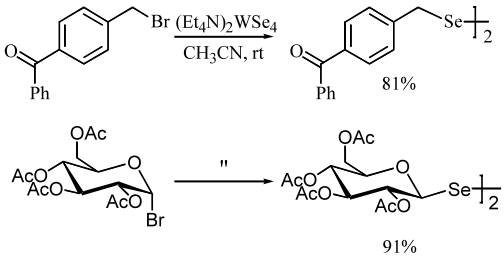
Tetraethylammonium tetraselenotungstate: a new and efficient selenium transfer reagent for the chemoselective synthesis of functionalised diselenides

Tetrahedron Letters 44 (2003) 2257

Vadivelu Saravanan, Emmanuel Porhiel and Srinivasan Chandrasekaran*

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



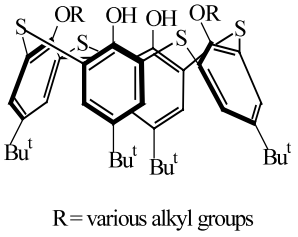
An expedient route to *p-tert*-butylthiacalix[4]arene 1,3-diethers via Mitsunobu reactions

Tetrahedron Letters 44 (2003) 2261

István Bitter* and Viktor Csokai

Department of Organic Chemical Technology, Budapest University of Technology and Economics, H-1521 Budapest, Hungary

p-tert-Butylthiacalix[4]arene is selectively alkylated using alcohols under the Mitsunobu protocol.



R = various alkyl groups

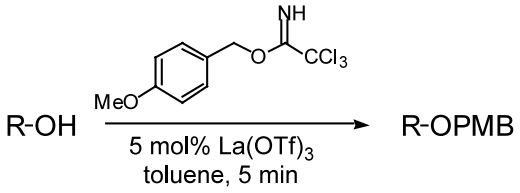
An efficient method for *para*-methoxybenzyl ether formation with lanthanum triflate

Tetrahedron Letters 44 (2003) 2267

Anand Narain Rai and Amit Basu*

Department of Chemistry, Brown University, Providence, RI 02912, USA

PMB ethers of alcohols are prepared in high yields and short reaction times using the trichloroacetimidate of PMB alcohol and lanthanum triflate. The mild conditions allow protection of acid-sensitive alcohols.

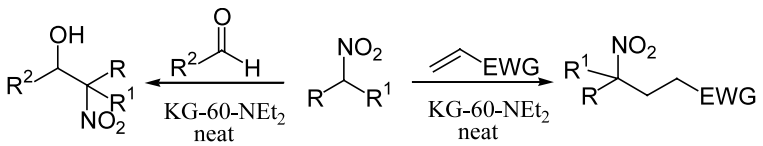


Use of heterogeneous catalyst KG-60-NEt_2 in Michael and Henry reactions involving nitroalkanes

Tetrahedron Letters 44 (2003) 2271

Roberto Ballini,[a,*] Giovanna Bosica,[a] Damiana Livi,[a] Alessandro Palmieri,[a] Raimondo Maggi[b,*] and Giovanni Sartori[b]

[a]*Dipartimento di Scienze Chimiche dell'Università, Via S. Agostino 1, 62032 Camerino, MC, Italy*
[b]*Dipartimento di Chimica Organica e Industriale dell'Università, Parco Area delle Scienze 17A, 43100 Parma, Italy*



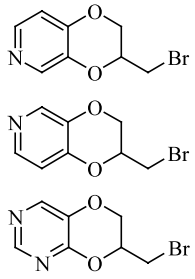
Tetrahedron Letters 44 (2003) 2275

Synthesis of novel aza analogues of 2-substituted-2,3-dihydro-1,4-benzodioxins as potential new scaffolds for drug discovery

Encarna Matesanz,[a,*] Jesús Alcázar,[a] J. Ignacio Andrés,[a] Jose M. Bartolomé,[a] Marcel De Bruyn,[b] Javier Fernández[a] and Kristof Van Emelen[b]

[a]*Johnson & Johnson Pharmaceutical Research & Development, a Division of Janssen-Cilag S.A., Medicinal Chemistry Department, Jarama s/n, 45007 Toledo, Spain*
[b]*Johnson & Johnson Pharmaceutical Research & Development, a Division of Janssen Pharmaceutica N.V., Medicinal Chemistry Department, Turnhoutseweg 30, B-2340 Beerse, Belgium*

Synthesis approaches that have led to three novel fuctionalizable aza analogues of 2-substituted-dihydro-1,4-benzodioxin system are described.



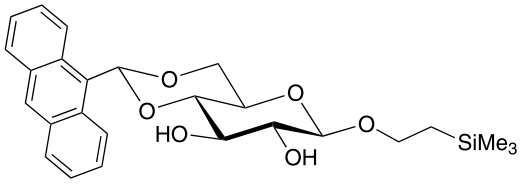
Tetrahedron Letters 44 (2003) 2279

9-Anthraldehyde acetals as protecting groups

Ulf Ellervik*

Organic and Bioorganic Chemistry, Center for Chemistry and Chemical Engineering, Lund University, PO Box 124, SE-221 00 Lund, Sweden

Anthraldehyde acetals can be introduced regioselectively to carbohydrates in high yields. Advantages over conventional acetal protecting groups are increased crystallinity and strong absorbance and fluorescence which facilitate purification and reaction monitoring. The anthraldehyde acetals can be deprotected selectively in the presence of benzylidene acetals and can be cleaved regioselectively to yield 6-*O*-(9-anthracenyl)methyl ethers.



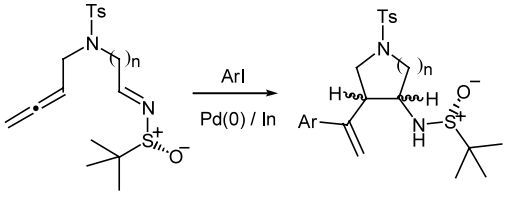
Tetrahedron Letters 44 (2003) 2283

Diastereoselective Pd/In bimetallic inter–intramolecular (class 2) cascade reactions of allenyl-imines and aryl iodides

Ian R. Cooper,[a] Ronald Grigg,[a,*] Michaele J. Hardie,[a] William S. MacLachlan,[b] Visuvanathar Sridharan[a] and W. Anthony Thomas[a]

[a]*Molecular Innovation, 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*

A new diastereoselective Pd/In bimetallic cascade reaction employing allenyl-sulfinimines and aryl iodides resulting in the formation of complex chiral pyrrolidines and piperidines is described. Diastereoselectivities up to 91:9 have been obtained.

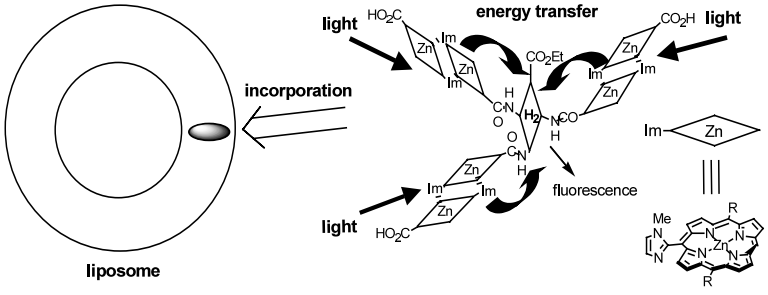


Tetrahedron Letters 44 (2003) 2287

Incorporation of a photosynthetic supramolecular complex by using imidazolyl Zn porphyrin dimers in bilayer lipid membrane

Hidekane Ozeki[a] and Yoshiaki Kobuke[a,b,*]

[a]*Graduate School of Materials Science, Nara Institute of Science and Technology, 8916-5 Takayama, Ikoma, Nara 630-0101, Japan*
[b]*CREST, Japan Science and Technology Corporation (JST), Japan*

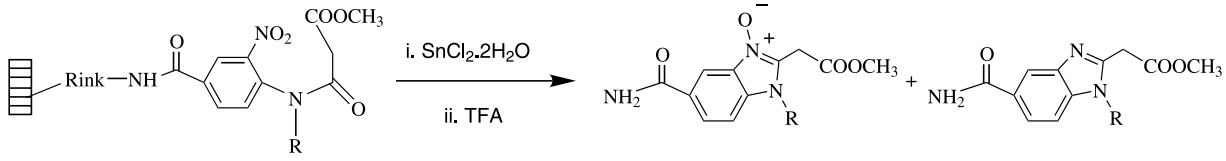


Tetrahedron Letters 44 (2003) 2293

Solid-phase synthesis of benzimidazole *N*-oxides on SynPhase™ Lanterns

Zemin Wu,* Nicholas J. Ede and Marc N. Mathieu

Mimotopes Pty Ltd, 11 Duerdin Street, Clayton, VIC 3168, Australia



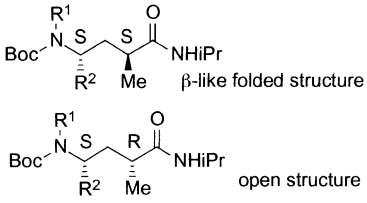
Tetrahedron Letters 44 (2003) 2297

Catalytic hydrogenation of vinylogous peptides: a route towards γ-peptide foldamers

Claude Grison,[a,*] Stéphane Genève,[a] Stéphanie Claudel,[a] Philippe Coutrot[a] and Michel Marraud[b]

[a]*Laboratoire de Chimie Organique Biomoléculaire, Institut Nancéien de Chimie Moléculaire, FR CNRS 1742, UMR 7565, Université Henri Poincaré, Nancy 1, BP 239, 54506 Vandoeuvre cédex, France*

[b]*Laboratoire de Chimie Physique Macromoléculaire, UMR 7568, ENSIC-INPL, BP 451, 54001 Nancy, France*



Catalytic hydrogenation over Pd/C of vinylogous aminoacids and aminoamides has been studied. The configuration of the ethylenic bond has an important effect on the diastereoselectivity. The higher selectivity is observed with the *E*-vinylogous aminoamides. The conformational preferences of the α,γ-disubstituted γ-peptides have been determined. The 2*S*,4*S*-γ-peptide moiety induces a β-like folded structure stabilized by an intramolecular hydrogen bond, whereas the 2*S*,4*R*-diastereomer assumes an open structure.

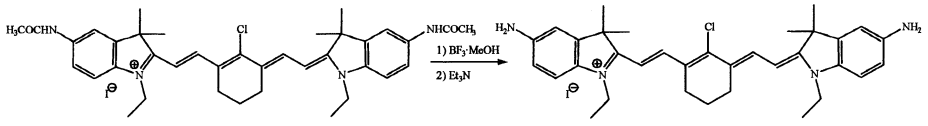
Tetrahedron Letters 44 (2003) 2301

Boron trifluoride–methanol complex—mild and powerful reagent for deprotection of labile acetylated amines

Serguei Miltsov, Laia Rivera, Cristina Encinas and Julián Alonso*

Grup de Sensors i Biosensors, Unitat de Química Analítica, Facultat de Ciències, Universitat Autònoma de Barcelona, 08193, Bellaterra, Spain

The deprotection of acetylated amines of cyanine-type dyes with boron trifluoride–methanol complex is presented.



Tetrahedron Letters 44 (2003) 2305

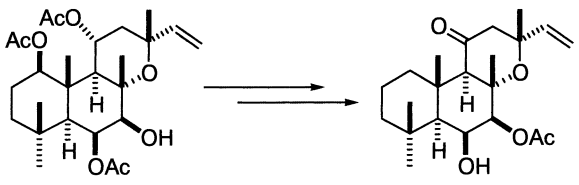
First synthesis of 1,9-dideoxyforskolin from ptychantin A

Hisahiro Hagiwara,[a,*] Fumihide Takeuchi,[a] Takashi Hoshi,[b] Toshio Suzuki,[b] Toshihiro Hashimoto[c] and Yoshinori Asakawa[c]

[a]*Graduate School of Science and Technology, Niigata University, 8050, 2-nocho, Ikarashi, Niigata 950-2181, Japan*

[b]*Faculty of Engineering, Niigata University, 8050, 2-nocho, Ikarashi, Niigata 950-2181, Japan*

[c]*Faculty of Pharmaceutical Sciences, Tokushima Bunri University, Yamashiro-cho, Tokushima 770-8514, Japan*



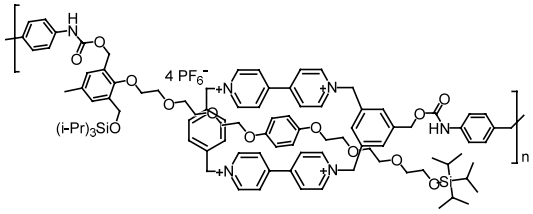
Tetrahedron Letters 44 (2003) 2307

Synthesis of a mechanically linked oligo[2]rotaxane

Abdelhak Belaissaoui, Satoru Shimada, Akihiro Ohishi and Nobuyuki Tamaoki*

Institute for Materials and Chemical Process, National Institute of Advanced Industrial Science and Technology, Central 5, 1-1-1 Higashi, Tsukuba, Ibaraki 305-8565, Japan

A bifunctional [2]rotaxane, bearing two free functional groups each in the ring and axial parts, was synthesized, followed by its polycondensation with methylene diphenyl diisocyanate leading to a mechanically linked oligo[2]rotaxane.

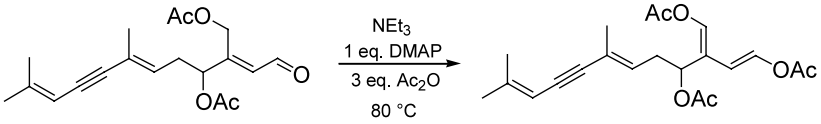


Tetrahedron Letters 44 (2003) 2311

On the construction of 2-substituted 1,4-diacetoxybutadiene moiety: application to the synthesis of (±)-caulerpenyne

Laurent Commeiras, Maurice Santelli and Jean-Luc Parrain*

Laboratoire de Synthèse Organique associé au CNRS (UMR 6009), Faculté des Sciences de Saint Jérôme, Avenue Escadrille Normandie-Niemen, 13397 Marseille Cedex 20, France



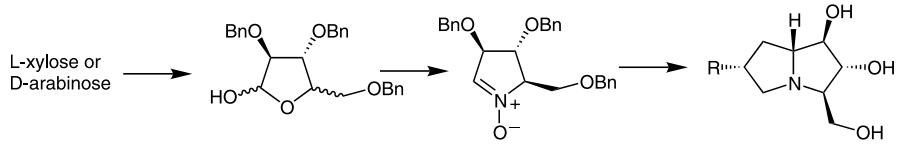
taxifolial A **caulerpenyne**

Tetrahedron Letters 44 (2003) 2315

Total syntheses of hyacinthacine A_2 and 7-deoxycasuarine by cycloaddition to a carbohydrate derived nitrone

Francesca Cardona, Enrico Faggi, Francesca Liguori, Martina Cacciarini and Andrea Goti*

Dipartimento di Chimica Organica 'Ugo Schiff', Polo Scientifico, Università di Firenze, via della Lastruccia 13, I-50019 Sesto Fiorentino (Firenze), Italy



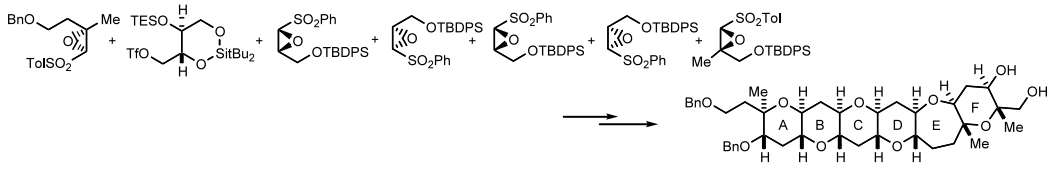
R = H: Hyacinthacine A_2
R = OH: 7-Deoxycasuarine

Tetrahedron Letters 44 (2003) 2319

Iterative synthesis of the ABCDEF-ring system of yessotoxin and adriatoxin

Yuji Mori,[a,*] Toyohisa Takase[a] and Ryoji Noyori[b]

[a]*Faculty of Pharmacy, Meijo University, 150 Yagotoyama, Tempaku-ku, Nagoya 468-8503, Japan*
[b]*Department of Chemistry, Graduate School of Science, Nagoya University, Chikusa-ku, Nagoya 464-8602, Japan*

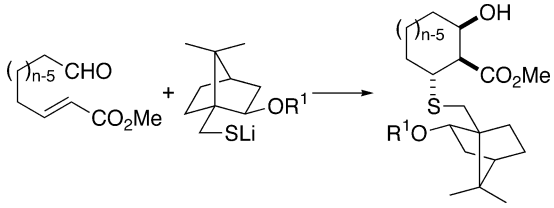


Tetrahedron Letters 44 (2003) 2323

Asymmetric Michael–aldol tandem cyclization of ω-oxo-α, β-unsaturated esters with 10-mercaptoisoborneol methyl ether

Katsumi Nishimura, Hiroshi Tsubouchi, Masashi Ono, Tomoharu Hayama, Yasuo Nagaoka and Kiyoshi Tomioka*

Graduate School of Pharmaceutical Sciences, Kyoto University, Yoshida, Sakyo-ku, Kyoto 606-8501, Japan



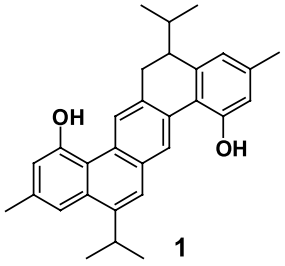
Tetrahedron Letters 44 (2003) 2327

Parviflorene A, a novel cytotoxic unsymmetrical sesquiterpene–dimer constituent from *Curcuma parviflora*

Masae Takahashi,[a] Takashi Koyano,[b] Thaworn Kowithayakorn,[c] Masahiko Hayashi,[d] Kanki Komiyama[d] and Masami Ishibashi[a,*]

[a]*Graduate School of Pharmaceutical Sciences, Chiba University, 1-33 Yayoi-cho, Inage-ku, Chiba 263-8522, Japan*
[b]*Temko Corporation, 4-27-4 Honcho, Nakano, Tokyo 164-0012, Japan*
[c]*Department of Horticulture, Faculty of Agriculture, Khon Kaen University, Khon Kaen 40002, Thailand*
[d]*The Kitasato Institute, 5-9-1 Shirokane, Minato-ku, Tokyo 108-8642, Japan*

A novel cytotoxic sesquiterpene–dimer-type compound, parviflorene A (**1**), was isolated from a tropical Zingiberaceous plant, *Curcuma parviflora*.



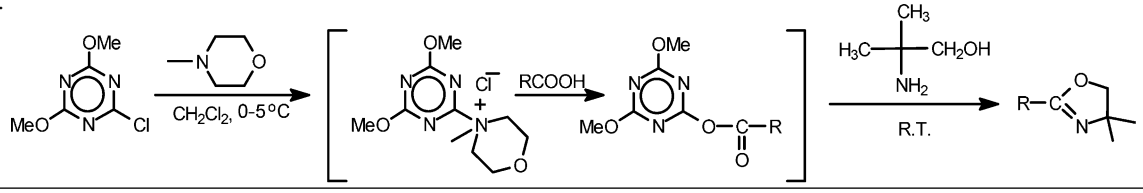
Tetrahedron Letters 44 (2003) 2331

Direct synthesis of 2-oxazolines from carboxylic acids using 2-chloro-4,6-dimethoxy-1,3,5-triazine under mild conditions

B. P. Bandgar* and S. S. Pandit

Organic Chemistry Research Laboratory, School of Chemical Sciences, Swami Ramanand Teerth Marathwada University, Vishnupuri, Nanded 431 606, India

2-Acyloxy-4,6-dimethoxy-1,3,5-triazines obtained from carboxylic acids and 2-chloro-4,6-dimethoxy-1,3,5-triazine were subsequently treated with 2-amino-2-methyl-1-propanol to afford the corresponding 2-oxazolines in excellent yield at room temperature.

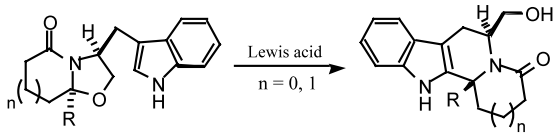


Tetrahedron Letters 44 (2003) 2335

Stereoselective synthesis of the indolizinoindole ring system

Steven M. Allin,[a,*] Christopher I. Thomas,[a] James E. Allard,[a] Matthew Duncton,[b] Mark R. J. Elsegood[a] and Mark Edgar[a]

[a]*Department of Chemistry, Loughborough University, Loughborough, Leicestershire LE11 3TU, UK*
[b]*OSI Pharmaceuticals, Watlington Road, Oxford OX4 6LT, UK*

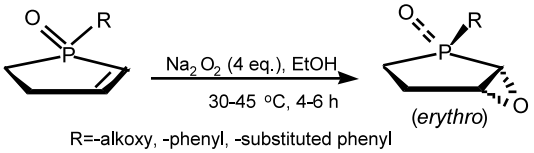


An efficient approach towards the stereospecific synthesis of epoxides from phospholene oxides

Tetrahedron Letters 44 (2003) 2339

Mitsuji Yamashita,[a,*] Valluru Krishna Reddy,[b] Lakonda Nagaprasada Rao,[b] Buchammagari Haritha,[c] Motoki Maeda,[c] Keiji Suzuki,[c] Hirono Totsuka,[c] Masaki Takahashi[a] and Tatsuo Oshikawa[d]

[a]*Department of Materials Chemistry, Faculty of Engineering, Shizuoka University, Hamamatsu 432-8561, Japan*
[b]*Satellite Venture Business Laboratory, Shizuoka University, Hamamatsu 432-8561, Japan*
[c]*Graduate School of Science and Engineering, Shizuoka University, Hamamatsu 432-8561, Japan*
[d]*Department of Chemistry and Biochemistry, Numazu College of Technology (NCT), Numazu 410-8501, Japan*



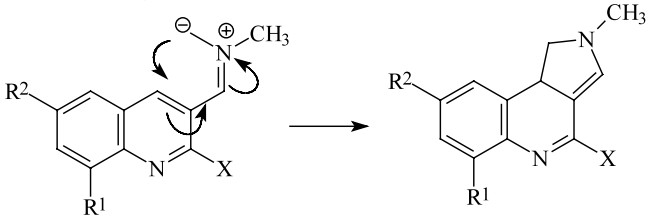
R=-alkoxy, -phenyl, -substituted phenyl

Synthesis of pyrrolo[3,4-*c*]quinolines by 1,5-electrocyclisation of non-stabilised azomethine ylides

Tetrahedron Letters 44 (2003) 2343

Áron Pintér, Miklós Nyerges,* Andrea Virányi and László Tőke*

Research Group of the Hungarian Academy of Sciences, Department of Organic Chemical Technology, Technical University of Budapest, H-1521 Budapest POB 91, Hungary



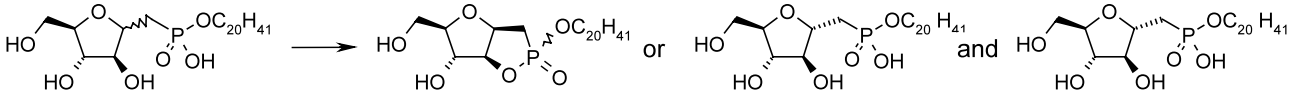
Synthesis of sugar-derived phostones by activation of γ-hydroxyphosphonic acids

Tetrahedron Letters 44 (2003) 2347

Michaël Bosco, Philippe Bisseret and Jacques Eustache*

Laboratoire de Chimie Organique et Bioorganique associé au CNRS, Université de Haute-Alsace, Ecole Nationale Supérieure de Chimie de Mulhouse 3, rue Alfred Werner, F-68093 Mulhouse Cedex, France

A facile conversion of sugar-derived γ-hydroxyphosphonic acid into phostones is described. The method could also be used for the preparation of pure α- and β-1-deoxy-1-phosphonomethylarabinose.



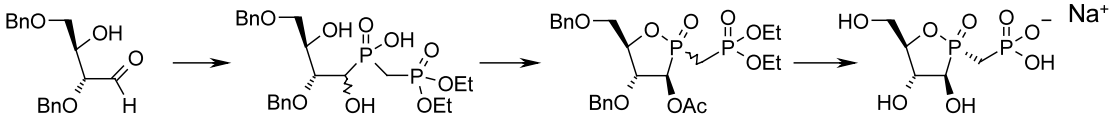
Cyclic phosphonomethylphosphinates: a new type of phosphorus-containing sugars

Tetrahedron Letters 44 (2003) 2351

Philippe Bisseret,* Jean-Guy Boiteau and Jacques Eustache*

Laboratoire de Chimie Organique et Bioorganique associé au CNRS, Université de Haute-Alsace, Ecole Nationale Supérieure de Chimie de Mulhouse 3, rue Alfred Werner, F-68093 Mulhouse Cedex, France

Condensation of a *H*-phosphinylphosphonate on a hydroxyaldehyde derived from D-arabinal was the key step in a synthesis of the first sugar-derived cyclic phosphonomethylphosphinates.

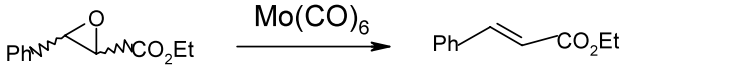


Tetrahedron Letters 44 (2003) 2355

$Mo(CO)_6$-promoted facile deoxygenation of α,β-epoxy ketones and α,β-epoxy esters

Asit Patra, Mausumi Bandyopadhyay and Dipakranjan Mal*

Department of Chemistry, Indian Institute of Technology, Kharagpur 721 302, India



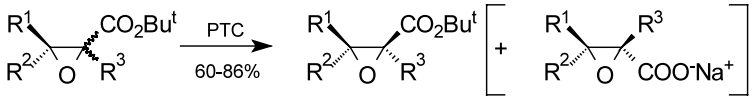
10 examples

Tetrahedron Letters 44 (2003) 2359

Convenient synthesis of *t*-butyl *Z*-3-substituted glycidates under conditions of phase-transfer catalysis

Andrzej Jonczyk* and Tomasz Zomerfeld

Warsaw University of Technology, Faculty of Chemistry, Koszykowa 75, 00-662 Warsaw, Poland



Z + *E*

R^1 = Ar, *c*-C_6H_{11}

R^2,R^3 = H, Me

Z

purity 90-98%

Tetrahedron Letters 44 (2003) 2363

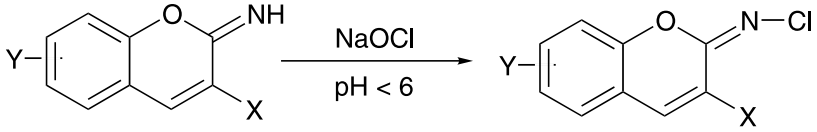
Novel *N*-chlorinated derivatives of 2*H*-1-benzopyran-2-imines

Julija Volmajer,[a] Renata Toplak,[a] Shmuel Bittner,[b] Ivan Leban[c] and Alenka Majcen Le Marechal[a,*]

[a]*University of Maribor, Faculty of Mechanical Engineering, Smetanova 17, 2000 Maribor, Slovenia*

[b]*Ben-Gurion University of the Negev, Department of Chemistry, Beer-Sheva 84105, Israel*

[c]*University of Ljubljana, Faculty of Chemistry and Chemical Technology, Aškerčeva 5, 1000 Ljubljana, Slovenia*



X = CN, COOEt

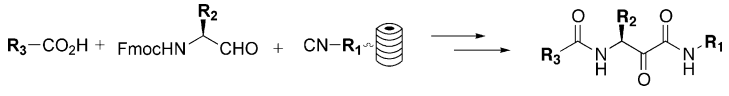
Y = 6-OH, 8-OH, H

Tetrahedron Letters 44 (2003) 2367

Solid-phase synthesis of modified oligopeptides via Passerini multicomponent reaction

Andrea Basso, Luca Banfi, Renata Riva, Paolo Piaggio and Giuseppe Guanti*

Università degli Studi di Genova, Dipartimento di Chimica e Chimica Industriale, via Dodecaneso 31, 16146 Genova, Italy

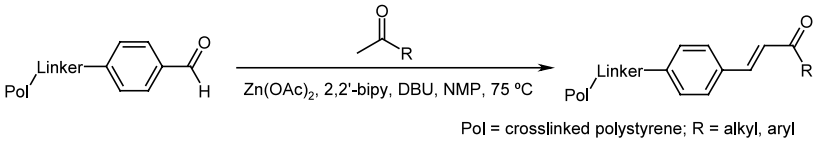


Tetrahedron Letters 44 (2003) 2371

Solid-phase aldol condensations mediated by zinc acetate and 2,2′-bipyridine under weakly basic conditions

Ulrich Sensfuss*

Novo Nordisk A/S, Novo Nordisk Park, 2760 Maaloev, Denmark



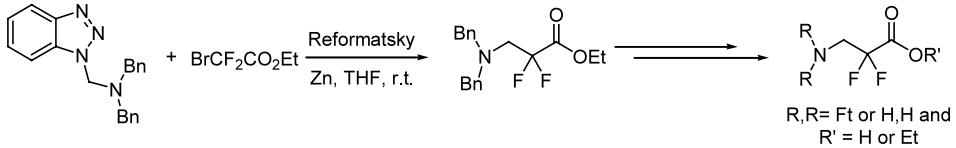
Pol = crosslinked polystyrene; R = alkyl, aryl

Tetrahedron Letters 44 (2003) 2375

A practical synthesis of 2,2-difluoro-3-amino-propanoic acid (α,α-difluoro-β-alanine)

Arnaud Cheguillaume, Simon Lacroix and Jacqueline Marchand-Brynaert*

Université catholique de Louvain, Unité de Chimie Organique et Médicinale, Bâtiment Lavoisier, place Louis Pasteur 1, B-1348 Louvain-La-Neuve, Belgium



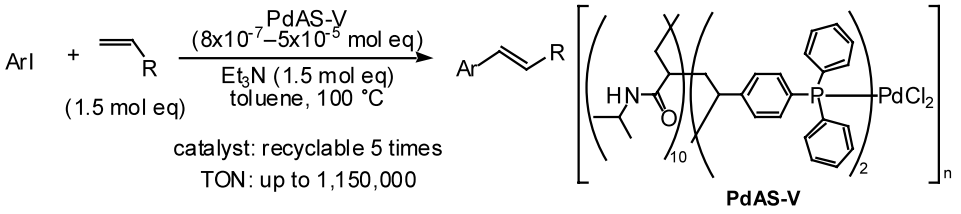
R,R= Ft or H,H and
R' = H or Et

Tetrahedron Letters 44 (2003) 2379

An efficient heterogeneous Heck reaction promoted by a new assembled catalyst of palladium and non-cross-linked amphiphilic polymer

Yoichi M. A. Yamada, Koji Takeda, Hideyo Takahashi and Shiro Ikegami*

Faculty of Pharmaceutical Sciences, Teikyo University, Sagamiko, Kanagawa 199-0195, Japan



catalyst: recyclable 5 times
TON: up to 1,150,000

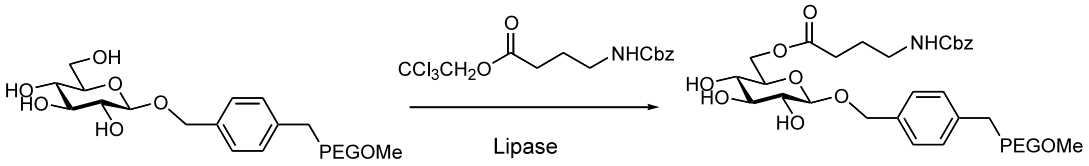
PdAS-V

Tetrahedron Letters 44 (2003) 2383

Chemoenzymatic polymer-supported liquid phase synthesis of glucose γ-aminobutyric ester

Carmen de Torres and Alfonso Fernández-Mayoralas*

Instituto de Química Orgánica General, CSIC, Juan de la Cierva 3, 28006 Madrid, Spain



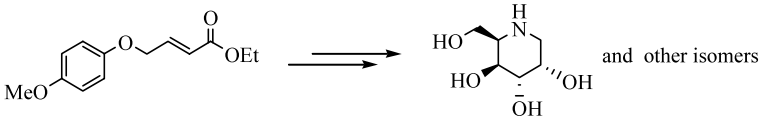
Tetrahedron Letters 44 (2003) 2387

A general methodology for the asymmetric synthesis of 1-deoxyiminosugars

Om V. Singh and Hyunsoo Han*

Department of Chemistry, The University of Texas at San Antonio, 6900 N. Loop 1604 West, San Antonio, TX 78249, USA

1-Deoxyiminosugars were synthesized from the readily available achiral olefin via regioselective aminohydroxylation, ring-closing metathesis, and dihydroxylation reactions in a highly stereoselective manner.

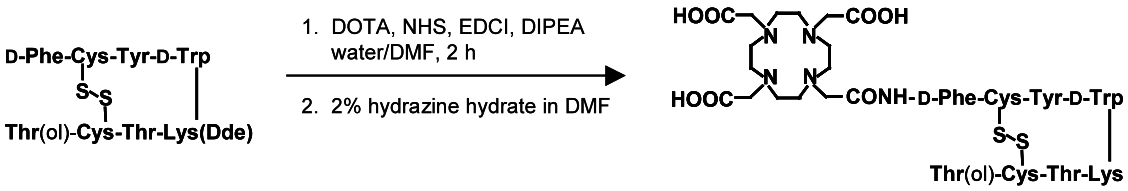


Tetrahedron Letters 44 (2003) 2393

Rapid and high-yield solution-phase synthesis of DOTA-Tyr^3-octreotide and DOTA-Tyr^3-octreotate using unprotected DOTA

Margret Schottelius,* Markus Schwaiger and Hans-Jürgen Wester

Nuklearmedizinische Klinik und Poliklinik, Klinikum rechts der Isar, Technische Universität München, Ismaninger Strasse 22, D-81675 München, Germany

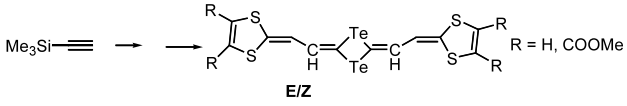


Tetrahedron Letters 44 (2003) 2397

Synthesis and transformations of some new 2,4-bismethylene-1,3-ditelluretanes

Desikan Rajagopal, M. V. Lakshmikantham, Michael P. Cava,* Grant A. Broker and Robin D. Rogers

Chemistry Department, University of Alabama, PO Box 87-0336, Tuscaloosa, AL 35487-0336, USA



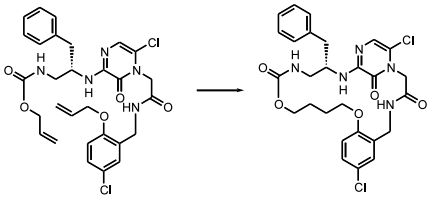
Tetrahedron Letters 44 (2003) 2401

Potent thrombin inhibitors via a 20-membered ring olefin metathesis macrocyclization

Philippe G. Nantermet* and Harold G. Selnick

Merck Research Laboratories, PO Box 4, West Point, PA 19486, USA

Twenty-membered ring pyrazinone derived macrocycles were prepared as a means to enhance the potency of existing thrombin inhibitors. Macrocyclization was accomplished via Grubbs olefin metathesis of a highly functionalized allyl-alloc scaffold, thus further confirming the power of such methodology.

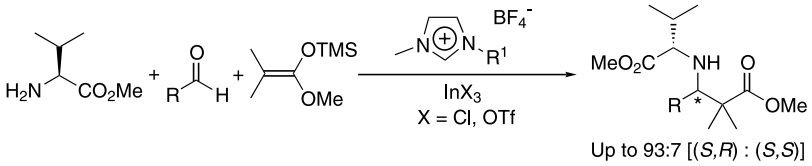


Tetrahedron Letters 44 (2003) 2405

Asymmetric Mannich-type reactions catalyzed by indium(III) complexes in ionic liquids

Shui-Ling Chen,[a] Shun-Jun Ji[b,*] and Teck-Peng Loh[a,b,*]

[a]*Department of Chemistry, 3 Science Drive 3, National University of Singapore, Singapore 117543*
[b]*College of Chemistry and Chemical Engineering, SooChow University, Jiangsu 215006, China*



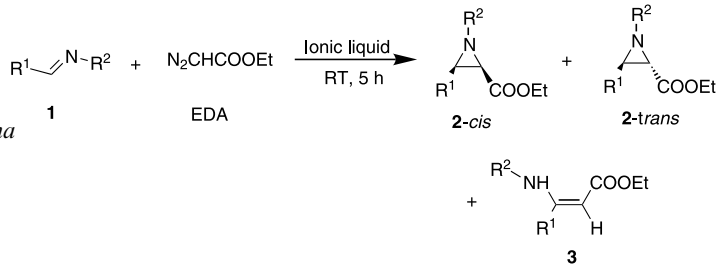
Tetrahedron Letters 44 (2003) 2409

Synthesis of aziridines from imines and ethyl diazoacetate in room temperature ionic liquids

Wei Sun, Chun-Gu Xia* and Hong-Wang Wang

State Key Laboratory for Oxo Synthesis and Selective Oxidation, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou 730000, PR China

The synthesis of aziridines from imines and ethyl diazoacetate in room temperature ionic liquids is reported. The reactions proceed readily under mild conditions with high *cis* selectivities and high yields.



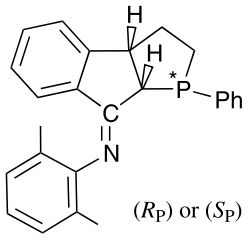
Tetrahedron Letters 44 (2003) 2413

New enantiopure cyclic β-iminophosphine ligands: applications in Pd-catalyzed asymmetric allylic substitution

Maria Zablocka,[a,*] Marek Koprowski,[a] Bruno Donnadieu,[b] Jean-Pierre Majoral,[b,*] Mathieu Achard[c] and Gérard Buono[c,*]

[a]*Centre of Molecular and Macromolecular Studies, Polish Academy of Sciences, Sienkiewicza 112, 90-363 Lodz, Poland*
[b]*Laboratoire de Chimie de Coordination, 205 route de Narbonne, 31077 Toulouse Cedex 4, France*
[c]*ENSSPICAM, CNRS, UMR 6516, Faculté St Jérôme, Av. Escadrille Normandie-Niemen, 13397 Marseille cedex 20, France*

New enantiopure cyclic β-iminophosphines are prepared and the catalytic properties of the corresponding Pd(0) complexes in asymmetric allylic alkylation and amination are reported.

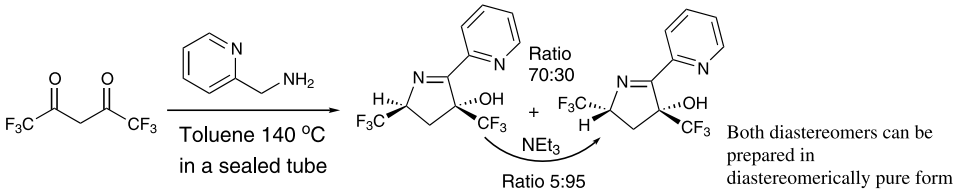


Tetrahedron Letters 44 (2003) 2417

Simple and highly diastereoselective synthesis of trifluoromethyl-containing myosmines via reaction between 2-(aminomethyl)pyridine and 1,1,1,5,5,5-hexafluoro-2,4-pentanedione

Hironari Ohkura, Dmitrii O. Berbasov and Vadim A. Soloshonok*

Department of Chemistry and Biochemistry, University of Oklahoma, Norman, OK 73019, USA

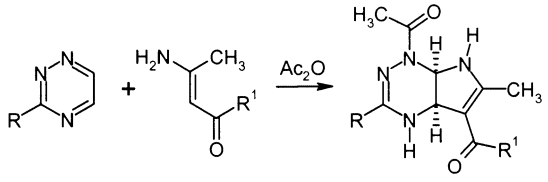


Tetrahedron Letters 44 (2003) 2421

Aminovinyl ketones and aminovinyl esters as C–C–N building blocks for the synthesis of 1*H*-pyrrolo[3,2-*e*]1,2,4-triazines

Valery N. Charushin,[a,*] Nataliya N. Mochulskaya,[b] Anatoly A. Andreiko,[a] Vera I. Filyakova,[a] Mikhail I. Kodess[a] and Oleg N. Chupakhin[a]

[a]*Institute of Organic Synthesis, Ural Branch of the Russian Academy of Sciences, 620219, Ekaterinburg, Russian Federation*
[b]*Department of Organic Chemistry, Urals State Technical University, 620002, Ekaterinburg, Russian Federation*



Tetrahedron Letters 44 (2003) 2425

The isolation and use of a benzodiazepine iminochloride for the efficient construction of flumazenil

Mark Rogers-Evans,[a,*] Paul Spurr[b] and Michael Hennig[c]

[a]*Discovery Chemistry, F. Hoffmann-La Roche Ltd, Pharmaceuticals Division, CH-4070 Basel, Switzerland*
[b]*Chemical Process Research, F. Hoffmann-La Roche Ltd, Pharmaceuticals Division, CH-4070 Basel, Switzerland*
[c]*Discovery Technologies, F. Hoffmann-La Roche Ltd, Pharmaceuticals Division, CH-4070 Basel, Switzerland*