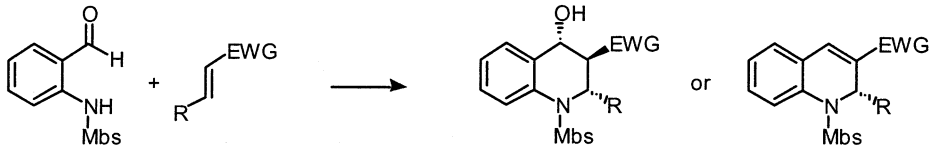
Efficient construction of 1,2-dihydroquinoline and 1,2,3,4-tetrahydroquinoline rings using tandem Michael-aldol reaction

Tetrahedron Letters 44 (2003) 8925

Kazuishi Makino,[a] Osamu Hara,[b] Yuko Takiguchi,[a] Takayuki Katano,[a] Yumiko Asakawa,[a] Keiichiro Hatano[c] and Yasumasa Hamada[a,*]

[a]*Graduate School of Pharmaceutical Sciences, Chiba University, Yayoi-cho, Inage-ku, Chiba 263-8522, Japan*
[b]*Faculty of Pharmacy, Meijo University, 150 Yagotoyama, Tempaku-ku, Nagoya 460-8503, Japan*
[c]*Graduate School of Pharmaceutical Sciences, Nagoya City University, Tanabe-dori, Mizuho-ku, Nagoya 467-8603, Japan*



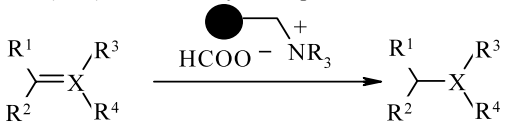
Catalytic transfer reduction of conjugated alkenes and an imine using polymer-supported formates

Tetrahedron Letters 44 (2003) 8931

Basudeb Basu,* Md. Mosharef H. Bhuiyan, Pralay Das and Ismail Hossain

Department of Chemistry, University of North Bengal, Darjeeling 734 430, India

An efficient and mild method for catalytic transfer hydrogenation of C=C and C=N double bonds with the aid of resin-supported formate (PSF) as the hydrogen donor and $Pd(OAc)_2$ as the catalyst is reported.



$R^1 = R^2 =$ Ph, Ar, H X = C, N

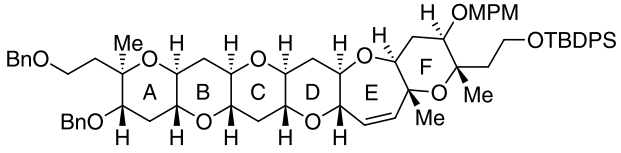
$R^3 = R^4 =$ CN, COOEt, COOMe, NHBoc, H, Ph

Convergent synthesis of the A–F ring segment of yessotoxin and adriatoxin

Tetrahedron Letters 44 (2003) 8935

Isao Kadota,[a,*] Hirokazu Ueno[b] and Yoshinori Yamamoto[b,*]

[a]*Research Center for Sustainable Materials Engineering, Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Sendai 980-8578, Japan*
[b]*Department of Chemistry, Graduate School of Science, Tohoku University, Sendai 980-8578, Japan*

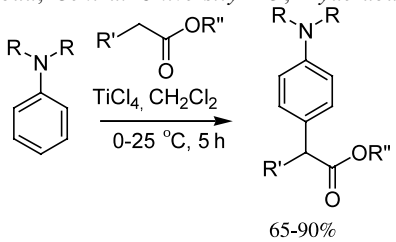


A novel arylation of arylacetic acid esters using tertiary arylamines and $TiCl_4$

Tetrahedron Letters 44 (2003) 8939

Mariappan Periasamy,* Neela KishoreBabu and K. Natarajan Jayakumar

School of Chemistry, University of Hyderabad, Central University PO, Hyderabad 500 046, India



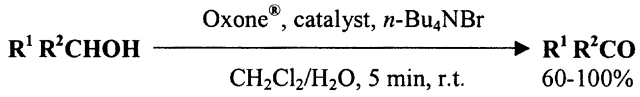
65-90%

Tetrahedron Letters 44 (2003) 8943

A new and highly effective method for catalytic oxidation of alcohols to the corresponding carbonyl compounds using the tris[(2-oxazolinyl)phenolato]manganese(III)/Oxone®/*n*-Bu_4NBr oxidation system

Mojtaba Bagherzadeh*

Department of Chemistry, Sharif University of Technology, PO Box 11395-9516, Tehran, Iran



R^1,R^2 = alkyl, allyl, benzyl, and H
catalyst = tris[(2-oxazolinyl)phenolato]manganese(III)

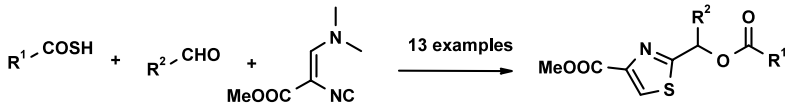
Tetrahedron Letters 44 (2003) 8947

Convergent multicomponent assembly of 2-acyloxymethyl thiazoles

Bernd Henkel, Barbara Beck, Benedikt Westner, Beatrice Mejat and Alexander Dömling*

Morphochem AG, Gmunder Str. 37-37a, 81379 München, Germany

A new multicomponent reaction (MCR) of thiocarboxylic acids, aldehydes and methyl 3-(*N*,*N*-dimethylamino)-2-isocyanoacrylate for the preparation of 2-acylhydroxymethyl thiazoles is described.

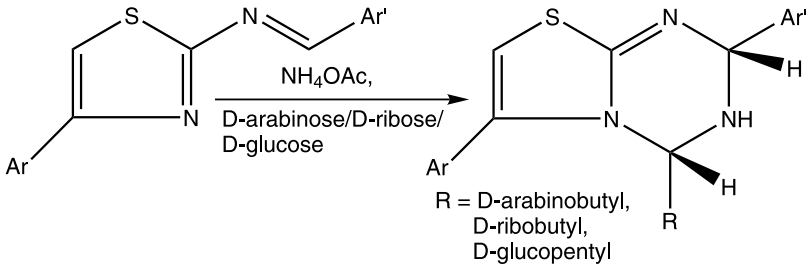


Tetrahedron Letters 44 (2003) 8951

Solvent-free microwave activated three-component synthesis of thiazolo-*s*-triazine *C*-nucleosides

Lal Dhar S. Yadav* and Ritu Kapoor

Department of Chemistry, University of Allahabad, Allahabad 211 002, India

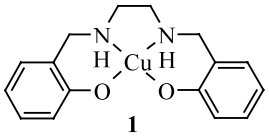


Tetrahedron Letters 44 (2003) 8955

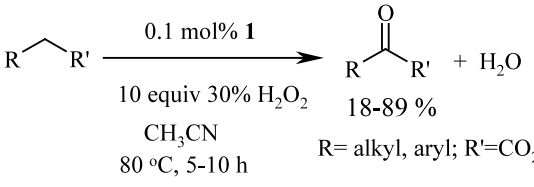
Copper(II)-catalyzed C–H oxidation of alkylbenzenes and cyclohexane with hydrogen peroxide

Subbarayan Velusamy and T. Punniyamurthy*

Department of Chemistry, Indian Institute of Technology Guwahati, Guwahati 781039, India



1



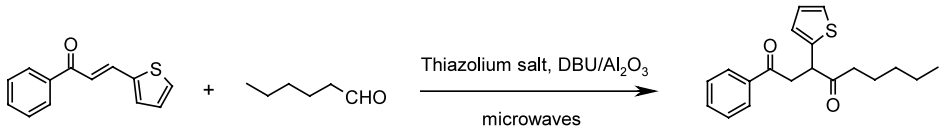
R= alkyl, aryl; R'=CO_2Et, alkyl, aryl

Tetrahedron Letters 44 (2003) 8959

Microwave-accelerated conjugate addition of aldehydes to α,β-unsaturated ketones

J. S. Yadav,* K. Anuradha, B. V. Subba Reddy and B. Eeshwaraiah

Division of Organic Chemistry, Indian Institute of Chemical Technology, Hyderabad 500 007, India

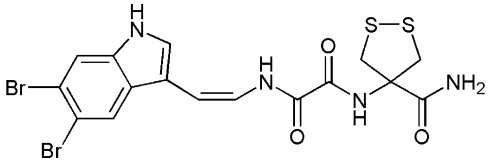


Tetrahedron Letters 44 (2003) 8963

Kottamide E, the first example of a natural product bearing the amino acid 4-amino-1,2-dithiolane-4-carboxylic acid (Adt)

David R. Appleton and Brent R. Copp*

Department of Chemistry, University of Auckland, Private Bag 92019, Auckland, New Zealand



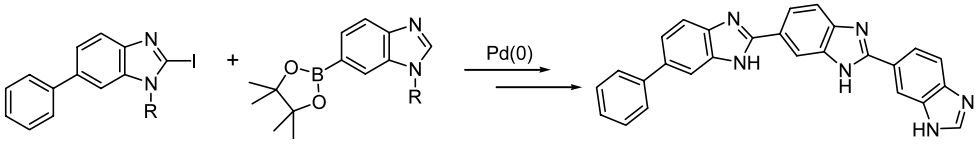
Kottamide E

Tetrahedron Letters 44 (2003) 8967

Synthesis of a terbenzimidazole topoisomerase I poison via iterative borinate ester couplings

Ben B. Wang and Paul J. Smith*

Department of Chemistry and Biochemistry, University of Maryland, Baltimore County, Baltimore, MD 21250, USA

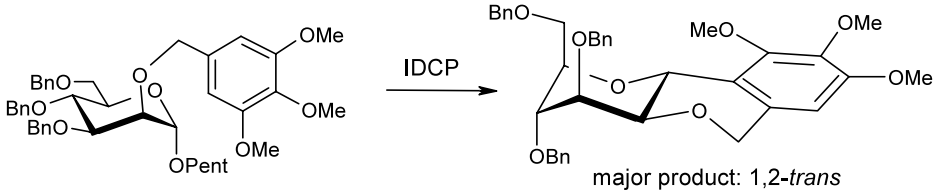


Tetrahedron Letters 44 (2003) 8971

Intramolecular *C*-glycosylation of 2-*O*-benzylated pentenyl mannopyranosides: remarkable 1,2-*trans* stereoselectivity

Nicolas Girard, Cyril Rousseau and Olivier R. Martin*

Institut de Chimie Organique et Analytique (ICOA), Faculté des Sciences and CNRS, BP 6759, 45067 Orléans cedex 2, France



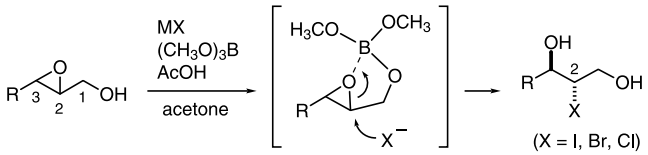
major product: 1,2-*trans*

Tetrahedron Letters 44 (2003) 8975

The first C2 selective halide substitution reaction of 2,3-epoxy alcohols by the use of $(CH_3O)_3B-MX$ (X = I, Br, Cl) system

Yoshihide Tomata, Minoru Sasaki, Keiji Tanino and Masaaki Miyashita*

Division of Chemistry, Graduate School of Science, Hokkaido University, Sapporo 060-0810, Japan

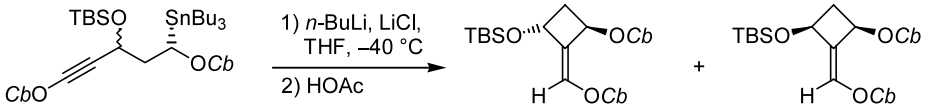


Tetrahedron Letters 44 (2003) 8979

Synthesis of 2-alkylidene-cycloalkane-1,3-diols via enantioselective intramolecular carbolithiation

Gabriele Gralla, Birgit Wibbeling and Dieter Hoppe*

Organisch-Chemisches Institut, Westfälische Wilhelms-Universität Münster, Corrensstraße 40, D-48149 Münster, Germany



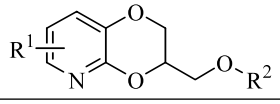
Tetrahedron Letters 44 (2003) 8983

Synthesis of novel 3-substituted-2,3-dihydro-1,4-dioxino[2,3-*b*]-pyridines as potential new scaffolds for drug discovery: selective introduction of substituents on the pyridine ring

Jesús Alcázar,* José M. Alonso, José M. Bartolomé, Laura Iturrino and Encarnación Matesanz

Johnson & Johnson Pharmaceutical Research & Development, a Division of Janssen-Cilag S.A., Medicinal Chemistry Dept., Jarama s/n, 45007 Toledo, Spain

Selective introduction of substituents on the pyridine ring of the 3-substituted-2,3-dihydro-1,4-dioxino[2,3-*b*]pyridine core has led to novel scaffolds suitable for drug discovery and combinatorial chemistry.



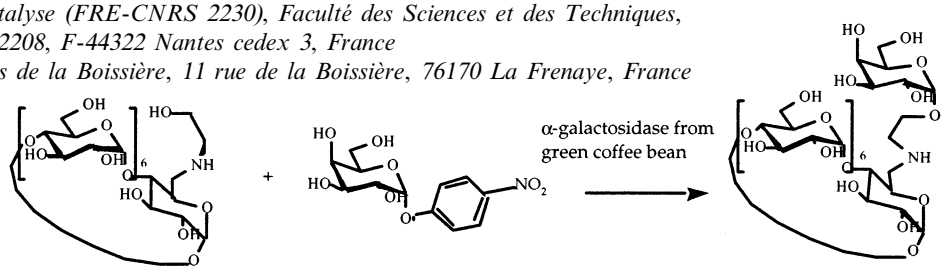
Tetrahedron Letters 44 (2003) 8987

An efficient, regioselective and fast enzymatic glycosylation for cyclodextrins

Véronique Bonnet,[a,b] Christophe Boyer,[b] Virginie Langlois,[a] Raphaël Duval[b] and Claude Rabiller[a,*]

[a]*Unité de Recherches en Biocatalyse (FRE-CNRS 2230), Faculté des Sciences et des Techniques, 2, rue de la Houssinière, BP 92208, F-44322 Nantes cedex 3, France*

[b]*CHIRALSEP, Parc d'activités de la Boissière, 11 rue de la Boissière, 76170 La Frenaye, France*

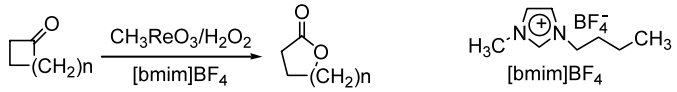


Tetrahedron Letters 44 (2003) 8991

CH_3ReO_3/H_2O_2 in room temperature ionic liquids: an homogeneous recyclable catalytic system for the Baeyer–Villiger reaction

Roberta Bernini,[a,*] Antonietta Coratti,[a] Giancarlo Fabrizi[b,*] and Antonella Goggiamani[b]

[a]*Dipartimento ABAC, Università degli Studi della Tuscia, Via S. Camillo De Lellis, 01100 Viterbo, Italy*
[b]*Dipartimento di Studi di Chimica e Tecnologia delle Sostanze Biologicamente Attive, Università degli Studi di Roma 'La Sapienza', P. le A. Moro 5, 00185 Roma, Italy*



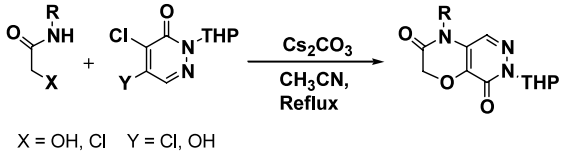
Tetrahedron Letters 44 (2003) 8995

Novel synthesis of pyridazino[4,5-*b*][1,4]oxazin-3,8-diones

Su-Dong Cho,[a] Sang-Yong Song,[a] Yong-Dae Park,[c] Jeum-Jong Kim,[c] Woo-Hong Joo,[a] Motoo Shiro,[d] J. R. Falck,[b] Dong-Soo Shin[a,*] and Yong-Jin Yoon[c,*]

[a]*Departments of Chemistry & Biology, Changwon National University, Changwon 641-773, South Korea*
[b]*Department of Biochemistry, University of Texas Southwestern Medical Center, Dallas, TX 75390, USA*
[c]*Department of Chemistry & Research Institute of Natural Science, Gyeongsang National University, Chinju 660-701, South Korea*
[d]*Rigaku Corporation, 3-9-12 Matsubara-cho, Akishima-shi, Tokyo 196-8666, Japan*

A novel and effective synthesis of pyridazino[4,5-*b*][1,4]oxazin-3,8-diones via Smiles rearrangement is presented. Treatment of *N*-substituted 2-chloro(or hydroxy)acetamide, 2-tetrahydropyranyl-4-chloro-5-hydroxy(or chloro)-pyridazin-3-one and cesium carbonate in refluxing acetonitrile was afforded the corresponding pyridazino[4,5-*b*][1,4]oxazine-3,8-diones in excellent yield.



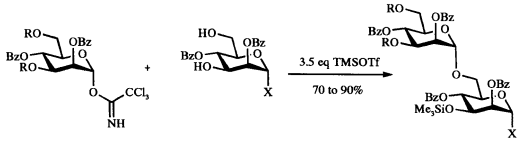
Tetrahedron Letters 44 (2003) 8999

Regioselective glycosylation of 3,6-unprotected mannoside derivatives: fast access to high-mannose type oligosaccharides

Nicolas Smiljanic, Sami Halila, Vincent Moreau* and Florence Djedaïni-Pilard

Laboratoire des Glucides, Université Picardie Jules Verne, 33 rue St-Leu, 80039 Amiens, France

Regioselective glycosylation of 3,6-unprotected mannoside acceptors leads to silylated disaccharides which can be used in subsequent glycosylation reactions.

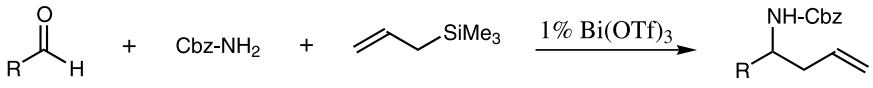


Tetrahedron Letters 44 (2003) 9003

Highly efficient three-component synthesis of protected homoallylic amines by bismuth triflate-catalyzed allylation of aldimines

Thierry Ollevier* and Tuya Ba

Département de Chimie, Université Laval, Québec (Québec), Canada G1K 7P4

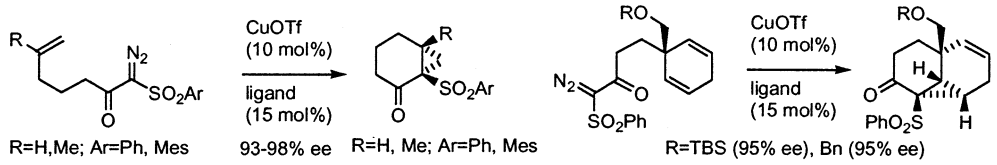


Tetrahedron Letters 44 (2003) 9007

Enantioselective intramolecular cyclopropanation of α-diazo-β-keto sulfones: asymmetric synthesis of bicyclo[4.1.0]heptanes and tricyclo[4.4.0.0]decenes

Masahiro Honma and Masahisa Nakada*

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

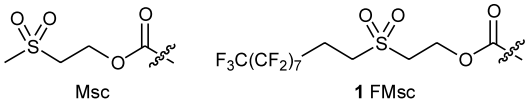


Tetrahedron Letters 44 (2003) 9013

A novel, base-labile fluorous amine protecting group: synthesis and use as a tag in the purification of synthetic peptides

Peter C. de Visser,[a,c] Marcel van Helden,[a] Dmitri V. Filippov,[a,b] Gijsbert A. van der Marel,[a] Jan W. Drijfhout,[b] Jacques H. van Boom,[a] Daan Noort[c] and Herman S. Overkleeft[a,*]

[a]*Leiden Institute of Chemistry, Leiden University, PO Box 9502, 2300 RA Leiden, The Netherlands*
[b]*Leiden University Medical Center, Leiden University, PO Box 9600, 2300 RC Leiden, The Netherlands*
[c]*TNO Prins Maurits Laboratory, PO Box 45, 2280 AA Rijswijk, The Netherlands*

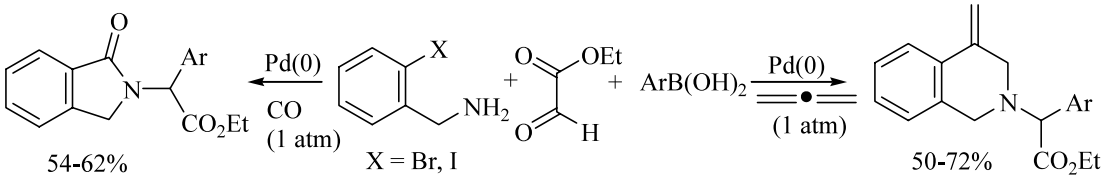


Tetrahedron Letters 44 (2003) 9017

Synthesis of novel cyclic α-amino acid derivatives via a one-pot sequential Petasis reaction/palladium catalysed process

Ronald Grigg,* Visuvanathar Sridharan and Abirami Thayaparan

Molecular Innovation, Diversity and Automated Synthesis (MIDAS) Centre, School of Chemistry, University of Leeds, Leeds LS2 9JT, UK

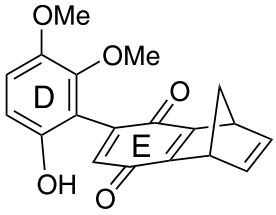


Tetrahedron Letters 44 (2003) 9021

Investigations into arylquinone atropisomers: synthesis and evaluation

Umar S. M. Maharoof and Gary A. Sulikowski*

Department of Chemistry, Texas A&M University, PO Box 30012, College Station, TX 77842–3012, USA



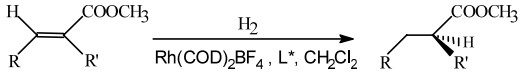
Tetrahedron Letters 44 (2003) 9025

Electronic and steric effects of ligands as control elements for rhodium-catalyzed asymmetric hydrogenation

Ildikó Gergely,[a] Csaba Hegedüs,[b] Áron Szöllösy,[c] Axel Monsees,[d] Thomas Riermeier[d] and József Bakos[a,*]

[a]*Department of Organic Chemistry, University of Veszprém, H-8201 Veszprém, PO Box 158, Hungary*
[b]*Research Group for Petrochemistry, Hungarian Academy of Sciences, H-8201 Veszprém, PO Box 158, Hungary*
[c]*Department of General and Analytical Chemistry, Technical University of Budapest, H-1521 Budapest, Hungary*
[d]*Degussa AG, Projecthause Catalyse, Industriepark Höchst, Building G830, D-65926 Frankfurt a. M., Germany*

A series of electronically and sterically modified (*S*)-BINOL and (*S*)-H_8-BINOL ligands was synthesized and effects on the catalytic performance were studied.



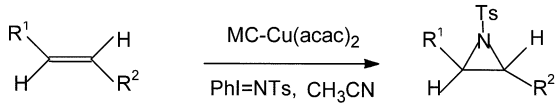
a. R = H, R' = CH_2COOCH_3
b. R = Ph, R' = $NHCOCH_3$

Tetrahedron Letters 44 (2003) 9029

Microencapsulated $Cu(acac)_2$: a recoverable and reusable polymer-supported copper catalyst for aziridination of olefins

M. Lakshmi Kantam,[a,*] B. Kavita,[a] V. Neeraja,[a] Y. Haritha,[a] M. K. Chaudhuri[b,*] and S. K. Dehury[b]

[a]*Indian Institute of Chemical Technology, Hyderabad 500 007, India*
[b]*Department of Chemistry, Indian Institute of Technology, Guwahati 81039, India*

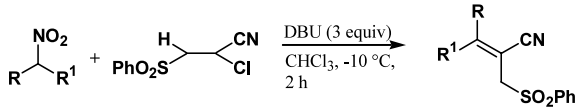


Tetrahedron Letters 44 (2003) 9033

One-pot synthesis of polyfunctionalized α,β-unsaturated nitriles from nitroalkanes

Roberto Ballini,* Dennis Fiorini, Maria Victoria Gil and Alessandro Palmieri

Dipartimento di Scienze Chimiche, Università di Camerino, Via S. Agostino 1, 62032 Camerino, Italy



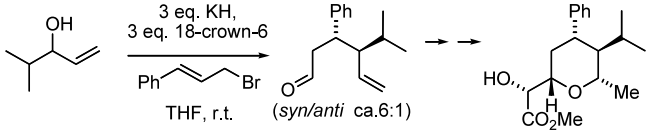
Tetrahedron Letters 44 (2003) 9035

Short synthesis of a tetrasubstituted tetrahydropyran with five stereogenic centres—stereoselective double tandem rearrangements and cyclisation

Nicholas Greeves,* Wai-Man Lee, Steven P. McLachlan, Graham H. Oakes, Mark Purdie and Jamie F. Bickley

Department of Chemistry, Robert Robinson Laboratories, University of Liverpool, Crown Street, Liverpool L69 7ZD, UK

A highly substituted tetrahydropyran with five stereogenic centres was constructed in five steps using a novel stereoselective double tandem reaction and a kinetically selective cyclisation.



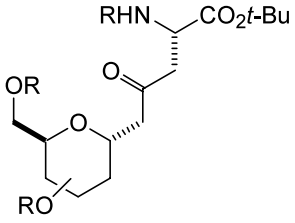
Tetrahedron Letters 44 (2003) 9039

Stereoselective approach to *C*-glycosylasparagines

Barry Lygo,* Benjamin I. Andrews and Daniel Slack

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

A simple and efficient method for the stereoselective synthesis of *C*-glycosylasparagines of the type shown is described.

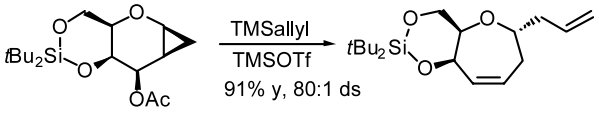


Tetrahedron Letters 44 (2003) 9043

Diastereoselective formation of seven-membered oxacycles by ring-expansion of cyclopropanated galactal

Rhys Batchelor and John O. Hoberg*

School of Chemical and Physical Sciences, Victoria University of Wellington, Wellington, New Zealand



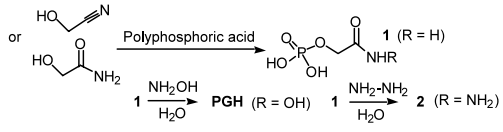
Tetrahedron Letters 44 (2003) 9047

New facile synthesis of phosphoglycolohydroxamic acid and other phosphoglycolic acid derivatives

Philippe Weber, Matthieu Fonvielle and Michel Therisod*

Lab. Chimie Bioorganique et Bioinorganique, ICMMO, Bat. 420, Université Paris-Sud, F-91405 Orsay, France

PGH is a known potent inhibitor of enzymes having dihydroxyacetone-phosphate as substrate.

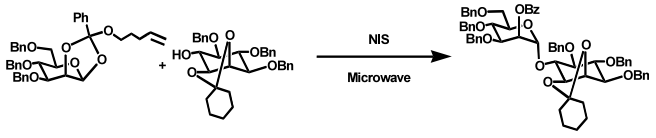


Tetrahedron Letters 44 (2003) 9051

Microwave-assisted saccharide coupling with *n*-pentenyl glycosyl donors

Felix Mathew,[a] K. N. Jayaprakash,[a] Bert Fraser-Reid,[a,*] Jessy Mathew[b,*] and Jan Scicinski[b]

[a]*Natural Products and Glycotechnology Research Institute, Inc., 4118 Swarthmore Road, Durham, NC 27707, USA*
[b]*Nuada Pharmaceuticals, Inc., 4324 South Alston Avenue, Durham, NC 27713, USA*

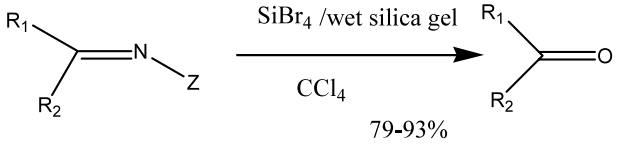


Tetrahedron Letters 44 (2003) 9055

$SiBr_4$/wet silica gel as an efficient heterogeneous system for cleavage of C=N

Surya Kanta De

Department of Chemistry, University of Washington, Seattle, WA 98195, USA



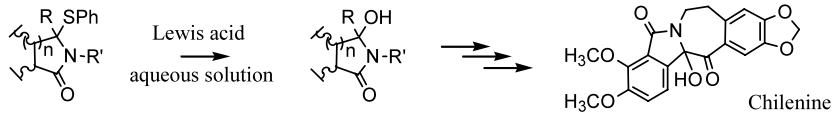
Z = OH, NHPh, $NHCONH_2$

Tetrahedron Letters 44 (2003) 9057

Lewis acid-promoted tandem desulfurization and hydroxylation of γ-phenylthio-substituted lactams: novel synthetic strategy of isoindolobenzazepine alkaloid, chilenine

Hidemi Yoda,* Kei-ichi Inoue, Yasuaki Ujihara, Nobuyuki Mase and Kunihiko Takabe

Department of Molecular Science, Faculty of Engineering, Shizuoka University, Johoku 3-5-1, Hamamatsu 432-8561, Japan

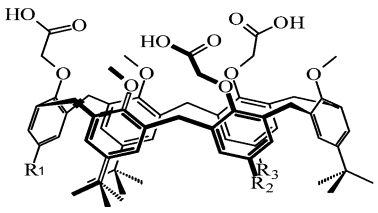


Tetrahedron Letters 44 (2003) 9061

Synthesis of mono-, di-, and trinitro tricarboxymethyl calix[6]arenes for the complexation of uranium(VI)

Rachid Souane, Véronique Hubscher, Zouhair Asfari, Françoise Arnaud* and Jacques Vicens*

UMR 7512 (CNRS-ULP), ECPM, 25 rue Becquerel, F-67087 Strasbourg Cedex 2, France



Mono-, di-, and trinitro tricarboxymethyl calix[6]arenes **3(a–c)** have been synthesised their acid–base behaviour determined by potentiometric investigations. It was shown that the nitro groups does not play a major role on the acid–base properties. Preliminary complexation of uranyl is presented.