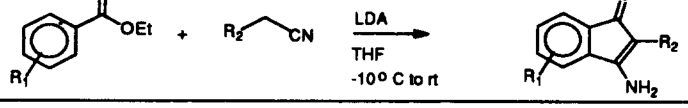
GRAPHICAL ABSTRACTS

Tetrahedron Letters, **1997**, *38*, 8121

A NEW ANIONIC CYCLIZATION REACTION: CONDENSATION OF BENZOATE ESTERS WITH NITRILES TO GIVE 3-AMINO-2-INDEN-1-ONES.

Nadim E. Kayaleh, Ramesh C. Gupta, John F. Morrissey, and Francis Johnson*, **Department of Chemistry, State University of New York at Stony Brook, Stony Brook, NY 11790-3400 USA**

The reaction between substituted ethyl (or methyl) benzoates and phenyl acetonitriles or alkyl nitriles in the presence of an excess of LDA leads to 3-amino-1-indenones. Acid hydrolysis of the latter provides in good yields the corresponding indandiones.



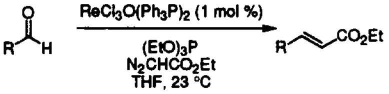
Tetrahedron Letters, **1997**, *38*, 8125

Synthesis of Unsaturated Esters from Aldehydes: An Inexpensive, Practical Alternative to the Horner–Emmons Reaction under Neutral Conditions

Brian E. Ledford and Erick M. Carreira*

Arnold and Mabel Beckman Laboratory for Chemical Synthesis
Division of Chemistry and Chemical Engineering
California Institute of Technology, Pasadena, California 91125

A practical, efficient, mild process is described for the synthesis of unsaturated esters from aldehydes in good yields and diastereoselectivities. All of the reagents used are commercially available at a nominal price: N_2CHCO_2Et, catalytic (1 mol %) $ReOCl_3(PPh_3)_2$, and $(EtO)_3P$. Additionally, the reaction process can be carried out successfully with reagent-grade solvent and reagent without purification.

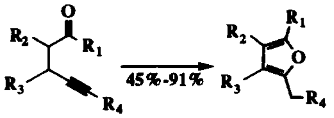


Tetrahedron Letters, **1997**, *38*, 8129

RAPID AND FACILE SYNTHESIS OF HIGHLY SUBSTITUTED FURANS.

David I. MaGee* and James D. Leach, Department of Chemistry, Bag Service #45222, University of New Brunswick, Fredericton, New Brunswick, Canada, E3B 6E2.

A short and efficient synthesis of highly substituted furans has been accomplished. The method is amenable for the production of 2,5-di, 2,3,5-tri and 2,3,4,5-tetrasubstituted furan compounds containing multiple functionalities.



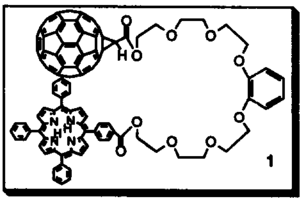
$R_1 = CH_3, C_3H_7, CH_2CO_2CH_3, OCH_3, C_6H_5$, tBu
$R_2 = H, CO_2CH_3, COC_6H_5, SO_2Ph$
$R_3 = H, Me$
$R_4 = SO_2Ph, CHO, CO_2Me, COC_6H_5, CH_2Br$

Tetrahedron Letters, **1997**, *38*, 8133

SYNTHESIS AND PHOTOPHYSICS OF A NOVEL PORPHYRIN-C_{60} HYBRID

Igor G. Safonov, Phil S. Baran, and David I. Schuster*
Department of Chemistry, New York University, New York, NY 10003

The amphiphilic hybrid 1 was found to be slightly soluble in DMSO, displayed a lower affinity for metal cations than expected, and had a surprisingly high quantum yield (Φ_Δ) for formation of singlet oxygen ($^1O_2$).



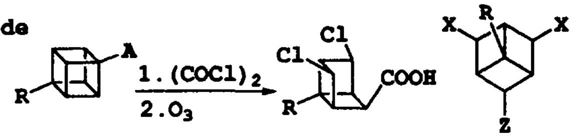
1

Tetrahedron Letters, **1997**, *38*, 8137

NORCUBANES FROM CUBANES. NOVEL REACTION OF AMIDOCUBANES WITH OXALYL CHLORIDE.

A. Bashir-Hashemi*[1], N. Gelber,[2] R. Gilardi[3]; [1]GEO-CENTERS, INC.at ARDEC, B.3028, [2]Picatinny Arsenal, NJ 07860; [3]Laboratory For The Structure Of Matter, NRL, Washington, D.C.20375

Amidocubanes react with oxalyl chloride to give substituted norcubanes.

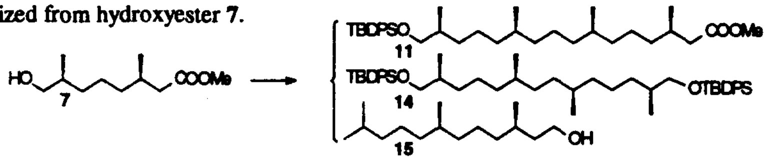


Tetrahedron Letters, **1997**, *38*, 8141

Synthesis of Archaebacterial Lipid C_{20} Chirons

William F. Berkowitz* and Yanzhong Wu
Department of Chemistry and Biochemistry, Queens College, CUNY, 65-30 Kissena Blvd., Flushing, NY 11367

Archaebacterial membrane lipid C_{20} chirons 11 and 14, and Vitamin E side chain 15 were synthesized from hydroxyester 7.

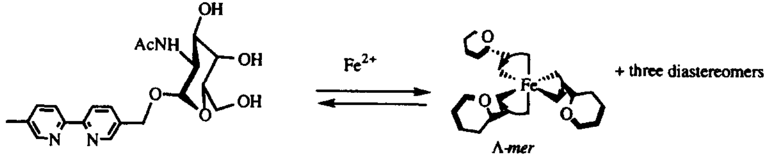


Tetrahedron Letters, **1997**, *38*, 8145

A Self-Adjusting Carbohydrate Ligand for GalNAc Specific Lectins

Shin Sakai‡,#, Yoshihiro Shigemasa‡, Tomikazu Sasaki*
* Department of Chemistry, BG-10, University of Washington, Seattle, WA 98195, USA;
‡ Department of Materials Science, Faculty of Engineering, Tottori University, Koyama-cho, Tottori 680, JAPAN; # Tomey Technology Co., 2-11-33, Noritakeshinmachi, Nishi-ku, Nagoya 451, JAPAN

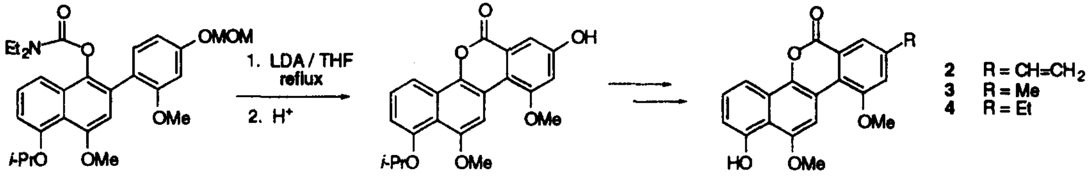
Bipyridine-modified GalNAc reacts with Fe(II) to form trivalent GalNAc ligands for various lectins.



Tetrahedron Letters, **1997**, *38*, 8149

COMBINED DIRECTED METALATION - CROSS COUPLING STRATEGIES. TOTAL SYNTHESIS OF THE AGLYCONES OF GILVOCARCIN V, M AND E.

Victor Snieckus* and Clint James, Guelph-Waterloo Center for Graduate Work in Chemistry, Waterloo, ON, Canada, N2L 3G1.

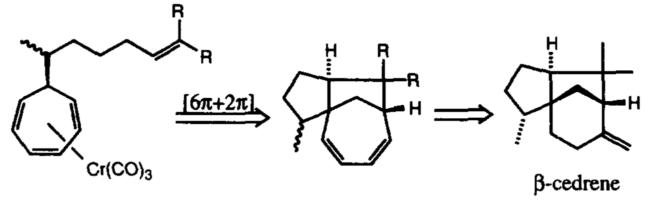


Tetrahedron Letters, **1997**, *38*, 8153

Studies on Intramolecular Cr(0)-Promoted [6π+2π] Cycloaddition Reactions. Synthesis of β-Cedrene

James H. Rigby* and Margarita Kirova-Snover
Department of Chemistry, Wayne State University,
Detroit, MI 48202-3489, USA

Intramolecular metal-promoted [6π+2π] cycloaddition followed by Tl(III)-mediated oxidative ring contraction affords β-cedrene.

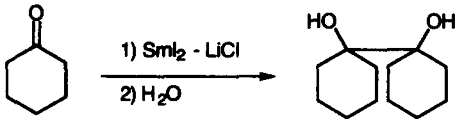


Tetrahedron Letters, **1997**, *38*, 8157

The Effect of Lithium Bromide and Lithium Chloride on the Reactivity of SmI_2 in THF.

James R. Fuchs, Michael L. Mitchell, Masangu Shabangi and Robert A. Flowers, II*
Department of Chemistry, University of Toledo, Toledo, OH 43606 USA

The influence of LiBr and LiCl on the reducing power of SmI_2 in THF is reported.



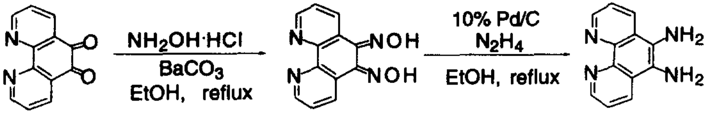
> 90% yield, 1 min.

Tetrahedron Letters, **1997**, *38*, 8159

SYNTHESIS OF FREE AND RUTHENIUM COORDINATED 5,6-DIAMINO-1,10-PHENANTHROLINE

Swamy Bodige and Frederick M. MacDonnell*, Department of Chemistry and Biochemistry
The University of Texas at Arlington, Arlington, Texas 76019

A new preparative route to 1,10-phenanthroline-5,6-diamine is described which triples existing yields and is directly applicable to complexes containing the N,N-coordinated 1,10-phenanthroline-5,6-dione ligand.



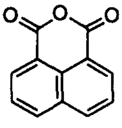
67 % yield overall

Tetrahedron Letters, **1997**, *38*, 8161

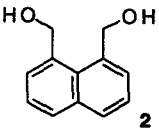
THE SINGULAR REDUCTION OF 1,8-*bis*-HYDROXYMETHYL NAPHTHALENE TO A BENZONORCARADIENE BY $LiAlH_4$.

Janeta V. Popovici-Müller and Thomas A. Spencer,* Department of Chemistry, Dartmouth College, Hanover, NH 03755 USA

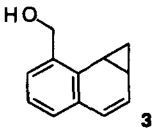
Reduction of anhydride **1** with $LiAlH_4$ in THF yields, in addition to diol **2**, benzonorcaradiene **3**. Extended $LiAlH_4$ treatment of **2** or lactone **4** affords ~65% of **3**.



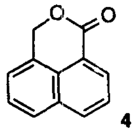
1



2



3



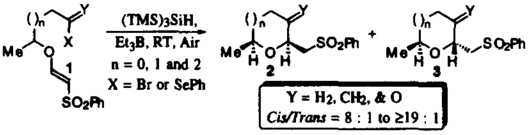
4

Tetrahedron Letters, **1997**, *38*, 8165

Vinylogous Sulfonates as Radical Acceptors for the Stereoselective Synthesis of Cyclic Ethers

P. Andrew Evans* and Thara Manangan
Brown Laboratory, Department of Chemistry and Biochemistry, University of Delaware, Newark, DE 19716.

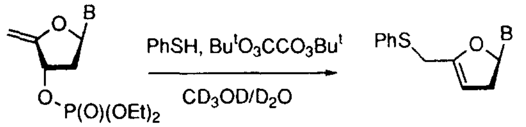
Treatment of the *E*-vinylogous sulfonates **1** with tris(trimethylsilyl)silane and triethylborane, in the presence of air, at room temperature furnished the cyclic ethers **2**/**3** in 34-99% yield with ≥8 : 1 *cis*-diastereoselectivity.



Tetrahedron Letters, **1997**, *38*, 8169

Nucleotide C4′ Radical Fragmentation is Base-Dependent

D. Crich and X.-S. Mo, Dept of Chemistry, University of Illinois at Chicago, 845 W. Taylor, Chicago, Il 60607-7061, USA

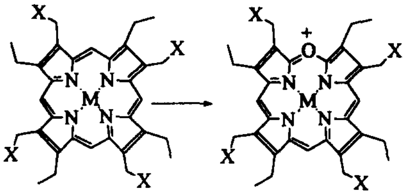


The relative rate of fragmentation is

G ~ T> Abz > A ~ C

Tetrahedron Letters, **1997**, *38*, 8173

A NEW METHOD FOR THE PREPARATION OF OXAPORPHYRINS: REACTION OF METALLO PORPHYRINS WITH IF.



M=Cu, Cu, Zn ; X=H , CH_3, CO_2CH_3

Hasrat Ali and Johan E. van Lier,* MRC Group in the Radiation Sciences, Faculty of Medicine, University of Sherbrooke, Sherbrooke (Québec), Canada J1H 5N4

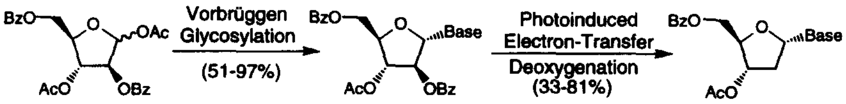
Reaction of metallo porphyrin with N-iodosuccinimide and TEA.3HF gave oxaporphyrin (verdoheme).

Tetrahedron Letters, **1997**, *38*, 8177

Stereocontrolled Synthesis of α-2′-Deoxyribonucleosides

*Zhiwei Wang and Carmelo J. Rizzo**
Department of Chemistry; Box 1822, Station B; Vanderbilt University; Nashville, TN 37235

A stereocontrolled, de novo synthesis of α-2'-deoxynucleosides is reported. The key step is the use of a benzoate at C2 of arabinose to direct the Vorbrüggen glycosylation. This group also serves as a deoxygeantion precursor.

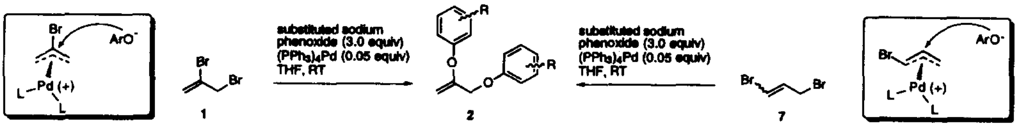


Tetrahedron Letters, **1997**, *38*, 8181

New Reactions Involving Palladacyclobutanes: The Attack of Phenoxide Ion at the Central Carbon of Both 1- and 2-Bromo(π-Allyl)palladium Complexes.

Michael G. Organ and Michael Miller, Department of Chemistry, York University, 4700 Keele Street, North York, Ontario, Canada, M3J 1P3 and the Department of Chemistry, Indiana University-Purdue University at Indianapolis, 402 N. Blackford St., Indianapolis, IN, USA, 46202.

Nucleophilic attack of phenoxide ion occurs primarily at the central carbon of halo-substituted (π-allyl)Pd complexes.

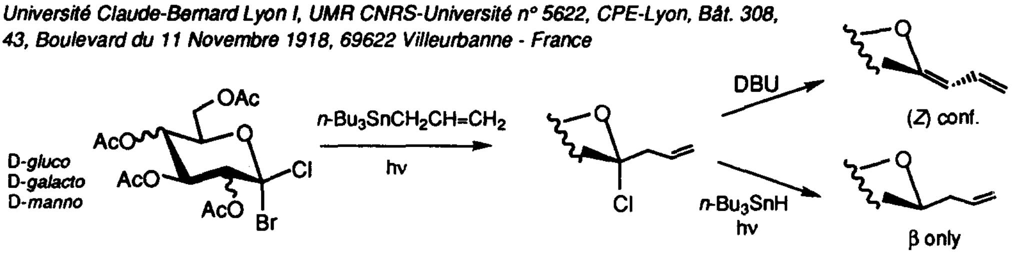


Tetrahedron Letters, **1997**, *38*, 8185

A STEREOCONTROLLED RADICAL ACCESS TO *C*-ALLYL *β*-D-GLYCOPYRANOSIDES FROM GLYCOPYRANOSYLIDENE DIHALIDES FOUND *EN ROUTE* TO *C*-GLYCODIENES

J.-P. Praly, G.-R. Chen, J. Gola, G. Hetzer, C. Raphoz

Université Claude-Bernard Lyon I, UMR CNRS-Université n° 5622, CPE-Lyon, Bât. 308, 43, Boulevard du 11 Novembre 1918, 69622 Villeurbanne - France

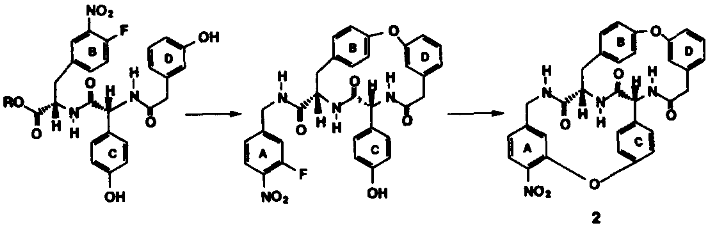


Tetrahedron Letters, **1997**, *38*, 8189

The First Synthesis of 16+15-Membered Bicyclic Polypeptide Model of A-O-C-B-O-D Rings of Kistamicin

René Beugelmans, Eduardo González Zamora and Georges Roussi

Institut de Chimie des Substances Naturelles, CNRS, 91198, Gif-sur-Yvette, France



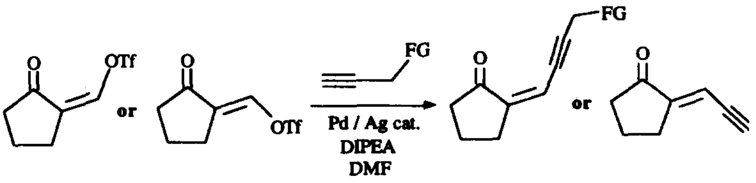
Tetrahedron Letters, **1997**, *38*, 8193

SYNTHESIS OF ENYNES RELATED TO NEOCARZINOSTATINE USING THE NEW Pd/Ag CATALYZED COUPLING REACTION

P. Bertus, P. Pale,*

Laboratoire de chimie organique physique, associé au CNRS, Université de Reims-Champagne-Ardenne, 51100 Reims, France.
Laboratoire de synthèse et réactivité organique, Institut Le Bel, Université L. Pasteur, 67000 Strasbourg, France

Both E and Z isomers of 2-triflyloxymethylenecyclopentanone respectively, have been coupled with various functionalized acetylenes in the presence of the Pd/Ag set of catalysts. Various E or Z 2-(alkynyl) methylenecyclopentanone derivatives, versatile intermediates toward NCS-Chrom and analogs, are stereoselectively obtained

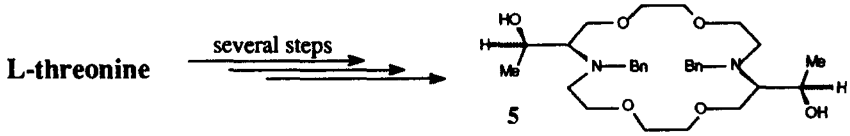


Tetrahedron Letters, **1997**, *38*, 8197

Easy Synthesis of a New C_2-Symmetric Diaza-crown Ether from L-Threonine.

Jean-Pierre Joly[a] and Gerhard Schröder[b]
a) Laboratoire de Chimie Organique 3, Université de Nancy I, BP 239, F-54506 Vandœuvre-lès-Nancy, France;
b) Institut für Organische Chemie der Universität Karlsruhe, Richard-Willstätter-Allee-2, D-76128 Karlsruhe, Germany.

The self-condensation of a contrafunctional amine yielded the C_2-symmetric diaza-crown ether 5:

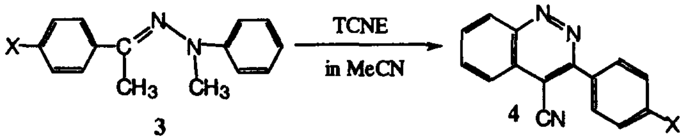


5

Tetrahedron Letters, **1997**, *38*, 8199

A NOVEL SYNTHESIS OF 1,2-DIAZANAPHTHALENES.

Yoshio Matsubara, Akihiro Horikawa and Zen-ichi Yoshida*, Department of
Applied Chemistry, Faculty of Science and Engineering, Kinki University, 5-4-1, Kowakae, Higashi-Osaka 577, Japan



3

4

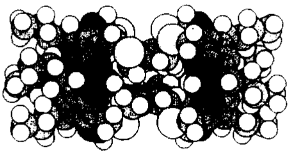
3a, 4a : X= H
3b, 4b : X= Cl
3c, 4c : X= OCH_3
3d, 4d : X= NO_2

Tetrahedron Letters, **1997**, *38*, 8203

CONFORMATIONAL STUDY OF A RIGID-STRUCTURED OCTATHIABISCAVITAND FROM [2 + 2] COUPLING OF CAPS AND BRIDGING UNITS.

Jungbai Lee,[a] Kihang Choi [b]
and Kyungsoo Paek[a*], [a] Department of Chemistry, Soong Sil University, Seoul 156-743, Korea
[b]Chemistry Division, Hanhyo Institute of Technology, Taejon 305-390, Korea

The conformation of a novel biscavitand solely obtained out of 4 possible stereoisomers from [2 + 2] coupling reaction was determined using NOESY spectrum.

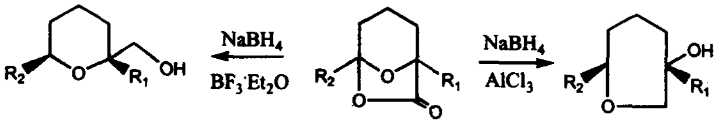


Tetrahedron Letters, **1997**, *38*, 8207

Ketal-Lactone Compounds and their Stereoselective Cleavage to Cyclic Ethers.

Jong-Gab Jun* and Dong Woo Lee
Department of Chemistry, Hallym University, Chunchon 200-702, Korea

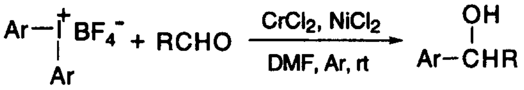
Excellent stereoselective ring opening of the ketal-lactone to 6-membered and 7-membered cyclic ethers.



Tetrahedron Letters, **1997**, *38*, 8211

THE FIRST EXAMPLE FOR REACTIVITY UMPOLUNG OF DIARYLIODONIUM SALTS: CHROMIUM(II)-MEDIATED ARYLATION OF ALDEHYDES

Da-Wei Chen,[a] Kazuhiko Takai,[b] and Masahito Ochiai[a]
a Faculty of Pharmaceutical Sciences, University of Tokushima, 1-78 Shomachi, Tokushima 770, Japan
b Department of Applied Chemistry, Faculty of Engineering, Okayama University, Tsushima, Okayama 700, Japan

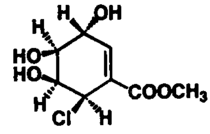


Tetrahedron Letters, **1997**, *38*, 8215

NOVEL ANTITUMOUR METABOLITES PRODUCED BY A FUNGAL STRAIN FROM A SEA HARE

Atsushi Numata,* Masashi Iritani, Takeshi Yamada, Katsuhiko Minoura, Eiko Matsumura, Takao Yamori[a] and Takashi Tsuruo,[b]
Osaka University of Pharmaceutical Sciences, Takatsuki, Osaka 569-11, Japan, Cancer Chemotherapy Center, Japanese Foundation for Cancer Research, Toshima-ku, Tokyo 170, Japan[a] and Institute of Molecular and Cellular Biosciences, University of Tokyo, Bunkyo-ku, Tokyo 170, Japan[b]

Pericosines A (**1**) and B with significant antitumour activity have been isolated from the culture broth of *Periconia byssoides* from the sea hare *Aplysia kurodai*, along with macrosphelides C and E – H. Their structures have been established on the basis of spectral analyses.



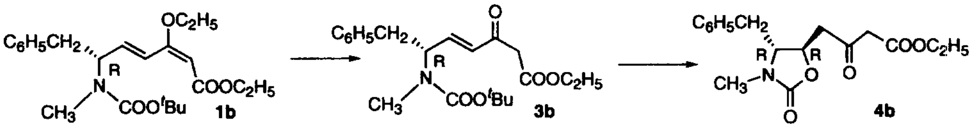
1

Tetrahedron Letters, **1997**, *38*, 8219

Synthesis, Reaction, and Structure of Chiral *N*-Methyl-2-oxazolidinones from 3-Ethoxy-6-(*N*-methyl-*N*-*tert*-butoxycarbonyl)amino-2,4-hexadienoates

Tomikazu Kawano, Kenji Negoro, and Ikuo Ueda*, The Institute of Scientific and Industrial Research, Osaka University, Mihogaoka, Ibaraki, Osaka 567, Japan

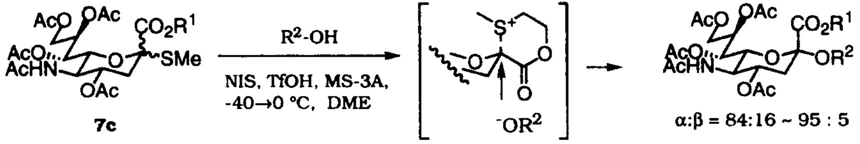
1b was treated with c-H_2SO_4 (1.0 equiv.) supported on silicagel at 0 °C in dichloromethane to afford 2-oxazolidinone (**4b**) stereo- and regio-selectively in a good yield via **3b**.



Tetrahedron Letters, **1997**, *38*, 8223

A NEW METHOD FOR THE FORMATION OF THE α-GLYCOSIDE BOND OF SIALYL CONJUGATES BASED ON LONG-RANGE PARTICIPATION.

Takashi Takahashi*, Hirokazu Tsukamoto and Haruo Yamada
Department of Chemical Engineering, Tokyo Institute of Technology, Ookayama, Meguro, Tokyo 152, Japan



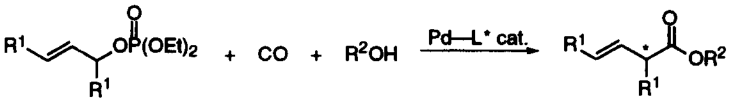
$R^1 = C_2H_4SMe$, R^2 = primary and secondary alcohols

Tetrahedron Letters, **1997**, *38*, 8227

PALLADIUM-CATALYZED ASYMMETRIC ALKOXYCARBONYLATION OF ALLYL PHOSPHATES

Yasushi Imada, Masaru Fujii, Yasushi Kubota, and Shun-Ichi Murahashi*
Department of Chemistry, Graduate School of Engineering Science, Osaka University, 1-3 Machikaneyama, Toyonaka, Osaka 560, Japan

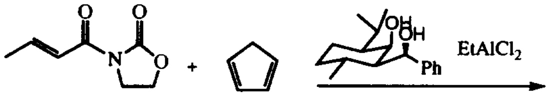
Asymmetric alkoxycarbonylation of allyl phosphates proceeds in the presence of a palladium complex catalyst bearing a chiral monodentate phosphine ligand affording the corresponding β,γ-unsaturated esters up to 48% *ee*.

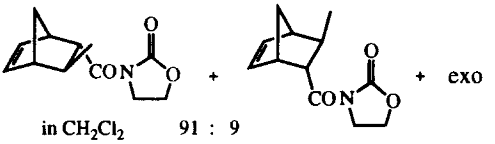


Tetrahedron Letters, **1997**, *38*, 8231

REMARKABLE SOLVENT EFFECT ON THE ENANTIOFACE SELECTIVITY IN THE DIELS-ALDER REACTION CATALYZED BY AN ALUMINUM COMPLEX OF A NEWLY PREPARED CHIRAL MENTHOL DERIVATIVE

Go Naraku, Kiyoto Hori, Yoshio N. Ito, and Tsutomu Katsuki
Department of Chemistry, Faculty of Science, Kyushu University, Hakozaki, Higashi-ku, Fukuoka 812-81, Japan





Reversal of enantioface selectivity was observed in the title reaction by switching the solvent from CH_2Cl_2 to THF. The nature of this effect was also investigated.

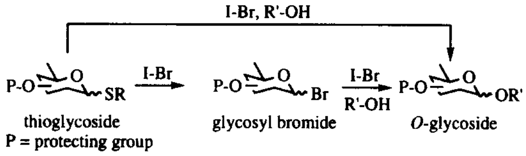
in CH_2Cl_2 91 : 9
in THF 14 : 86

Tetrahedron Letters, **1997**, *38*, 8233

GLYCOSYLATION CHEMISTRY PROMOTED BY IODINE MONOBROMIDE : EFFICIENT SYNTHESIS OF GLYCOSYL BROMIDES FROM THIOGLYCOSIDES, AND O-GLYCOSIDES FROM 'DISARMED' THIOGLYCOSIDES AND GLYCOSYL BROMIDES

K.P. Ravindranathan Kartha and Robert A Field
School of Chemistry, University of St Andrews,
St Andrews, FIFE KY16 9ST, U.K.

I-Br is an efficient reagent for the conversion of thioglycosides to glycosyl halides. It can also promote the glycosylation of sugar alcohols by 'disarmed' glycosyl halides and thioglycosides.

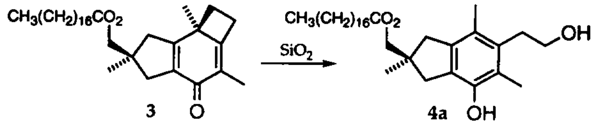


Tetrahedron Letters, **1997**, *38*, 8237

STEAROYLDELICONE, AN UNSTABLE PROTOILLUDANE SESQUITERPENOID FROM INTACT FRUIT BODIES OF *RUSSULA DELICA*

M. Clericuzio[a], F. Pan[b], F. Han[b], Z. Pang[b,*] and O. Sterner[a,*]
Dep. of Organic Chemistry 2, University of Lund, P.O.Box 124, 221 00 Lund (Sweden)
and Inst. of Botany, Chinese Academy of Sciences, Nanjing 210014 (P.R. China)

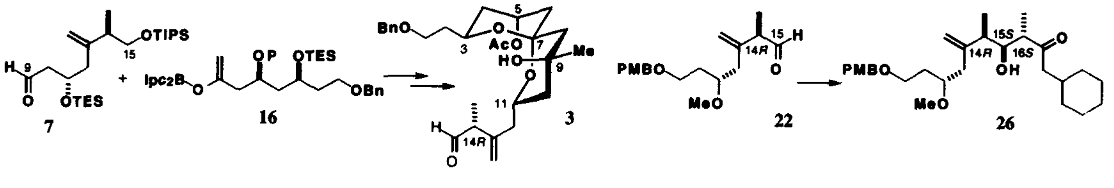
Stearoyldelicone (3) is the major sesquiterpenoid in intact fruit bodies of *R. delica*. In contact with silica gel it is rapidly transformed to the illudalane **4a**.



Tetrahedron Letters, **1997**, *38*, 8241

STUDIES IN MARINE MACROLIDE SYNTHESIS: SYNTHESIS OF THE C_1-C_{15} SUBUNIT OF SPONGISTATIN 1 (ALTOHYRTIN A) AND 15,16-ANTI ALDOL COUPLING REACTIONS.

Ian Paterson* and Renata M. Oballa
University Chemical Laboratory, Lensfield Road, Cambridge CB2 1EW, UK.

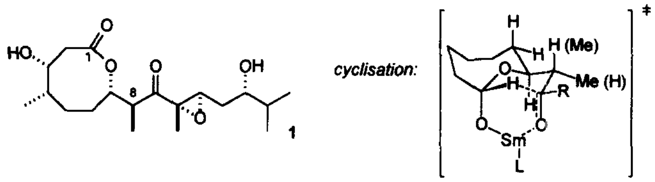


Tetrahedron Letters, **1997**, *38*, 8245

STUDIES TOWARDS THE SYNTHESIS OF THE MARINE METABOLITE, OCTALACTIN A

Alison N. Hulme,* Garnet E. Howells
Department of Chemistry, The University of Edinburgh, King's Buildings, West Mains Road, Edinburgh, EH9 3JJ, UK

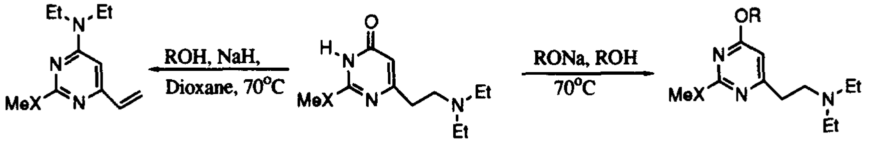
Studies towards the synthesis of the marine metabolite octalactin A **1**, are described. Key steps in this strategy include an *anti* aldol reaction to set the C_7-C_8 stereochemistry, Horner Wadsworth Emmons coupling to give a trisubstituted *E*-double bond and a novel samarium-mediated cyclisation reaction.



Tetrahedron Letters, **1997**, *38*, 8249

AN UNEXPECTED AND EFFICIENT DIRECT NUCLEOPHILIC C-4 HYDROXY SUBSTITUTION ON 2-METHOXY- AND 2-METHYLTHIO-4(3H)-PYRIMIDINONES BEARING A DIETHYLAMINO MOIETY ON THE C-6 SIDE CHAIN.

M. Botta,[a] F. Occhionero,[b] R. Saladino,[c] C. Crestini,[c] R. Nicoletti[b]. (a) Università degli studi di Siena, Siena (Italy). (b) Università degli studi "La Sapienza", Roma (Italy). (c) Università degli studi "La Tuscia", Viterbo (Italy).



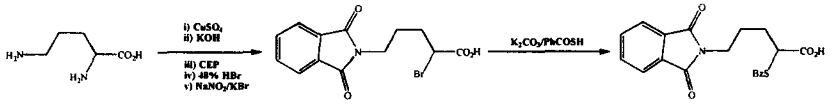
X= O, or S
R= Me, Et, n-Bu, Bn

Tetrahedron Letters, **1997**, *38*, 8253

A SHORT, SCALEABLE SYNTHESIS OF BOTH ENANTIOMERS OF 2-BENZOYLSULFANYL-5-PHTHALIMIDOPENTANOIC ACID FROM ORNITHINE

Karen E. Holt, Gordon E. Hutton, C. Neil Morfitt, Graham Ruecroft, Stephen J.C. Taylor, Peter D. Tiffin,*
Neil Tremayne and Martin Woods. Chiroscience Ltd., Cambridge Science Park, Milton Road, Cambridge, CB4 4WE, UK.

An efficient "one-pot" synthesis of (R)-and (S)-2-bromo-5-phthaloylaminovaleric acid from ornithine is described. Subsequent reaction with potassium thiobenzoate affords a concise, scaleable route to (R)-and (S)-2-benzoylsulfanyl-5-phthalimidopentanoic acid, an intermediate in the synthesis of MMP inhibitors.

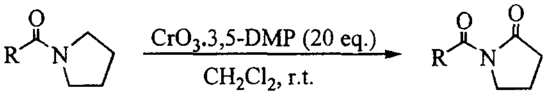


Tetrahedron Letters, **1997**, *38*, 8257

OXIDATION OF *N*-ACYL-PYRROLIDINES TO IMIDES WITH CrO_3·3,5-DIMETHYLPYRAZOLE.

Gonzalo Blay, Luz Cardona, Begoña García, Cristina L. García and José R. Pedro*.
Departament de Química Orgànica, Facultat de Química, Universitat de València, 46100 Burjassot (València) Spain.

N-Acyl-pyrrolidones are easily obtained by treatment of *N*-acyl-pyrrolidines with CrO_3·3,5-dimethylpyrazole complex (CrO_3·3,5-DMP) at room temperature.



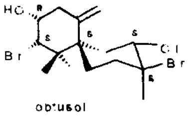
R = alkyl, aryl

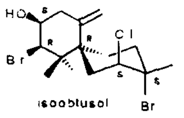
Tetrahedron Letters, **1997**, *38*, 8261

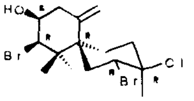
STEREOCHEMICAL FEATURES OF SESQUITERPENE METABOLITES AS A DISTINCTIVE TRAIT OF RED SEAWEEDS IN THE GENUS *LAURENCIA*

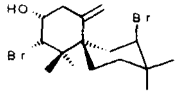
Graziano Guella, Aysel Öztunç, Ines Mancini, Francesco Pietra
Laboratorio di Chimica Bioorganica, Università di Trento, 38050 Povo-Trento, Italy

Four lineages of red seaweeds in the genus *Laurencia* may be characterized by chamigrenes in four stereochemical families, exemplified by these metabolites


obtusol


isoobtusol


rogiolol

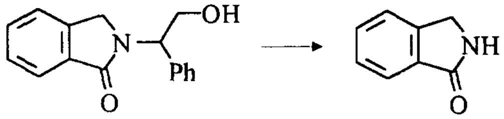

cartilagineol

Tetrahedron Letters, **1997**, *38*, 8265

CHEMOSELECTIVE DEBENZYLATION INVOLVING REMOVAL OF A 2-HYDROXY-1-PHENYLETHYL GROUP FROM NITROGEN

Olivier Fains and John M. Vernon*, Department of Chemistry, University of York, Heslington, York YO1 5DD, U.K.

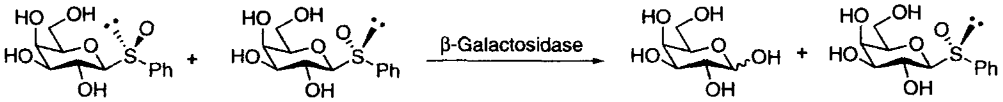
A simple 3-step procedure (mesylation, elimination, hydrolysis) achieves the removal of the side chain benzylic group in the isoindolinone 7 without affecting the endocyclic benzylic nitrogen bond.


7 9

Tetrahedron Letters, **1997**, *38*, 8267

CHEMICAL AND ENZYMATIC DIASTEREOSELECTIVE CLEAVAGE OF β-D-GALACTOPYRANOSYLSULFOXIDES

N. Khiar,[a] I. Alonso,[†] N. Rodriguez,[‡] A. Fernandez-Mayoralas,[b] J.Jimenez-Barbero,[b]
O. Nieto,[b] F. Cano,[c] C. Foces-Foces,[c] M. Martin-Lomas.[c]
[a] Instituto de Investigaciones Químicas, C.S.I.C., c/. Américo Vespucio, s/n., Isla de la Cartuja, 41092 Sevilla. Spain
[b]Grupo de Carbohidratos, Instituto de Química Orgánica, CSIC; Juan de la Cierva, 3; E-28006 Madrid.
[c]Departamento de Cristalografia, Instituto de Química-Fisica ``Rocasolano´´, CSIC, Serrano, 119, E-28806 . Madrid

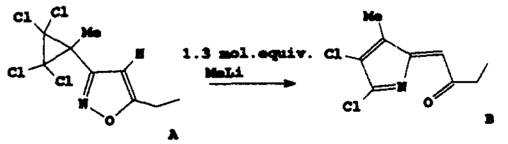


Tetrahedron Letters, **1997**, *38*, 8271

AN UNUSUAL REARRANGEMENT OF ISOXAZOLES TO 2-ALKENOYLPYRROLES OR 1-AZAFULVENES

**Ahmad R. Al Dulayymi [a] and Mark S.Baird,[a] and William Clegg [b]
Department of Chemistry, University of Wales, Bangor, Gwynedd, Wales, LL57 2UW and School of Chemistry, University of Newcastle upon Tyne, UK NE1 7RU**

Intramolecular interaction of vinylcarbenes derived from 1,2-dichlorocyclopropenes with oxazolines can lead to a rearrangement with the formation of 1-azafulvenes or derived 2-alkenoylpyrroles, eg. A → B.

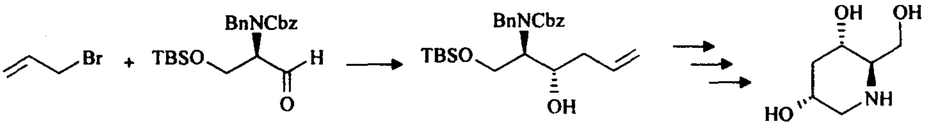


Tetrahedron Letters, **1997**, *38*, 8275

TOTAL SYNTHESIS OF 1,3-DIDEOXYNOJIRIMYCIN

Dorota Gryko[a] and Janusz Jurczak[a,b]* [a]Institute of Organic Chemistry, Polish Academy of Sciences, Kasprzaka 44/52, 01-224 Warsaw; [b]Department of Chemistry, Warsaw University, Pasteura 1, 02-093 Warsaw, Poland.

Addition of allyl bromide to *N*-Bn-*N*-Cbz-*O*-TBS-D-serinal leads to *anti*-adduct which is subsequently transformed into(2*R*,4*S*,5*R*)-1,3-dideoxynojirimycin.

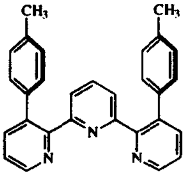


Tetrahedron Letters, **1997**, *38*, 8279

BUILDING OFF THE BACK OF CHELATORS: SYNTHESIS OF 3,3"-BIS(4-METHYLPHENYL)-2,2':6',2"-TERPYRIDINE

Andrew C. Benniston, Chemistry Department, University of Glasgow, Glasgow, G12 8QQ, UK.

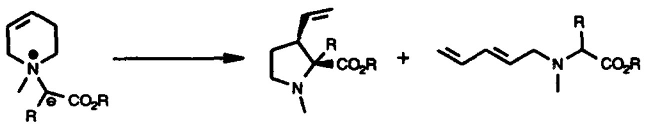
Using an adaptation of the Jameson method for the synthesis of 2,2':6',2"-terpyridine (terpy), a ditolyl-functionalised ligand has been prepared in which the substituted groups are located in the highly unusual 3,3" position. The new ligand represents an attempt to develop terpy-based systems with di-functionality that emerges from the 'back side' of the chelator.



Tetrahedron Letters, **1997**, *38*, 8283

FACTORS AFFECTING THE [3,2]-SIGMATROPIC REARRANGEMENTS OF DIDEHYDROPIPERIDINIUM YLIDS

David.J. Hyett,[a] J.B. Sweeney,*[a] Ali Tavassoli,[a]
and Jerome F. Hayes,[b]
a. Department of Chemistry, University of Reading
Reading, RG6 6AD, UK
b.SKB Pharmaceuticals, Old Powder Mills, Tonbridge,
TN11 9AN, UK



The influence of base on the rearrangement reactions of ammonium ylids have been studied

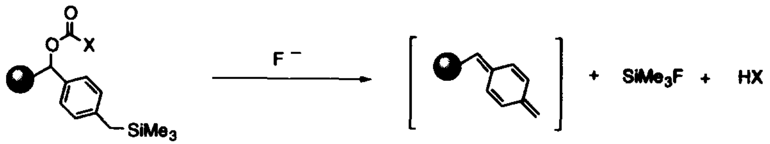
Tetrahedron Letters, **1997**, *38*, 8287

NEW FLUORIDE-LABILE LINKERS FOR SOLID-PHASE ORGANIC SYNTHESIS

Anne Routledge, H. Thijs Stock, Sabine L. Flitsch*, and Nicholas J. Turner*, Chemistry Department, The Edinburgh Centre for Protein Technology, Kings Buildings, West Mains Rd, Edinburgh, EH9 3JJ.

Fluoride-labile linker **1** can be used as a linker in solid-phase synthesis. It can be used to release carboxylic acids, amines or alcohols.

X= Ar, NHR, OR



1