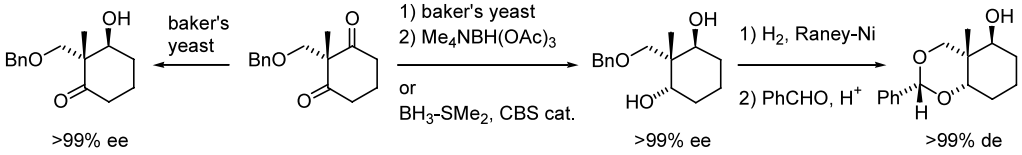
Preparation of new chiral building blocks via asymmetric catalysis

Tetrahedron Letters 44 (2003) 7239

Mitsuhiro Iwamoto, Hatsuo Kawada, Tomoyuki Tanaka and Masahisa Nakada*

Department of Chemistry, School of Science and Engineering, Waseda University, 3-4-1 Ohkubo, Shinjuku-ku, Tokyo 169-8555, Japan



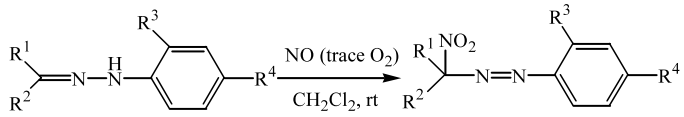
A novel reaction of ketone arylhydrazones with nitric oxide

Tetrahedron Letters 44 (2003) 7245

Desuo Yang,[a,b] Liandi Lei,[a] Zhongquan Liu[a] and Longmin Wu[a,*]

[a]*State Key Laboratory of Applied Organic Chemistry, Lanzhou University, Lanzhou 730000, PR China*
[b]*Department of Chemistry & Engineering, Baoji College of Arts & Science, Baoji Shaanxi 721007, PR China*

Reaction of nitric oxide with ketone arylhydrazones affords C1′-nitro azo-compounds.

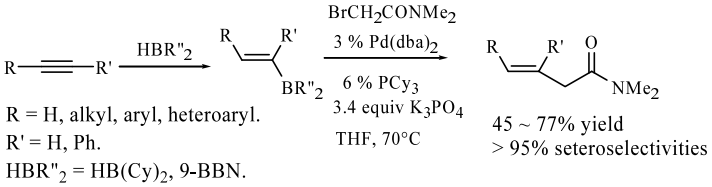


Palladium-catalyzed stereoselective synthesis of (*E*)-β,γ-unsaturated amides

Tetrahedron Letters 44 (2003) 7249

Fen-Tair Luo,[a,*] Ting-Yi Lu[b] and Cuihua Xue[a]

[a]*Institute of Chemistry, Academia Sinica, Nankang, Taipei, Taiwan 11529*
[b]*Department of Chemistry and Biochemistry, National Chung Cheng University, Chia-Yi, Taiwan 621*



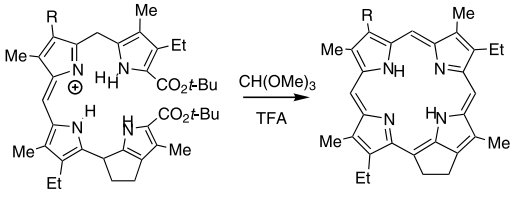
Total synthesis of the porphyrin mineral abelsonite and related petroporphyrins with five-membered exocyclic rings

Tetrahedron Letters 44 (2003) 7253

Bo Zhang and Timothy D. Lash*

Department of Chemistry, Illinois State University, Normal, IL 61790-4160, USA

Eastern ring closure of *b*-bilenes with TFA and trimethyl orthoformate affords a series of three geochemically important porphyrins, including DPEP and the mineral abelsonite, in excellent yields.

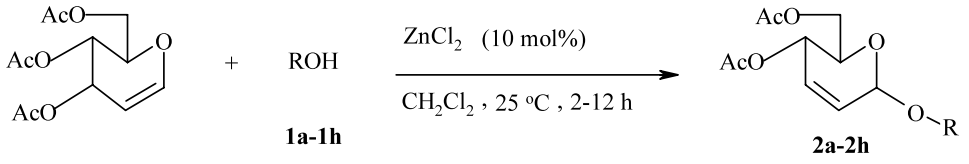


$ZnCl_2$-catalyzed Ferrier reaction; synthesis of 2,3-unsaturated 1-*O*-glucopyranosides of allylic, benzylic and tertiary alcohols

Tetrahedron Letters 44 (2003) 7257

B. K. Bettadaiah and P. Srinivas*

Central Food Technological Research Institute, Mysore 570013, India



R = Allylic, benzylic, tertiary

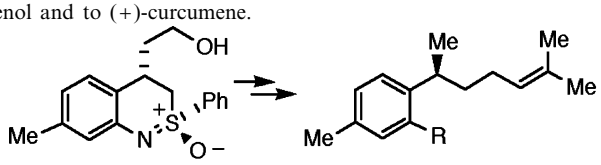
Benzothiazines in synthesis. Formal syntheses of (+)-curcumene and (+)-curcuphenol

Tetrahedron Letters 44 (2003) 7261

Michael Harmata,* Xuechuan Hong and Charles L. Barnes

Department of Chemistry, University of Missouri-Columbia, Columbia, MO 65211, USA

A benzothiazine readily available in enantiomerically pure form via a stereoselective, intramolecular Michael addition reaction could be converted to a precursor to (+)-curcuphenol and to (+)-curcumene.



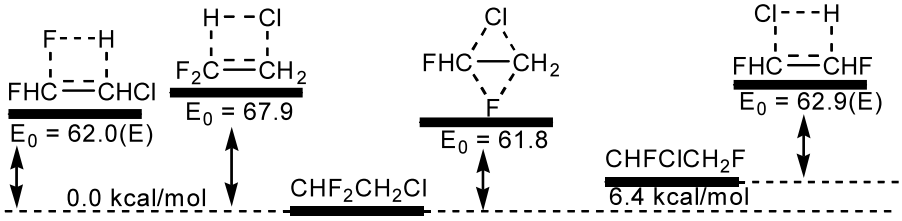
R = H, (+)-curcumene
R = OH, (+)-curcuphenol

Theoretical calculations of product percentage yields for the thermal decomposition of 2-chloro-1,1-difluoroethane

Tetrahedron Letters 44 (2003) 7265

Melinda R. Beaver, George L. Heard and Bert E. Holmes*

Department of Chemistry, University of North Carolina at Asheville, Asheville, NC 28804, USA



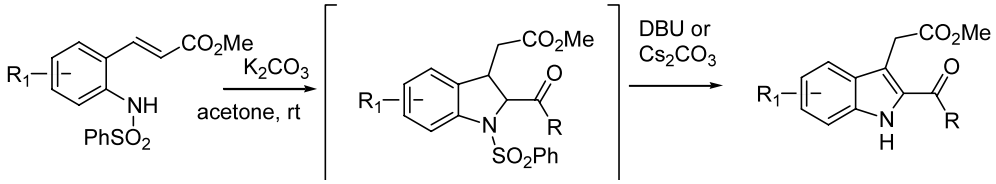
Threshold energies calculated at B3PW91/6-311+G(2d,p)

Synthesis of 2-acylindole-3-acetic acids: a novel base-mediated indole synthesis

Tetrahedron Letters 44 (2003) 7269

Kazunari Nakao, Yoshinori Murata, Hiroki Koike, Chikara Uchida, Kiyoshi Kawamura, Sachiko Mihara, Shigeo Hayashi and Rodney W. Stevens*

Discovery Chemistry Research, Nagoya Laboratories, Global Research & Development, Pfizer Inc., 5-2 Taketoyo, Aichi 470-2393, Japan



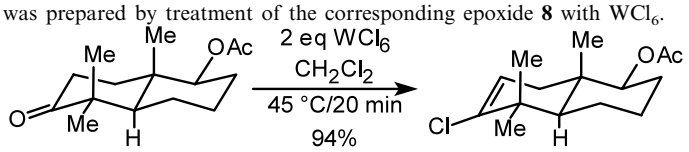
Tetrahedron Letters 44 (2003) 7273

Efficient synthesis of vinyl chlorides and/or *gem*-dichlorides from ketones by treatment with tungsten hexachloride

Michael E. Jung* and Jacob I. Wasserman

Department of Chemistry and Biochemistry, University of California, Los Angeles, 405 Hilgard Ave, Los Angeles, CA 90095-1569, USA

Treatment of cyclic ketones, e.g. **4**, with tungsten hexachloride provided good yields of vinyl chlorides, e.g. **5**, and/or *gem*-dichlorides. A *trans*-diequatorial dichloride **9** was prepared by treatment of the corresponding epoxide **8** with WCl_6.



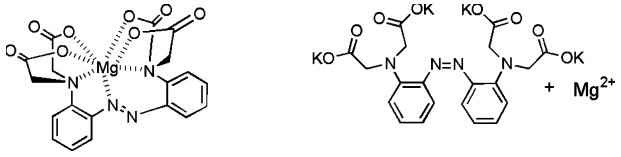
4 **5**

Tetrahedron Letters 44 (2003) 7277

A new class of azobenzene chelators for Mg^{2+} and Ca^{2+} in buffer at physiological pH

Atsuya Momotake and Tatsuo Arai*

University of Tsukuba, Tennnodai 1-1-1, Tsukuba 305-8571, Japan



[*trans*-3a+Mg-4K]$^{2-}$ higher affinity

***cis*-3a** lower affinity

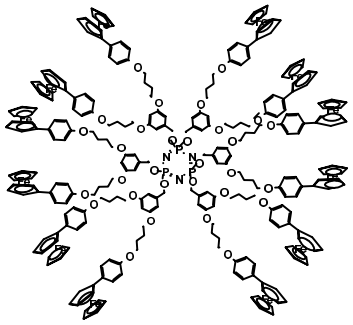
Tetrahedron Letters 44 (2003) 7281

A ferrocene dendrimer based on a cyclotriphosphazene core

Saumitra Sengupta*

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

All 12 ferrocene units are electrochemically equivalent.

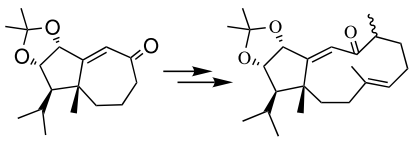


Tetrahedron Letters 44 (2003) 7285

Studies towards the total synthesis of novel dolabellane-type diterpenoids: construction of the 5,11-fused bicyclic framework

Goverdhan Mehta* and Jayant D. Umarye

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

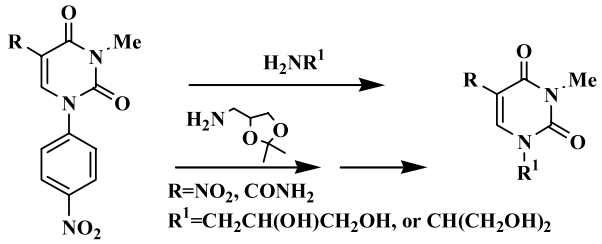


Tetrahedron Letters 44 (2003) 7291

Synthesis of 1-(dihydroxypropyl)-5-substituted uracils

Andrzej Gondela and Krzysztof Walczak*

Institute of Organic Chemistry and Technology, Silesian University of Technology, Krzywoustego 4, 44-100 Gliwice, Poland

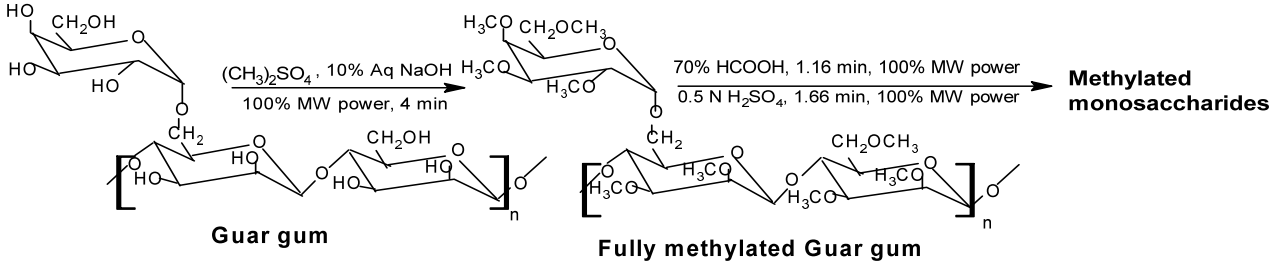


Tetrahedron Letters 44 (2003) 7295

Microwave promoted methylation of plant polysaccharides

Vandana Singh,* Ashutosh Tiwari, Devendra Narayan Tripathi and Tulika Malviya

Department of Chemistry, University of Allahabad, Allahabad 211002, India



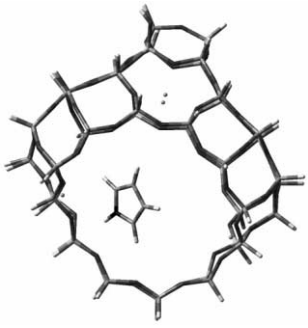
Tetrahedron Letters 44 (2003) 7299

The cation-π cloud interaction and the zeolite basicity concept

Rodrigo J. Corrêa*

Instituto de Química, Departamento de Química Orgânica, Universidade Federal do Rio de Janeiro, Cidade Universitária, CT Bloco A, Ilha do Fundão, Rio de Janeiro/RJ, Brazil, 21949-900

Pyrrole inside Y zeolite cage.

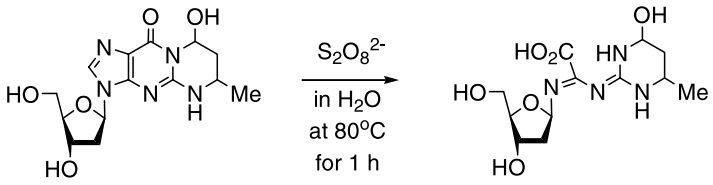


Tetrahedron Letters 44 (2003) 7303

Oxidative hydrolysis of a cyclic 1,N^2-propano-2′-deoxyguanosine, an adduct of 2′-deoxyguanosine with acetaldehyde or crotonaldehyde

Magoichi Sako,* Shinsuke Inagaki, Yukihiro Esaka and Yoshihiro Deyashiki

Gifu Pharmaceutical University, 5-6-1, Mitahora-higashi, Gifu 502-8585, Japan



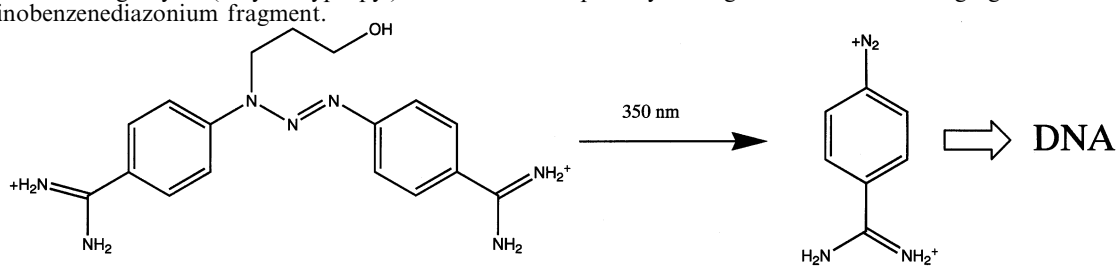
Photochemical DNA cleavage by a Berenil analog

Tetrahedron Letters 44 (2003) 7307

Sally J. Burr, Abdulghani Mselati and Emrys W. Thomas*

Division of Biological Sciences, Salford University, Salford M5 4WT, UK

DNA photocleavage by *N*-(3-hydroxypropyl)-Berenil involves photolysis to give the active cleaving agent—the 4-amidinobenzenediazonium fragment.

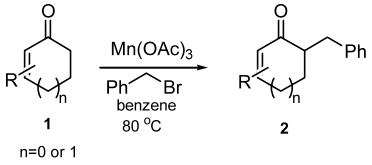


Mn(III) acetate-mediated regioselective benzylation of various α,β-unsaturated and β-alkoxy-α,β-unsaturated ketones

Tetrahedron Letters 44 (2003) 7311

Cihangir Tanyeli* and Devrim Özdemirhan

Department of Chemistry, Middle East Technical University, 06531 Ankara, Turkey

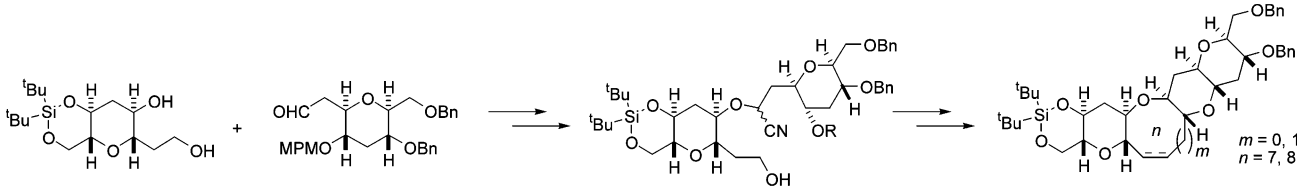


Convergent synthesis of *trans*-fused 6/*n*/6/6 (*n* = 7, 8) tetracyclic ether system via α-cyano ethers

Tetrahedron Letters 44 (2003) 7315

Tohru Oishi,* Koji Watanabe and Michio Murata

Department of Chemistry, Graduate School of Science, Osaka University, Toyonaka, Osaka 560-0043, Japan

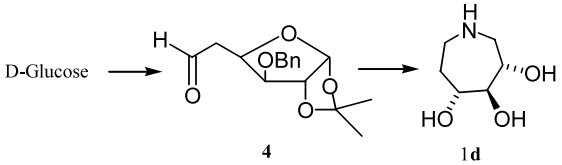


An expeditious synthesis of a (3*S*,4*S*,5*R*)-trihydroxyazepane

Tetrahedron Letters 44 (2003) 7321

Dilip D. Dhavale,* Vinod D. Chaudhari and Jayant N. Tilekar

Department of Chemistry, Garware Research Centre, University of Pune, Pune 411 007, India

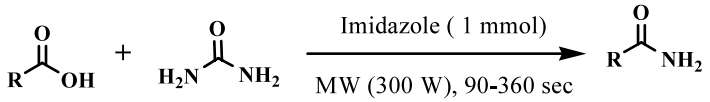


Tetrahedron Letters 44 (2003) 7325

Direct preparation of primary amides from carboxylic acids and urea using imidazole under microwave irradiation

Ali Khalafi-Nezhad,* Babak Mokhtari and Mohammad Navid Soltani Rad

Department of Chemistry, College of Science, Shiraz University, Shiraz 71454, Iran

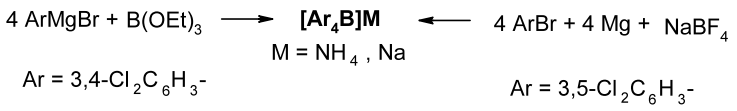


Tetrahedron Letters 44 (2003) 7329

Synthesis of some halogenated tetraarylborates

Romana Anulewicz-Ostrowska,[a] Tomasz Kliś,[b] Dariusz Krajewski,[b] Bartosz Lewandowski[b] and Janusz Serwatowski[b,*]

[a]*Faculty of Chemistry, University of Warsaw, Pasteura 1, 02-090 Warsaw, Poland*
[b]*Faculty of Chemistry, Warsaw University of Technology, Noakowskiego 3, 00-664 Warsaw, Poland*

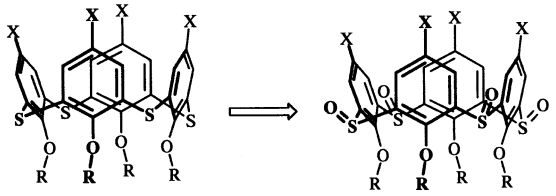


Tetrahedron Letters 44 (2003) 7333

Stereoselective oxidation of thiacalix[4]arenes with the $NaNO_3$/CF_3COOH system

Pavel Lhoták,[a,*] Jiří Morávek,[a] Tomáš Šmejkal,[a] Ivan Stibor[a] and Jan Sýkora[b]

[a]*Department of Organic Chemistry, Institute of Chemical Technology, Technická 5, 166 28 Prague 6, Czech Republic*
[b]*Institute of Chemical Process Fundamentals, Czech Academy of Sciences, Rozvojová 135, 165 02 Prague 6, Czech Republic*



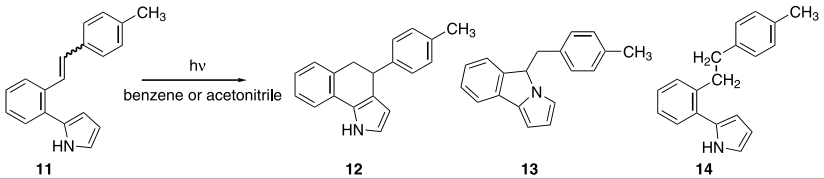
The oxidation of thiacalix[4]arenes using the $NaNO_3$/CF_3COOH system leads smoothly to the corresponding tetrasulfoxides in a stereoselective manner, wherein the alkyl and sulfoxide groups are oriented in the opposite directions.

Tetrahedron Letters 44 (2003) 7337

Photochemistry of stilbenyl-pyrroles: a new approach to indole and isoindole derivatives

Nikola Basarić,[a] Željko Marinić[b] and Marija Šindler-Kulyk[a,*]

[a]*Department of Organic Chemistry, Faculty of Chemical Engineering and Technology, University of Zagreb, Maruličev trg 19, HR-10000, Croatia*
[b]*NMR Center, Ruđer Bošković Institute, PO Box 180, HR-10002 Zagreb, Croatia*

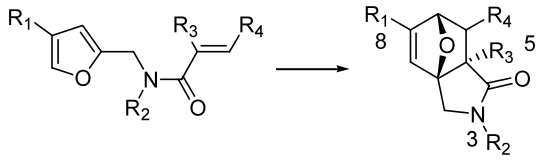


Tetrahedron Letters 44 (2003) 7341

Synthesis of a novel series of 10-oxa-3-aza-tricyclo[5.2.1.0^{1,5}]dec-8-en-4-ones through an intramolecular Diels–Alder reaction

Karen L. Milkiewicz,* Irina B. Neagu, Daniel J. Parks and Tianbao Lu

3-Dimensional Pharmaceuticals, 665 Stockton Drive, Exton, PA 19341, USA

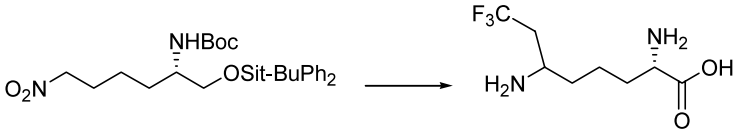


Tetrahedron Letters 44 (2003) 7345

The synthesis of 6-trifluoroethyl-L-lysine: a method to introduce functionality at C-6 of L-lysine

E. Ann Hallinan,[a,*] Clifford R. Dorn,[a] William M. Moore,[b] Gina M. Jerome,[b] Pamela T. Manning[c] and Barnett S. Pitzele[a]

[a]*Pharmacia, 4901 Searle Parkway, Skokie, IL 60077, USA*
[b]*Pharmacia, 800 North Lindbergh Boulevard, St. Louis, MO 63167, USA*
[c]*Pharmacia, 700 Chesterfield Parkway, St. Louis, MO 63198, USA*

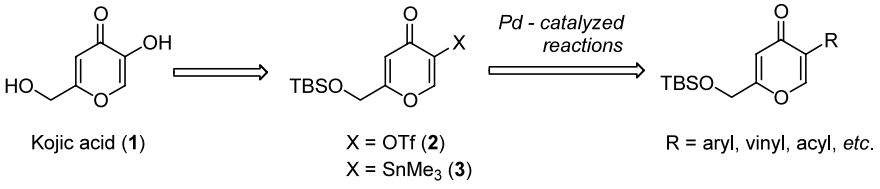


Tetrahedron Letters 44 (2003) 7349

A concise approach to 5-substituted-4-pyrones from kojic acid

Tomoyuki Kamino,[a] Kouji Kuramochi[b] and Susumu Kobayashi[a,b,*]

[a]*Faculty of Pharmaceutical Sciences, Tokyo University of Science, 2641 Yamazaki, Noda, Chiba 278-8510, Japan*
[b]*Frontier Research Center for Genomic Drug Discovery, Tokyo University of Science, 2641 Yamazaki, Noda, Chiba 278-8510, Japan*

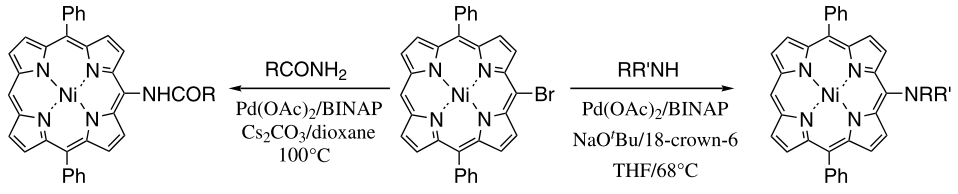


Tetrahedron Letters 44 (2003) 7353

Palladium-catalyzed *meso*-amination and amidation of porphyrins: marked acceleration with the Ni(II) central metal ion

Toshikatsu Takanami, Mikiko Hayashi, Fumio Hino and Kohji Suda*

Meiji Pharmaceutical University, 2-522-1, Noshio, Kiyose, Tokyo 204-8588, Japan

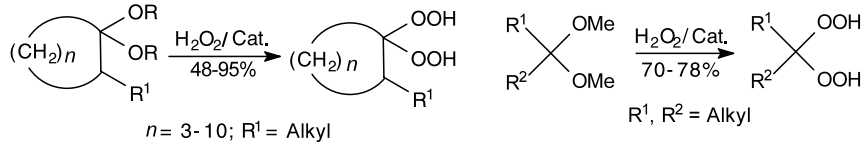


Tetrahedron Letters 44 (2003) 7359

A new method for the synthesis of bishydroperoxides based on a reaction of ketals with hydrogen peroxide catalyzed by boron trifluoride complexes

Alexander O. Terent'ev, Alexander V. Kutkin, Maxim M. Platonov, Yuri N. Ogibin* and Gennady I. Nikishin

N. D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, 119991 Moscow, Leninsky Prospect, 47, Russia

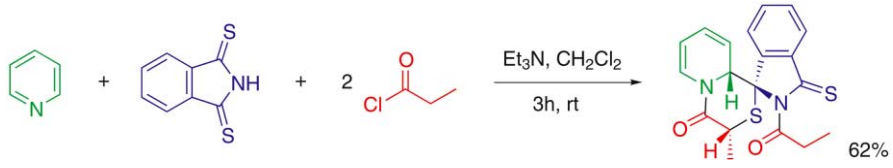


Tetrahedron Letters 44 (2003) 7365

A novel one-pot, three-component reaction: formation of tricyclic 1,2-dihydropyridines via mesomeric betaines

Shinji Yamada,* Tomoko Misono, Chisako Morita and Noriko Nunami

Department of Chemistry, Faculty of Science, Ochanomizu University, Bunkyo-ku, Tokyo 112-8610, Japan



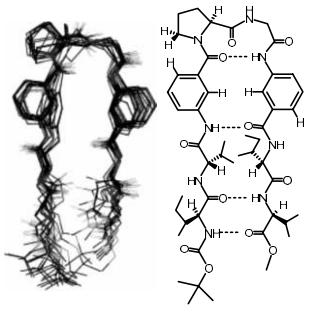
Tetrahedron Letters 44 (2003) 7369

Formation of β-hairpins in L-Pro-Gly containing peptides facilitated by 3-amino benzoic acid

M. H. V. Ramana Rao, S. Kiran Kumar and A. C. Kunwar*

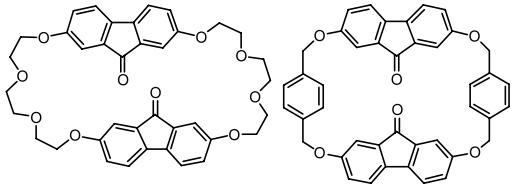
NMR Center, Indian Institute of Chemical Technology, Hyderabad 500 007, India

Designed β-hairpin peptides tolerate insertion of 3-amino benzoic acid (3-Aba) and also permit accommodation of both enantiomers of Pro-Gly turn motifs.



Tetrahedron Letters 44 (2003) 7373

Bis(fluorenono)phanes: a new class of perspective macrocyclic receptors



Nikolay G. Lukyanenko,[a,*] Tatiana I. Kirichenko,[a] Alexander Yu. Lyapunov,[a] Tatiana Yu. Bogaschenko,[a] Victor N. Pastushok,[a] Yurii A. Simonov,[b] Marina S. Fonari[b] and Mark M. Botoshansky[c]

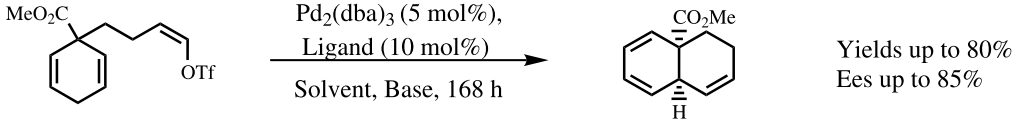
[a]*Department of Fine Organic Synthesis, A.V. Bogatsky Physico-Chemical Institute, National Academy of Sciences of Ukraine, Lustdorfskaya doroga 86, 65080 Odessa, Ukraine*
[b]*Institute of Applied Physics Academy of Sciences of Moldova, Academy str., 5 MD 2028, Chisinau, Moldova*
[c]*Department of Chemistry, Technion-Israel Institute of Technology, Technion City, 32000, Haifa, Israel*

Tetrahedron Letters 44 (2003) 7377

A comparison of palladium complexes of BINAP and diphenylphosphinooxazoline ligands in the catalytic asymmetric synthesis of *cis*-decalins

Denis Kiely and Patrick J. Guiry*

Centre for Synthesis and Chemical Biology, Conway Institute of Biomolecular and Biomedical Research, Department of Chemistry, University College Dublin, Belfield, Dublin 4, Ireland



Tetrahedron Letters 44 (2003) 7381

Isolation and synthesis of 2-chloro-10-α-hydroxynaltrexone, a new naltrexone degradant

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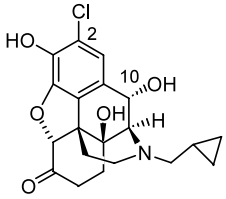
The structure of a new degradant of naltrexone HCl was confirmed by independent synthesis to be 2-chloro-10-α-hydroxynaltrexone **2**.



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