

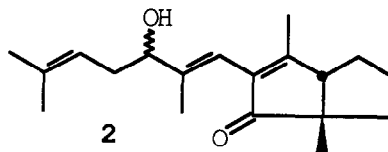
GRAPHICAL ABSTRACTS

Tetrahedron Lett. 29, 4357 (1988)

XESTENONE, A NEW BICYCLIC C₁₉ TERPENOID FROM THE MARINE SPONGE *XESTOSPONGIA VANILLA*

P.T. Northcote and R.J. Andersen*, Department of Chemistry
University of British Columbia, Vancouver, B.C. Canada V6T 1Y6

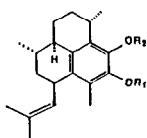
Xestenone (**2**), a novel degraded diterpenoid, has been isolated from the sponge *Xestospongia vanilla*.



Tetrahedron Lett. 29, 4361 (1988)

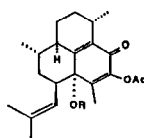
NEW MARINE DITERPENOID, INCLUDING UNIQUE HYDROPEROXIDE, FROM A CARIBBEAN GORGONIAN CORAL OF THE GENUS *PSUEDOPTEROGORGIA*.

C. A. Harvis, M. T. Burch, and W. Fenical, Institute of Marine Resources, University of California, San Diego, La Jolla, CA 92093-0228
The new natural products **1a**, **1b**, **3**, and **5** are described.

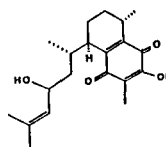


1a R₁ = H, R₂ = Ac

1b R₁ = Ac, R₂ = H



3 R = OH



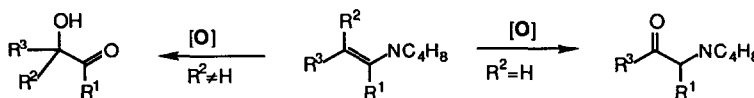
5

Tetrahedron Lett. 29, 4365 (1988)

OXIDATION OF ENAMINES TO α -HYDROXY KETONES AND α -AMINO KETONES USING N-SULFONYLOXAZIRIDINES

Franklin A. Davis* and Aurelia C. Sheppard, Department of Chemistry, Drexel University, Philadelphia, PA 19104

Tri-substituted enamines are oxidized to α -hydroxy ketones by N-sulfonyloxaziridines [O] while di-substituted enamines are oxidized to α -amino ketones. A unified mechanism for the formation of both α -hydroxy ketones and α -amino ketones is proposed.

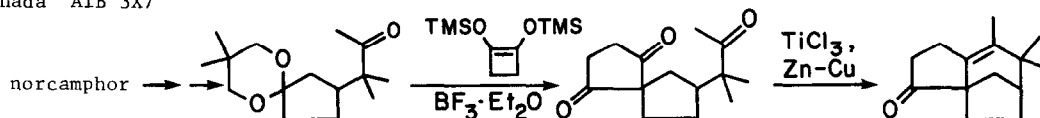


Tetrahedron Lett. 29, 4369 (1988)

A NEW ROUTE TO THE ZIZAANE SESQUITERPENES: AN EFFICIENT SYNTHESIS OF (+)-ISOKHUSIMONE

Yong-Jin Wu and D. Jean Burnell*

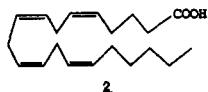
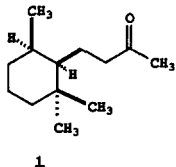
Department of Chemistry, Memorial University of Newfoundland, St. John's, Newfoundland
Canada A1B 3X7



CONFORMATIONAL ANALYSIS OF FLEXIBLE MOLECULES:
LOCATION OF THE GLOBAL MINIMUM ENERGY CONFORMATION
BY THE SIMULATED ANNEALING METHOD

Stephen R. Wilson*, Weili Cui, Jules W. Moskowitz and Kevin E. Schmidt

An new approach for finding the lowest energy conformation of flexible molecules is reported. Examples are tetrahydroionone, arachidonic acid and enkephalin.



Tyr-Gly-Gly-Phe-Met

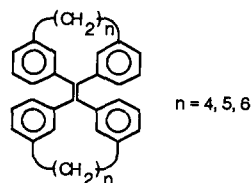
Tetrahedron Lett. 29, 4373 (1988)

SPECTROSCOPIC PROPERTIES OF [n.1]-META-CYCLOPHANEYLIDENES

David A. Shultz and Marye Anne Fox*

Department of Chemistry, University of Texas, Austin, Texas 78712

The photophysical properties of the title compounds are discussed. These compounds show large fluorescence quantum yields which are the result of relatively small torsional displacements of the phenyl rings upon relaxation in the first electronic excited state.

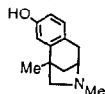


Tetrahedron Lett. 29, 4377 (1988)

APHANORPHINE, A NOVEL TRICYCLIC ALKALOID FROM
THE BLUE-GREEN ALGA *APHANIZOMENON FLOS-AQUAE*

Nanda Gulavita, Akira Hori and Yuzuru Shimizu*, Department of Pharmacognosy and Environmental Health Sciences, The University of Rhode Island, Kingston, RI 02881, USA; Parkanyi Laszlo and Jon Clardy*, Department of Chemistry, Baker Laboratory, Cornell University, Ithaca, New York 14853-1301 USA

An alkaloid, aphanorphine was isolated from blue-green alga, *Aphanizomenon flos-aquae*.



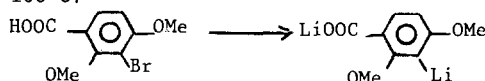
Tetrahedron Lett. 29, 4381 (1988)

SYNTHESIS OF N-SUCCINIMIDYL-2,4-DIMETHOXY-3-(TRI-N-BUTYLSTANNYL)BENZOATE VIA REGIO-SPECIFICALLY
GENERATED LITHIUM 2,4-DIMETHOXY-3-LITHIOBENZOATE

Acharan S. Narula and Michael R. Zalutsky

Department of Radiology, Duke University Medical Center, Durham, NC 27710

Lithium 2,4-dimethoxy-3-lithiobenzoate can be efficiently generated from 2,4-dimethoxy-3-bromobenzoic acid in THF at -100°C .

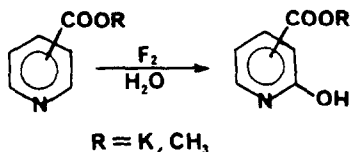


Tetrahedron Lett. 29, 4385 (1988)

CONTROLLED, REGIOSPECIFIC OXIDATION OF
PYRIDINE CARBOXYLIC ACIDS AND ESTERS WITH
ELEMENTAL FLUORINE

Michael Van Der Puy, David Nalewajek, and Gene E. Wicks
Allied-Signal Inc., Buffalo Research
Laboratory, Buffalo, NY, 14210, USA

Pyridine carboxylic acid salts or
esters in aqueous solution were
treated with F₂ to give the
corresponding 2-pyridones.



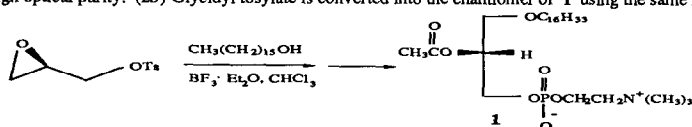
Tetrahedron Lett. 29, 4389 (1988)

NOVEL ENANTIOSELECTIVE SYNTHESIS OF
PLATELET ACTIVATING FACTOR AND ITS
ENANTIOMER VIA RING OPENING OF GLYCIDYL TOSYLATE WITH 1-HEXADECANOL

Pedro N. Guivisdalsky and Robert Bittman*

Department of Chemistry, Queens College of The City University of New York, Flushing, NY 11367

A stereo- and regioselective procedure is reported for the conversion of (2*R*)-glycidyl tosylate into platelet activating factor **1** with very high optical purity. (2*S*)-Glycidyl tosylate is converted into the enantiomer of **1** using the same methodology.

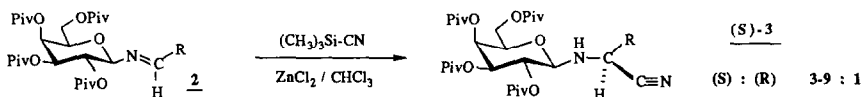


Tetrahedron Lett. 29, 4393 (1988)

REVERSAL OF ASYMMETRIC INDUCTION IN STEREOSELECTIVE
STRECKER SYNTHESIS ON GALACTOSYLAMINE AS THE CHIRAL
MATRIX

Horst Kunz, Wilfried Sager, Waldemar Pfrengle and Dirk Schanzenbach
Institut für Organische Chemie der Universität Mainz, F.R. Germany

In contrast to corresponding (R)-selective reactions in isopropanol, the reaction of the aldimines **2** with silyl cyanide and solid ZnCl₂ in chloroform selectively leads to (S)-α-amino nitriles **3**.



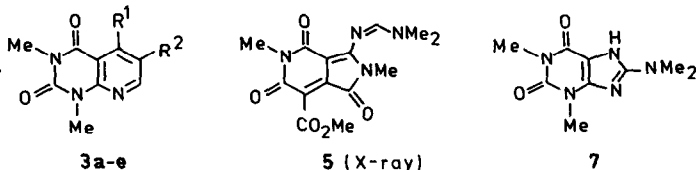
Tetrahedron Lett. 29, 4397 (1988)

6-[(DIMETHYLAMINO)METHYLENE]AMINO-1,3-DIMETHYLURACIL: A
VERSATILE AZA-DIENE SUBSTRATE FOR CYCLOADDITION AND MICHAEL-TYPE REACTIONS

Eileen B. WALSH, ZHU Nai-jue, GUO Fang, and Heinrich WAMHOFF*

Institut für Organische Chemie und Biochemie der Universität Bonn, Gerhard-Domagk-Str.1
D-5300 Bonn 1, FRG and Institute of Chemistry, Academia Sinica, Beijing, P.R. of China

3a-e, **5**, and **7** have been obtained
from the title uracil by [4+2]-
cycloaddition and Michael addition.



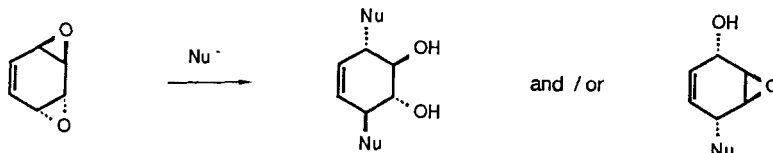
Tetrahedron Lett. 29, 4401 (1988)

CONCERNING THE REACTIVITY OF 1,2:3,4-DIEPOXIDES
TOWARDS NUCLEOPHILES

Thomas Esser and Urs Séquin*

Tetrahedron Lett. 29, 4405 (1988)

Institut für Organische Chemie der Universität, St. Johannis-Ring 19,
CH-4056 Basel, Switzerland

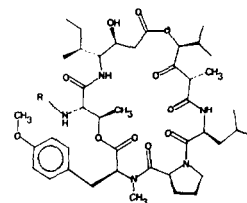


TOTAL SYNTHESIS OF THE DIDEMNINS - 2. SYNTHESIS OF
DIDEMNIN A, B, C AND PROLYLDIDEMNIN A

U.Schmidt*, M.Kroner and H.Griesser

Institut für Organische Chemie der Universität, Pfaffen-
waldring 55, D-7000 Stuttgart 80, Bundesrepublik Deutschland

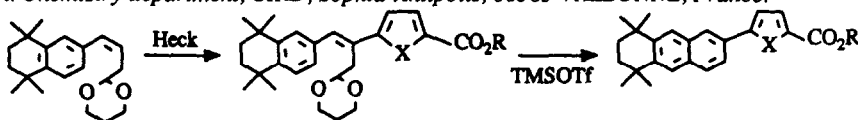
Didemnin A (R=H-R-MeLeu), C (R=H-Lac-R-MeLeu), prolyldidemnin A
(R=H-Pro-R-MeLeu) and the highly cancerostatic, antiviral and
immunosuppressive didemnin B (R=H-Lac-Pro-R-MeLeu) have been
prepared by deprotecting the benzyloxycarbonyl compound (R=Z)
and constructing the side chain that determines the biological
properties.



Tetrahedron Lett. 29, 4407 (1988)

AROMATIC RETINOID (PART 2): A SHORT AND CONVENIENT ROUTE TO
5-(5,6,7,8-TETRAHYDRO-5,5,8,8-TETRAMETHYL-2-ANTHRACENYL)-2-FURAN AND
-2-THIOPHENE CARBOXYLIC ACIDS. Jacques Eustache*, Jean-Michel Bernardon and Braham
Shroot. Chemistry department, CIRD, Sophia-Antipolis, 06565 VALBONNE, France.

Tetrahedron Lett. 29, 4409 (1988)



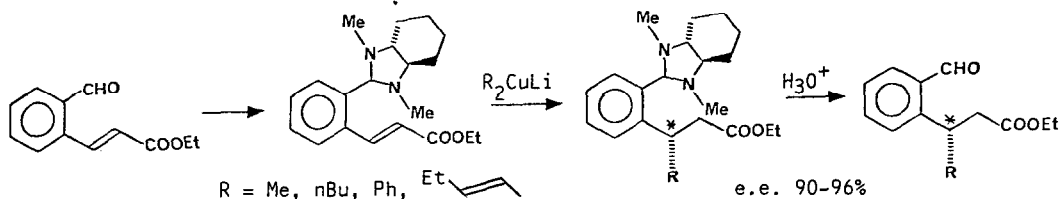
The title compounds were prepared by a short synthetic sequence involving Heck coupling of
a substituted styrene with suitable halogeno-heterocycles followed by trimethylsilyl triflate induced
cyclisation/aromatization.

DIASTERESELECTIVE CONJUGATE ADDITION WITH ACETALS,
OXAZOLIDINES AND IMIDAZOLIDINES AS CHIRAL AUXILIARIES

A. ALEXAKIS*, R. SEDRANI, P. MANGENEY, J.F. NORMANT

Laboratoire de Chimie des Organo-éléments, tour 45,
Université P. et M. Curie, 4 place Jussieu F-75252 PARIS Cédex 05

Tetrahedron Lett. 29, 4411 (1988)

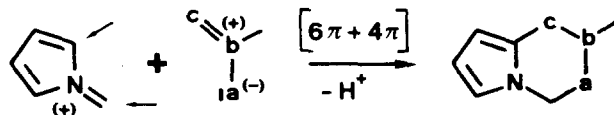


[6 π +4 π] CYCLOADDITIONS OF 5-AZONIAFULVENE IONS WITH
NITRONES AND AZOMETHINE IMINES

Tetrahedron Lett. 29, 4415 (1988)

by Ulrich Burger* and Alain O. Bringham

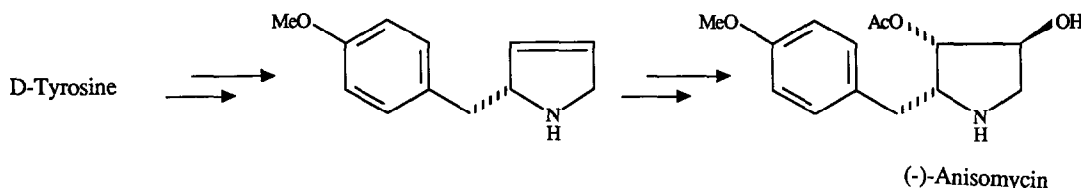
Department of Organic Chemistry, University of Geneva, Switzerland



A NEW SYNTHESIS OF (-)-ANISOMYCIN OR (+)-ANISOMYCIN
STARTING FROM D-TYROSINE OR L-TYROSINE

Tetrahedron Lett. 29, 4419 (1988)

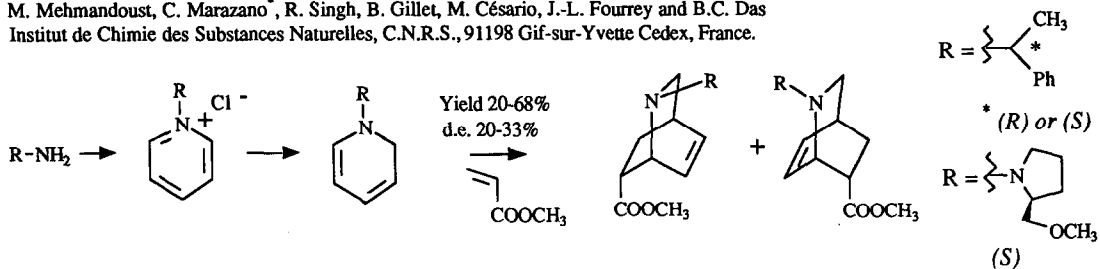
Samir JEGHAM and Bhupesh C. DAS
Institut de Chimie des Substances Naturelles, C.N.R.S.
91198 Gif-sur-Yvette Cedex, France



SYNTHESIS OF CHIRAL ISOQUINUCLIDINES AND DETERMINATION
OF THEIR ABSOLUTE CONFIGURATION

Tetrahedron Lett. 29, 4423 (1988)

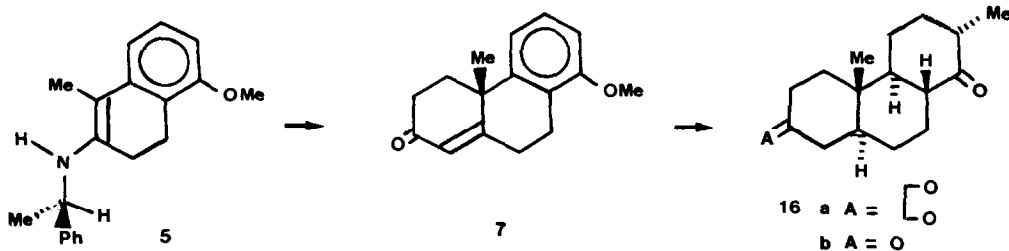
M. Mehmandoust, C. Marazano*, R. Singh, B. Gillet, M. Césario, J.-L. Fourrey and B.C. Das
Institut de Chimie des Substances Naturelles, C.N.R.S., 91198 Gif-sur-Yvette Cedex, France.



ENANTIOSELECTIVE PREPARATION OF KEY [ABC] INTERM.
STEROID SYNTHESIS THROUGH THE ASYMMETRIC MICHAEL AL
PROCESS INVOLVING CHIRAL IMINES.

Tetrahedron Lett. 29, 4427 (1988)

d'Angelo J., Reviel G., Volpe T., Pfau M., ESPCI, Paris (FRANCE)

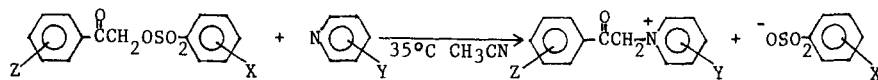


Tetrahedron Lett. 29, 4431 (1988)

A Multiple Hammett Study of the Nucleophilic Substitution Reaction of α -Carbonyl Derivatives
Soo-Dong Yoh* and Oh-Seuk Lee

Department of Chemistry, Kyungpook National University, Daegu 635, Korea

The mechanism for the reaction of phenacyl benzenesulfonates with pyridines have been studied by means of multiple Hammett correlations.

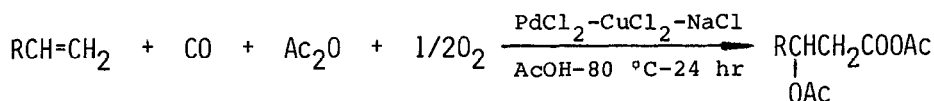
Tetrahedron Lett. 29, 4435 (1988)

AEROBIC OXIDATIVE-CARBONYLATION OF OLEFINS.

A CONVENIENT PREPARATION OF β -HYDROXYALKANOIC ACID DERIVATIVES FROM OLEFINS

Hisao URATA, Atsuko FUJITA, and Takamasa FUCHIKAMI*

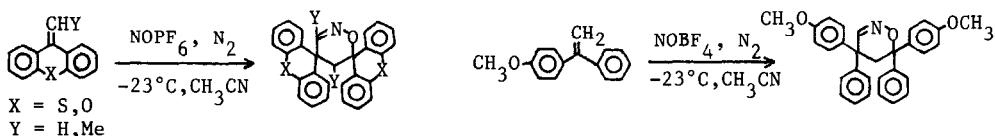
Sagami Chemical Research Center, Nishi-Ohnuma 4-4-1, Sagami-hara, Kanagawa 229, Japan

Tetrahedron Lett. 29, 4437 (1988)

REACTIONS OF NITROSONIUM HEXAFLUOROPHOSPHATE WITH SOME OLEFINIC COMPOUNDS IN ACETONITRILE: ONE STEP SYNTHESIS OF 4H-5,6-DIHYDRO-1,2-OXAZINES.

Gae Hyung Lee, Jae Mok Lee, Won Bok Jeong, and Kyongtae Kim*

Department of Chemistry, Seoul National University, Seoul 151-742, Korea

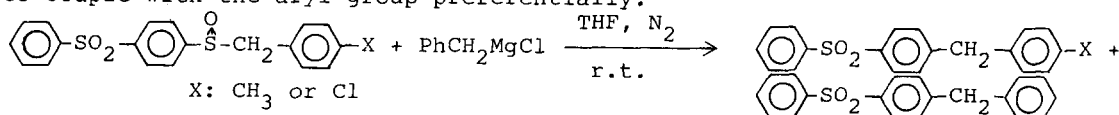
Tetrahedron Lett. 29, 4441 (1988)

SENSITIVE NATURE OF LIGAND COUPLING AND PSEUDOROTATION TO ELECTRONIC EFFECT OF SUBSTITUENT---LIGAND COUPLING

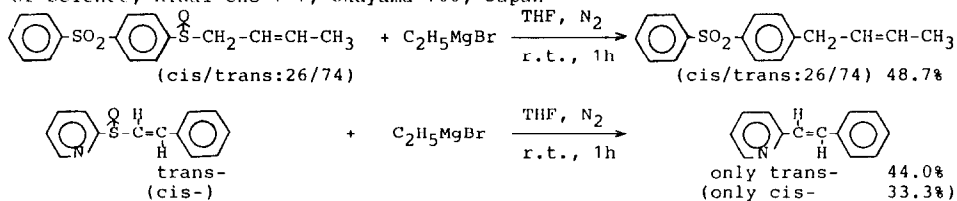
IN THE REACTIONS OF BENZYLIC ARYL SULFOXIDES WITH

BENZYLIC GRIGNARD REAGENTS. S. Wakabayashi, M. Ishida, T. Takeda and S. Oae*, Okayama University of Science, Ridai-cho 1-1, Okayama 700, Japan

In the reaction of p-benzenesulfonylphenyl benzylic sulfoxides with benzylic Grignard reagents, benzylic groups bearing an electron-withdrawing group tends to couple with the aryl group preferentially.



LIGAND COUPLING THROUGH α -SULFURANE --- COMPLETE RETENTION OF GEOMETRIC CONFIGURATION OF ALLYLIC AND VINYLIC GROUPS IN THE REACTIONS OF ALLYLIC AND VINYLIC SULFOXIDES WITH GRIGNARD REAGENTS. S. Oae*, T. Takeda and S. Wakabayashi*, Okayama University of Science, Ridai-cho 1-1, Okayama 700, Japan



THERMAL REARRANGEMENT OF *N*-ACETYL-*N*-NITROSONEURAMINIC ACID DERIVATIVE: SYNTHESIS OF 3-DEOXY-*D*-NONULOSONIC ACID (KDN)

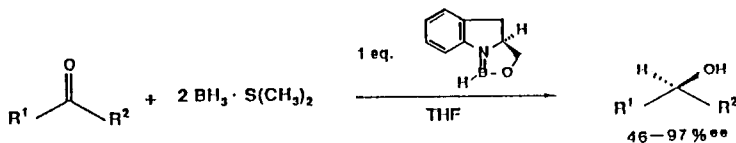
Ryuichi Shirai, Mitsunobu Nakamura, Sumiko Hara, and Haruo Ogura* School of Pharmaceutical Sciences, Kitasato University, Shirokane, Minato-ku, Tokyo 108, Japan

Thermal rearrangement of 1 followed by deprotection gave 3-deoxy-*D*-nonulosonic acid (KDN) (2).



ASYMMETRIC BORANE REDUCTION OF KETONES CATALYZED BY OXAZABOROLIDINE

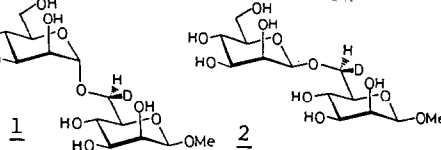
In Kwon Youn, Sang Who Lee, and Chwang Siek Pak* Korea Research Institute of Chemical Technology, Chungnam, Korea



CONFORMATIONAL ANALYSIS OF α AND β (1-6) MANNOSID-SACCHARIDES BY DEUTERIUM SUBSTITUTION EFFECT ON RELAXATION RATE AND NOE

Hiroshi Hori, Yoshihiro Nishida, Hiroshi Ohruai*, Hiroshi Meguro* and Jun Uzawa^a Department of Food Chemistry, Tohoku University, Sendai, Japan,

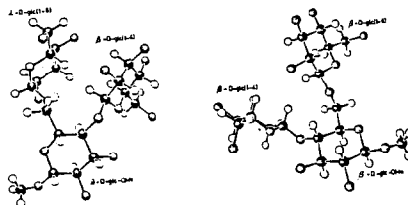
^aRIKEN(Institute of Physical and Chemical Reserch) The study of 1H -differential relaxation rate and NOE using chirally deuterated sugars 1 and 2, revealed the preferred conformation of each α and β (1-6) oligomannose in solution.



CONFORMATIONAL ANALYSES OF Q4,Q6-BRANCHING TRI-D-
GLUCOPYRANOSIDES: INFLUENCE OF Q-4 LINKED RESIDUES
ON SOLUTION CONFORMATIONS ABOUT C5-C6 BONDS AT
(1-6)-LINKAGES.

Tetrahedron Lett. 29, 4461 (1988)

Y. Nishida, H. Hori, H. Ohrai*, H. Meguro* (Tohoku
Uni., Jpn), J. Uzawa (RIKEN, Jpn), D. Reimer,
V. Sinnwell and H. Paulsen (Hamburg Uni., West
Germany).



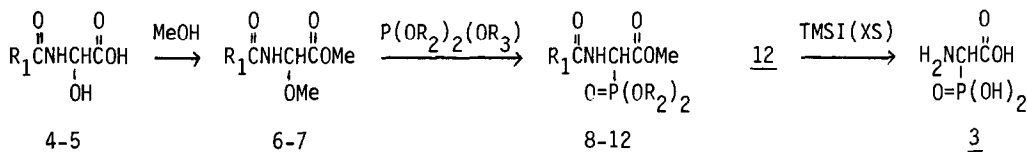
Conformations of four branching trisaccharides
were analyzed by NMR and HSEA calculations.

FACILE SYNTHESIS OF α -PHOSPHORYLATED α -AMINO ACIDS

Tetrahedron Lett. 29, 4465 (1988)

Bonchul Ku, Dong Young Oh*

Department of Chemistry, Korea Advanced Institute of Science & Technology Seoul 131-650, Korea



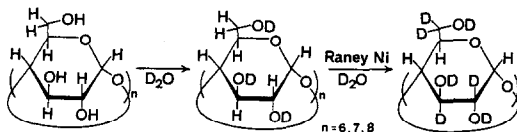
2,3,6,6-PERDEUTERO-CYCLODEXTRINS. POWERFUL NEW FAMILY
OF CYCLODEXTRIN FOR NMR SPECTROSCOPY

Tetrahedron Lett. 29, 4467 (1988)

Yasuhisa Kuroda*, Masahiko Yamada and Iwao Tabushi

Department of Synthetic Chemistry, Kyoto University, Sakyo-ku Kyoto, 606 Japan

2,3,6,6-Perdeutero- α , β and γ -cyclodextrins were prepared by the Raney nickel catalyzed
H-D exchange reaction in D₂O.

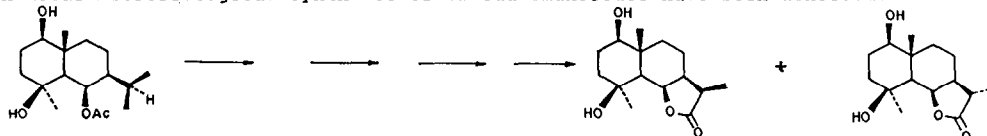


CHEMICAL-MICROBIOLOGICAL SYNTHESIS OF 6 β -EUDESMANOLIDES:
INCUBATION OF 6 β -ACETOXYEUDESMANES BY *CURVULARIA LUNATA*

Tetrahedron Lett. 29, 4471 (1988)

J.M. Arias, A. García-Granados*, A. Martínez, M.E. Onorato and F. Rivas
Dpto. de Química Orgánica. Facultad de Ciencias. Universidad de Granada. 18071 Granada. SPAIN

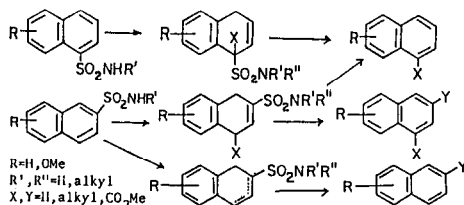
A chemical-microbiological synthesis of 6 β -eudesmanolides have been achieved.



METAL-AMMONIA REDUCTION AND REDUCTIVE ALKYLATION OF NAPHTHALENE SULPHONAMIDES. A NEW ROUTE TO SUBSTITUTED NAPHTHALENES.

L. Gottlieb and H.J.E. Loewenthal*, Dept. of Chemistry, Technion-Israel Institute of Technology, Haifa, Israel.

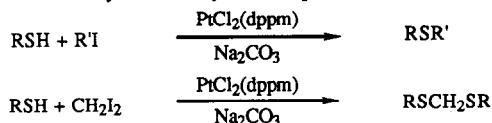
Naphthalene-1- and -2-sulphonamides can be converted into dihydro compounds which can be alkylated in situ or subsequently. On heating the products rearomatise, giving specifically substituted naphthalenes.



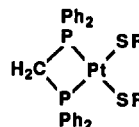
CARBON-SULPHUR BOND FORMATION CATALYSED BY BIS(DIPHENYLPHOSPHINO)-METHANE COMPLEXES OF PLATINUM (II)

Philip C. Bulman Page*, Sukhbinder S. Klair, Michael P. Brown, Marjorie M. Harding, Christopher S. Smith, Stephen J. Maginn, and Suzanne Mulley

School of Chemistry, University of Liverpool, P.O.Box 147, Liverpool, L69 3BX, U.K.



up to 92% via



A SYNTHESIS OF THE C(1)-C(15) SEGMENT OF TSUKUBAENOLIDE (FK 506).

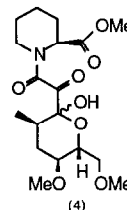
Philip Kocienski* and Michael Stocks
Chemistry Department, The University, Southampton, SO9 5NH, U. K.

and

David Donald*, Martin Cooper, and Anthony Manners

Fisons Pharmaceuticals PLC, Bakewell Road, Loughborough, Leicestershire, LE11 0RH, U.K.

A synthesis of the C(1)-C(15) segment (4) of the immunosuppressant Tsukubaenolide from Tri-O-acetyl-D-glucal and (S)-Pipicolinic acid methyl ester is described.



BIO-ORGANIC SYNTHESIS OF OPTICALLY ACTIVE CYANOHYDRINS AND ACYLOINS

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Chiral acyloins of high optical purity have been obtained in good yields by enzyme catalyzed formation of optically active cyanohydrins, followed by hydroxyl protection and reaction with a Grignard reagent.

