

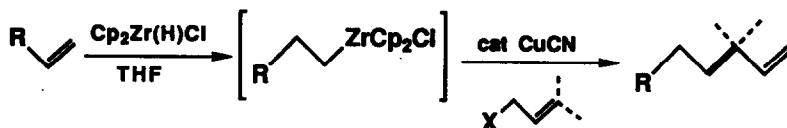
GRAPHICAL ABSTRACTS

*Tetrahedron Lett.* 1992, 33, 5857

COPPER-CATALYZED ALLYLIC ALKYLATIONS OF ALKYLZIRCONIUM INTERMEDIATES

Luigi M. Venanzi, Roman Lehmann, Robert Keil, and Bruce H. Lipshutz\*  
Laboratory for Inorganic Chemistry, ETH, CH-8092, Zurich,  
Department of Chemistry, University of California, Santa Barbara, CA 93106

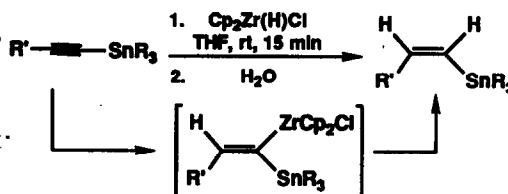
$S_N2'$  displacements on allylic groups by alkylzircononium species catalyzed by CuCN.



PREPARATION OF Z-VINYLISTANNANES VIA HYDROZIRCONATION OF STANNYLACETYLENES

Bruce H. Lipshutz,\* Robert Keil, and John C. Barton  
Department of Chemistry  
University of California, Santa Barbara, CA 93106

Protioquenching of vinylzirconium intermediates derived from 1-trialkylstannylalkynes leads to the corresponding Z-vinylstannanes in high yields.

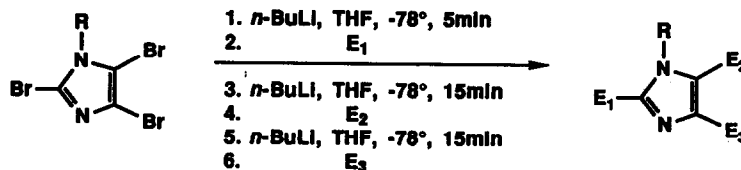


*Tetrahedron Lett.* 1992, 33, 5861

SINGLE-FLASK POLYFUNCTIONALIZATION OF THE IMIDAZOLE RING; A STREAMLINED ROUTE TO THE ANTITUMOR AGENT CARMETHIZOLE

Bruce H. Lipshutz\* and William Hagen  
Department of Chemistry, University of California  
Santa Barbara, CA 93106

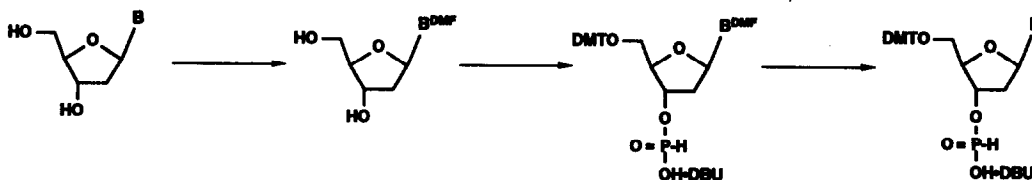
Trisubstituted imidazoles via sequential lithiation/electrophilic quenching.



*Tetrahedron Lett.* 1992, 33, 5865

H-PHOSPHONATE DNA SYNTHESIS WITHOUT AMINO PROTECTION

Pei-Pei Kung and Roger A. Jones,\* Department of Chemistry, Rutgers, The State University of New Jersey, Piscataway, NJ 08855  
Oligonucleotide synthesis by the H-phosphonate method can be carried out without the use of amino protecting groups. The amino-unprotected monomers are readily prepared from the *N*-dimethylaminomethylene derivatives.



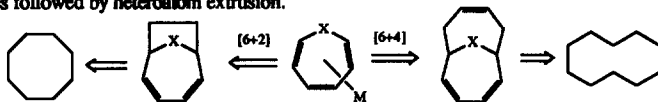
*Tetrahedron Lett.* 1992, 33, 5869

**METAL PROMOTED HIGHER-ORDER CYCLOADDITION REACTIONS. A FACILE ENTRY INTO SUBSTITUTED EIGHT- AND TEN-MEMBERED CARBOCYCLES.**

*Tetrahedron Lett.* 1992, 33, 5873

James H. Rigby,\* Humy S. Ateeq and A. Chris Krueger  
Department of Chemistry, Wayne State University, Detroit, Michigan 40202

Substituted eight- and ten-membered carbocycles can be accessed by employing a metal promoted higher-order cycloaddition of heterocyclic trienes followed by heteroatom extrusion.

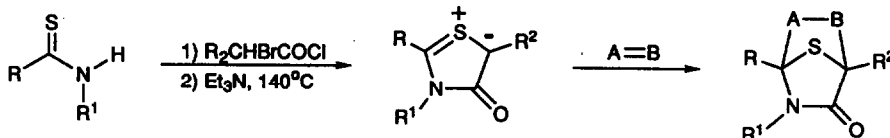


**GENERATION AND CYCLOADDITION REACTIONS OF TRANSIENT ALKYL-SUBSTITUTED ANHYDRO-4-HYDROXYTHIAZOLIUM HYDROXIDES**

*Tetrahedron Lett.* 1992, 33, 5877

Donald L. Hertzog, William R. Nadler, Zhijia J. Zhang, and Albert Padwa\*  
Department of Chemistry, Emory University Atlanta, GA 30322 USA

Transient alkyl-substituted anhydro-4-hydroxythiazolium hydroxides undergo efficient inter- and intramolecular cycloaddition to provide the corresponding 1,3-dipolar cycloadducts in high yield.

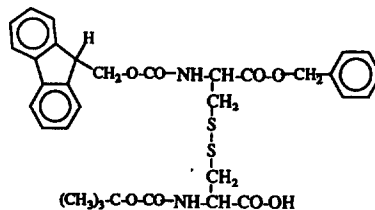


**SEQUENTIAL SYNTHESIS OF AN UNSYMMETRICAL TWO-CHAIN DISULFIDE PEPTIDE ON SOLID-PHASE**

*Tetrahedron Lett.* 1992, 33, 5881

Erika E. Büllesbach and Christian Schwabe  
Medical University of South Carolina, Department of Biochemistry and Molecular Biology, 171 Ashley Avenue, Charleston S.C. 29425

The synthesis of an unsymmetrical cystine-derivative Fmoc-Cys(Boc-Cys)-OBzl allowed the sequential synthesis of a disulfide-linked two-chain polypeptide on solid-phase.



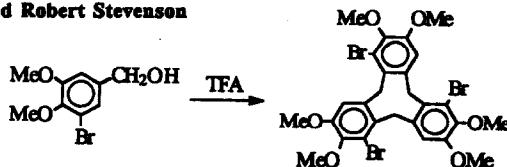
**A Simple Synthesis of Cyclotribromoveratrylene (CTBV)  
An Extractive of the Red Alga *Halopytis pinastroides*.**

*Tetrahedron Lett.* 1992, 33, 5885

Emile Al-Farhan, Olusegun M. Falana, Phillip M. Keehn\* and Robert Stevenson

Department of Chemistry, Brandeis University, Waltham, Massachusetts 02254, U.S.A.

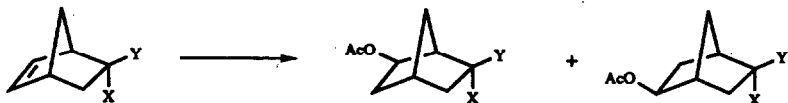
**Abstract:** Treatment of 5-bromoveratryl alcohol with trifluoroacetic acid yields 1,6,11-tribromo-10,15-dihydro-2,3,7,8,12,13-hexamethoxy-5H-tribenzo[a,d,g]cyclononene (CTBV), previously isolated from the red alga, *Halopytis pinastroides*.



*Tetrahedron Lett.* 1992, 33, 5887

**Remote Substituent Effects on Regioselectivity in Rhodium(I)-catalyzed Hydroborations of Norbornenes**

K.M.J. Brands and A.S. Kende\* Department of Chemistry, University of Rochester, Rochester, New York 14627, USA

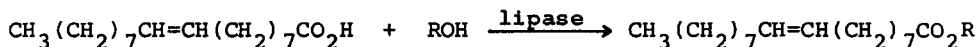


Remote substituent effects on the regioselectivities of both the conventional and the rhodium(I)-catalyzed hydroborations of some norbornenes are discussed, and synthetically useful regioselectivities controlled by certain *endo*-substituents in the catalyzed series are demonstrated.

*Tetrahedron Lett.* 1992, 33, 5891

**ENZYME-CATALYZED ESTERIFICATIONS IN MICROEMULSION-BASED ORGANO GELS**

M.G.Nascimento\*, M.C.Rezende, R.Dalla Vecchia, P.C.Jesus and L.M.Z. Aguiar, Departamento de Química, Universidade Federal de S. Catarina, Florianópolis, SC 88049, Brasil



The examples illustrate a new alternative for biocatalyzed reactions in organic media, by the use of enzymes immobilized in microemulsion-based gels (MBG's).

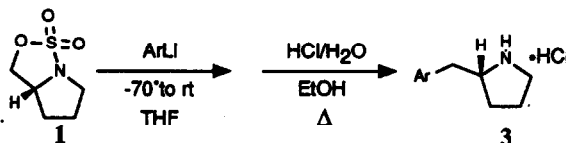
*Tetrahedron Lett.* 1992, 33, 5895

**Alkylation of the Cyclic Sulfamate of Prolinol. Preparation of Optically Active 2-Alkyl-Substituted Pyrrolidines**

Gary F. Cooper\*, Keith E. McCarthy and Michael G. Martin

Institute of Organic Chemistry, Syntex Research, 3401 Hillview Ave., Palo Alto, CA 94304 USA

Treatment of the cyclic sulfamate of (R)-prolinol (1) with aromatic lithium reagents, followed by acidic hydrolysis, gives 2-substituted pyrrolidines 3a-c in moderate yields.



- a Ar = 3,4-dimethoxyphenyl
- b Ar = phenyl
- c Ar = 2-thienyl

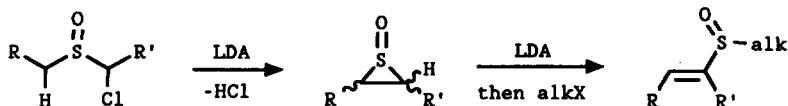
*Tetrahedron Lett.* 1992, 33, 5897

**THE ONE-POT GENERATION AND RING OPENING OF ALKYL AND ARYL THIIRANE-S-OXIDES**

Adrian L. Schwan\* and David A. Wilson

Guelph-Waterloo Centre for Graduate Work in Chemistry, Guelph Campus, Department of Chemistry and Biochemistry, University of Guelph, Guelph, ON, Canada N1G 2W1.

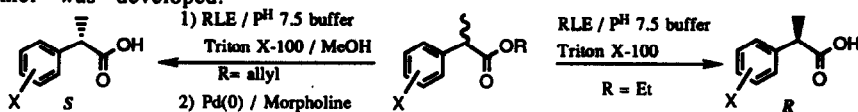
The reaction of  $\alpha$ -chlorosulfoxides with LDA affords transient thiirane-S-oxides.



## RABBIT LIVER ESTERASE-MEDIATED ENANTIOSELECTIVE

SYNTHESIS OF 2-ARYLPROPANOIC ACIDS. Chris H. Senanayake,\* Timothy J. Bill, Robert D. Larsen, John Leazer, and Paul J. Reider Department of Process Research, Merck Research Laboratories, Division of Merck & Co., Inc., P.O. Box 2000, Rahway, New Jersey 07065, USA.

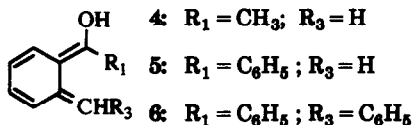
A novel enzymatic resolution of arylpropanoic acids with rabbit liver esterase to afford either enantiomer was developed.



## SCAVENGING OF PHOTOENOLS BY ACIDS AND BASES

J.C. Scaiano<sup>a</sup>, Véronique Wintgens<sup>b</sup> and J.C. Netto-Ferreira<sup>c</sup>

<sup>a</sup>Department of Chemistry, University of Ottawa, Ottawa, Canada K1N 6N5; <sup>b</sup>Laboratoire de Matériaux Moléculaires, C.N.R.S., Thiais, 94320-France; <sup>c</sup>Universidade Federal Rural do Rio de Janeiro, Departamento de Química, Itaguaí, Rio de Janeiro, Brazil, CEP 23851

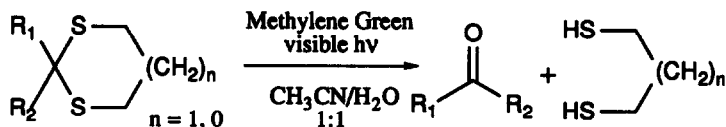


Photoenols generated by irradiation of *o*-methylacetophenone, *o*-methylbenzophenone and *o*-benzylbenzophenone readily react with acids and bases, presumably to yield the parent ketone. The rate constants for these reactions were determined employing laser flash photolysis techniques. For example 4 reacts with sodium hydroxide and trifluoroacetic acid with rate constants of  $1.2 \times 10^9$  and  $1.1 \times 10^6 \text{ M}^{-1}\text{s}^{-1}$ , respectively.

## PHOTOSENSITIZED CLEAVAGE OF THE DITHIO PROTECTING GROUP BY VISIBLE LIGHT

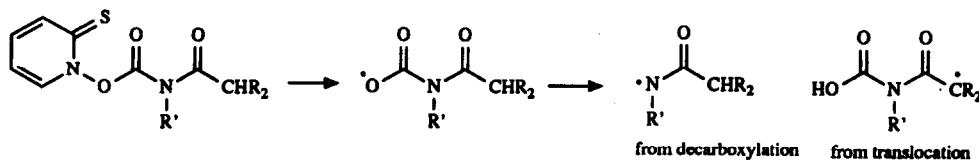
Gary A. Epling\* and Qingxi Wang, Department of Chemistry University of Connecticut, Storrs, CT 06269, USA

Dithio compounds have been deprotected using visible light and methylene green as a sensitizer. Reaction proceeds under nitrogen, and involves an electron transfer pathway.



*N*-ACYL-*N*-ALKYLCARBAMOYLOXY RADICALS: ENTRIES TO AMIDYL RADICALS BY DECARBOXYLATION AND TO  $\alpha$ -AMIDE RADICALS BY RADICAL TRANSLOCATION

J. L. Esker and M. Newcomb\*, Department of Chemistry, Wayne State University, Detroit, Michigan, 48202, USA



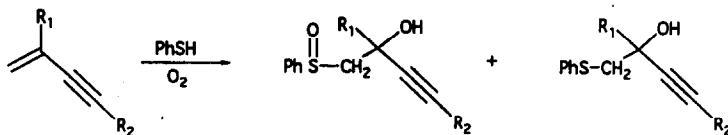
*Tetrahedron Lett.* 1992, 33, 5917

**THE CO-OXIDATION OF CONJUGATED ENYNES. A CONVENIENT SYNTHESIS OF  $\beta$ -SULFOXY ACETYLENIC CARBINOLS**

Xiaoheng Wang, Zhijie Ni, Xiuqing Lu, Temeika Y. Smith, Augusto Rodriguez,\* and Albert Padwa\*

Department of Chemistry, Clark Atlanta University and Emory University, Atlanta, GA 30322, USA

Several  $\beta$ -sulfoxy substituted acetylenic carbinols were prepared by the addition of thiyl radicals and oxygen to conjugated enynes.

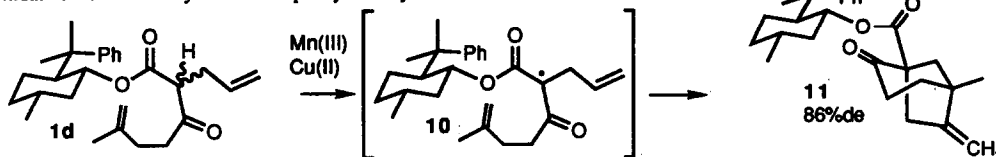


*Tetrahedron Lett.* 1992, 33, 5921

**ASYMMETRIC INDUCTION IN MANGANESE(III)-BASED OXIDATIVE FREE-RADICAL CYCLIZATIONS OF CHIRAL ESTERS AND AMIDES**

Barry B. Snider and Qingwei Zhang, Department of Chemistry, Brandeis University, Waltham, MA 02254-9110, USA

Oxidative free-radical cyclization of phenylmethyl ester **1d** affords **11** in 86%de.



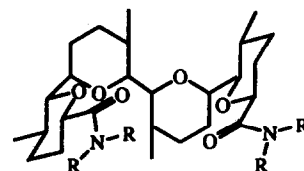
*Tetrahedron Lett.* 1992, 33, 5925

**Enhancing the Binding Properties of a Conformationally Rigid Podand Ionophore.**

Shawn D. Erickson, Michael H.J. Ohlmeyer and W. Clark Still

Department of Chemistry, Columbia University, New York, NY 10027 USA

By adding two equatorial carboxamide groups to a conformationally homogeneous tetracyclic podand ionophore, binding constants for  $K^+$  approach that of the macrocyclic ionophore 18-crown-6.



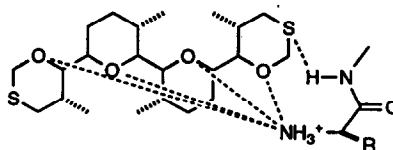
*Tetrahedron Lett.* 1992, 33, 5929

**Two-Point Binding in Podand Acetals Favors Enantioselective Complexation.**

Ge Li and W. Clark Still

Department of Chemistry, Columbia Univ, New York, NY 10027

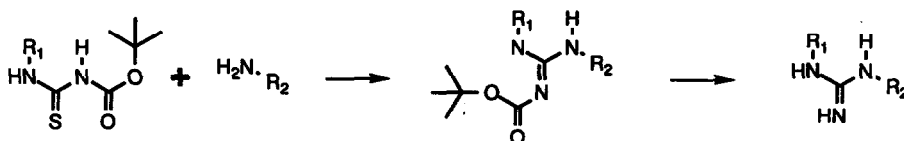
The hemithioacetal podand ionophore shown binds enantioselectively D-amino acid amides but L-amino acid esters.



*Tetrahedron Lett.* 1992, 33, 5933

#### A MILD AND EFFICIENT METHOD FOR THE PREPARATION OF GUANIDINES

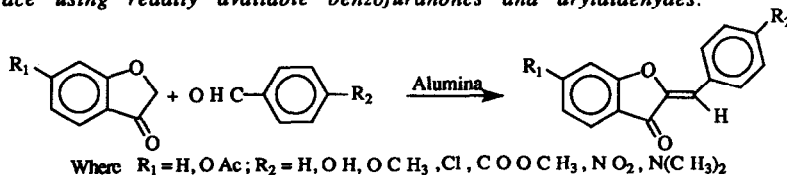
Michael A. Poss,\* Edwin Iwanowicz, Joyce A. Reid, James Lin, and Zhengxiang Gu  
The Bristol-Myers Squibb Pharmaceutical Research Institute, P.O. Box 4000, Princeton, New Jersey 08543-4000, USA



#### ALUMINA-MEDIATED CONDENSATION A SIMPLE SYNTHESIS OF AUONES

Rajender S. Varma\* and Manju Varma, The Center for Biotechnology, Baylor College of Medicine, 4000 Research Forest Drive, The Woodlands, TX 77381, U. S. A.

A synthesis of auones (2-phenylmethylene-3(2H)-benzofuranones) is described which occurs on alumina surface using readily available benzofuranones and arylaldehydes.

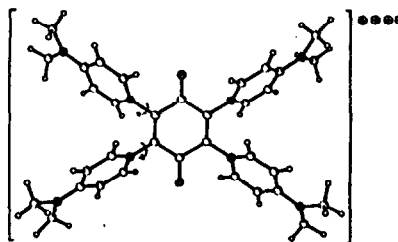


*Tetrahedron Lett.* 1992, 33, 5937

#### THE SINGLE CRYSTAL STRUCTURE OF AN ORGANIC TETRACATION: TETRAKIS(4-DIMETHYLAMINOPYRIDINIUM)- P-BENZOQUINONE TETRAKIS(TRIFLATE)

Hans Bock, Sabine Nick and Jan W. Bats, Department of Chemistry, University Frankfurt, Niederurseler Hang, Germany

The structure of the title compound and its distortions due to the perturbation by four positive charges is discussed by comparison to related compounds and based on MNDO calculations.



*Tetrahedron Lett.* 1992, 33, 5941

#### TRANSESTERIFICATION OF THE BENZYL ESTER PROTECTING GROUP DURING PURIFICATION OF A PROTECTED PENTAPEPTIDE.

Weiguang Zeng, Bahram Hemmasi and Ernst Bayer\*, Institut für Organische Chemie der Universität Tübingen, Auf der Morgenstelle 18, W-7400 Tübingen, Germany

Partial transesterification of the benzyl ester protecting group of the N-terminal glutamic acid residue of a protected pentapeptide during gel chromatographic purification using methanol as eluting solvent is described.



*Tetrahedron Lett.* 1992, 33, 5945

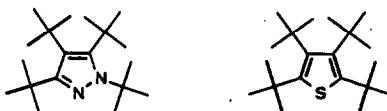
**TETRA-*tert*-BUTYLPIRAZOLE AND TETRA-*tert*-BUTYLTHIOPHENE**

*Tetrahedron Lett.* 1992, 33, 5947

Adolf W. Krebs\*, Erhard Franken, Michael Müller, Horst Colberg, Walter Cholcha, Jörg Wilken, Jörg Ohrenberg, Reinhard Albrecht+ and Erwin Weiss+

Institut für Organische Chemie, Institut für Anorganische und Angewandte Chemie+, Universität Hamburg, Martin-Luther-King-Platz 6, D-2000 Hamburg 13, Germany

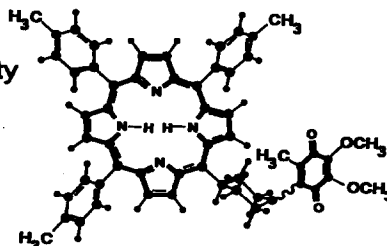
Syntheses and some reactions of tetra-*tert* butylpyrazole and tetra-*tert* butylthiophene are reported.



**Covalently Linked Porphyrin Ubiquinones (0) as Model Compounds for Photosynthetic Reaction Center.**  
Henrik Dieks, Jens Sobek, Peizhu Tian and Harry Kurreck, Institute of Organic Chemistry, Free University of Berlin, Takustr. 3, 1000 Berlin 33, Germany.

*Tetrahedron Lett.* 1992, 33, 5951

Synthesis, cyclic voltammetry and optical spectroscopy of cyclohexylene bridged porphyrin ubiquinones(0); ENDOR study of the semiquinone derivative.

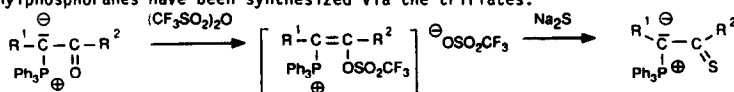


**A METHOD FOR THE PREPARATION OF THIOACYLALKYLIDENE-TRIPHENYLPHOSPHORANES FROM ACYLALKYLIDENETRIPHENYLPHOSPHORANES.**

*Tetrahedron Lett.* 1992, 33, 5955

Hans Jürgen Bestmann, Andreas Pohlschmidt and Kamlesh Kumar, Institute of Chemistry, University Erlangen-Nürnberg, Henkestraße 42, D-8520 Erlangen

Starting from acylalkylidenetriphenylphosphoranes the corresponding thioacylalkylidene-triphenylphosphoranes have been synthesized via the triflates.



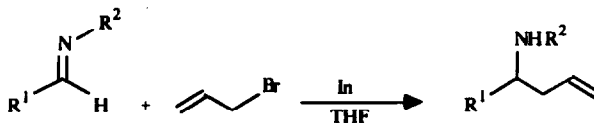
**INDIUM - MEDIATED ALLYLATION OF ALDIMINES**

*Tetrahedron Lett.* 1992, 33, 5959

Pierre Beuchet, Nathalie Le Marrec and Paul Mosset\*

Laboratoire de Synthèses et Activations de Biomolécules, CNRS URA 1467 ENSCR, Avenue du Général Leclerc, 35700 Rennes-Beaulieu, France

Aldimines are allylated under simple Barbier type conditions using allyl bromide and indium powder in THF.

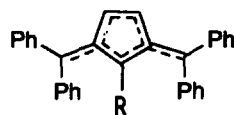


### 3,5-Dimethylenecyclopentenyl Ions. Synthesis and Properties of Tetraphenyl Derivatives

*Tetrahedron Lett.* 1992, 33, 5961

Takeishi Kawase, Seiji Muro, and Masaji Oda\*  
Department of Chemistry, Faculty of Science,  
Osaka University, Toyonaka, Osaka 560, Japan

While the anions **A** is stable, the cation **B** is unstable probably for kinetic reason undergoing intramolecular cyclization.



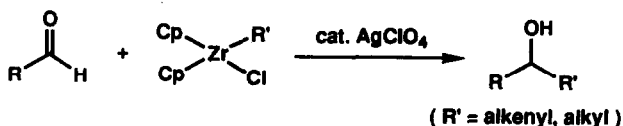
**A**: anion  
**B**: cation

### Grignard-type Addition of Alkenyl- and Alkylzirconocene Chloride to Aldehyde: Remarkable Catalytic Acceleration Effect of AgClO<sub>4</sub>

*Tetrahedron Lett.* 1992, 33, 5965

Hikeki Maeta, Takeshi Hashimoto, Takayuki Hasegawa, and Keisuke Suzuki\*  
Department of Chemistry, Keio University, Hiyoshi, Kohoku-ku, Yokohama 223, Japan

Catalytic amount of AgClO<sub>4</sub> prominently accelerates the transfer of alkenyl- or alkyl-group from the corresponding zirconocene chloride (Cp<sub>2</sub>Zr(R')Cl) to aldehydes.

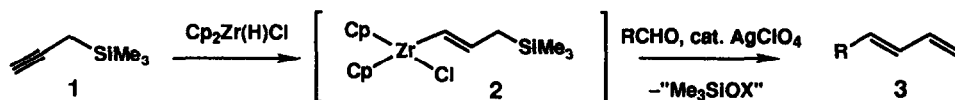


### New and Highly (*E*)-Selective Synthesis of Terminal 1,3-Diene via Three-Carbon Elongation of Aldehyde

*Tetrahedron Lett.* 1992, 33, 5969

Hideki Maeta and Keisuke Suzuki\*  
Department of Chemistry, Keio University, Hiyoshi, Kohoku-ku, Yokohama 223, Japan

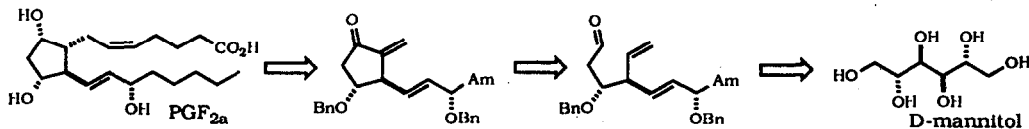
A new and facile synthetic method of 1,3-diene is described.



### New Chiral Synthetic Intermediate for Prostaglandins

*Tetrahedron Lett.* 1992, 33, 5973

T. Takahashi,\* T. Shimayama, M. Miyazawa, M. Nakazawa, H. Yamada, K. Takatori, and M. Kajiwara  
Department of Chemical Engineering, Tokyo Institute of Technology, Ookayama, Meguro-ku, Tokyo 152, Japan;  
Department of Medicinal Chemistry, Meiji College of Pharmacy, Yato-cho, Tanashi-shi, Tokyo 188, Japan.



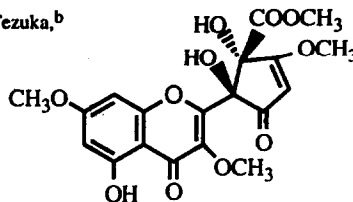


**CHRYSOGRAYANONE, A NOVEL CHROMONE DERIVATIVE FROM *CHRYSOSPLENium GRAYANUM* MAXIM.**

Munehisa Arisawa,<sup>a\*</sup> Miwa Shiojima,<sup>a</sup> Hua Bai,<sup>a</sup> Toshimitsu Hayashi,<sup>a</sup> Yasuhiro Tezuka,<sup>b</sup> Tooru Taga,<sup>c</sup> Yoshihisa Miwa,<sup>c</sup> Tohru Kikuchi,<sup>b</sup> and Naokata Morita<sup>a</sup>

Department of Medicinal Resources, Faculty of Pharmaceutical Sciences,<sup>a</sup> Research Institute for WAKAN-YAKU (Oriental Medicine),<sup>b</sup> Toyama Medical & Pharmaceutical University, 2630 Sugitani, Toyama 930-01, Japan

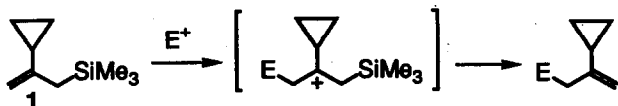
A novel chromone, chrysograyanon has been isolated from *Chrysosplenium grayanum* and was determined to be 3,7-dimethoxy-5-hydroxy-2-(4-methoxy-1 $\beta$ ,5 $\alpha$ -dihydroxy-2-oxo-5 $\beta$ -methoxycarbonylcyclopent-3-enyl)-chromone on the basis of spectroscopic evidences and X-ray analysis.



**Synthesis and Reactions of 2-Cyclopropyl-2-propenyltrimethylsilane. Silicon-Directed Generation of Cyclopropylcarbiny System**

Makoto Hojo, Katsufumi Ohsumi, and Akira Hosomi\*

Department of Chemistry, University of Tsukuba, Tsukuba, Ibaraki 305, Japan



Reactions of 1 with electrophiles gave allylation products with retention of a cyclopropyl ring.

**A NEW RHODIUM(II) PHOSPHATE CATALYST FOR DIAZOCARBONYL REACTIONS INCLUDING ASYMMETRIC SYNTHESIS**

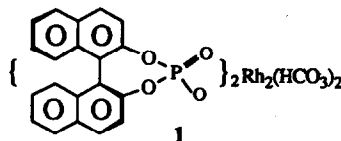
Noreen McCarthy, M. Anthony McKervey\* and Tao Ye

School of Chemistry, The Queen's University, Belfast BT9 5AG, N. Ireland  
Malachy McCann\* and Eamonn Murphy

Dept. of Chemistry, St. Patrick College, Maynooth, Co. Kildare, Rep. of Ireland  
Michael. P. Doyle

Dept. of Chemistry, Trinity University, San Antonio, Texas 78212, U.S.A.

Catalyst 1 has been used for asymmetric synthesis in sigmatropic rearrangement, C-H insertion and aromatic cycloaddition



**ASYMMETRIC DIPOLAR CYCLOADDITION REACTIONS OF DIAZOCOMPOUNDS MEDIATED BY A BINAPHTHOLPHOSPHATE RHODIUM CATALYST**

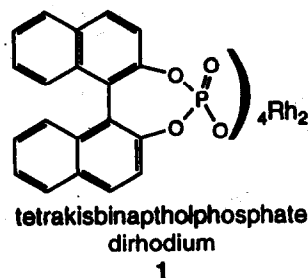
Michael C. Pirrung\* & Jiancun Zhang

Department of Chemistry, Duke University

P. M. Gross Chemical Laboratory

Durham, North Carolina 27706 USA

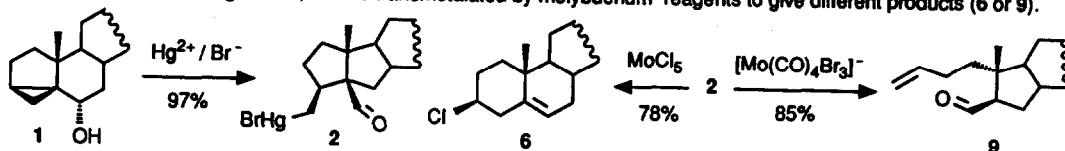
A new class of chiral rhodium catalysts derived from binaphthol promotes the dipolar cycloaddition of diazocompounds to heterocycles with good asymmetric induction.



*Tetrahedron Lett.* 1992, 33, 5991

**REGIOSELECTIVE OPENING OF A CYCLOPROPANE RING BY MERCURY(II) AND TRANSMETALATION OF THE PRODUCT WITH MOLYBDENUM. A NOVEL, STEREOELECTRONICALLY CONTROLLED SKELETAL REARRANGEMENT AND GROB-TYPE FRAGMENTATION OF ORGANOMOLYBDENUM INTERMEDIATES**

J. Šrogl and P. Kočovský<sup>\*</sup>; Department of Chemistry, University of Leicester, Leicester LE1 7RH, England  
Organomercurial 2, arising from 1, can be transmetalated by molybdenum reagents to give different products (6 or 9).



*Tetrahedron Lett.* 1992, 33, 5995

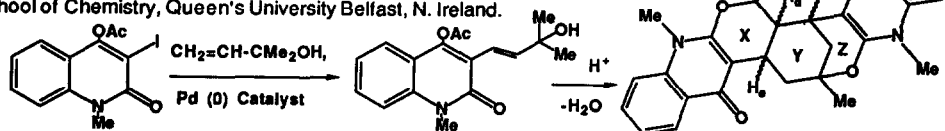
**Approaches to the Syntheses of Dimeric Quinolinone Alkaloids.**

Charles F. Neville,<sup>a,b</sup> Stephen Barr<sup>a,b,c</sup> and the late Michael F. Grundon<sup>b</sup>

<sup>a</sup> Daichi Pure Chemicals Co Ltd., Tokai-mura, Ibaraki 319-11 Japan.

<sup>b</sup> Department Applied Physical Sciences, University of Ulster, Coleraine, N. Ireland

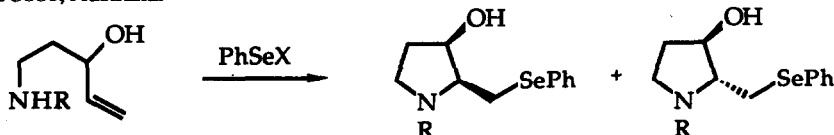
<sup>c</sup> School of Chemistry, Queen's University Belfast, N. Ireland.



*Tetrahedron Lett.* 1992, 33, 5999

**Selenium Induced Stereoselective Cyclization of N-protected 3-hydroxy-4-pentenylamines**

Matthew A. Cooper and A. David Ward<sup>\*</sup>, Department of Organic Chemistry, University of Adelaide, Adelaide SA 5001, Australia.



Selenium induced cyclofunctionalization of N-protected pentenylamines gives substituted hydroxypyrrolidines in high yield and with good stereoselectivity.

*Tetrahedron Lett.* 1992, 33, 6003

**THE CONVERSION OF CARBOXYLIC ACIDS TO KETO PHOSPHORANE PRECURSORS OF 1,2,3-VICINAL TRICARBONYL COMPOUNDS.** Harry H. Wasserman,<sup>\*</sup> David S. Ernis, Charles A. Blum and Vincent M. Rotello, Department of Chemistry, Yale University, New Haven, CT 06511 USA

Acyl phosphoranylidines react with acid chlorides or anhydrides in the presence of bis(trimethylsilyl)acetamide, or couple directly with carboxylic acids activated by EDCI to give keto phosphoranes.



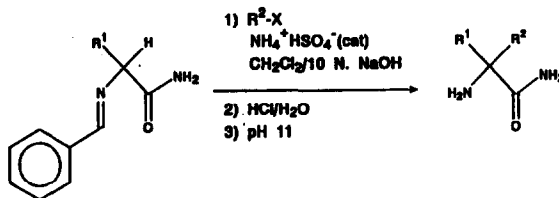
**SYNTHESIS OF  $\alpha,\alpha$ -DISUBSTITUTED  $\alpha$ -AMINO ACID AMIDES BY PHASE-TRANSFER CATALYZED ALKYLATION**

*Tetrahedron Lett.* 1992, 33, 6007

Bernard Kaptein\*, Wilhelmus H.J. Boesten, Quirinus B. Broxterman, Hans E. Schoemaker and Johan Kamphuis.

DSM Research, Bio-organic Chemistry Section, P.O.Box 18, 6160 MD Geleen, The Netherlands.

*N*-Benzylidene  $\alpha$ -amino acid amides were alkylated at the  $\alpha$ -position under phase-transfer conditions without amide alkylation.

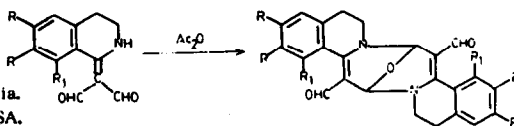


Novel formation of 9,18-diformyl-5,6,14,17-tetrahydro-8,17-epoxy-6H,15H-[1,5]diazocino [2,1-a : 6,5-a']disoquinolines from (3,4-dihydroisoquinolnyl-1)propan-1,3-dials.

Kuppuswamy Nagarajan<sup>a</sup>, Patrick J Rodrigues<sup>a</sup>, Kuantee Go<sup>b</sup> and Rengachary Parthasarathy<sup>b</sup>

<sup>a</sup> R & D Centre, Searle (India) Ltd., Thane 400613, India.

<sup>b</sup> Roswell Park Cancer Institute, Buffalo, NY 14263, USA.



Reaction of (3,4-dihydroisoquinolnyl-1)propan-1,3-dials with acetic anhydride gives novel epoxydiazocinodisoquinolines.

*Tetrahedron Lett.* 1992, 33, 6011

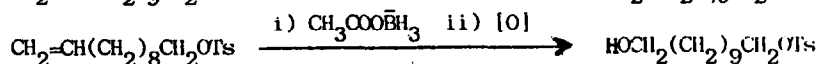
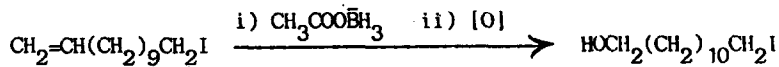
**HYDROBORATION OF FUNCTIONALISED OLEFINS WITH ACETOXYBOROHYDRIDE**

*Tetrahedron Lett.* 1992, 33, 6015

Ranjit S. Dhillon\*, Kaushal Nayyar\* and Jasvinder Singh<sup>@</sup>

\*Department of Chemistry, Punjab Agricultural University, Ludhiana-141004, India.

<sup>@</sup>Department of Chemistry, Panjab University, Chandigarh, India.



**MALAYSIATIN, THE FIRST CYCLIC HEPTAPEPTIDE FROM A MARINE SPONGE**

*Tetrahedron Lett.* 1992, 33, 6017

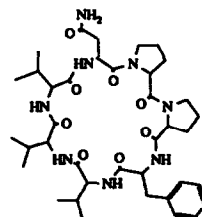
Rogelio Fernández<sup>1</sup>, Siraj Omar<sup>2</sup>, Miguel Feliz<sup>3</sup>, Emilio Quiñó<sup>1</sup> and Ricardo Riguera<sup>1\*</sup>

<sup>1</sup>Departamento de Química Orgánica, Facultad de Química, Universidad de Santiago de Compostela, 15706, Santiago de Compostela, Spain.

<sup>2</sup>National University of Malaysia (Sabah).

<sup>3</sup>Departament de Química Orgánica, Facultat de Química, Universitat de Barcelona, 08028, Barcelona, Spain.

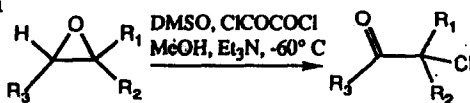
Malaysiatin (1), the first homodetic cycloheptapeptide from a marine source, has been isolated from the cytotoxic and antimicrobial extracts of *Pseudaxinyssa* sp.



A mild method for conversion of epoxides into  $\alpha$ -chloro ketones

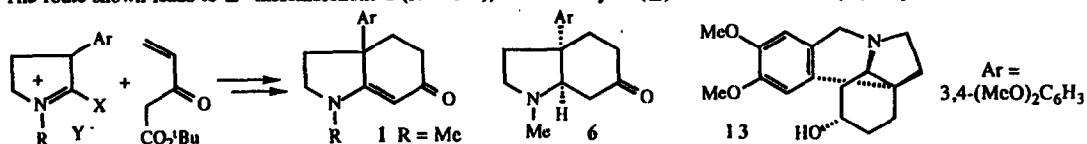
Sushil Raina, Debnath Bhuniya, and Vinod K. Singh\*, Department of Chemistry, Indian Institute of Technology Kanpur - 208 016, India

**Abstract:** Epoxides on treatment with DMSO, oxalyl chloride, cat. amount of methanol, and Et<sub>3</sub>N at -60° C are converted to  $\alpha$ -chloro ketones in high yield.

FORMAL SYNTHESSES OF ( $\pm$ )-MESEMBRINE AND ( $\pm$ )-DIHYDROMARITIDINE

Joseph P. Michael,\* Arthur S. Howard, Ruth B. Katz and Mzwandile I. Zwane

Centre for Molecular Design, Department of Chemistry, University of the Witwatersrand, Wits 2050, South Africa

The route shown leads to  $\Delta^7$ -mesembrenone 1 (R = Me), and formally to ( $\pm$ )-mesembrine 6 and ( $\pm$ )-dihydromaritidine 13.STEREOSELECTIVE RADICAL ANNULATION ROUTE TO THE SYNTHESIS OF ( $\pm$ )-PAULOWNIN AND ( $\pm$ )-ISOGMELINOL

Sankar Adhikari and Subhas Roy\*

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

A highly stereocontrolled synthesis of ( $\pm$ )-paulownin (1a) and ( $\pm$ )-isogmelinol (1b) is reported involving intramolecular radical cyclisation reaction as a key step.

a, Ar = 3,4-methylenedioxyphenyl

b, 3,4-dimethoxyphenyl

