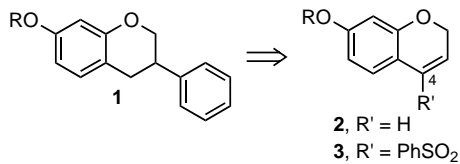
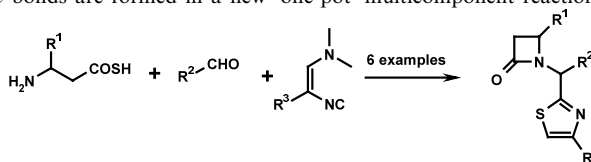


**4-Chromenesulphones: synthesis and transformation to isoflavonoid models**

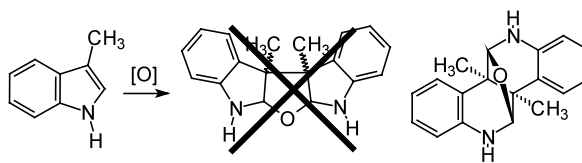
Tetrahedron Letters 43 (2002) 6893

Alessandro Bolis C. Simas,<sup>\*</sup> Luis F. O. Furtado and Paulo R. R. Costa*Universidade Federal do Rio de Janeiro, Núcleo de Pesquisas de Produtos Naturais, Ilha da Cidade Universitária, CCS, bloco H, Rio de Janeiro, RJ, 21941-590, Brazil*Isoflavonoid models (carrying basic skeleton **1**) were constructed from chromenes **2** through novel sulphones **3**.**Simultaneous assembly of the  $\beta$ -lactam and thiazole moiety by a new multicomponent reaction**

Tetrahedron Letters 43 (2002) 6897

Jürgen Kolb,<sup>a</sup> Barbara Beck<sup>b</sup> and Alexander Dömling<sup>b,\*</sup><sup>a</sup>*Technische Universität München, Lichtenbergstr. 4, 85747 Garching, Germany*<sup>b</sup>*Morphochem AG, Gmunder Str. 37-37a, 81379 München, Germany*How does it work? Three acyclic starting materials assemble according to a molecular program to form a highly strained  $\beta$ -lactam ring as well as an aromatic thiazole ring in the products. The increase in molecular complexity here is dramatic as in addition to the two rings, 2 C–N, 2 C–S and 1 C–C bonds are formed in a new ‘one-pot’ multicomponent reaction.**Structural correction of the 3-methylindole oxidatively-coupled dimer**

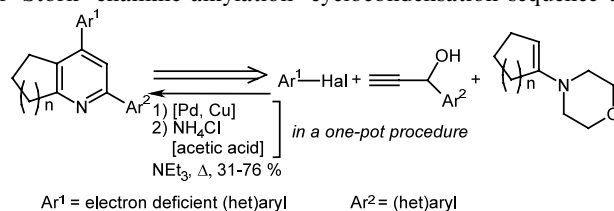
Tetrahedron Letters 43 (2002) 6903

Ke-Qing Ling,<sup>a</sup> Tong Ren,<sup>b</sup> John D. Protasiewicz<sup>a</sup> and Lawrence M. Sayre<sup>a,\*</sup><sup>a</sup>*Department of Chemistry, Case Western Reserve University, Cleveland, OH 44106-7078, USA*<sup>b</sup>*Center for Supramolecular Science and Department of Chemistry, University of Miami, Coral Gables, FL 33124-0431, USA***A novel four component one-pot access to pyridines and tetrahydroquinolines**

Tetrahedron Letters 43 (2002) 6907

N. A. M. Yehia, K. Polborn and T. J. J. Müller<sup>\*</sup>*Organisch-Chemisches Institut, Ruprecht-Karls-Universität Heidelberg, Im Neuenheimer Feld 270, D-69120 Heidelberg, Germany*

A coupling–isomerization–Stork–enamine alkylation–cyclocondensation sequence to dihydropyridines and tetrahydroquinolines.



## Stereoselective formation of optically active 2-oxy-1,3-oxazolidin-4-ones and an efficient synthesis of optically active secondary 2-pyrrolidones

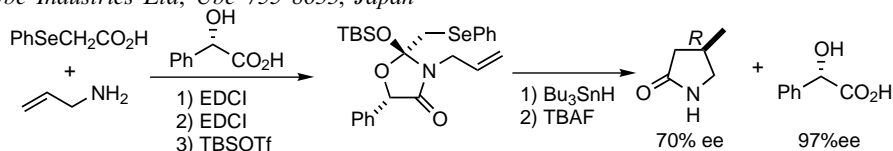
Tetrahedron Letters 43 (2002) 6911

Yoji Omata,<sup>a</sup> Akikazu Kakehi,<sup>b</sup> Masashi Shirai<sup>c</sup> and Akio Kamimura<sup>a,\*</sup>

<sup>a</sup>Department of Applied Chemistry, Faculty of Engineering, Yamaguchi University, Ube 755-8611, Japan

<sup>b</sup>Department of Chemistry and Material Engineering, Shinshu University, Nagano 380-8553, Japan

<sup>c</sup>Ube Laboratory, Ube Industries Ltd, Ube 755-8633, Japan



## Establishment of *Camellia sinensis* cell culture with high peroxidase activity and oxidative coupling reaction of dibenzylbutanolides

Tetrahedron Letters 43 (2002) 6915

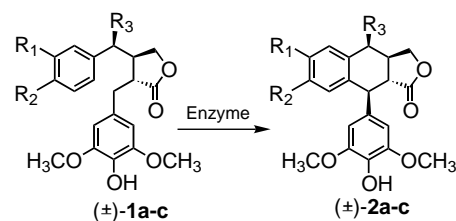
Masumi Takemoto,<sup>a,\*</sup> Youichi Aoshima,<sup>b</sup> Nikolay Stoynev<sup>c</sup> and James Peter Kutney<sup>c</sup>

<sup>a</sup>School of Pharmaceutical Sciences, University of Shizuoka, 52-1 Yada, Shizuoka 422-8526, Japan

<sup>b</sup>Shizuoka Agricultural Experiment Station, 678-1 Tomigaoka Toyoda-cho, Iwata-gun, Shizuoka 438-0803, Japan

<sup>c</sup>Department of Chemistry, University of British Columbia, 2036 Main Mall, Vancouver, B.C., Canada V6T 1Z1

Peroxidase-catalyzed oxidative coupling of racemic **1a-c** to cyclic products (**2a-c**) proceeded with *Camellia sinensis* cell culture quantitatively in the absence of foreign hydrogen peroxide.



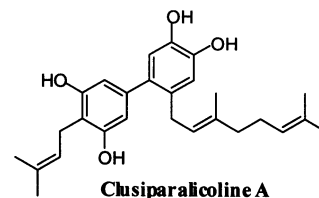
## The first total synthesis and neurotrophic activity of clusiparalicoline A, a prenylated and geranylated biaryl from *Clusia paralicola*

Tetrahedron Letters 43 (2002) 6919

Shigeki Takaoka, Kousuke Nakade and Yoshiyasu Fukuyama\*

Institute of Pharmacognosy, Faculty of Pharmaceutical Sciences, Tokushima Bunri University, Tokushima 770-8514, Japan

Clusiparalicoline A, synthesized by the sequential Stille and Suzuki reactions, has been found to exhibit a potent neurite outgrowth promoting activity at 1.0 μM in a primary culture of fetal rat cortical neurons.

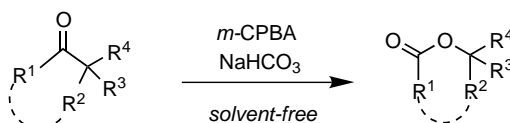


## Remarkable rate acceleration of the solvent-free Baeyer–Villiger reaction on the surface of NaHCO<sub>3</sub> crystals for sterically congested cyclic and acyclic ketones

Tetrahedron Letters 43 (2002) 6925

Takayuki Yakura, Tomoko Kitano, Masazumi Ikeda and Jun'ichi Uenishi\*

Kyoto Pharmaceutical University, Misasagi, Yamashina, Kyoto 607-8412, Japan

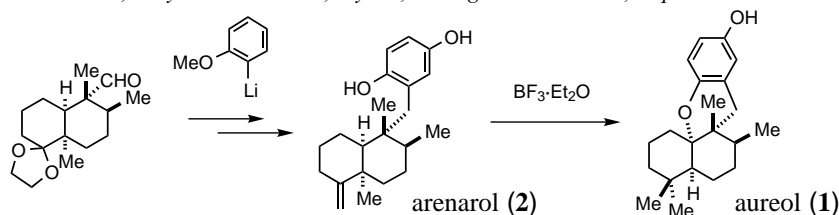


## An efficient synthesis of (+)-aureol via boron trifluoride etherate-promoted rearrangement of (+)-arenarol

Tetrahedron Letters 43 (2002) 6929

Masahiko Nakamura, Akiyuki Suzuki, Mari Nakatani, Takamasa Fuchikami, Munenori Inoue and Tadashi Katoh\*

Sagami Chemical Research Center, Hayakawa 2743-1, Ayase, Kanagawa 252-1193, Japan



## Enzyme-mediated enantioselective hydrolysis of cyclic carbonates bearing an unsaturated substituent

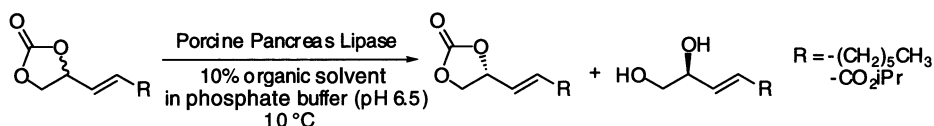
Tetrahedron Letters 43 (2002) 6933

Kazutsugu Matsumoto,<sup>a,\*</sup> Yasuhide Nakamura,<sup>b</sup> Megumi Shimojo<sup>c</sup> and Minoru Hatanaka<sup>b</sup>

<sup>a</sup>Department of Chemistry, Meisei University, Hodokubo 2-1-1, Hino, Tokyo 191-8506, Japan

<sup>b</sup>Department of Applied Chemistry and Biotechnology, Fukui University, Bunkyo 3-9-1, Fukui 910-8507, Japan

<sup>c</sup>Department of Biosciences and Informatics, Keio University, Hiyoshi 3-14-1, Yokohama 223-8522, Japan

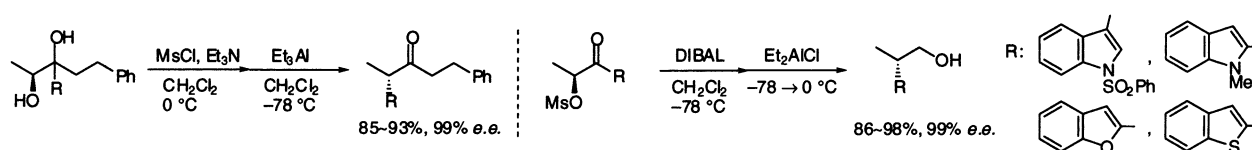


## Pinacol rearrangement for constructing asymmetric centers adjacent to heterocycles

Tetrahedron Letters 43 (2002) 6937

Tomoichi Shinohara and Keisuke Suzuki\*

Department of Chemistry, Tokyo Institute of Technology, and CREST, Japan Science and Technology Corporation (JST), O-okayama, Meguro-ku, Tokyo 152-8551, Japan



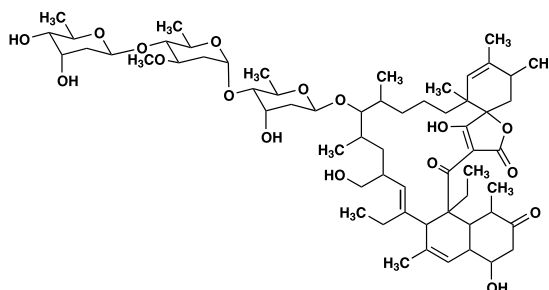
## Versipelostatin, a novel GRP78/Bip molecular chaperone down-regulator of microbial origin

Tetrahedron Letters 43 (2002) 6941

Hae-Ryong Park,<sup>a</sup> Kazuo Furihata,<sup>b</sup> Yoichi Hayakawa<sup>a</sup> and Kazuo Shin-ya<sup>a,\*</sup>

<sup>a</sup>Institute of Molecular and Cellular Biosciences, The University of Tokyo, Bunkyo-ku, Tokyo 113-0032, Japan

<sup>b</sup>Graduate School of Agricultural and Life Sciences, The University of Tokyo, Bunkyo-ku, Tokyo 113-8657, Japan

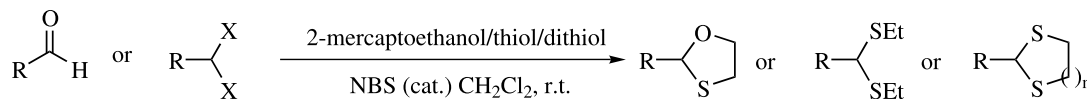


## Oxathioacetalization, thioacetalization and transthoacetalization of carbonyl compounds by *N*-bromosuccinimide: selectivity and scope

*Tetrahedron Letters* 43 (2002) 6947

Ahmed Kamal,\* Gagan Chouhan and Kaleem Ahmed

Division of Organic Chemistry, Indian Institute of Chemical Technology, Hyderabad 500007, India



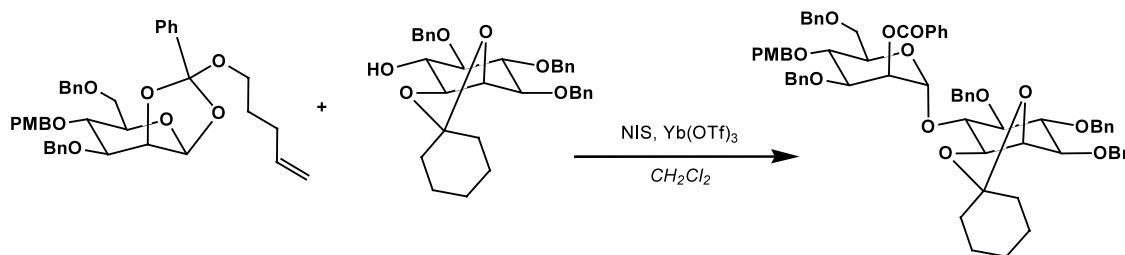
R = aryl, allyl, cyclohexyl; X = OMe, OEt, OAc ; n = 1,2

## Ytterbium(III) trifluoromethanesulfonate for specific activation of *n*-pentenyl orthoesters in the presence of acid-sensitive functionalities

*Tetrahedron Letters* 43 (2002) 6953

K. N. Jayaprakash, K. V. Radhakrishnan and Bert Fraser-Reid\*

Natural Products and Glycotechnology Research Institute, Inc. (NPG), 4118 Swarthmore Road, Durham, NC 27706, USA

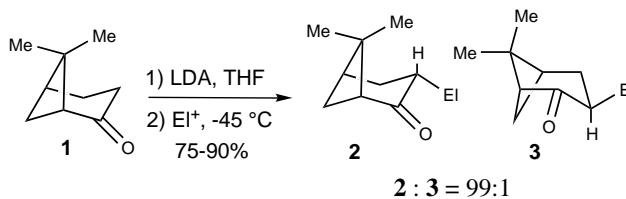


## A general method for the highly diastereoselective, kinetically controlled alkylation of (+)-nopinone

*Tetrahedron Letters* 43 (2002) 6957

Kevin R. Campos,\* Sandra Lee, Michel Journet, Jason J. Kowal, Dongwei Cai, Robert D. Larsen and Paul J. Reider

Department of Process Research, Merck Research Laboratories, PO Box 2000, Rahway, NJ 07065, USA

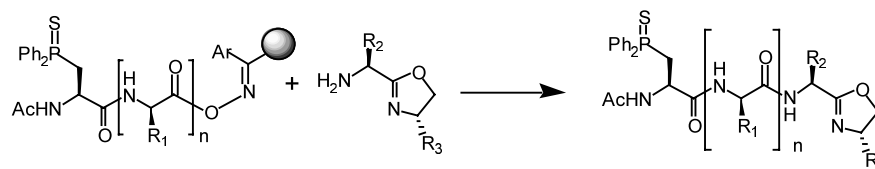


## Solid-phase synthesis of phosphine-oxazoline peptides

*Tetrahedron Letters* 43 (2002) 6961

Scott R. Gilbertson\* and Ping Lan

Department of Chemistry, Washington University, St. Louis, MO 63130, USA



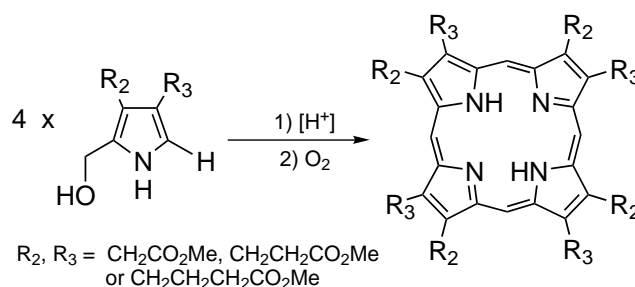
## Studies on the tetramerization of substituted monopyrroles to type I porphyrins

*Tetrahedron Letters* 43 (2002) 6967

C. Pichon-Santander and A. I. Scott\*

*Center for Biological NMR, Department of Chemistry, Texas A&M University, PO Box 30012, College Station, TX 77842-3012, USA*

Tetramerization of pyrroles bearing two different electron-donating groups as substituents under slightly acidic conditions afforded porphyrins with a high ratio of type I isomer in good yields.

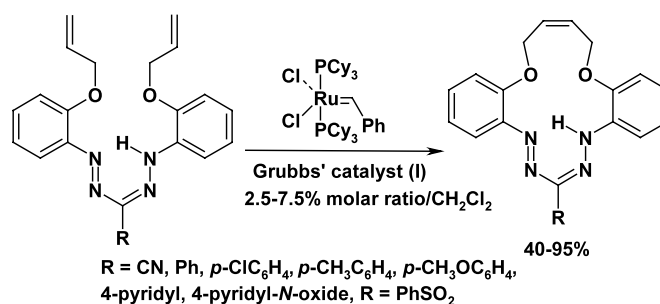


## Efficient highly stereoselective synthesis of olefinic macrocyclic crown-formazans with the *Z*-configuration via ring-closure metathesis

*Tetrahedron Letters* 43 (2002) 6971

Yehia A. Ibrahim,\* Haider Behbehani, Maher R. Ibrahim and Nada M. Abrar

*Chemistry Department, Faculty of Science, Kuwait University, PO Box 5969, Safat 13060, Kuwait*

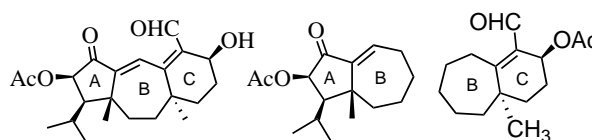


## Towards a total synthesis of guanacastepene A: construction of fully functionalized AB and BC ring segments

*Tetrahedron Letters* 43 (2002) 6975

Goverdhan Mehta,\* Jayant D. Umarye and Vanessa Gagliardini

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



## The room temperature preparation of the 1-chloro-2,2-difluorovinylzinc reagent from HCFC-133a ( $\text{CF}_3\text{CH}_2\text{Cl}$ ).

*Tetrahedron Letters* 43 (2002) 6979

## The first ambient, high yield, one-flask preparation of $\alpha$ -chloro- $\beta,\beta$ -difluorostyrenes

R. Anilkumar and Donald J. Burton\*

*Department of Chemistry, University of Iowa, Iowa City, IA 52242, USA*



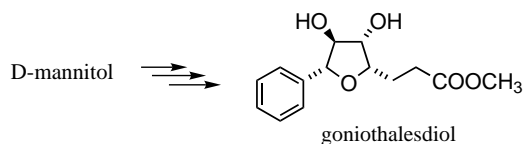
### The first total synthesis of goniiothalesdiol

Tetrahedron Letters 43 (2002) 6983

Matej Babjak, Peter Kapitán and Tibor Gracza\*

Department of Organic Chemistry, Slovak University of Technology, Radlinského 9, SK-812 37 Bratislava, Slovakia

A total synthesis of goniiothalesdiol and its epimer is described.



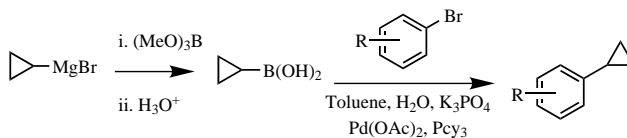
### Cyclopropylboronic acid: synthesis and Suzuki cross-coupling reactions

Tetrahedron Letters 43 (2002) 6987

Debra J. Wallace\* and Cheng-yi Chen

Department of Process Research, Merck Research Laboratories, PO Box 2000, Rahway, NJ 07065, USA

An efficient synthesis of cyclopropylboronic acid is reported. This compound undergoes efficient Suzuki-type cross-coupling reactions with a range of aryl and heteroaryl bromides.

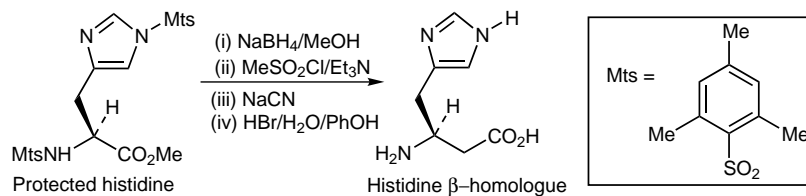


### The homologation of histidine

Tetrahedron Letters 43 (2002) 6991

Amit Kumar, Stephanos Ghilagaber, Jamie Knight and Peter B. Wyatt\*

Department of Chemistry, Queen Mary, University of London, Mile End Road, London E1 4NS, UK



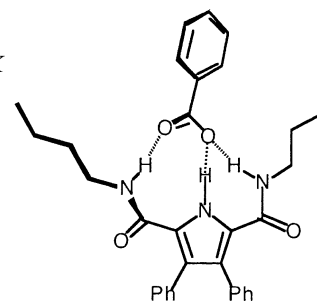
### Confirmation of a 'cleft-mode' of binding in a 2,5-diamidopyrrole anion receptor in the solid state

Tetrahedron Letters 43 (2002) 6995

Salvatore Camiolo, Philip A. Gale,\* Michael B. Hursthouse and Mark E. Light

University of Southampton, Department of Chemistry, Highfield, Southampton SO17 1BJ, UK

The crystal structure of benzoate bound to a 2,5-diamidopyrrole anion receptor has been elucidated revealing the formation of a 'cleft conformation'.



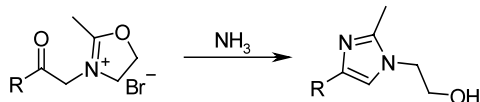
## Preparation of 1,2,4-trisubstituted imidazoles by ammonolysis of *N*-(2-oxoalkyl)oxazolinium salts

*Tetrahedron Letters* 43 (2002) 6997

Matthew P. John, Stephen A. Hermitage\* and James R. Titchmarsh

*GlaxoSmithKline, Chemical Development Division, Medicines Research Centre, Gunnels Wood Road, Stevenage, Hertfordshire SG1 2NY, UK*

A variety of aryl and alkyl substituted imidazoles have been prepared by the ring opening of *N*-(2-oxoalkyl)oxazolinium salts with ammonia.



## SmI<sub>2</sub>-mediated facile one-pot preparation of 2,4-diarylquinolines from 3-aryl-2,1-benzisoxazoles

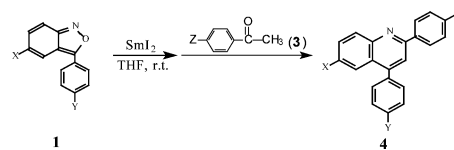
*Tetrahedron Letters* 43 (2002) 7001

Xuesen Fan<sup>a,c</sup> and Yongmin Zhang<sup>a,b,\*</sup>

<sup>a</sup>*Department of Chemistry, Zhejiang University (Campus Xixi), Hangzhou 310028, PR China*

<sup>b</sup>*State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai 200032, PR China*

<sup>c</sup>*Department of Chemistry, Henan Normal University, Xinxiang 453002, PR China*



On treatment with SmI<sub>2</sub>, 3-aryl-2,1-benzisoxazoles undergo reductive cleavage of the N–O bond leading to 2-aminobenzophenones in high yields upon protonation. If aryl methyl ketones are added to the reaction mixture prior to protonation, 2,4-diarylquinolines can be obtained in moderate yields.

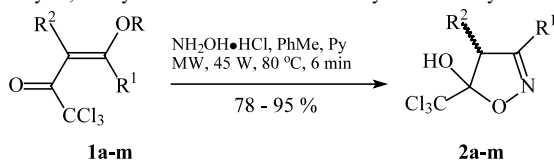
## Microwave assisted synthesis of 5-hydroxy-5-trichloromethyl-4,5-dihydroisoxazoles

*Tetrahedron Letters* 43 (2002) 7005

Marcos A. P. Martins,\* Paulo Beck, Wilson Cunico, Claudio M. P. Pereira, Adilson P. Sinhoroim, Rogério F. Blanco, Rodrigo Peres, Helio G. Bonacorso and Nilo Zanatta

*Núcleo de Química de Heterociclos (NUQUIMHE), Departamento de Química, Universidade Federal de Santa Maria, 97.105-900 Santa Maria, RS, Brazil*

A series of 13 5-hydroxy-5-trichloromethyl-4,5-dihydroisoxazoles have been synthesized by environmentally benign microwave (MW) induced techniques.

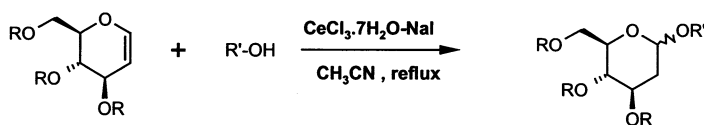


## CeCl<sub>3</sub>·7H<sub>2</sub>O: a novel reagent for the synthesis of 2-deoxysugars from D-glycals

*Tetrahedron Letters* 43 (2002) 7009

J. S. Yadav,\* B. V. S. Reddy, K. Bhaskar Reddy and M. Satyanarayana

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



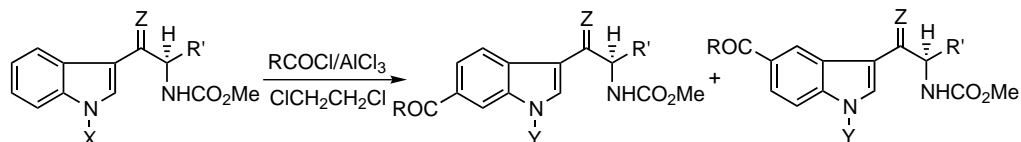
## Regioselective acylation at the 5- or 6-position of L-tryptophan derivatives

Tetrahedron Letters 43 (2002) 7013

Yongwen Jiang<sup>a</sup> and Dawei Ma<sup>b,\*</sup>

<sup>a</sup>Department of Chemistry, Fudan University, Shanghai 200433, China

<sup>b</sup>State Key Laboratory of Bioorganic and Natural Products Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, China



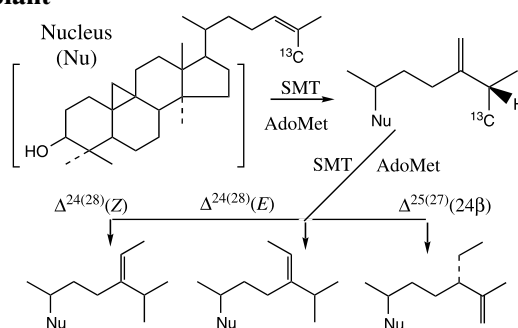
## Sterol methyl transferase. Evidence for successive C-methyl transfer reactions generating $\Delta^{24(28)}$ - and $\Delta^{25(27)}$ -olefins by a single plant enzyme

Tetrahedron Letters 43 (2002) 7017

Allen L. Dennis and W. David Nes\*

Department of Chemistry and Biochemistry, Texas Tech University, Lubbock, TX 79409, USA

Recombinant soybean sterol methyl transferase converted [27-<sup>13</sup>C]-cycloartenol to (25*R*)-[27-<sup>13</sup>C]24(28)methylenecycloartenol and 24(28)-methylenecycloartenol to a mixture of (24*E*)- and (24*Z*)-24-ethylidenecycloartenol and 24 $\beta$ -ethyl-25(27)-dehydrocycloartenol.

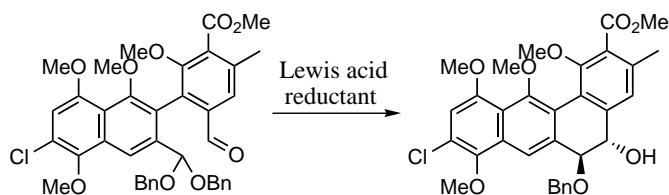


## Semi-pinacol strategy for constructing B-ring of pradimicin–benanomicin antibiotics

Tetrahedron Letters 43 (2002) 7023

Ken Ohmori, Mitsuru Kitamura, Yuji Ishikawa, Hirohisa Kato, Mami Oorui and Keisuke Suzuki\*

Department of Chemistry, Tokyo Institute of Technology, and CREST, Japan Science and Technology Corporation (JST), O-okayama, Meguro-ku, Tokyo 152-8551, Japan



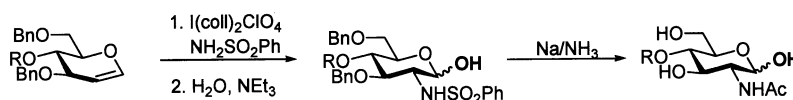
## Reducing oligosaccharides via glycal assembly: on the remarkable stability of anomeric hydroxyl groups to global deprotection with sodium in liquid ammonia

Tetrahedron Letters 43 (2002) 7027

Ulrich Iserloh,<sup>a</sup> Vadim Dudkin,<sup>a</sup> Zhi-Guang Wang<sup>a</sup> and Samuel J. Danishefsky<sup>a,b,\*</sup>

<sup>a</sup>Laboratory for Bioorganic Chemistry, The Sloan-Kettering Institute for Cancer Research, 1275 York Avenue, New York, NY 10021, USA

<sup>b</sup>Department of Chemistry, Columbia University, Havemeyer Hall, New York, NY 10027, USA



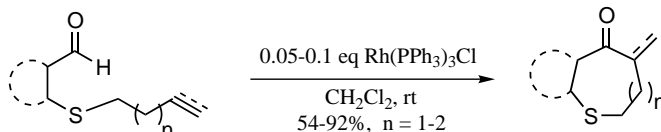


### Chelation-assisted intramolecular hydroacylation: synthesis of medium ring sulfur heterocycles

*Tetrahedron Letters* 43 (2002) 7031

Holly D. Bendorf,\* Christine M. Colella, Elizabeth C. Dixon, Melissa Marchetti, Alicia N. Matukonis, Jeffrey D. Musselman and Tara A. Tiley

*Department of Chemistry, Lycoming College, Williamsport, PA 17701, USA*



### A novel one-pot synthesis of 3-acetyl- and 3-benzoylisoxazole derivatives using ammonium cerium nitrate (CAN)

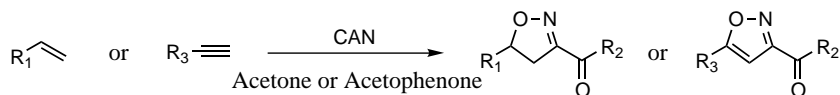
*Tetrahedron Letters* 43 (2002) 7035

Ken-ichi Itoh,<sup>a</sup> Shigeo Takahashi,<sup>a</sup> Tetsuya Ueki,<sup>a</sup> Takashi Sugiyama,<sup>b</sup> T. Tomoyoshi Takahashi<sup>c</sup> and C. Akira Horiuchi<sup>a,\*</sup>

<sup>a</sup>*Department of Chemistry, Rikkyo (St. Paul's) University, 3-34-1 Nishi-Ikebukuro, Toshima-ku, Tokyo 171-8501, Japan*

<sup>b</sup>*Institute for Chemical Research, Kyoto University, Uji, Kyoto 611-0011, Japan*

<sup>c</sup>*Department of Chemistry, The Jikei University School of Medicine, Kokuryo-cho Chofu, Tokyo 182-8570, Japan*

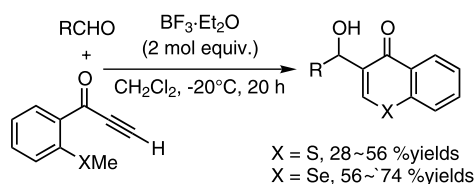


### Tandem Michael-aldol reaction via 6-endo-dig cyclization of ynone-chalcogenides: synthesis of 2-unsubstituted 3-(hydroxyalkyl)-chalcogenochromen-4-ones

*Tetrahedron Letters* 43 (2002) 7039

Tadashi Kataoka,\* Hironori Kinoshita, Sayaka Kinoshita and Tatsunori Iwamura

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

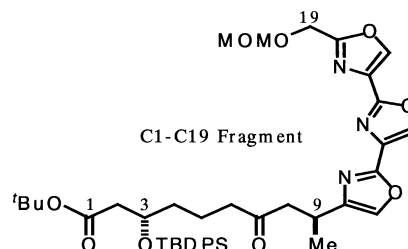


### Asymmetric synthesis of a C1-C19 fragment of ulapualide A

*Tetrahedron Letters* 43 (2002) 7043

Cassandra A. Celatka and James S. Panek\*

*Department of Chemistry and Center for Streamlined Synthesis, Metcalf Center for Science and Engineering, Boston University, 590 Commonwealth Avenue, Boston, MA 02215, USA*

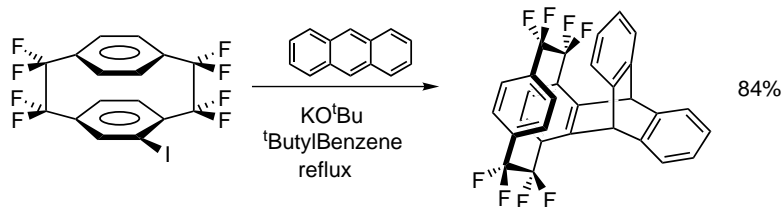


### 4,5-Dehydrooctafluoro[2.2]paracyclophane: facile generation and extraordinary Diels–Alder reactivity

Tetrahedron Letters 43 (2002) 7047

Merle A. Battiste,\* Jian-Xin Duan, Yi-An Zhai, Ion Ghiviriga, Khalil A. Abboud, Adrian Roitberg, G. Robert Shelton and William R. Dolbier, Jr.\*

Department of Chemistry, University of Florida, PO Box 117200, Gainesville, FL 32611-7200, USA

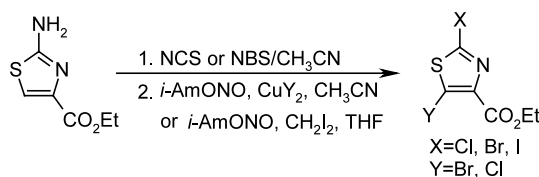


### Synthesis of 2,5-dihalothiazole-4-carboxylates

Tetrahedron Letters 43 (2002) 7051

John F. Okonya and Fahad Al-Obeidi\*

Aventis Combinatorial Technologies Center, Selectide, 1580 E. Hanley Blvd., Tucson, AZ 85737, USA

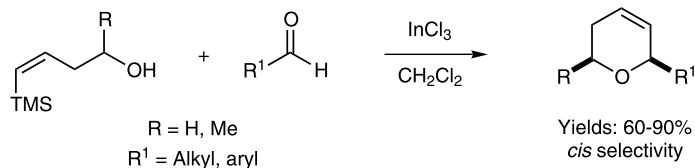


### The silyl–Prins reaction: a novel method for the synthesis of dihydropyrans

Tetrahedron Letters 43 (2002) 7055

Adrian P. Dobbs\* and Saša Martinović

School of Chemistry, University of Exeter, Stocker Road, Exeter EX4 4QD, UK



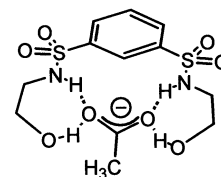
### Effect of hydroxyl groups in receptors bearing disulfonamide on anion recognition in acetonitrile-*d*<sub>3</sub>

Tetrahedron Letters 43 (2002) 7059

Shin-ichi Kondo,\* Takashi Suzuki and Yumihiko Yano

Department of Chemistry, Faculty of Engineering, Gunma University, Kiryu, Gunma 376-8515, Japan

To elucidate the roles of hydroxyl group on anion-recognition chemistry, receptors bearing disulfonamide and hydroxyl groups were prepared and their anion-binding properties were evaluated in acetonitrile.

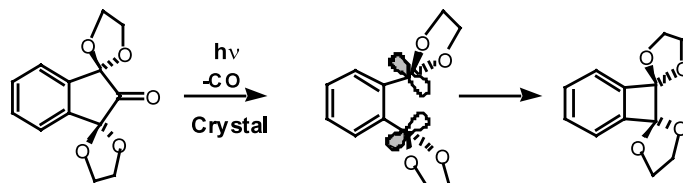


## Engineering reactions in crystals: *gem*-dialkoxy substitution enables the photodecarbonylation of crystalline 2-indanone

Tetrahedron Letters 43 (2002) 7063

Danny Ng, Zhe Yang and Miguel A. Garcia-Garibay\*

Department of Chemistry, University of California, Los Angeles, CA 90095-1569, USA



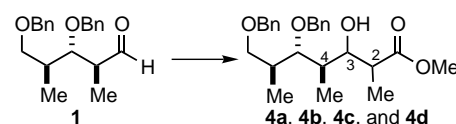
## Synthesis of polypropionate motifs containing the *anti-anti* unit

Tetrahedron Letters 43 (2002) 7067

Philippe Mochirian,<sup>a</sup> Benoit Cardinal-David,<sup>a</sup> Brigitte Guérin,<sup>a</sup> Michel Prévost<sup>a</sup> and Yvan Guindon<sup>a,b,\*</sup>

<sup>a</sup>Institut de recherches cliniques de Montréal (IRCM), Bio-organic Chemistry Laboratory, 110, avenue des Pins Ouest, Montréal, Québec, Canada H2W 1R7

<sup>b</sup>Department of Chemistry and Department of Pharmacology, Université de Montréal, CP 6128, succursale Centre-Ville, Montréal, Québec, Canada H3C 3J7



Reported herein is the iteration of a strategy employing a Mukaiyama reaction in tandem with a hydrogen transfer reaction for the elaboration of four polypropionate motifs containing the *anti-anti* unit. In this process, Lewis acid acts as the key element in controlling the diastereoselectivity of each step, the outcome of which is >20:1 for all of the reactions performed.

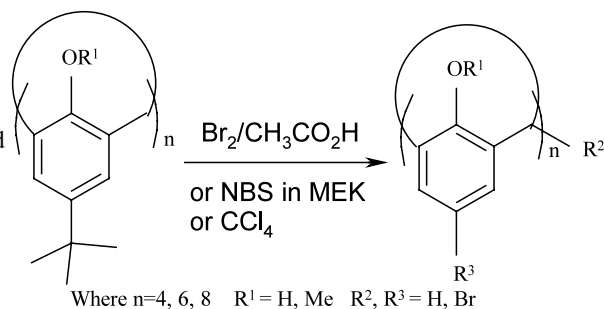
## One step facile synthesis of bromo calix[n]arenes

Tetrahedron Letters 43 (2002) 7073

Satish Kumar, H. M. Chawla and R. Varadarajan\*

Department of Chemistry, Indian Institute of Technology, New Delhi, India

Bromination of *p*-*tert*-butylcalix[n]arenes under different reaction conditions can provide either methylene bridge or ring substituted calix[n]arenes that are usually only amenable through long circuitous routes.



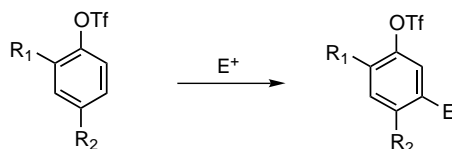
## The reaction of aryl triflates and aryl pivalates with electrophiles. The triflate as a *meta*-directing group

Tetrahedron Letters 43 (2002) 7077

George A. Kraus,\* Wenge Cui and Young Ho Seo

Department of Chemistry, Iowa State University, Ames, IA 50011, USA

Electrophilic reactions of substituted aryl triflates yield products wherein the substituents direct the regioselectivity of electrophilic substitution.



## Synthesis of furanochromones: a new step in improvement of fluorescence properties

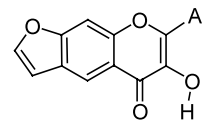
Tetrahedron Letters 43 (2002) 7079

Andrey S. Klymchenko,<sup>a,b,\*</sup> Turan Ozturk<sup>a</sup> and Alexander P. Demchenko<sup>a,c</sup>

<sup>a</sup>TUBITAK RIGEB and TUBITAK MRC, Gebze-Kocaeli 41470, Turkey

<sup>b</sup>Department of Chemistry, Kyiv National Taras Shevchenko University, 01033 Kyiv, Ukraine

<sup>c</sup>A. V. Palladin Institute of Biochemistry, 9 Leontovicha str., 02030 Kyiv, Ukraine



An improvement in the procedure for the preparation of 3-hydroxychromones resulted in the synthesis of furanochromones. They exhibit the highest fluorescence quantum yields among all 3-hydroxychromones known to date and show larger separation between the two emission bands. This makes them promising for designing two-band fluorescence sensors.

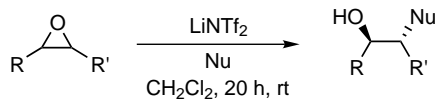
## Regioselective ring opening of epoxides by nucleophiles mediated by lithium bistrifluoromethanesulfonimide

Tetrahedron Letters 43 (2002) 7083

Janine Cossy,<sup>a,\*</sup> Véronique Bellosta,<sup>a</sup> Claire Hamoir<sup>a</sup> and Jean-Roger Desmurs<sup>b</sup>

<sup>a</sup>Laboratoire de Chimie Organique associé au CNRS, ESPCI, 10 rue Vauquelin, 75231 Paris Cedex 05, France

<sup>b</sup>Rhodia, 190 avenue Thiers, 69457 Lyon Cedex 06, France



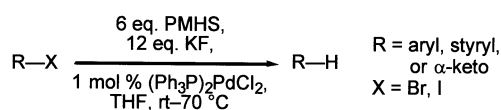
Nu = HNR<sub>2</sub>, H<sub>2</sub>NR, PhSH, H<sub>2</sub>N-N(Me)<sub>2</sub>

## Palladium-catalyzed hydrodehalogenations by fluoride activated polymethylhydrosiloxane

Tetrahedron Letters 43 (2002) 7087

Robert E. Maleczka, Jr.,\* Ronald J. Rahaim, Jr. and Robson R. Teixeira

Department of Chemistry, Michigan State University, East Lansing, MI 48824, USA



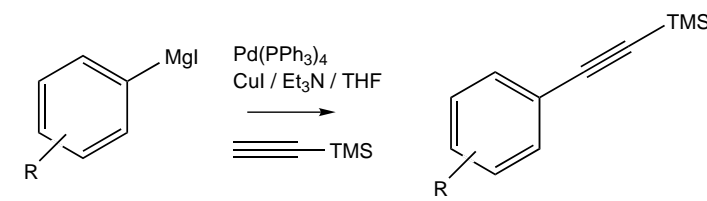
## Palladium-catalyzed carbon-carbon coupling reactions using aryl Grignards

Tetrahedron Letters 43 (2002) 7091

Christine Gottardo\* and Andrea Aguirre

Department of Chemistry, Lakehead University, Thunder Bay, Ont., Canada P7B 5E1

Grignard reagents were used in the Sonogashira coupling of alkynes and aryl halides.



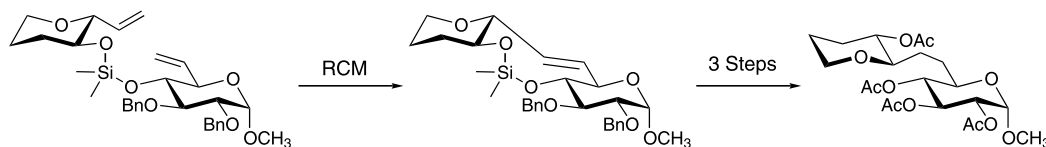
R = EWG, EDG

## Cross-metathesis and ring-closing metathesis of olefinic monosaccharides

Maarten H. D. Postema\* and Jared L. Piper

Department of Chemistry, Wayne State University, Detroit, MI 48202, USA

Tetrahedron Letters 43 (2002) 7095

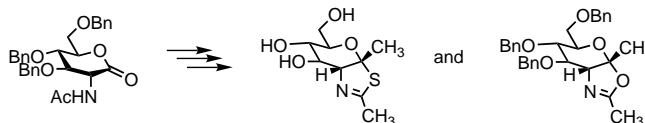


## Addition of trialkylaluminum reagents to glyconolactones. Synthesis of 1-C-methyl GlcNAc oxazoline and thiazoline

Spencer Knapp,\* Chunhua Yang and Thomas Haimowitz

Department of Chemistry & Chemical Biology, Rutgers–The State University of New Jersey, 610 Taylor Road, Piscataway, NJ 08854-8087, USA

Tetrahedron Letters 43 (2002) 7101



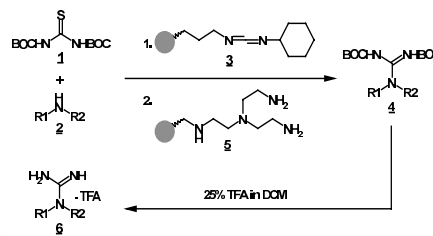
## A novel, facile methodology for the synthesis of *N,N'*-bis(*tert*-butoxycarbonyl)-protected guanidines using polymer-supported carbodiimide

Olga Guisado, Sonia Martínez and Joaquín Pastor\*

High Throughput Chemistry Group, Johnson & Johnson Pharmaceutical Research and Development, a division of Janssen-Cilag, S.A., Centro de Investigación Química. C/ Jarama s/n, Toledo 45007, Spain

A novel methodology for the synthesis of guanidines has been developed using PS-carbodiimide as activating agent for *N,N'*-bis(*tert*-butoxycarbonyl)thiourea and PS-trisamine as scavenger, followed by deprotection with trifluoroacetic acid.

Tetrahedron Letters 43 (2002) 7105

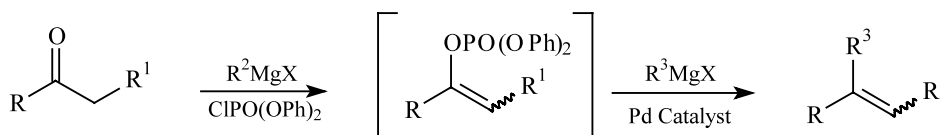


## Palladium-catalyzed cross coupling of Grignard reagents with in situ-derived enol phosphates

Joseph A. Miller\*

DSM Pharmaceuticals, Inc., 5900 NW Greenville Boulevard, Greenville, NC 27834, USA

Tetrahedron Letters 43 (2002) 7111



**Heck reactions in a non-aqueous ionic liquid using silica supported palladium complex catalysts**Keisuke Okubo,<sup>a</sup> Masayuki Shirai<sup>b</sup> and Chiaki Yokoyama<sup>a,\*</sup><sup>a</sup>*Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Katahira, Sendai 980-8577, Japan*<sup>b</sup>*Supercritical Fluid Research Center, National Institute of Advanced Industrial Science and Technology, Sendai 983-8551, Japan*