Weijin Road 94, Tianjin 300071, People's Republic of China

A series of novel double-armed calix[4]arene derivatives have been synthesized as a selective chromoionophore for Na^+.

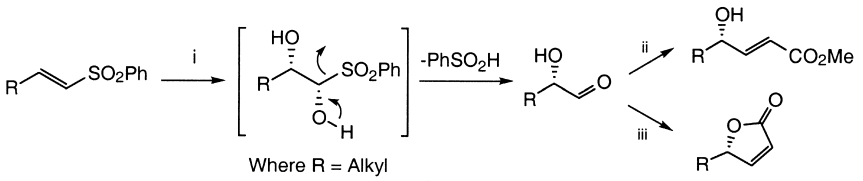


Asymmetric dihydroxylation of vinyl sulfones: routes to enantioenriched α-hydroxyaldehydes and the enantioselective syntheses of furan-2(5*H*)-ones

Tetrahedron 59 (2003) 7973

Paul Evans* and Mélanie Leffray

Department of Chemistry, University of Liverpool, Liverpool L69 7ZD, UK



i, AD mix -α; ii, NaH, $(EtO)_2POCH_2CO_2Me$; or iii, NaH, $(F_3CCH_2O)_2POCH_2CO_2Me$; 20-50%; 88-95% e.e.

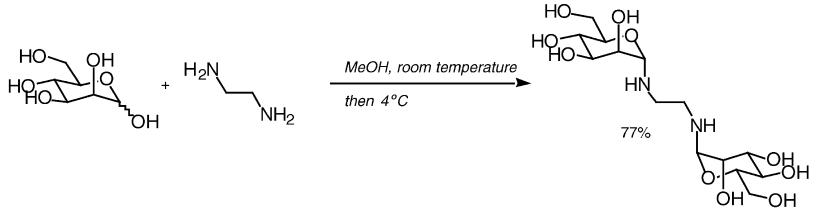
One-pot synthesis of multivalent arrays of mannose mono- and disaccharides

Tetrahedron 59 (2003) 7983

Wayne Hayes,[a] Helen M. I. Osborn,[a,*] Sadie D. Osborne,[a] Robert A. Rastall[b] and Barbara Romagnoli[a]

[a]*School of Chemistry, University of Reading, Whiteknights, Reading RG6 6AD, UK*
[b]*School of Food Bioscience, University of Reading, Whiteknights, Reading RG6 6AP, UK*

The synthesis of multivalent arrays of mannose mono- and disaccharides is achieved by condensation reactions between di- to hexavalent amines with either D-mannose or Man α-1,2-Man or Man α-1,3-Man. No protecting groups are utilised within this strategy.



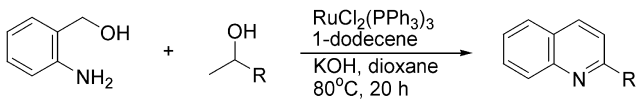
Ruthenium-catalyzed oxidative coupling and cyclization between 2-aminobenzyl alcohol and secondary alcohols leading to quinolines

Tetrahedron 59 (2003) 7997

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

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

2-Aminobenzyl alcohol is oxidatively coupled and cyclized with secondary alcohols under $RuCl_2(PPh_3)_3$/KOH/1-dodecene/dioxane/80°C to afford quinolines.

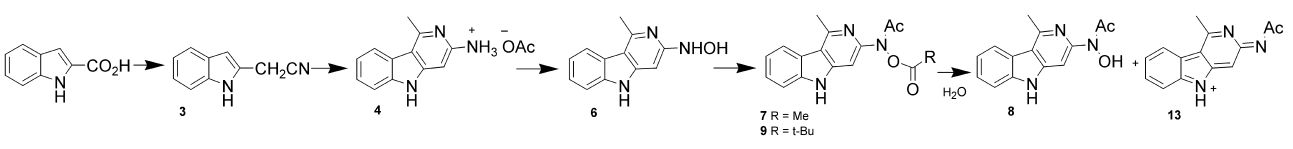


Synthesis and characterization of the aqueous solution chemistry of the food-derived carcinogen model *N*-acetoxy-*N*-(1-methyl-5*H*-pyrido[4,5-*b*]indol-3-yl)acetamide and its *N*-pivaloyloxy analogue

Tetrahedron 59 (2003) 8003

Sridharan Rajagopal, Michael E. Brooks, Thach-Mien Nguyen and Michael Novak*

Department of Chemistry and Biochemistry, Hughes Laboratory, Miami University, Oxford, OH 45056, USA



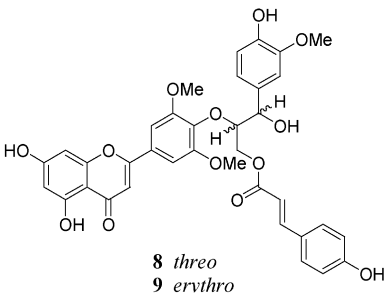
Six new flavonolignans from *Sasa veitchii* (Carr.) Rehder

Tetrahedron 59 (2003) 8011

Yuki Nakajima, Young Sook Yun and Akira Kunugi*

Graduate School of Life Science, Tokyo University of Pharmacy and Life Science, 1432-1 Horinouchi, Hachioji, Tokyo 192-0392, Japan

From dry leaves of *Sasa veitchii* (Carr.) Rehder, six new flavonolignans **4**–**9**, each consisting of a tricin unit linked to a guaiacylglyceryl derivative, were isolated, and their structures were determined on the basis of spectroscopic data and chemical evidence. These flavonolignans were found to be three pairs of regioisomers.



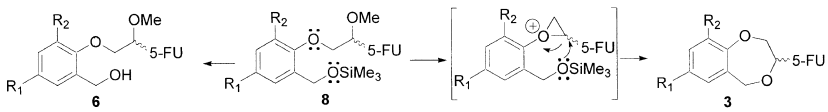
8 *threo*
9 *ervthro*

Neighbouring-group participation as the key step in the reactivity of acyclic and cyclic salicyl-derived *O,O*-acetals with 5-fluorouracil. Antiproliferative activity, cell cycle dysregulation and apoptotic induction of new *O,N*-acetals against breast cancer cells

Tetrahedron 59 (2003) 8017

Estrella Saniger,[a] Joaquín M. Campos,[a] Antonio Entrena,[a] Juan A. Marchal,[b] Houria Boulaiz,[c] Antonia Aránega,[c] Miguel Á. Gallo[a] and Antonio Espinosa[a,*]

[a]*Departamento de Química Farmacéutica y Orgánica, Facultad de Farmacia, c/ Campus de Cartuja s/n, 18071 Granada, Spain*
[b]*Departamento de Ciencias de la Salud, Facultad de Ciencias Experimentales y de la Salud, Paraje de las Lagunillas s/n, 23071 Jaén, Spain*
[c]*Departamento de Ciencias Morfológicas, Facultad de Medicina, Avenida de Madrid s/n, 18071 Granada, Spain*



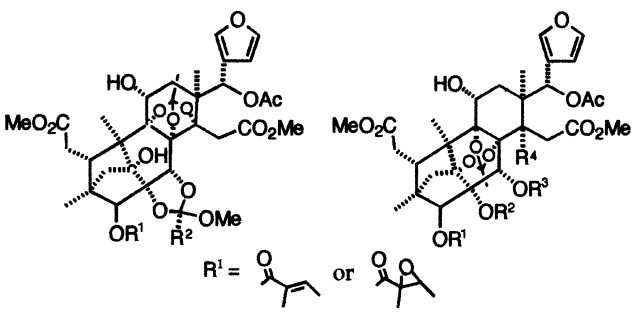
R_1 and R_2 Electron-neutral or -releasing groups lead **8** to **3**; R_1 electron-withdrawing groups lead **8** to **6** (R_2 = H)

Swietenialides, novel ring D opened phragmalin limonoid orthoesters from *Swietenia mahogani* JACQ.

Tetrahedron 59 (2003) 8027

Mona M. G. Saad,[a] Tetsuo Iwagawa,[a] Matsumi Doe[b] and Munehiro Nakatani[a,*]

[a]*Faculty of Science, Department of Chemistry and Bioscience, Kagoshima University, 1-21-35 Korimoto, Kagoshima 890-0065, Japan*
[b]*Department of Chemistry, Graduate School of Science, Osaka City University, 3-3-138 Sugimoto, Sumiyoshiku, Osaka 558-8585, Japan*

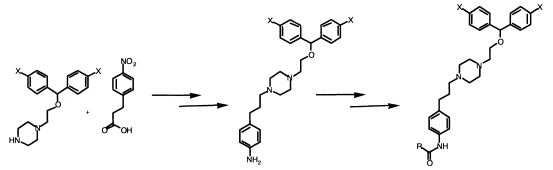


The design and synthesis of novel derivatives of the dopamine uptake inhibitors GBR 12909 and GBR 12935. High-affinity dopaminergic ligands for conjugation with highly fluorescent cadmium selenide/zinc sulfide core/shell nanocrystals

Tetrahedron 59 (2003) 8035

Ian D. Tomlinson,[a] John Mason,[b] Jon N. Burton,[a] Randy Blakely[b] and Sandra J. Rosenthal[a,*]

[a]*Department of Chemistry, Vanderbilt University, Station B, 351822, Nashville, TN 37235-1822, USA*
[b]*Department of Pharmacology, Vanderbilt University School of Medicine, Vanderbilt University, Nashville, TN, USA*



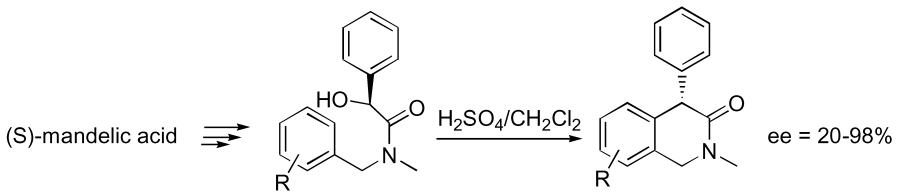
(4) R = CH_3, X = H
(7) R = $CH_2OCH_2CH_2OCH_2CH_2SH$, X = H
(12) R = $(CH_2)_{10}SH$, X = H
(18) R = $(CH_2)_{10}SH$, X = F

Highly stereoselective Friedel–Crafts type cyclization. Facile access to enantiopure 1,4-dihydro-4-phenyl isoquinolinones

Tetrahedron 59 (2003) 8049

Nicolas Philippe,[a] François Denivet,[a] Jean-Luc Vasse,[a] Jana Sopkova-de Olivera Santos,[b] Vincent Levacher[a,*] and Georges Dupas[a]

[a]*Laboratoire de Chimie Organique Fine et Hétérocyclique associé au CNRS, IRCOF-INSA, B.P. 08, F-76131 Mont Saint Aignan Cédex, France*
[b]*UFR des Sciences Pharmaceutiques (CERMN). 5 rue Vaubénard F-14032 Caen, France*



First total syntheses of the 1,2,3,4-tetrahydronaphtho [2,1-*f*]isoquinolines annoretine and litebamine

Tetrahedron 59 (2003) 8057

M. Carme Pampín,[a] Juan C. Estévez,[a] Ramón J. Estévez,[a,*] Rafael Suau[b] and Luis Castedo[a]

[a]*Departamento de Química Orgánica, Universidade de Santiago, E-15782 Santiago de Compostela, Spain*
[b]*Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Málaga, E-29071 Málaga, Spain*