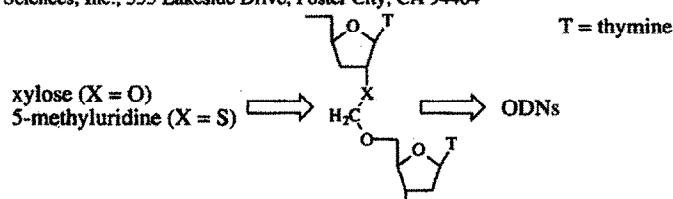


## GRAPHICAL ABSTRACTS

**DEOXYOLIGONUCLEOTIDES CONTAINING 2',5' ACETAL LINKAGES: SYNTHESIS AND HYBRIDIZATION PROPERTIES.**  
Jeffrey S. Pudlo, Xiaodong, Cao, S. Swaminathan and Mark D. Matteucci\*, Gilead Sciences, Inc., 353 Lakeside Drive, Foster City, CA 94404

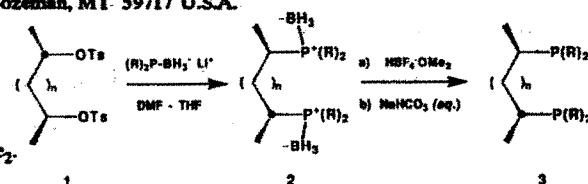
*Tetrahedron Letters*, 1994, 35, 9315



**AN EFFICIENT PROCEDURE FOR THE SYNTHESIS OF ELECTRON RICH BISPHOSPHINES CONTAINING HOMOCHIRAL BACKBONES.** Lydia McKinstry and Tom Livinghouse\*, Department of Chemistry and Biochemistry, Montana State University, Bozeman, MT 59717 U.S.A.

*Tetrahedron Letters*, 1994, 35, 9319

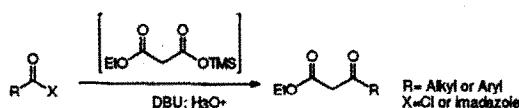
An eminently practical method for the synthesis of homochiral bisphosphines is described. This procedure entails the sequential reaction of homochiral ditosylate with the appropriate dialkylphosphine-borane anion followed by  $\text{BH}_3$  decomplexation mediated by  $\text{HBF}_4 \cdot \text{OMe}_2$ .



**A PROCESS FOR THE SYNTHESIS OF  $\beta$ -KETOESTERS USING *IN-SITU* GENERATED (TRIMETHYLSILYL)MALONATES.** Xui Wang\*, William T. Monte, James J. Napier, and Ameen Ghannam, Chemical Research and Development, Chemical and Agricultural Products Division, Abbott Laboratories, North Chicago, IL 60064

*Tetrahedron Letters*, 1994, 35, 9323

(TMS)ethyl malonate can be generated *in-situ* and acylated to prepare a variety of  $\beta$ -ketoesters or alkylidene malonates.

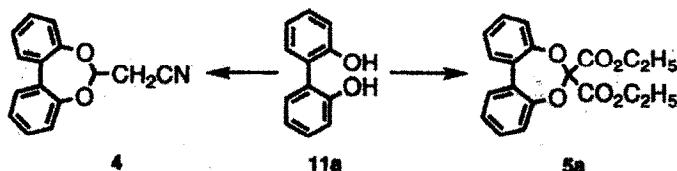


**NOVEL DIBENZO[*d,f*][1,3]DIOXEPINES.**

Robert E. Johnson\* and Edward R. Bacon  
Sterling Winthrop Pharmaceuticals Research Division  
1250 S. Collegeville Road, P.O.Box 5000, Collegeville, PA. 19426 USA

*Tetrahedron Letters*, 1994, 35, 9327

The reaction of 2,2'-biphenol 11a and base with either 2-chloroacrylonitrile or diethyl bromomalonate gave either 4 or 5a, respectively.

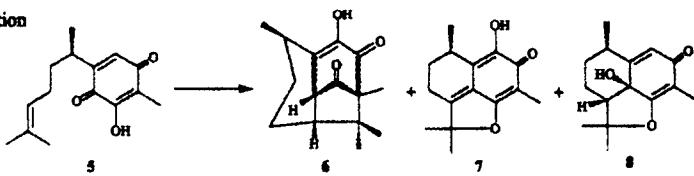


THE STRUCTURE OF  $\beta$ -ISOPIPITZOL

Tetrahedron Letters, 1994, 35, 9329

Francisco Yuste,\* Héctor Barrios, Eduardo Díaz, Benjamín Ortiz,  
Rubén Sánchez-Obregón and Fernando Walls. Instituto de Química, Universidad Nacional Autónoma de México,  
Circuito Exterior, Ciudad Universitaria, Coyoacán 04510, México D.F.

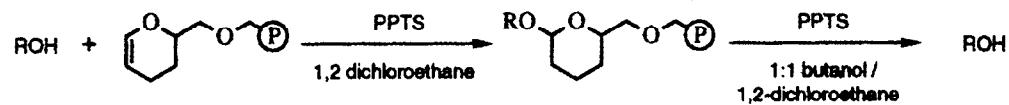
The Lewis acid catalyzed intramolecular cycloaddition of isoperezone (5) produced  $\beta$ -isopipitzol (6), perezimone (7) and dibydroisoperezimone (8).



STRAIGHTFORWARD AND GENERAL METHOD  
FOR COUPLING ALCOHOLS TO SOLID SUPPORTS.

Tetrahedron Letters, 1994, 35, 9333

Lorin A. Thompson and Jonathan A. Ellman, Department of Chemistry, University of California, Berkeley CA 94720 USA  
A new method is described for coupling alcohols to solid supports to provide an alcohol-derivatized resin that is stable to strongly basic or nucleophilic reagents.

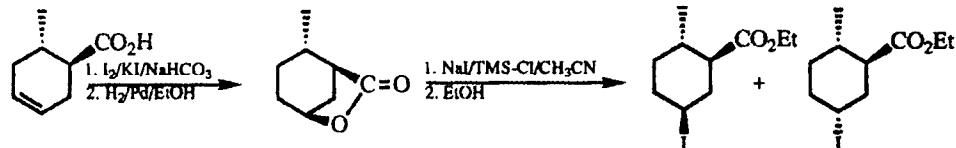


Regioselective Synthesis of Ceralure B<sub>1</sub> and A, Ethyl *cis*-  
(and *trans*-) 5-Iodo-*trans*-2-Methylcyclohexane-1-Carboxylate

Tetrahedron Letters, 1994, 35, 9337

James W. Avery, Roy T. Cunningham, and Rolland M. Waters  
USDA-ARS-PSI-Insect Chemical Ecology Laboratory, Beltsville, MD 20705

Reaction of *in situ* iodotrimethylsilane and 2-methyl-6-oxabicyclo[3.2.1]octan-7-one leads to 2-methyl-5-iodocyclohexyl esters.

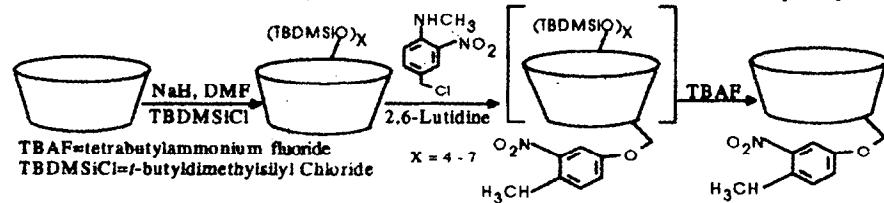


Selective Protection of the Secondary Side of  $\beta$ -Cyclodextrin.

Tetrahedron Letters, 1994, 35, 9339

Shengping Tian and Valerian T. D'Souza\*, Department of Chemistry,  
University of Missouri-St. Louis, St. Louis, MO 63121 USA

Secondary side of  $\beta$ -Cyclodextrin is protected to enable selective chemical modifications on its primary side.

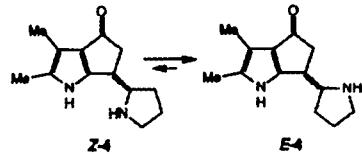


**Dinoflagellate Bioluminescence:  
The Chromophore of Dinoflagellate Luciferin**

*Tetrahedron Letters*, 1994, 35, 9343

Milan N. Stojanovic and Yoshito Kishi\*  
Department of Chemistry, Harvard University  
Cambridge, Massachusetts 02138, U.S.A.

A concise synthesis of the chromophore proposed for dinoflagellate luciferin was accomplished. The synthetic model **4** was shown to exist as a mixture of *Z*- and *E*-isomers. The  $^{13}\text{C}$  NMR of dinoflagellate luciferin corresponded better to that of *E*-**4**, suggesting the C.15-C.16 configuration of the natural product to be *E*.

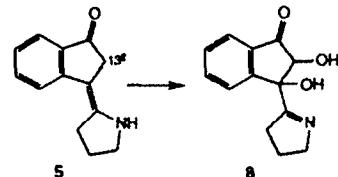


**Dinoflagellate Bioluminescence:  
Chemical Behavior of the Chromophore towards Oxidants**

*Tetrahedron Letters*, 1994, 35, 9347

Milan N. Stojanovic and Yoshito Kishi\*  
Department of Chemistry, Harvard University  
Cambridge, Massachusetts 02138, U.S.A.

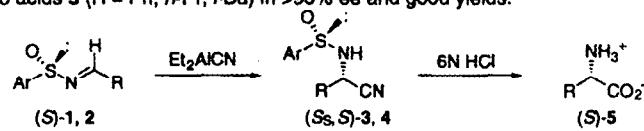
The bioluminescent process of dinoflagellates involves air-oxidation of the luciferin at the C.13<sup>2</sup> position. Molecular oxygen at high substrate concentrations, superoxide anion, and Fenton reagent were demonstrated to effect oxidation of the chromophore model **5** at the same site to yield **8**.



**ASYMMETRIC STRECKER SYNTHESIS USING ENANTIOPURE  
SULFINIMINES: A CONVENIENT SYNTHESIS OF  $\alpha$ -AMINO ACIDS**  
Franklin A. Davis\*, Rajarathnam E. Reddy, and Padma S. Portonovo  
Department of Chemistry, Drexel University, Philadelphia, PA 19104

*Tetrahedron Letters*, 1994, 35, 9351

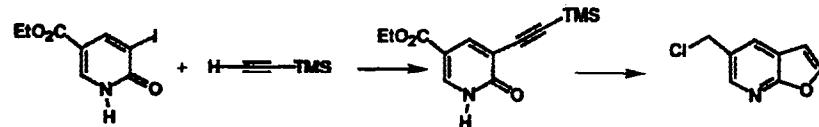
Stereoselective addition of diethylaluminum cyanide to enantiopure sulfinimines **1** ( $\text{Ar} = p\text{-Tolyl}$ ) and **2** ( $\text{Ar} = 2\text{-methoxy-1-naphthyl}$ ) affords diastereomerically enriched (de: 38–66%)  $\alpha$ -amino nitriles **3** and **4** which were hydrolyzed in one step to  $\alpha$ -amino acids **5** ( $\text{R} = \text{Ph}, n\text{-Pr}, i\text{-Bu}$ ) in >95% ee and good yields.



**Synthesis of Functionalized Furo[2,3-*b*]pyridines via the Pd-catalyzed Coupling of Acetylenes to Iodopyridones. Preparation of a Key Intermediate to a New HIV Protease Inhibitor L-754, 394.**

*Tetrahedron Letters*, 1994, 35, 9355

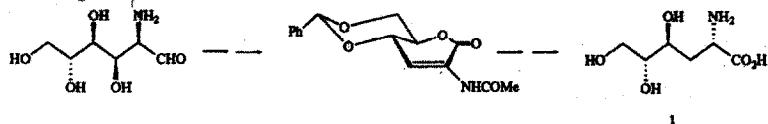
I. N. Houpis, W.B. Choi, P.J. Reider, A. Molina, H. Churchill, J. Lynch, and R.P. Volante  
Merck Research Laboratories, Process Research Department, P.O. Box 2000, Rahway, N.J. 07065.



**A Short Synthesis of (2S,4S,5R)-4,5,6-Trihydroxynorleucine.**  
Oscar Varela\*, Alejandro Pablo Nin and Rosa M. de Ledercrner.

Departamento de Química Orgánica, Facultad de Ciencias Exactas y Naturales.  
Universidad de Buenos Aires. Ciudad Universitaria, Pabellón II, 1428. Argentina.

The synthesis of enantiomerically pure (2S,4S,5R)-4,5,6-trihydroxynorleucine (**1**) via diastereoselective hydrogenation of  $\alpha,\beta$ -unsaturated sugar lactone obtained from D-glucosamine, is described.



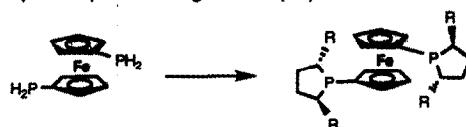
*Tetrahedron Letters*, 1994, 35, 9359

**NEW CHIRAL 1,1'-BIS(PHOSPHOLANO)FERROCENE LIGANDS FOR ASYMMETRIC CATALYSIS**

Mark J. Burk\* and Michael F. Gross

Department of Chemistry, Duke University, P.M. Gross Chemical Laboratory, Durham, NC 27706

New chiral 1,1'-bis(phospholano)ferrocene ligands are prepared and used in hydrogenation reactions.

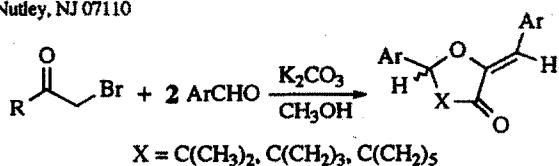


**A Convenient Route to Substituted Tetrahydrofuran-3-ones:  
Condensations of  $\alpha$ -Bromo Ketones with Aromatic Aldehydes**

*Tetrahedron Letters*, 1994, 35, 9367

Yong Dong,\*†, Thomas P. Cleary† and Louis J. Todaro‡, Synthesis Development Department† and Physical Chemistry Department‡, Hoffmann-La Roche Inc., Nutley, NJ 07110

$\alpha$ -Bromo ketones react with aromatic aldehydes to produce substituted tetrahydrofuran-3-ones in good yields (55% to 83%).

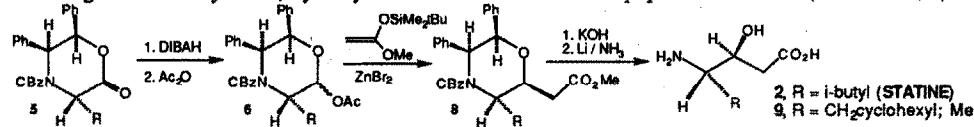


**A New Method for Hydroxymethylene Peptide Isostere  
Synthesis: Asymmetric Synthesis of Statine**

*Tetrahedron Letters*, 1994, 35, 9371

Robert M. Williams\*, Pierre-Jean Colson and Weixu Zhai  
Department of Chemistry, Colorado State University, Fort Collins, Colorado 80523.

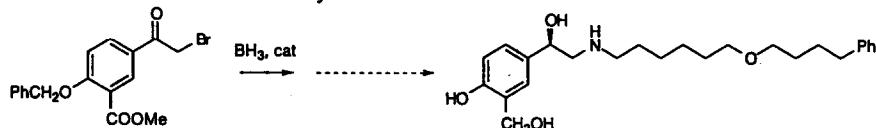
Reduction of the lactones **5** followed by acetylation (**6**) and coupling with a ketenesilyl acetal, gives the homologated heterocycles **8**; hydrolysis and reduction furnishes peptide isosteres **9** (and statine, **2**) in high %ee.



**Enantioselective Synthesis of Salmeterol via Asymmetric Borane Reduction**  
**Robert Hett, Ragnar Stare and Paul Helquist\***  
**Department of Chemistry and Biochemistry, University of Notre Dame, Notre Dame, Indiana 46556 U.S.A.**

*Tetrahedron Letters*, 1994, 35, 9375

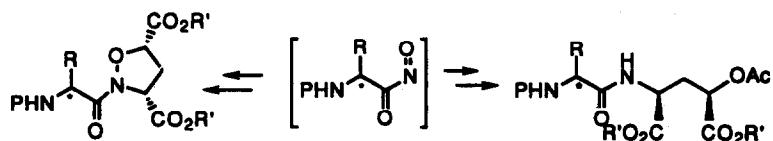
Enantioselective syntheses of both enantiomers of salmeterol are accomplished using asymmetric borane reductions with chiral oxazaborolidines as catalysts.



**ASYMMETRIC SYNTHESSES OF NOVEL AMINO ACIDS AND PEPTIDES FROM ACYLNITROSO-DERIVED CYCLOADDUCTS.** Allen R. Ritter and Marvin J. Miller\*, Department of Chemistry and Biochemistry, University of Notre Dame, Notre Dame, IN 46556

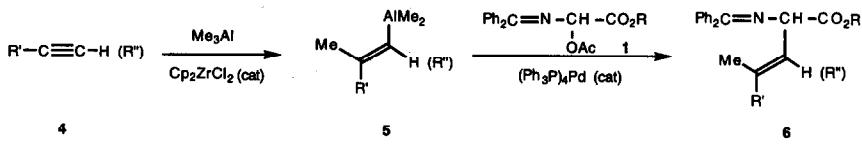
*Tetrahedron Letters*, 1994, 35, 9379

New amino acids and peptides can be generated from cycloadducts of amino acid-derived acylnitroso intermediates.



**Synthesis of  $\beta,\gamma$ -Unsaturated Amino Acid Derivatives by Alkyne Carbometalation-Palladium Catalyzed Coupling with 2-Aza- $\pi$ -Allyl Palladium Complexes**  
**Martin J. O'Donnell,\* Min Li, William D. Bennett and Todd Grote**  
**Department of Chemistry, Indiana University-Purdue University at Indianapolis, Indianapolis, IN 46202**

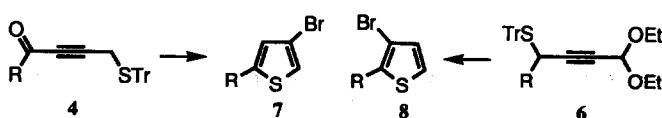
*Tetrahedron Letters*, 1994, 35, 9383



**A FACILE PREPARATION OF 2- AND 5-SUBSTITUTED 3-BROMOTHIOPHENES.**  
**T. Masquelin, D. Obrecht\*.**

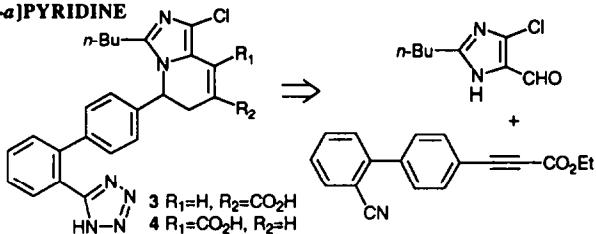
*Tetrahedron Letters*, 1994, 35, 9387

A new approach to the synthesis of 5- and 2-substituted 3-bromothiophenes of types 7 and 8 is presented starting from acetylenic ketones 4 and acetylenic acetals 6.



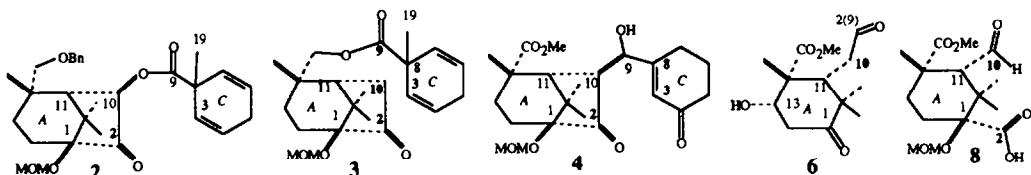
**SYNTHESSES OF CONFORMATIONALLY RESTRICTED ANALOGUES OF AN ANGIOTENSIN II RECEPTOR ANTAGONIST. GENERAL SYNTHETIC APPROACH TO FUNCTIONALIZED IMIDAZO[1,5-a]PYRIDINE DERIVATIVES.** Branislav Musicki\* and Jean-Paul Vevert  
Centre de Recherches Roussel-UCLAF,  
102 Route de Noisy, 93235 Romainville, France

Syntheses of two conformationally restricted analogues 3 and 4 of an angiotensin II receptor antagonist losartan are described. Michael addition of imidazole-5-carboxaldehydes to biphenylpropiolates provides an efficient method for the skeletal construction of imidazo[1,5-a]pyridine derivatives.



**LEFT-HALF TAXOID BUILDING BLOCKS FROM HAJOS-PARRISH KETONE**  
S.Armeniyadis\*, D.V.Yashunsky, R.Pereira de Freitas, R.Brondi Alves,  
M.Muñoz Dorado, Q.Wang and P.Potier  
Institut de Chimie des Substances Naturelles, CNRS, F-91198 Gif-sur-Yvette(France)

An efficient route for the construction of homochiral-multifunctional taxoid A-ring segments is presented.



**PHOSPHATE NATUREL ET PHOSPHATE TRISODIQUE : NOUVEAUX CATALYSEURS SOLIDES DE LA CONDENSATION DE KNOEVENAGEL EN MILIEU HETEROGENE.** Said Sebtí\*, Ahmed Saber et Abdallah Rhibil.  
Laboratoire de Chimie Organique Appliquée, Université Hassan II, Faculté des Sciences Ben M'Sik B.P. 7955, Sidi Othmane, Casablanca (Maroc).

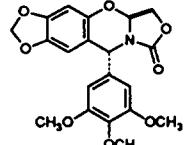
La condensation de Knoevenagel des aldéhydes avec les méthylènes activés est réalisée, en milieu hétérogène, en présence de phosphates solides.



**SYNTHESIS OF 4-OXA-2-AZAPODOPHYLLOTOXIN, A NOVEL ANALOG OF THE ANTITUMOR LIGNAN PODOPHYLLOTOXIN.**

Yukio Hitotsuyanagi, Yoshitatsu Ichihara, Koichi Takeya, and Hideji Itokawa\*

Department of Pharmacognosy, Tokyo College of Pharmacy,  
Horinouchi 1432-1, Hachioji, Tokyo 192-03, Japan

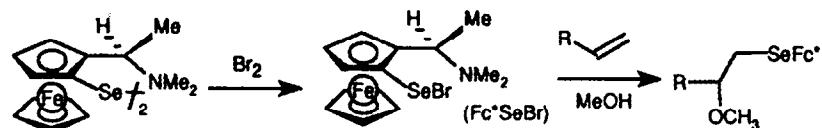


4-Oxa-2-azapodophyllotoxin has been synthesized from sesamol. It showed significant activity against adriamycin-resistant P-388 leukemia cells.

**A Highly Selective Asymmetric Methoxyselenylation of Alkenes with a Chiral Ferrocenylselenium Reagent**

*Tetrahedron Letters*, 1994, 35, 9403

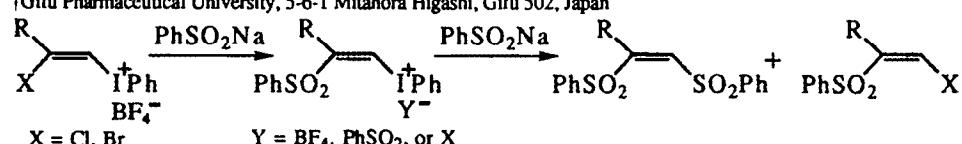
Shin-ichi Fukuzawa \* and Yoh Kasugahara, Department of Applied Chemistry, Chuo University, Bunkyo-ku, Tokyo 112, Japan  
Sakae Uemura, Division of Energy and Hydrocarbon Chemistry, Graduate School of Engineering, Kyoto University, Sakyo-ku, Kyoto 606-01, Japan



**Evidence for Michael-Type Reaction of Alkenyliodonium Salts:**

*Tetrahedron Letters*, 1994, 35, 9407

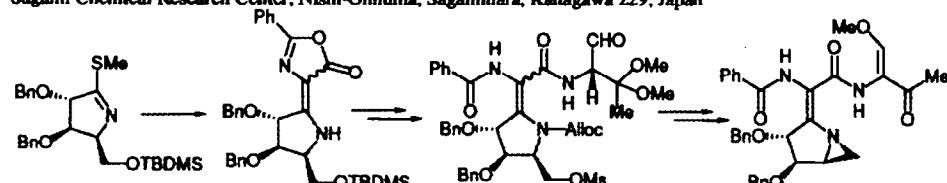
Nucleophilic Substitutions with Sodium Benzenesulfinate  
Masahito Ochiai,\* Yutaka Kitagawa, Mika Toyonari, and Koji Uemura†  
Faculty of Pharmaceutical Sciences, University of Tokushima, 1-78 Shomachi, Tokushima 770, Japan  
†Gifu Pharmaceutical University, 5-6-1 Mitahora Higashi, Gifu 502, Japan



**A Novel Synthesis of the C1-C17 Fragment of Carzinophilin**

*Tetrahedron Letters*, 1994, 35, 9409

Masaru Hashimoto and Shiro Terashima  
Sagami Chemical Research Center, Nishi-Ohnuma, Sagamihara, Kanagawa 229, Japan

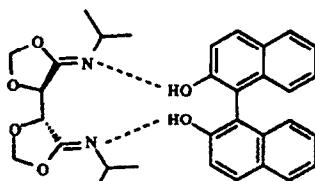


**Enantioselective Dual N...HO Bonding between (R,R)-4,4'-bi-[5-(Z)-N-isopropylimino]-1,3-dioxolane] and (S)-1,1'-bi-2-naphthol.**

*Tetrahedron Letters*, 1994, 35, 9413

Yasuo Dobashi\* and Akira Dobashi,\* Tokyo College of Pharmacy, Horinouchi, Hachioji, Tokyo 192-03, Japan.  
Yoichi Iitaka, Department of Biological Sciences, Faculty of Science and Engineering, The Nishi-Tokyo University, Uenohara, Kitatsuru, Yamanashi 409-01, Japan

The title compounds underwent enantioselective complexation via hydrogen bond formation in CDCl<sub>3</sub>, and X-ray analysis of the co-crystal comprised of these compounds indicated dual N...HO bonding as the mode of complexation. Binding geometry was examined by PM3 calculation

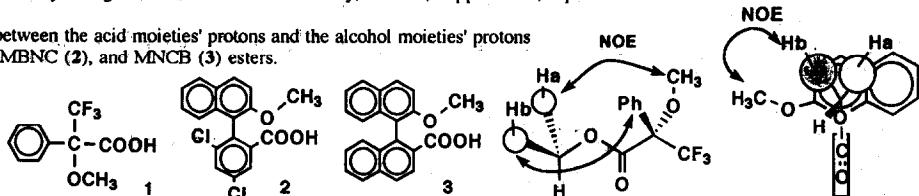


**NOE CORRELATIONS IN MTPA, MNCB AND MBNC ESTERS**

*Tetrahedron Letters*, 1994, 35, 9417

Yukiharu Fukushi, Chie Yajima and Junya Mizutani, Department of Applied Bioscience, Faculty of Agriculture, Hokkaido University, Kita-ku, Sapporo 060, Japan

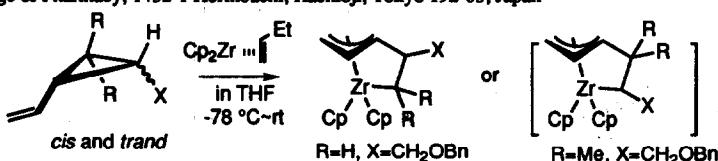
NOEs are observed between the acid moieties' protons and the alcohol moieties' protons in some MTPA (1), MBNC (2), and MNCB (3) esters.



**Regioselective Bond Cleavage of Vinylcyclopropane**

*Tetrahedron Letters*, 1994, 35, 9421

Derivatives with the "Zirconocene-Butene" Complex  
Yuji Hanzawa,\* Susumu Harada, Ryoko Nishio and Takeo Taguchi\*  
Tokyo College of Pharmacy, 1432-1 Horinouchi, Hachioji, Tokyo 192-03, Japan

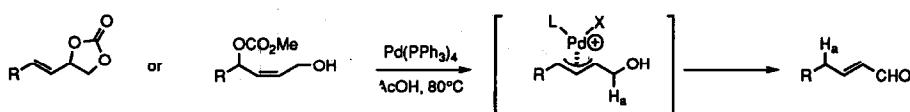


**SYNTHESIS OF  $\alpha,\beta$ -UNSATURATED ALDEHYDES THROUGH PALLADIUM CATALYZED REGIOSELECTIVE HYDROGEN MIGRATION**

*Tetrahedron Letters*, 1994, 35, 9425

Tatsuya Minami and Miyaji Hanaka\* Faculty of Pharmaceutical Sciences, Kanazawa University, 13-1 Takara-machi, Kanazawa 920, Japan

Treatment of cyclic carbonate of 3-alkene-1,2-diol or 4-methylcarbonate of 2-alkene-1,4-diol with a catalytic amount of Pd(PPh<sub>3</sub>)<sub>4</sub> in aqueous THF or AcOH gave  $\alpha,\beta$ -unsaturated aldehydes in good yields. The reaction can be interpreted by the regioselective 1,4-hydrogen migration of  $\pi$ -allylpalladium intermediate.

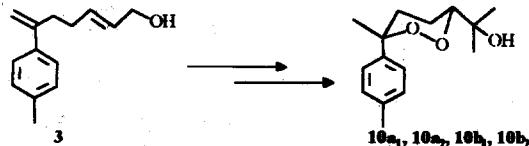


**ENANTIOSELECTIVE TOTAL SYNTHESIS OF ALL FOUR STEREOISOMERS OF YINGZHAOSU C**

*Tetrahedron Letters*, 1994, 35, 9429

Xing-Xiang Xu\* and Han-Qing Dong , Shanghai Institute of Organic Chemistry, Academia Sinica, 354 Fenglin Lu, Shanghai 200032, China

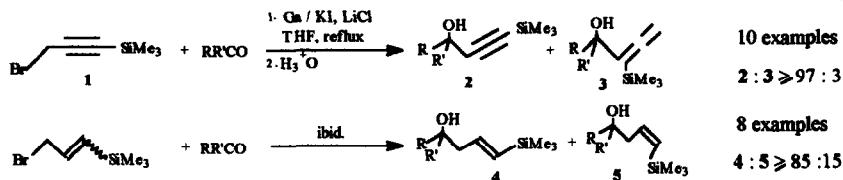
An enantioselective total synthesis of all four stereoisomers of Yingzhaosu C, an antimalarial peroxy-containing sesquiterpene isolated from Yingzhao [*Artobotrys uncinatus* (L.) Merr.], is described.



**GALLIUM-MEDIATED HIGHLY REGIOSELECTIVE REACTIONS OF TRIMETHYLSILYLPROPARGYL BROMIDE AND TRIMETHYLSILYLALLYL BROMIDE WITH CARBONYL COMPOUNDS.**

Tetrahedron Letters, 1994, 35, 9433

Ying Han Yao-Zeng Huang\* Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, China

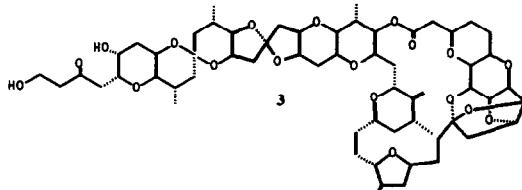


**ISOHOMOHALICHONDRIN B, A NEW ANTITUMOUR POLYETHER MACROLIDE FROM THE NEW ZEALAND DEEP-WATER SPONGE *LISSEODENDRIX* SP.**

Tetrahedron Letters, 1994, 35, 9435

Marc Litaudon, Joanne B Hart, John W Blunt, Robin J Lake & Murray H G Munro. Department of Chemistry, University of Canterbury, Christchurch, NEW ZEALAND

Isohomohalichondrin B 3 is a new halichondrin type with selective cytotoxicity against cancer cell lines.



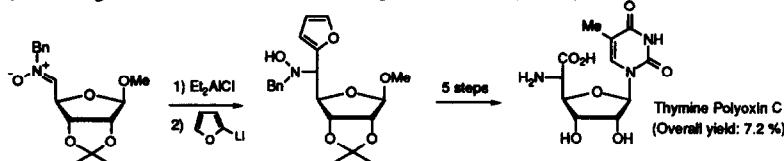
**TOTAL SYNTHESIS OF THYMINE POLYOXIN C**

Tetrahedron Letters, 1994, 35, 9439

Alessandro Dondoni\*,<sup>a</sup> Federico Junquera<sup>b</sup>, Francisco L. Merchán<sup>b</sup>,

Pedro Merino\*<sup>b</sup> and Tomás Tejero<sup>b</sup>. a) Dipartimento di Chimica, Laboratorio di Chimica Organica, Università, Ferrara, Italy.

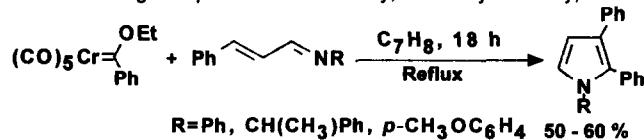
b) Departamento de Química Orgánica, ICMA, Universidad de Zaragoza, CSIC, Zaragoza, Spain.



**Reaction of a Chromium Carbene Complex with 1-Azadienes and the Synthesis of Trisubstituted Pyrroles.**

Tetrahedron Letters, 1994, 35, 9443

Timothy N. Danks and David Velo-Rego:-Department of Chemistry, University of Surrey, Guildford Surrey, GU2 5XH.



**ASYMMETRIC DIHYDROXYLATION OF  $\alpha$ -AND  $\beta$ -FARNESENE**

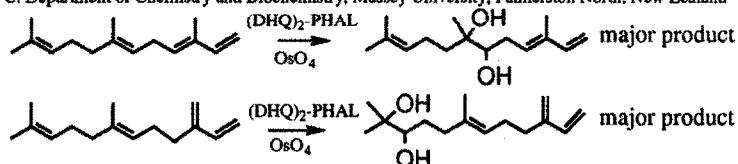
*Tetrahedron Letters*, 1994, 35, 9445

Margaret A. Brimble,<sup>A\*</sup> Daryl D. Rowan<sup>B</sup> and Julie A Spicer<sup>C</sup>

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

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C. Department of Chemistry and Biochemistry, Massey University, Palmerston North, New Zealand

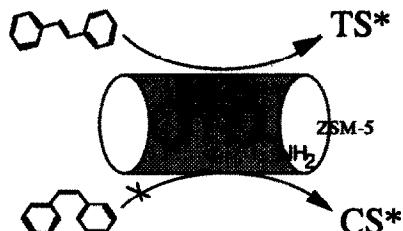


**SHAPE-SELECTIVE PHOTOSENSITIZED ISOMERIZATION OF STILBENE USING A BENZOPHENONE INCORPORATED WITHIN ACID ZEOLITES.**

*Tetrahedron Letters*, 1994, 35, 9447

Maria V. Baldoví, Avelino Corma,\* Hermenegildo García,\* and Vicente Martí  
Instituto de Tecnología Química UPV-CSIC, Apartado 22012, 46071 Valencia, Spain.

Acid-base interaction has been found to be strong enough to immobilize aminobenzophenone within a series of acid zeolites of a medium and large pore size. The resulting heterogeneous photosensitizers exhibit a similar initial activity for stilbene isomerization independently of the zeolite host, except for the HZSM-5 sample that do not sensitize cis-stilbene.

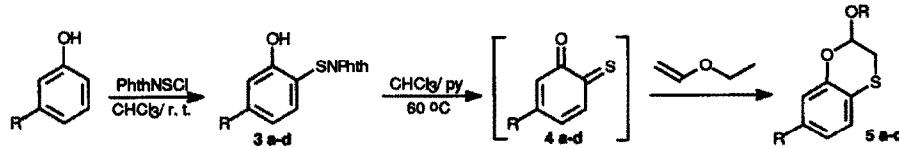


**PHTHALIMIDESULFENYL CHLORIDE PART 8<sup>1</sup>. REACTION WITH ACTIVATED ARENES: THE FIRST EXAMPLE OF *ORTHO*-THIOQUINONES GENERATION.**

*Tetrahedron Letters*, 1994, 35, 9451

Giuseppe Capozzi, Stefano Menichetti\*, Cristina Nativi\* and Maria Cristina Simoni.  
Centro CNR "Chimica dei Composti Eterociclici". Dipartimento di Chimica Organica, Università di Firenze, via G. Capponi 9, I-50121 Italy.

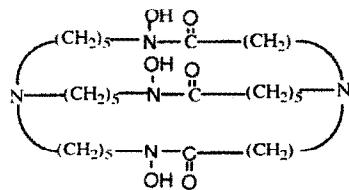
Easily generated *ortho*-thiobenzoquinones 4a,b and *ortho*-thionaphthoquinones 4c,d have been trapped by vinyl ethers.



**A NOVEL MACROBICYCLIC CRYPTAND INCORPORATING 3 ENDOCYCLIC**

*Tetrahedron Letters*, 1994, 35, 9455

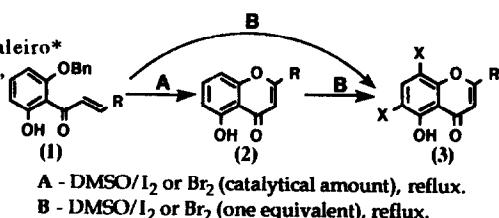
**HYDROXAMATE DONOR GROUPS.** Surinder S Chana and Robert C Hider\*. Department Of Pharmacy, King's College London, Manresa Road, London SW3 6LX.



**SYNTHESIS OF 6,8-(DIBROMO OR DIODO)-5-HYDROXY-2-(PHENYL OR STYRYL)CHROMONES**

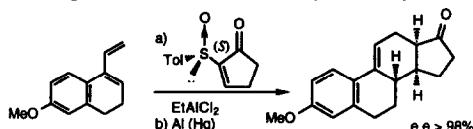
Diana C. G. A. Pinto, Artur M. S. Silva and José A. S. Cavaleiro\*  
 Department of Chemistry, University of Aveiro, 3800 Aveiro,  
 Portugal

A convenient synthesis of 6,8-(dibromo or diodo)-5-hydroxy-2-(phenyl or styryl)chromones (3) is described.



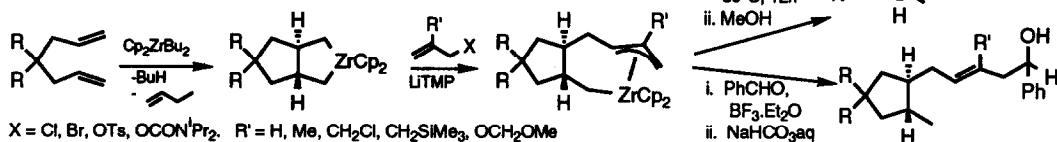
**DIELS-ALDER REACTION OF (S)-2-p-TOLYSULFINYL-2-CYCLOPENTENONE WITH DANE'S DIENE: AN EFFICIENT APPROACH TO THE ENANTIOSELECTIVE PREPARATION OF PERHYDRO-CYCLOPENTA[a]PHENANTHRENES.**

Inés Alonso, Juan C. Carretero,\* José L. García Ruano\* and Luisa M. Martín Cabrejas  
 Departamento de Química (C-I), Universidad Autónoma, Cantoblanco, 28049-Madrid, Spain  
 Isabel López-Solera and Paul R. Raithby. University Chemical Laboratory, Lensfield Road, Cambridge CB2 1EW; U.K.



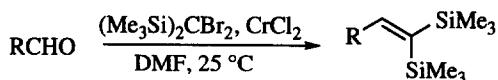
**THE TANDEM INSERTION OF ALLYL CARBENOIDS AND ALDEHYDES OR KETONES INTO ZIRCONACYCLOPENTANES: VARIATION OF THE ALLYL MOIETY AND FUNCTIONALISATION OF THE FINAL CARBON-ZIRCONIUM BOND.**

Tim Luker and Richard J. Whiting\*, Department of Chemistry,  
 The University, Southampton, Hants SO17 1BJ, U.K.



**CHROMIUM(II)-MEDIATED SYNTHESIS OF 1,1-BIS(TRIMETHYLSILYL)ALKENES FROM ALDEHYDES AND (Me<sub>3</sub>Si)<sub>2</sub>CBr<sub>2</sub>**

David M. Hodgson\* and Paul J. Comina  
 Department of Chemistry, University of Reading,  
 Whiteknights, PO Box 224, Reading RG6 2AD, U.K.

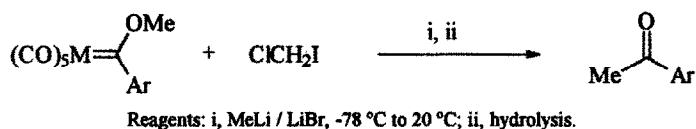


**AN EFFICIENT CONVERSION OF AROMATIC FISCHER CARBENE COMPLEXES INTO METHYLKETONES**

*Tetrahedron Letters, 1994, 35, 9471*

José Barluenga,\* Pablo L. Bernad Jr. and José M. Concellón.

Instituto de Química Organometálica "Enrique Moles", Julián Clavería s/n, Universidad de Oviedo, 33071 Oviedo, Spain.



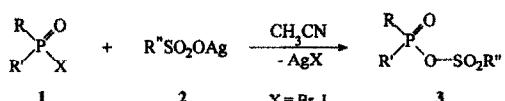
**New General Synthesis of Mixed Phosphorus and Sulfonic Acids Anhydrides via Reaction of Phosphorus Acids Bromides and Iodides with Silver Salts of Sulfonic Acids: A Route to P-Chiral Anhydrides**

*Tetrahedron Letters, 1994, 35, 9473*

Jacek Wasiak and Jan Michalski\*

Centre of Molecular and Macromolecular Studies, Polish Academy of Science, 90-363 Łódź, ul. Sienkiewicza 112, Poland.

The anhydrides 3 are formed in excellent yield. The first synthesis of mixed diastereoisomeric anhydrides 3 containing P-chiral center is described.

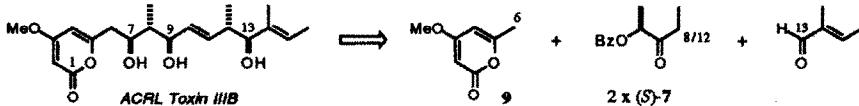


**ANTI ALDOL REACTIONS OF LACTATE-DERIVED KETONES.**

**APPLICATION TO THE TOTAL SYNTHESIS OF (-)-ACRL TOXIN IIIB.**

Ian Paterson\* and Debra J. Wallace, University Chemical Laboratory, Lensfield Road, Cambridge CB2 1EW, UK.

The fungal polyketide derivative (-)-ACRL toxin IIIB was prepared from  $\alpha$ -pyrone 9 and tiglic aldehyde, using the boron-mediated anti aldol reaction of (S)-7 twice in the synthesis.



**Al<sub>2</sub>O<sub>3</sub> SUPPORTED KF : AN EFFICIENT MEDIATOR IN THE EPOXIDATION OF ELECTRON DEFICIENT ALKENES WITH t-BuOOH**

*Tetrahedron Letters, 1994, 35, 9481*

Veejendra K. Yadav\* and Kamal K. Kapoor

Department of Chemistry, Indian Institute of Technology, Kanpur 208 016, IN

KF adsorbed on Al<sub>2</sub>O<sub>3</sub> promotes epoxidation of electron deficient alkenes. Base-labile functional groups survive.

