

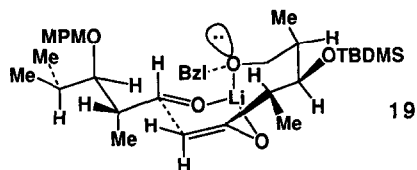
GRAPHICAL ABSTRACTS

CONCERNING THE DIASTEREOFACIAL SELECTIVITY OF ALDOL REACTIONS OF CHIRAL METHYL KETONE ENOLATES: EVIDENCE FOR REMOTE CHELATION IN THE BAFILOMYCIN ALDOL REACTION

W. R. Roush,* T. D. Bannister and M. D. Wendt, Department of Chemistry, Indiana University, Bloomington, IN 47405

Evidence is presented that the aldol reactions of the lithium enolates of **4** and **7** proceed by way of chelated transition state **19**.

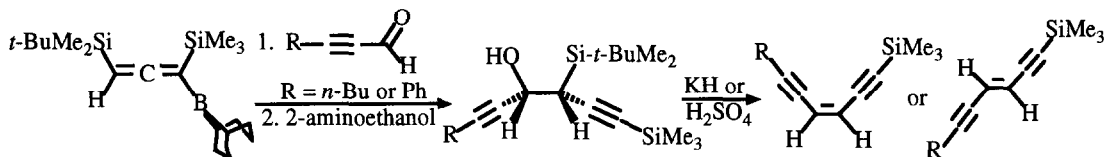
Tetrahedron Lett. 1993, 34, 8387



STEREOSELECTIVE SYNTHESIS OF ENEDIYNES AND ENYNES BY CONDENSATION OF ALDEHYDES WITH γ -(TRIALKYLSILYL)ALLENYLBORANES.

Kung K. Wang,* Zhongguo Wang, and Yu Gui Gu, Department of Chemistry, West Virginia University, Morgantown, West Virginia 26506 USA

Tetrahedron Lett. 1993, 34, 8391

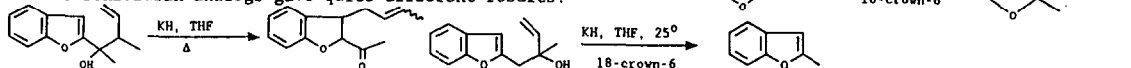


REARRANGEMENTS OF SOME FURAN AND BENZOFURAN 1,5-DIENOLS

David Martin, Julie A. Wurster, Mary J. Boylan, Robert M. Borzilleri, Gregory T. Engel and Edward J. Walsh*, Department of Chemistry, Allegheny College, Meadville, PA, 16335 USA

It was found that the 1-(2-furyl)-methyl-3-buten-ol isomers behave quite differently under basic conditions. The 1-(2-furyl)-2-methyl-3-buten-2-ol gave us the first example of an anionic oxy-Cope reaction on a simple furan.

The benzofuran analogs gave quite different results:

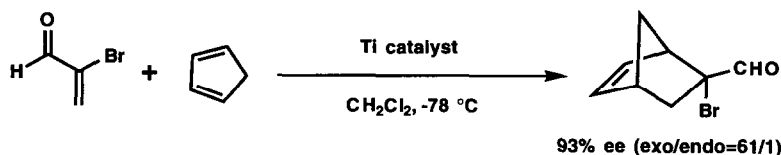


Tetrahedron Lett. 1993, 34, 8395

CATALYTIC ENANTIOSELECTIVE DIELS-ALDER REACTIONS USING TITANIUM COMPLEXES OF *CIS-N*-SULFONYL-2-AMINO-1-INDANOLS

E. J. Corey,* Thomas D. Roper, Kazuaki Ishihara and Georgios Sarakinos, Department of Chemistry, Harvard University, Cambridge, Massachusetts, 02138

Tetrahedron Lett. 1993, 34, 8399



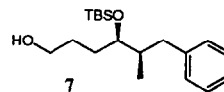
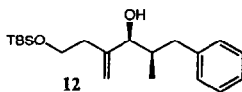
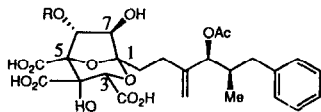
The Asymmetric Syntheses of the C-1 Sidechains
of Zaragozaic Acid A and Zaragozaic Acid C

Tetrahedron Lett. 1993, 34, 8403

Albert J. Robichaud[†] Gregory D. Berger[†] and David A. Evans[‡]

[†]Merck Research Laboratories, Rahway, N.J. 07065

[‡]Department of Chemistry, Harvard University, Cambridge, Mass. 02138



The syntheses of the C-1 sidechain derivatives, 12 and 7, of zaragozic acid A and zaragozic acid C were performed. The two separate routes, utilizing chiral oxazolidinone aldol chemistry, and assignment of the sidechain fragments is discussed.

AN IMPROVED SYNTHESIS OF 2,3- AND 3,4-
UNSATURATED PYRANOSIDES: THE USE OF MICROWAVE
ENERGY. Lúcia H.B. Baptistella*, Alana Z. Neto, Helena Onaga and Eduardo

Tetrahedron Lett. 1993, 34, 8407

A.M. Godoi; Instituto de Química, Universidade Estadual de Campinas, C.P. 6154, 13081-970, Campinas, SP, Brasil

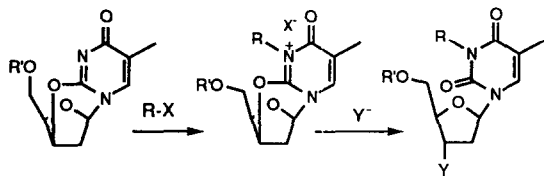
An improved, rapid preparation of unsaturated carbohydrates using microwave-induced Tipson-Cohen reaction has been developed.



3'-Substituted Pyrimidines via Alkylation-opening of 2,3'-Cyclothymidine

Ashis K. Saha*, Wayne Schairer, Donald A. Upson Department of Medicinal Chemistry,
Sterling Winthrop Pharmaceuticals Research Division, 25 Great Valley Parkway, Malvern, PA 19355

Tetrahedron Lett. 1993, 34, 8411



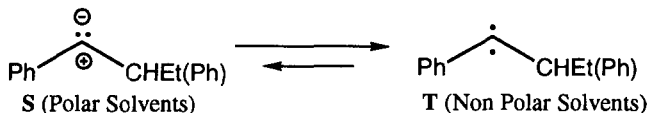
A general strategy for synthesis of 3'-substituted thymidine derivatives is described, consisting of activation via N-3 alkylation of 2,3'-cyclothymidine followed by nucleophilic opening at 3'-position. Examples include demonstration of carbon-carbon bond formation at the 3'-position.

SOLVENT EFFECTS ON THE SINGLET-TRIPLET EQUILIBRIUM
AND REACTIVITY OF A GROUND TRIPLET STATE ARYLALKYL
CARBENE. M. A. García-Garibay,* Craig Theroff, Steve H. Shin and Jesper

Jemelius, Department of Chemistry and Biochemistry, University of California, Los Angeles, CA 90024 USA

Tetrahedron Lett. 1993, 34, 8415

By stabilizing the singlet state, solvent polarity exerts a remarkable effect on the chemistry of triplet ground state carbenes.

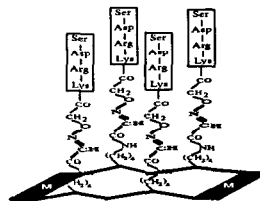


Template Assembled Synthetic Proteins: Condensation of a Multifunctional Peptide to a Topological Template via Chemoselective Ligation

Tetrahedron Lett. **1993**, *34*, 8419

G. Tuchscherer, Institute of Organic Chemistry, University of Lausanne
Rue de la Barre 2, CH-1005 Lausanne, Switzerland

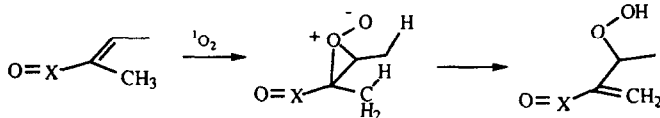
Chemoselective ligation of unprotected peptides to topological templates via oxime bond formation gives readily access to TASP molecules.



ON THE ORIGIN OF GEMINAL REGIOSELECTIVITY IN THE ENE REACTION OF SINGLET OXYGEN WITH SUBSTITUTED ALKENES. Waldemar Adam,* Markus J. Richter, Institute of Organic Chemistry, University of Würzburg, Am Hubland, D-97074 Würzburg, Germany

Tetrahedron Lett. **1993**, *34*, 8423

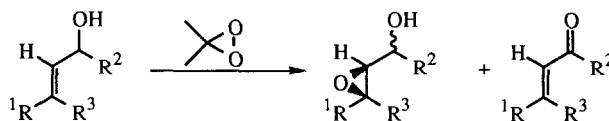
The geminal regioselectivity of the $^1\text{O}_2$ ene reaction with acceptor-substituted alkenes can be attributed to a weakening of the proximal C-O bond of a perepoxide intermediate by the substituent.



OXIDATION OF ALLYLIC ALCOHOLS BY DIMETHYLDIOXIRANE: COMPETITION REACTION BETWEEN EPOXIDATION AND C-H INSERTION. Waldemar Adam*, Frank Prechtl, Markus J. Richter, Alexander K. Smerz, Institute of Organic Chemistry, University of Würzburg, Am Hubland, D-97074 Würzburg, Germany

Tetrahedron Lett. **1993**, *34*, 8427

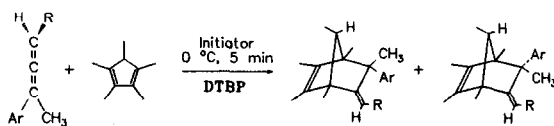
Epoxidation of allylic alcohols with dimethyldioxirane is accompanied by oxidation of the hydroxy functionality to the enone.



Electron Transfer Initiated Diels-Alder Reaction with Allenes as Dienophiles, Michael Schmittl* and Clemens Wöhrle, Institut für Organische Chemie und Biochemie, Universität Freiburg, Albertstr. 21, D-79104 Freiburg, Germany

Tetrahedron Lett. **1993**, *34*, 8431

In the presence of one-electron oxidants the [4+2]-cycloaddition of electron-rich allenenes with pentamethylcyclopentadiene can be accomplished at 0 °C within 5 min in up to 80% yield.



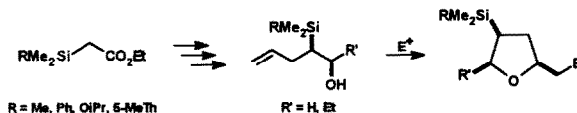
- a: Ar: *p*-An, R: H;
- b: Ar: *p*-An, R: CH₃;
- c: Ar: *p*-An, R: COOC₂H₅;
- d: Ar: *p*-Tol, R: H.

HIGHLY STEREOSELECTIVE ACCESS TO 2,4- AND 2,4,5-SUBSTITUTED TETRAHYDROFURANS FROM α -SILYLACETIC ESTERS. A STUDY OF HOMOALLYLIC STEREOCONTROL.

Olivier Andrey and Yannick Landais*

Institut de Chimie Organique, Université de Lausanne, Rue de la Barre 2, 1005 Lausanne, Switzerland.

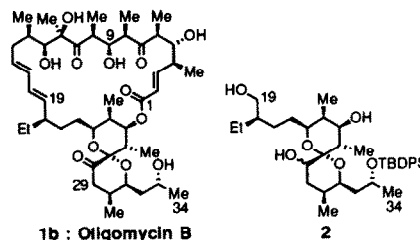
Cis-2,4- and *cis-cis*-2,4,5-substituted tetrahydrofurans have been prepared stereoselectively using electrophilic cyclofunctionalization of β -hydroxyhomoallylsilanes readily available from α -silylacetic esters.



SYNTHETIC STUDIES ON OLIGOMYCINS. ENANTIOSPECIFIC SYNTHESIS OF THE OLIGOMYCIN B SPIROKETAL PORTION AND ESTABLISHMENT OF THE ABSOLUTE STEREOCHEMISTRY OF OLIGOMYCIN B.

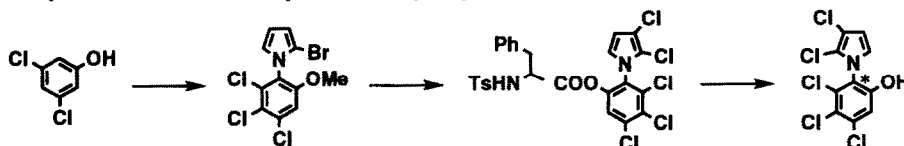
M. Nakata,* T. Ishiyama, Y. Hirose, H. Maruoka, and K. Tatsuta, Department of Applied Chemistry, Keio University, 3-14-1 Hiyoshi, Kohoku-ku, Yokohama 223, Japan

The enantiospecific synthesis of the oligomycin B spiroketal portion **2** has been achieved, establishing the absolute stereochemistry of oligomycin B (**1b**).



TOTAL SYNTHESIS OF CHLORINATED PHENYLPYRROLE ANTIBIOTICS, (+)- AND (-)- NEOPYRROLOMYCINS Kuniaki Tatsuta* and Manabu Itoh,

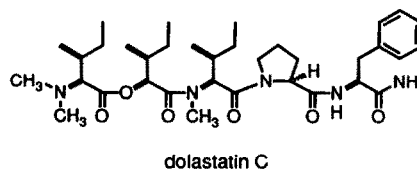
Graduate School of Science and Engineering, Waseda University, Ohkubo, Shinjuku-ku, Tokyo 169, Japan
The first synthesis has been accomplished through regioselective halogenations and optical resolution.



ISOLATION, STRUCTURE, AND SYNTHESIS OF DOLASTATIN C, A NEW DEPSIPEPTIDE FROM THE SEA HARE *DOLABELLA AURICULARIA*

Hiroki Sone, Takayuki Nemoto, Makoto Ojika, and Kiyoyuki Yamada*
Department of Chemistry, Faculty of Science, Nagoya University, Chikusa, Nagoya 464, Japan

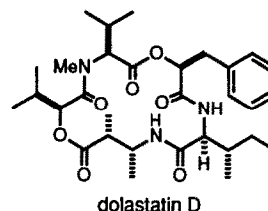
A new depsipeptide dolastatin C has been isolated from the Japanese sea hare *Dolabella auricularia*. The structure was elucidated by spectroscopic and chemical means and determined unambiguously by the synthesis.



ISOLATION, STRUCTURE, AND SYNTHESIS OF DOLASTATIN D, A CYTOTOXIC CYCLIC DEPSIPEPTIDE FROM THE SEA HARE *DOLABELLA AURICULARIA*

Hiroki Sone, Takayuki Nemoto, Hiroyuki Ishiwata, Makoto Ojika,* and Kiyoyuki Yamada*
Department of Chemistry, Faculty of Science, Nagoya University, Chikusa, Nagoya 464, Japan

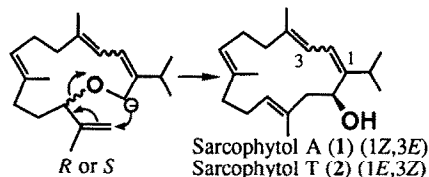
A cytotoxic cyclic depsipeptide, dolastatin D, has been isolated from the Japanese sea hare *Dolabella auricularia*. The structure was elucidated by spectroscopic and chemical means and was confirmed unambiguously by the synthesis.



Total Syntheses of Both Enantiomers of Sarcophytols A and T Based on Stereospecific [2,3]Wittig Rearrangement.

M. Kodama,* S. Yoshio, S. Yamaguchi, Y. Fukuyama, H. Takayanagi, Y. Morinaka, S. Usui, and Y. Fukazawa, Faculty of Pharmaceutical Sciences, Tokushima Bunri University, Tokushima 770; Pharmaceutical Laboratory, Research Center, Mitsubishi Kasei Corporation, Yokohama 227; Department of Chemistry, Hiroshima University, Higashi-Hiroshima 724, Japan

Enantioselective syntheses of both enantiomers of 1 and 2 using yeast reduction and stereospecific [2,3]Wittig rearrangement as key steps are described.



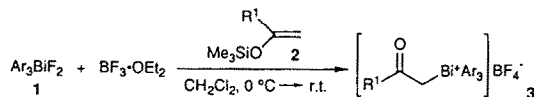
A NOVEL SYNTHESIS OF ALKYLBI SMUTHONIUM SALTS AND THEIR REACTION WITH SOME NUCLEOPHILES. FIRST X-RAY STRUCTURAL ANALYSIS OF A STABILIZED ALKYLBI SMUTHONIUM TETRAFLUOROBORATE.

Yoshihiro Matano^a, Nagao Azuma^b and Hitomi Suzuki^{*a}

^a Department of Chemistry, Faculty of Science, Kyoto University, Kitashirakawa, Sakyo-ku, Kyoto 606, Japan,

^b Department of Chemistry, Faculty of General Education, Ehime University, Bunkyo-cho, Matsuyama 790, Japan

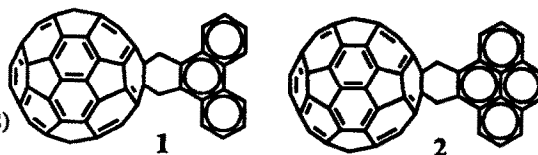
Treatment of Ar₃BiF₂ 1 with silyl ethers 2 in the presence of BF₃·OEt₂ gave (2-oxoalkyl)triarylbismuthonium tetrafluoroborates 3



REACTION OF FULLERENE WITH BENZOCYCLOBUTENE HOMOLOGS

Tetsuya Tago, Toshiyuki Minowa, Yukihiko Okada, and Jun Nishimura*
Department of Chemistry, Gunma University, Tenjincho, Kiryu 376, Japan

Fullerene was easily converted to its derivatives (1 and 2) by the treatment with benzocyclobutene homologs for 20 h at 140 °C.

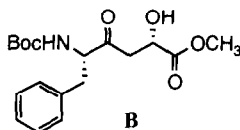
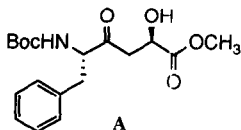


SYNTHESIS OF α -HYDROXY KETOMETHYLENE DIPEPTIDE

ISOSTERES Byeang Hyeon Kim*, Yong Jun Chung and Eun Jung Ryu

Department of Chemistry, Center for Biofunctional Molecules, Pohang Institute of Science and Technology, Pohang, 790-600, Korea

Novel α -hydroxy ketomethylene dipeptide isosteres (e.g. **A**, **B**) were prepared efficiently.

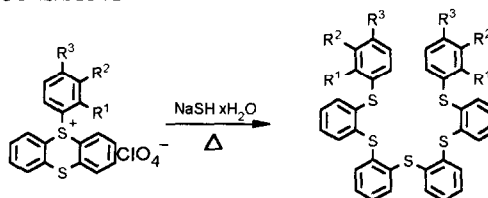


ONE STEP SYNTHESIS OF POLYARYLTHIOETHERS CONSISTING OF ORTHO-PHENYLTHIO MOIETY

Song Seok Shin, Man Nyoung Kim, Hyun Ock Kim, and Kyongtae Kim*

Department of Chemistry,

Seoul National University, Seoul 151-742, Korea

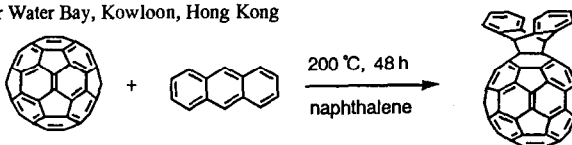


Solvent: THF/H₂O (10:1, v/v); PhH/H₂O (1:1, v/v)

USE OF NAPHTHALENE AS A SOLVENT FOR SELECTIVE FORMATION OF THE 1:1 DIELS-ALDER ADDUCT OF C₆₀ WITH ANTHRACENE.

Koichi Komatsu,* Yasujiro Murata, Nobuyuki Sugita, Institute for Chemical Research, Kyoto University, Uji, Kyoto-fu 611, Japan; Ken'ichi Takeuchi, Division of Energy and Hydrocarbon Chemistry, Graduate School of Engineering, Kyoto University, Sakyo-ku, Kyoto 606-01, Japan; Terence S. M. Wan, Department of Chemistry, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong

A reaction of C₆₀ with equimolar amount of anthracene in naphthalene at 200 °C affords the 1:1 Diels-Alder adduct in good yield.

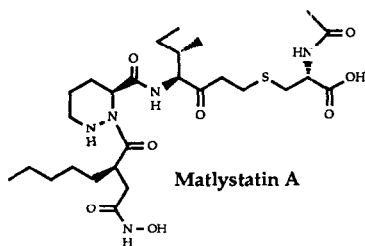


Total Synthesis of Matlystatin A

Kazuhiko Tamaki, Shinwa Kurihara,

and Yukio Sugimura*

Bioscience Research Laboratories, Sankyo Co., Ltd., 1-2-58 Hiromachi 1-chome, Shinagawa-ku, Tokyo 140, Japan



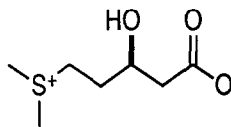
The first total synthesis of matlystatin A and determination of its absolute configuration are described.

Tetrahedron Lett. **1993**, *34*, 8481

GONYOL: METHIONINE-INDUCED SULFONIUM ACCUMULATION IN A DINNOFLAGELLATE *GONYAULAX POLYEDRA*

Hideshi Nakamura,* Kazuhiro Fujimaki, Osamu Sampei, and Akio Murai
Department of Chemistry, Faculty of Science,
Hokkaido University, Sapporo 060, Japan

Gonyol was isolated from a dinnoflagellate *Gonyaulax polyedra* cultured in the presence of methionine and the structure was confirmed by synthesis to be 3*S*-5-dimethylsulfonio-3-hydroxypentanoate.

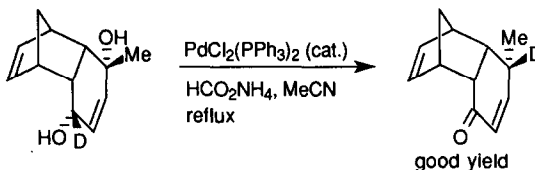


Gonyol

Tetrahedron Lett. **1993**, *34*, 8485

PALLADIUM-CATALYZED STEREOSPECIFIC 1,4-HYDROGEN MIGRATION OF *CIS*-CYCLOHEX-2-EN-1,4-DIOL SYSTEMS

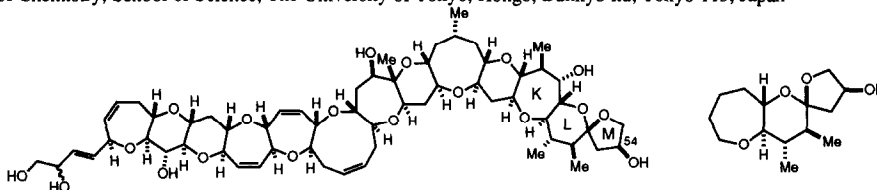
Seiichi Takano,* Minoru Moriya, Takashi Kamikubo, Kou Hiroya, and Kunio Ogasawara
Pharmaceutical Institute, Tohoku University, Aobayama, Sendai 980, Japan



STEREOSELECTIVE SYNTHESIS OF A KLM RING MODEL OF CIGUATOXIN: CONFIRMATION OF THE C54 STEREOCHEMISTRY

Makoto Sasaki, Atsuhiko Hasegawa, and Kazuo Tachibana

Department of Chemistry, School of Science, The University of Tokyo, Hongo, Bunkyo-ku, Tokyo 113, Japan

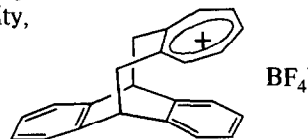


Tetrahedron Lett. **1993**, *34*, 8493

Synthesis, Structure, and Physical Properties of 1,11-o-Benzo[2]orthocyclo[2](1,2)tropyliophane

Yoshimasa Fukazawa,* Satoshi Harada, Akira Inai and Toshiya Okajima
Department of Chemistry, Faculty of Science, Hiroshima University,
Higashi-Hiroshima 724, Japan

The title compound has been synthesized, the structure and the physical properties of which are investigated by X-ray, spectroscopic analysis, and Molecular Orbital calculations.



**RESTRUCTURING OF THE BLEOMYCIN METAL CORE.
NOVEL OXYGEN-ACTIVATING LIGANDS WITH
SYMMETRIZED STRUCTURE**

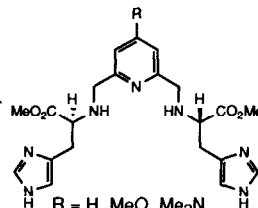
Masami Otsuka,** Honoo Satake,^a Yukio Sugiura,** Satoru Murakami,^b Masakatsu Shibasaki,^b
Susumu Kobayashi^c

^aInstitute for Chemical Research, Kyoto University, Uji, Kyoto611, Japan.

^bFaculty of Pharmaceutical Sciences, The University of Tokyo, Hongo, Bunkyo-ku, Tokyo113, Japan.

^cSagami Chemical Research Center, Sagamihara-shi, Kanagawa229, Japan.

Novel ligands with symmetrized coordination environment consisting of two histidine units and a pyridine are prepared. Oxygen-activating efficiency of the iron complexes of the synthetic ligands increased by introducing electron donating substituent into the pyridine ring.

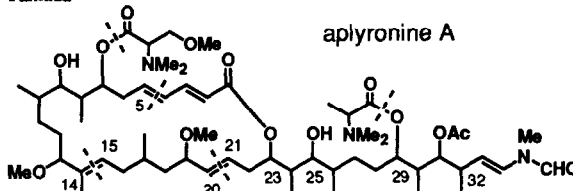


**FURTHER STUDIES ON APLYRONINE A, AN ANTITUMOR SUBSTANCE
ISOLATED FROM THE SEA HARE *APLYSIA KURODAI***

Makoto Ojika, Hideo Kigoshi, Takeshi Ishigaki, and Kiyoyuki Yamada*

Department of Chemistry, Faculty of Science,
Nagoya University, Chikusa, Nagoya 464, Japan

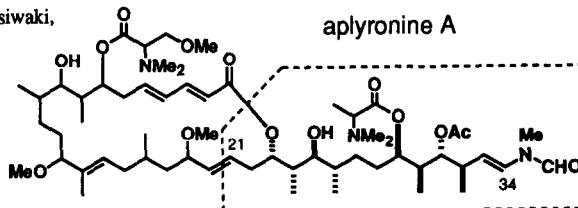
The six fragments of aplyronine A, a potent antitumor substance were obtained by the chemical degradations and were characterized. Relative stereochemistry (C23–C25, C29–C32) was investigated.



**STUDIES ON THE STEREOCHEMISTRY OF APLYRONINE A:
DETERMINATION OF THE STEREOCHEMISTRY
OF THE C21–C34 FRAGMENT**

Makoto Ojika, Hideo Kigoshi, Takeshi Ishigaki, Masanori Nisiwaki,
Itaru Tsukada, Kazuhiro Mizuta, and Kiyoyuki Yamada*
Department of Chemistry, Faculty of Science,
Nagoya University, Chikusa, Nagoya 464, Japan

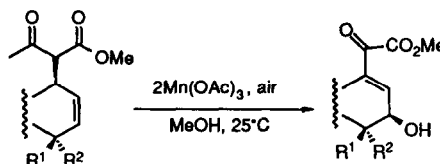
The absolute stereochemistry of eight chiral centers in aplyronine A, a potent antitumor substance of marine origin, was determined by the enantioselective synthesis.



**Manganese(III)-Based Oxidative Free-Radical Reaction
of α -Allyl- β -Keto Ester with Molecular Oxygen**

Takashi Ohshima, Mikiko Sodeoka, and Masakatsu Shibasaki*
Faculty of Pharmaceutical Sciences, University of Tokyo,
Hongo, Bunkyo-ku, Tokyo 113, Japan

Oxidative reactions of α -allyl- β -keto esters with $Mn(OAc)_3 \cdot 2H_2O$ give the δ -hydroxy- β,γ -unsaturated- α -keto esters in good yields. The mechanism of this reaction is discussed.



**SULFONE DIRECTED RHODIUM CATALYSED HYDROBORATION:
REGIOCHEMISTRY IN ACYCLIC SYSTEM**

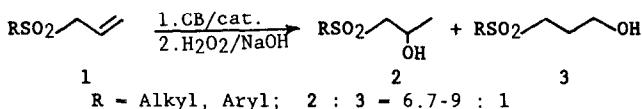
Xue-Long Hou^a, Dao-Guang Hong^b, Guo-Bin Rong^b, Yang-Long Guo^b, and Li-Xin Dai^{*a}

^aLaboratory of Organometallic Chemistry, Shanghai Institute of Organic

Chemistry, Academia Sinica, Shanghai, 200032 China

^bDepartment of Chemistry, East China University of Science and Technology, Shanghai, 200237 China

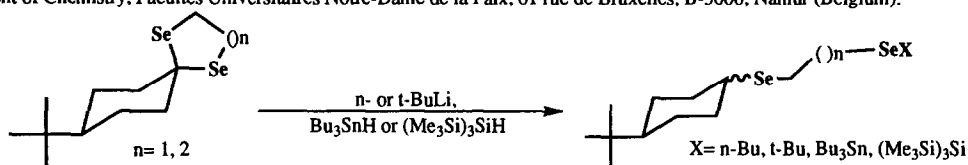
Reaction of allyl sulfones with CB catalysed by Rh(PPh₃)₃Cl provides Markownikoff product with high regioselectivity.



Cleavage of the C-Se bond of Cyclic Selenoacetals derived from 4-t-Butyl Cyclohexanone with Butyllithiums and Tin and Silyl Hydrides

Alain Krief, * Elie Badaoui and Willy Dumont

Departement of Chemistry, Facultés Universitaires Notre-Dame de la Paix, 61 rue de Bruxelles, B-5000, Namur (Belgium).

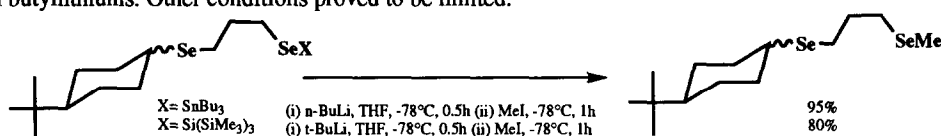


Synthesis of Selenolates from Stannyl and Silyl Alkylselenides.

Alain Krief, * Elie Badaoui and Willy Dumont.

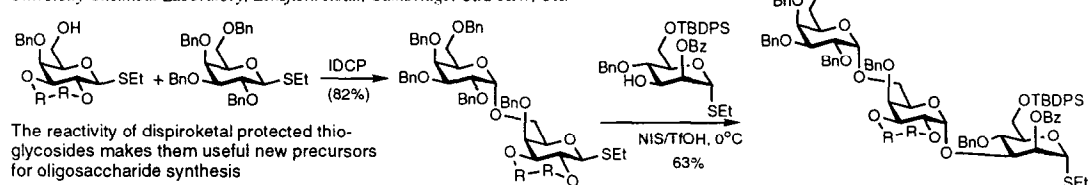
Department of Chemistry, Facultés Universitaires Notre-Dame de la Paix, 61 rue de Bruxelles, B-5000, Namur (Belgium).

Stannyl and silyl alkylselenides have been efficiently transformed to the corresponding alkylselenolates on reaction with butyllithiums. Other conditions proved to be limited.



**DISPIROKETALS IN SYNTHESIS (PART 5): A NEW OPPORTUNITY
FOR OLIGOSACCHARIDE SYNTHESIS USING DIFFERENTIALLY
ACTIVATED GLYCOSYL DONORS AND ACCEPTORS**

Geert-Jan Boons, Peter Grice, Ray Leslie, Steven V. Ley,* and Lam Lung Yeung
University Chemical Laboratory, Lensfield Road, Cambridge, CB2 1EW, UK.



The reactivity of dispiroketal protected thio-glycosides makes them useful new precursors for oligosaccharide synthesis

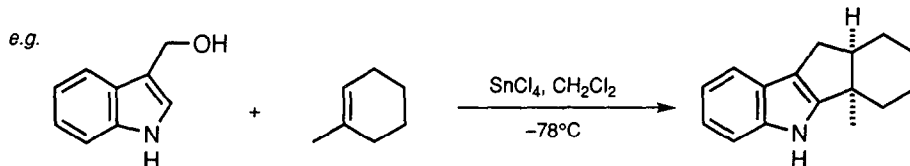
SYNTHESIS OF CYCLOPENT[b]INDOLES BY FORMAL [3+2]-ADDITION OF INDOLYLMETHYL CATIONS TO ALKENES

Tetrahedron Lett. **1993**, *34*, 8527

C.-A. Harrison, R. Leineweber, C. J. Moody and J. M. J. Williams

Department of Chemistry, Loughborough University of Technology, Loughborough, Leicestershire LE11 3TU, U.K.

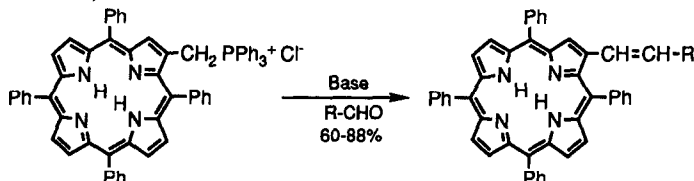
Treatment of indole-2- or 3-methanols with tin(IV) chloride in the presence of alkenes results in [3+2]-addition to give cyclopent[b]indoles.



Tetrahedron Lett. **1993**, *34*, 8531

THE SYNTHESIS OF BUTADIENE-BRIDGED PORPHYRIN DIMERS AND STYRYL PORPHYRINS USING A PORPHYRIN-DERIVED WITTIG REAGENT.

Edia E. Bonfantini and David L. Officer*. Department of Chemistry and Biochemistry, Massey University, Palmerston North, New Zealand.



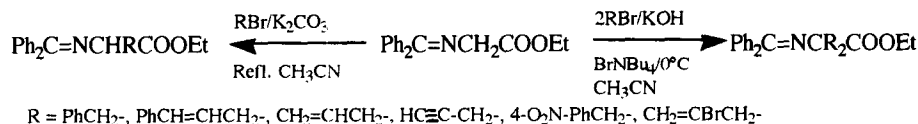
Tetrahedron Lett. **1993**, *34*, 8535

SYNTHESIS OF α -SUBSTITUTED AND α,α -DISUBSTITUTED α -AMINO ACIDS BY CONTROLLED MONO- AND DIALKYLATION OF ETHYL N-DIPHENYLMETHYLENEGLYCINATE.

J. Ezquerro*,¹ C. Pedregal,¹ M. Moreno-Mañas*,² R. Pleixats² and A. Roglans²

¹ Centro de Investigación LILLY, S.A. Paraje de la Cruz s/n. 28130-Madrid. Spain.

² Department of Chemistry, Universitat Autònoma de Barcelona. Bellaterra. 08193-Barcelona. Spain.



Tetrahedron Lett. **1993**, *34*, 8539

STEREOSELECTIVE TEMPLATE-DIRECTED C-GLYCOSIDATION. SYNTHESIS OF 5-MEMBERED OXYGEN HETEROCYCLES VIA CATION-MEDIATED INTRAMOLECULAR CYCLIZATION REACTIONS.

Donald Craig* and Mark W. Pennington

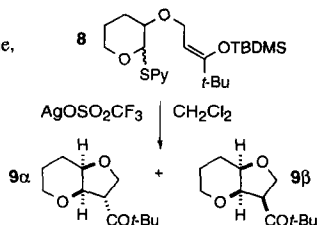
Department of Chemistry, Imperial College of Science, Technology and Medicine, London SW7 2AY, U.K.

Peter Warner

Zeneca Pharmaceuticals,

Mereseide, Alderley Park, Macclesfield, Cheshire SK10 4TG, U.K.

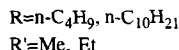
(2-Pyridylthio)glycosidic enol ethers **8** undergo silver(I)-mediated cyclization to give the bicyclic C-glycosides **9 α** and **9 β** . Some derivatization reactions of **9** are described.



A Novel Method of Highly Enantioselective Synthesis of γ -Hydroxy- β -Keto Phosphonates via Allene Oxides.

Marek M. Kabat

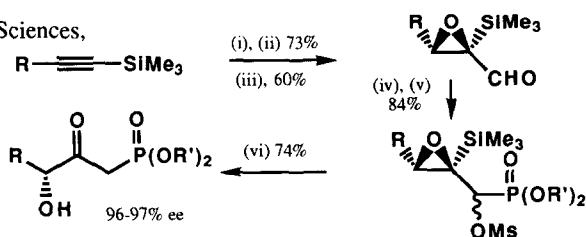
Institute of Organic Chemistry, Polish Academy of Sciences, Kasprzaka 44, 01-224 Warszawa, Poland



(i) ^tBuMgBr, cat. (Cp)₂TiCl₂, HCHO (ii) L(+)-DET, Ti(OⁱPr)₄

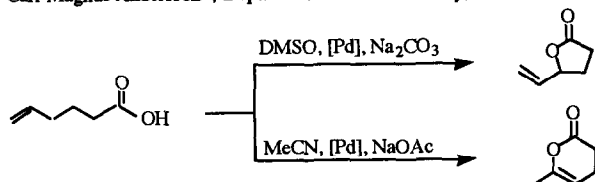
^tBuOOH (iii) PCC (iv) HP(O)(OR')₂, DBU (v) MsCl, Py

(vi) TBAF (1 eq), H₂O (10 eq)/THF



REGIOCHEMISTRY OF PALLADIUM(II)-ASSISTED OXIDATIVE LACTONISATION REACTIONS.

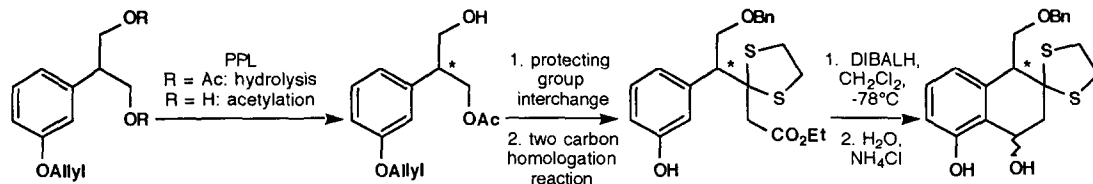
Ulf Annyb* and Magnus Stenkula, Division of Organic Chemistry 1, Chemical Center, University of Lund, POB 124, S-221 00 Lund
Carl-Magnus Andersson*, Dept. of Medicinal Chemistry, Preclinical R&D, Astra Draco AB, POB 34, S-221 00 Lund, SWEDEN



Abstract : The regioselectivity of Pd(II)-assisted lactonisation of alkenoic acids can be governed by the choice of solvent and/or base.

CHEMOENZYMATIC APPROACH TO THE AB RING SYSTEM OF AKLAVINONE

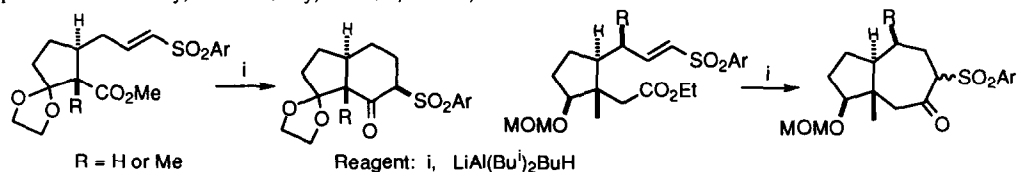
Giuseppe Guanti,* Luca Banfi, Stefano Brusco, and Renata Riva, Istituto di Chimica Organica e C.N.R., Centro di Studio per la Chimica dei Composti Cicloalifatici ed Aromatici, corso Europa 26, 16132 Genova (Italy).



NOVEL CYCLIZATIONS INVOLVING VINYL SULFONES: STEREOSELECTIVE CONSTRUCTION OF PERHYDROAZULENES AND TRANS-HYDRINDANES

D. Neville Jones,* Mark W.J. Maybury, Steven Swallow, and Nicholas C.O. Tomkinson

Department of Chemistry, The University, Sheffield, S3 7HF, U.K.



THE MECHANISM OF NITRATION OF 2,4,6-TRIALKYLPHENOLS

BY NITROGEN DIOXIDE IN SOLUTION. Robert G. Coombes*

and Andrew W. Diggle, Department of Chemistry, City University, Northampton Square, London, EC1V 0HB, UK

Stewart P. Kempbell, Shell Research Ltd, Thornton Research Centre, P.O. Box No.1, Chester, CH1 3SH, UK

Step 1 or step 3 may appear rate limiting depending on R.

