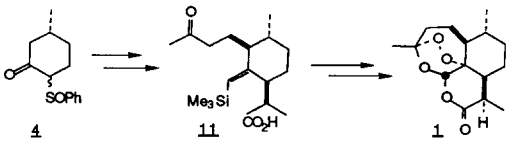
Tetrahedron Lett.28,4629(1987)

THE TOTAL SYNTHESIS OF (+)-ARTEMISININ, (+)-9-DESMETHYLARTEMISININ, AND (+)-9-ISOARTEMISININ

Mitchell A. Avery, Clive Jennings-White, and Wesley K.M. Chong
Bio-organic Laboratory, Life Sciences Division, SRI International, 333 Ravenswood Ave, Menlo Park, CA 94025

A synthesis of (+)-artemisinin(1) from the 3R-methylcyclohexanone 4 via cyclization of the ozone adduct of 11.



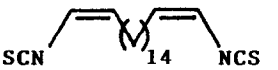
4 11 1

Tetrahedron Lett.28,4633(1987)

LONG-CHAIN α,ω-BISISOTHIOCYANATES FROM A MARINE SPONGE

Peter Karuso and Paul J. Scheuer*, Department of Chemistry, University of Hawaii at Manoa, Honolulu, HI 96822

The major organic constituent of Fijian *Pseudaxinyssa* sp. is (Z,Z)-1,18-diisothiocyanooctadeca-1,17-diene (1). Minor metabolites are homologs of 1, corresponding monoolefins and α-isothiocyano-ω-formyl analogs.

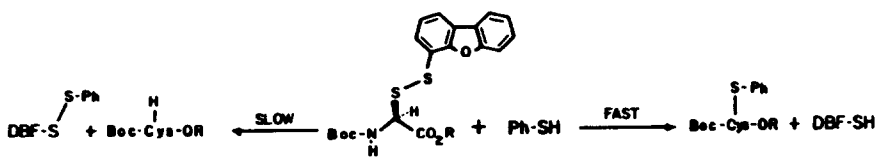


(1)

Tetrahedron Lett.28,4637(1987)

PEPTIDE SYNTHESIS BY PRIOR THIOL CAPTURE--V
THE SCOPE AND CONTROL OF DISULFIDE INTERCHANGE DURING THE ACYL TRANSFER STEP

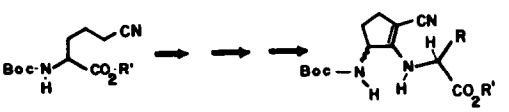
Daniel S. Kemp* and Nader Fotouhi
Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA 02139



Tetrahedron Lett.28,4641(1987)

AMINO ACID DERIVATIVES THAT STABILIZE SECONDARY STRUCTURES OF POLYPEPTIDES--III
1-ACYLAMINO-2-AMINOALKYL-3-CYANO-2-CYCLOPENTENES

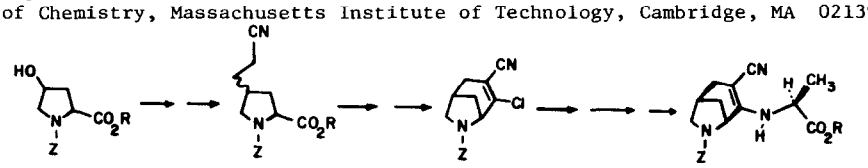
Daniel S. Kemp* and Jeffery S. Carter
Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA 02139



Tetrahedron Lett.28,4645(1987)

AMINO ACID DERIVATIVES THAT STABILIZE SECONDARY STRUCTURES OF POLYPEPTIDES--IV.
4-ALKYLAMINO-3-CYANO-6-AZA BICYCLO[3.2.1]OCT-3-ENES

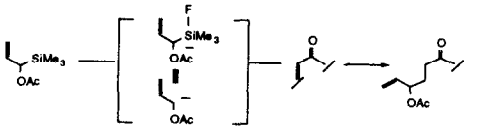
Daniel S. Kemp* and Jeffrey S. Carter
Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA 02139



Tetrahedron Lett.28,4649(1987)

FLUORIDE ION MEDIATED CONJUGATE ADDITION REACTIONS OF 1-ACYLOXY-2-PROPENYLTRIMETHYLSILANE. SYNTHESIS OF 3-(1-ACYLOXY-2-PROPENYL)ALKANONES.

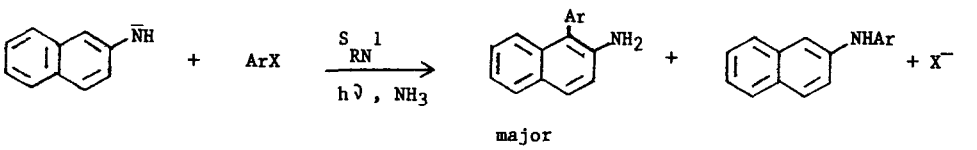
James S. Panek* and Michelle A. Sparks
Department of Chemistry, Boston University, Boston, Massachusettes 02215



Tetrahedron Lett.28,4653(1987)

PHOTOSTIMULATED REACTIONS OF HALOARENES WITH 2-NAPHTHYLAMIDE IONS. A FACILE SYNTHESIS OF 1-ARYL-2-NAPHTHYLAMINES.

A.B.Pierini*, M.T.Baumgartner and R.A.Rossi*
INFIQC, Dpto. de Química Orgánica, Facultad de Cs.Químicas, Universidad Nacional de Cordoba, Suc. 16, C.C. 61, 5016 CORDOBA/ARGENTINA.

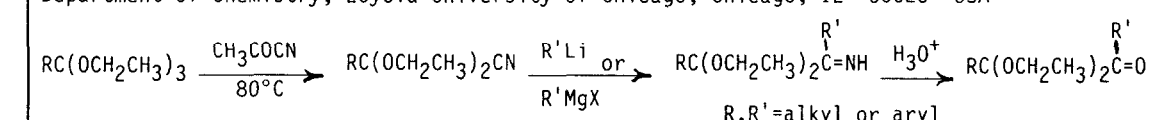


major

Tetrahedron Lett.28,4657(1987)

A FACILE ROUTE TO α-IMINO ACETALS AND THE CORRESPONDING MONOACETAL DERIVATIVES OF α-DIKETONES WITH COMPLETE REGIOCHEMICAL CONTROL.

James H. Babler* and Charles J. Marcuccilli
Department of Chemistry, Loyola University of Chicago, Chicago, IL 60626 USA

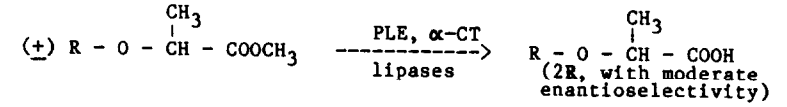


R,R'=alkyl or aryl

ENANTIOSELECTIVE HYDROLYSIS OF 2-(CHLOROPHENOXY)PROPIONIC ESTERS BY ESTERASES.

Tetrahedron Lett.28,4661(1987)

Roxane DERNONCOUR and Robert AZERAD
Laboratoire de Chimie et Biochimie Pharmacologiques et Toxicologiques, UA 400 du CNRS, Université R.Descartes, 45, rue des Saints-Pères, 75270-Paris Cedex 06 (FRANCE).

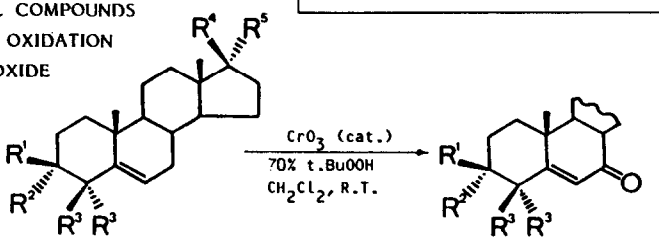


R= Phenyl, 2'-Cl-phenyl, 3'-Cl-phenyl, 4'-Cl-phenyl, 2',4'-diCl-phenyl, 2',4',5'-triCl-phenyl

Tetrahedron Lett.28,4665(1987)

SYNTHESIS OF UNSATURATED CARBONYL COMPOUNDS VIA A CHROMIUM-MEDIATED ALLYLIC OXIDATION BY 70% TERT.BUTYLHYDROPEROXIDE

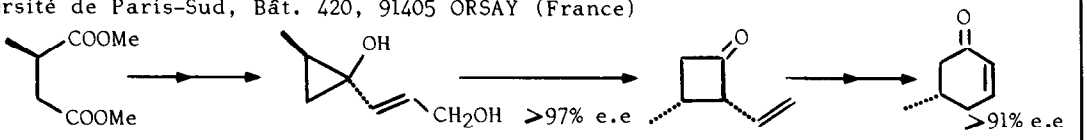
Jacques MUZART
Unité Associée au CNRS n° 459, Université de Reims Champagne-Ardenne, Reims, France



Tetrahedron Lett.28,4669(1987)

Optically active cyclopropanols from the enzymatic resolution of dimethyl α-alkylsuccinates. Synthesis of chiral 2-vinyl-cyclobutanones and cyclohexenones.

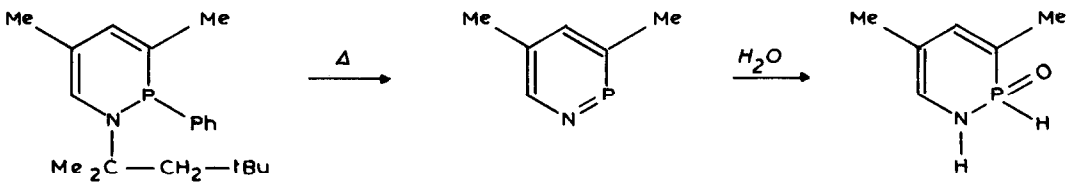
Jacques SALAUN* and Belkacem KARKOUR
Laboratoire des Carbocycles (Associé au CNRS), Institut de Chimie Moléculaire d'Orsay Université de Paris-Sud, Bât. 420, 91405 ORSAY (France)



1,2-λ^3 AZAPHOSPHININE BY FLASH VACUUM THERMOLYSIS.

Tetrahedron Lett.28,4673(1987)

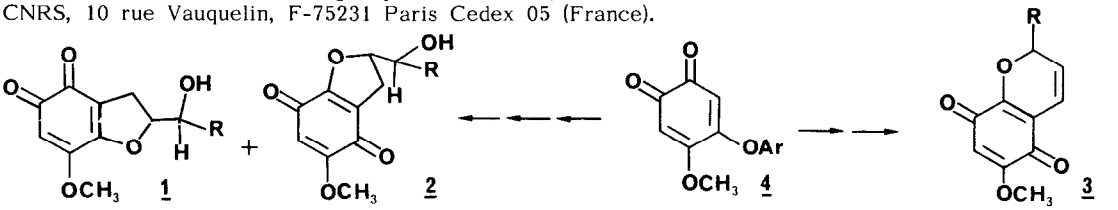
Catherine Bourdieu and André Foucaud
Groupe de Physicochimie Structurale associé au C.N.R.S., Université de Rennes, Rennes, France.



NOUVELLES VOIES DE SYNTHESE DE BENZOQUINONES HETEROCYCLIQUES.

Tetrahedron Lett.28,4675(1987)

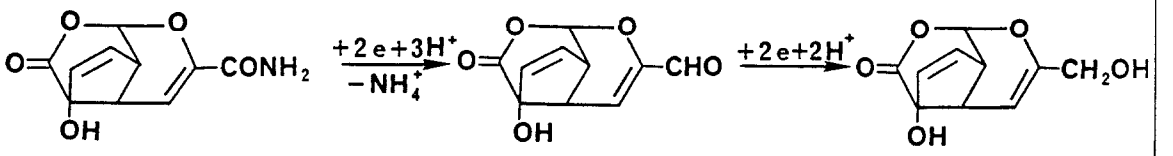
Olivia REINAUD, Patrice CAPDEVIELLE et Michel MAUMY
Laboratoire de Recherches Organiques de l'ESPCI, associé au CNRS, 10 rue Vauquelin, F-75231 Paris Cedex 05 (France).



REDUCTION ELECTROCHIMIQUE DE LA FONCTION AMIDE D'UN COMPOSE ANTITUMORAL : L'ECHINOSPORINE

Tetrahedron Lett.28,4679(1987)

D. DEPREZ, R. MARGRAFF, J. BIZOT, J.P PULICANI
RHONE POULENC SANTE, Centre de Recherches de Vitry - 13 Quai Jules Guesde 94400 VITRY/SEINE

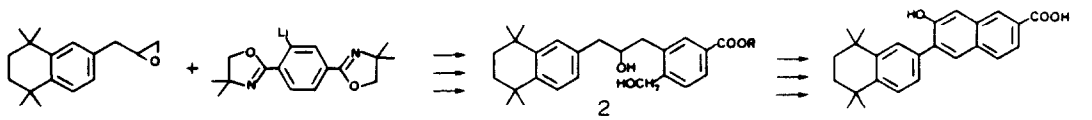


AROMATIC RETINOIDS: A SHORT SYNTHESIS OF 7-HYDROXY-6-(5,6,7,8-TETRAHYDRO-5,5,8,8-TETRAMETHYL -2-NAPHTHYL)-2-NAPHTHOIC ACID.

Tetrahedron Lett.28,4681(1987)

Jacques Eustache *, Jean-Michel Bernardon and Braham Shroot. Chemistry Department, CIRD, Sophia-Antipolis, 06565 Valbonne-Cedex, France.

The title compound was prepared by a short synthetic route, the key step of which is a one pot oxidation/cyclisation/aromatization of 2

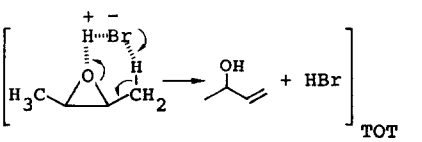


HETEROGENEOUS ASYMMETRIC RING-OPENING REACTIONS OF PROCHIRAL EPOXIDES INCLUDED AS GUEST MOLECULES IN TRI-o-THYMOTIDE CLATHRATES

Tetrahedron Lett.28,4685(1987)

Raymond Gerdil* and Giacomo Barchietto
Department of Organic Chemistry, University of Geneva, CH-1211 Geneva 4, Switzerland

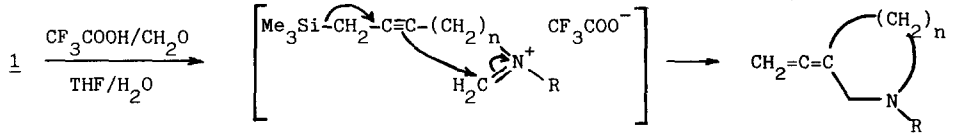
Gaseous hydrogen halides promote the rearrangement of prochiral enclathrated epoxides to allylic alcohols in contrast to the base-catalyzed analogous reaction in the liquid state. Chirality transfer from the host lattice to the guest products is observed.



Tetrahedron Lett.28,4689(1987)

Synthèse de vinylidène-3 pyrrolidines, pipéridines et perhydroazépines, à partir d' ω-monoalkylamino-propargyltriméthylsilanes par processus d'aminométhylation-désilylation intramoléculaire.

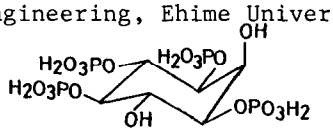
D. DAMOUR, J. PORNET et L. MIGINIAC, Laboratoire de Synthèse Organique, UA CNRS 574, Université de Poitiers, 40, avenue du Recteur Pineau, 86022 POITIERS, France.



Tetrahedron Lett.28,4691(1987)

SYNTHESIS OF D-MYO-INOSITOL 1,3,4,5-TETRAKIS-PHOSPHATE

S. Ozaki, Y. Kondo, H. Nakahira, S. Yamaoka, and Y. Watanabe
Department of Resources Chemistry, Faculty of Engineering, Ehime University, Matsuyama 790, Japan



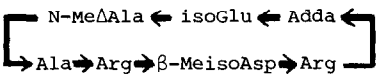
Ins(1,3,4,5)P_4

Tetrahedron Lett.28,4695(1987)

CYANOVIRIDIN RR, A TOXIN FROM THE CYANOBACTERIUM (BLUE-GREEN ALGA) MICROCYSTIS VIRIDIS

Takenori Kusumi,Takashi Ooi,Makoto M. Watanabe#,Hiroshi Takahashi#, and Hiroshi Kakisawa*
Department of Chemistry, The University of Tsukuba, Sakura, Ibaraki, Japan 305
#The National Institute for Environmental Studies, Yatabe, Ibaraki, Japan 305

The structure of cyanoviridin RR has been determined by modern NMR techniques such as the HMBC spectrum.

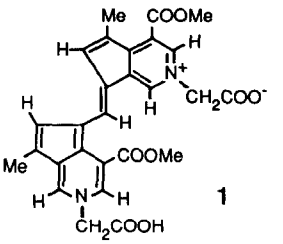


Tetrahedron Lett.28,4699(1987)

Structure of Genipocyanin G1, A Spontaneous Reaction Product Between Genipin and Glycine

S. Fujikawa, Y. Fukui, K. Koga,
T. Iwashita, H. Komura, and K. Nomoto*
Research Center, Suntory Ltd., and
Suntory Institute for Bioorganic Research(SUNBOR),
Wakayamadai, Mishima-gun, Osaka 618, JAPAN

The structure of a spontaneous 1:1 reaction product was determined as **1** by ^{1}H-NMR experiments (COSY, nOe, and NOESY).



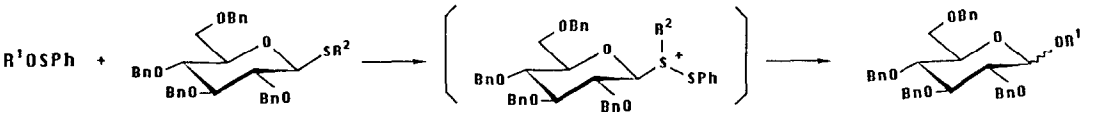
1

Tetrahedron Lett.28,4701(1987)

SULFENATE ESTERS AS GLYCOSYL ACCEPTORS: A NOVEL APPROACH TO O-GLYCOSIDES FROM THIOGLYCOSIDES AND SULFENATE ESTERS

Yukishige Ito and Tomoya Ogawa
RIKEN (The Institute of Physical and Chemical Research), Wako-shi, Saitama, 351-01, Japan

The reaction of sulfenate esters with thioglycosides gave glycosylated products under mild conditions.



Tetrahedron Lett.28,4705(1987)

TOTAL SYNTHESIS OF LEPIDOPTERAN A, SELF-DEFENCE SUBSTANCE PRODUCED BY SILKWORM.

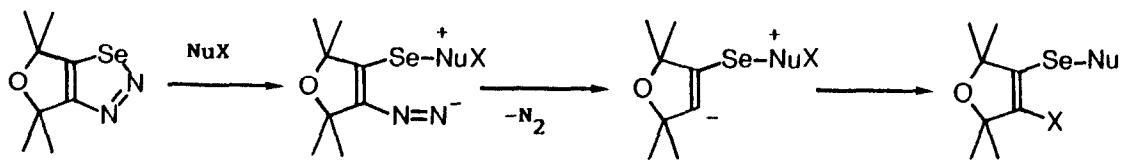
Tadashi Teshima, Takahisa Nakai, Manabu Kitazawa, and Tetsuo Shiba
Department of Chemistry, Faculty of Science, Osaka University, Toyonaka, Osaka 560, Japan

H-Arg-Trp-Lys-Ile-Phe-Lys-Lys-Ile-Glu-Lys-Met-Gly-Arg-Asn-Ile-Arg-Asp-Gly-Ile-
Val-Lys-Ala-Gly-Pro-Ala-Ile-Glu-Val-Leu-Gly-Ser-Ala-Lys-Ala-Ile-NH_2 Lepidopteran A

Tetrahedron Lett.28,4707(1987)

REACTIONS OF CYCLOALKENO-1,2,3-SELENADIAZOLE WITH NUCLEOPHILES

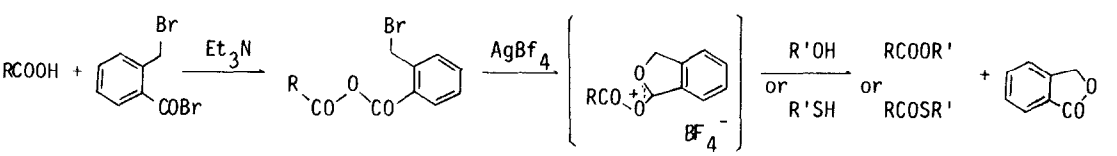
Wataru Ando,* Yorio Kumamoto, Hitoshi Ishizuka, and Norihiro Tokitoh
Department of Chemistry, University of Tsukuba, Sakuramura, Niiharigun, Ibaraki 305, Japan



Tetrahedron Lett.28,4711(1987)

ACTIVATION OF MIXED CARBOXYLIC α-BROMOTOLUOYL ANHYDRIDES BY SILVER TETRAFLUOROBORATE. SYNTHESIS OF ESTERS AND THIOL ESTERS

Satoshi Fukuoka, Seiji Takimoto, Tsutomu Katsuki,* and Masaru Yamaguchi
Department of Chemistry, Kyushu University 33, Higashi-ku, Fukuoka 812, Japan

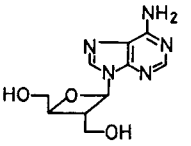


Tetrahedron Lett.28,4713(1987)

STUDIES ON THE TOTAL SYNTHESIS OF OXETANOCIN; II. TOTAL SYNTHESIS OF OXETANOCIN

Setsuko Niitsuma*, Yuh-ichiro Ichikawa, Kuniki Kato and Tomohisa Takita
Research Laboratories, Pharmaceuticals Group,
Nippon Kayaku Co. Ltd.,
3-31-12 Shimo, Kita-ku, Tokyo 115, Japan

The first total synthesis of a novel nucleoside oxetanocin was achieved.



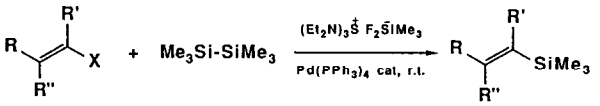
oxetanocin

Tetrahedron Lett.28,4715(1987)

PALLADIUM-MEDIATED SILYLATION OF ORGANIC HALIDES WITH DISILANE/F⁻ REAGENT

Yasuo HATANAKA and Tamejiro HIYAMA*
Sagami Chemical Research Center, 4-4-1 Nishiohnuma, Sagamihara, Kanagawa 229, Japan

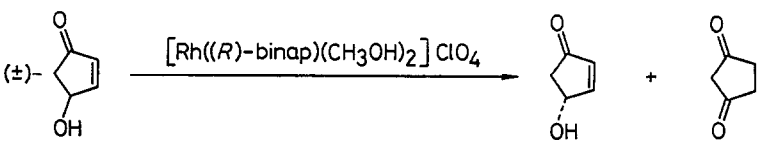
Vinyl halides or aryl iodides were converted into the corresponding trimethylsilyl substituted olefins or arenes with hexamethyldisilanes and Pd(0) catalyst.



Tetrahedron Lett.28,4719(1987)

KINETIC RESOLUTION OF 4-HYDROXY-2-CYCLOPENTENONE BY RHODIUM-CATALYZED ASYMMETRIC ISOMERIZATION

M. Kitamura, K. Manabe, R. Noyori,* and H. Takaya[1]
Department of Chemistry, Nagoya University, Chikusa, Nagoya 464, Japan, [1]Institute for Molecular Science, Myodaiji, Okazaki 444, Japan



27% yield
91% ee

Tetrahedron Lett.28,4725(1987)

SELECTIVE REDUCTION OF KETONES WITH SODIUM BOROHYDRIDE–ACETIC ACID

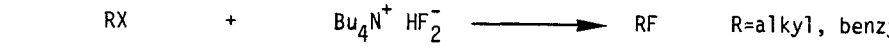
Tuula E.A. Nieminen and Tapio A. Hase
University of Helsinki, Department of Chemistry, Vuorikatu 20, SF-00100, Helsinki

only if X = OH or NH_2

Tetrahedron Lett.28,4733(1987)

TETRABUTYLAMMONIUM BIFLUORIDE: A VERSATILE AND EFFICIENT FLUORINATING AGENT

Pilar Bosch, Francisco Camps, Esther Chamorro, Vicens Gasol and Angel Guerrero
Departamento de Química Orgánica Biológica, C.S.I.C. Jorge Girona Salgado 18-26
08034-Barcelona. SPAIN

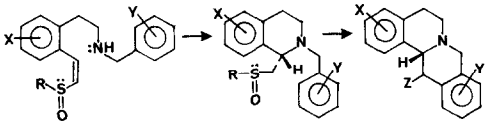


Tetrahedron Lett.28,4737(1987)

INTRAMOLECULAR ADDITION OF AMINES TO CHIRAL VINYL SULFOXIDES, TOTAL SYNTHESIS OF (R)-(+)-CANADINE

Stephen G. Pyne,
Department of Chemistry, University of Wollongong,
P.O. Box 1144, Wollongong, N.S.W. 2500, Australia.

(R)-(+)-Canadine has been prepared via intramolecular addition of an amine to a chiral vinyl sulfoxide and the intramolecular Pummerer reaction.

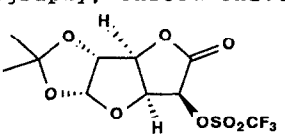


Tetrahedron Lett.28,4741(1987)

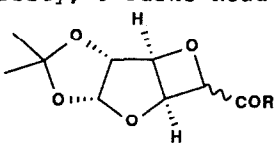
CHIRAL OXETANES FROM SUGAR LACTONES: SYNTHESIS OF DERIVATIVES OF 3,5-ANHYDRO-1,2-O-ISOPROPYLIDENE-α-D-GLUCURONIC ACID AND OF 3,5-ANHYDRO-1,2-O-ISOPROPYLIDENE-β-L-IDURONIC ACID

G. N. Austin,[b] G. W. J. Fleet,[a] J. M. Peach,[a] K. Prout,[b] and Jong Chan Son[a]
[a]Dyson Perrins Laboratory, Oxford University, South Parks Road, Oxford OX1 3QY
[b]Department of Chemical Crystallography, Oxford University, 9 Parks Road ,Oxford

Ring contraction reactions of the triflate (1), initiated by attack of nucleophiles at at the lactone carbonyl, give chiral oxetanes (2) in good to moderate yield.



(1)



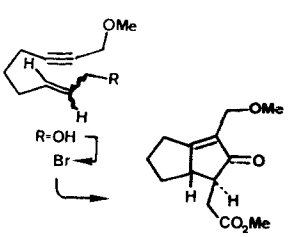
(2) R=$NHCH_2PH$, OMe, $NHNH_2$

Tetrahedron Lett.28,4745(1987)

STEREOSELECTIVE SYNTHESIS OF BYCICLO[3.3.0] OCT-1-EN-3-ONE DERIVATIVES

F. Camps, J. Coll, J.M. Moretó and J. Torras
Departament de Química Orgànica Biològica, C.I.D. (C.S.I.C.)
c/ Jordi Girona, 18-26. 08034-Barcelona, Spain.

Intramolecular carbonylative cyclization of either E or Z-9-methoxy--2-nonen-7-ynyl bromide provided the title ring system.

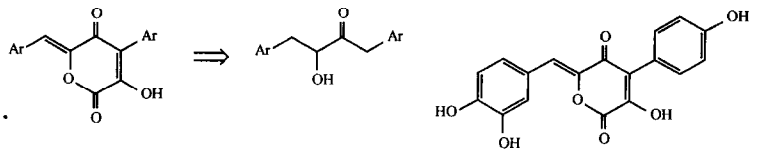


Tetrahedron Lett.28,4749(1987)

SYNTHESIS OF GREVILLINS AND THEIR BIOGENETIC INTER-RELATIONSHIP WITH TEPHENYLQUINONES, XYLERYTHRINS AND PULVINIC ACIDS.

Gerald Pattenden, Neil A. Pegg and Ronald W. Kenyon,
Department of Chemistry, The University, Nottingham, NG7 2RD and ICI Organics Division, Blackley, Manchester, M9 3DA.

A synthesis of the grevillin group of pigments present in fungi, using benzylacyloins as key intermediates is described.

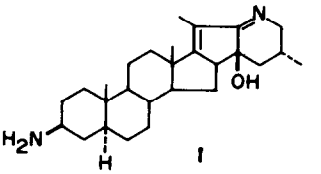


Tetrahedron Lett.28,4753(1987)

SOLANOCASTRINE, A UNIQUE 16,23-CYCLO-22,26-EPIMINO-CHOLESTANE FROM SOLANUM CAPSICASTRUM

Ajit K. Chakravarty and Satyesh C. Pakrashi* , Indian Institute of Chemical Biology, Calcutta-700032,India.

Solanocastrine (1), a steroidal alkaloid with a novel C-C linkage between C-16 and C-23, isolated from the leaves of Solanum capsicastrum Link has been characterised on the basis of chemical and spectral evidences.

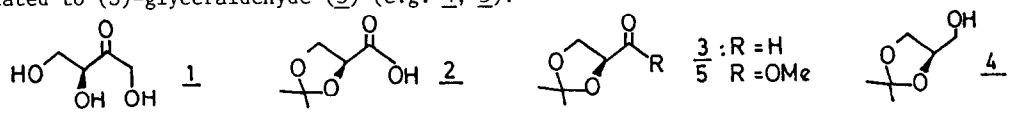


Tetrahedron Lett.28,4757(1987)

L-(S)-ERYTHRULOSE : A NOVEL PRECURSOR TO L-2,3-O-ISOPROPYLIDENE-C3 CHIRONS

H. De Wilde, P. De Clercq and Maurits Vandewalle*
State Univ. Ghent, Lab. Organic Synthesis, Krijgslaan, 281 (S4), B-9000 GENT (Belgium) and
H. Röper, CPC Europe, R & D Center, Havenstraat, 84, B-1800 VILVOORDE (Belgium).

The now more readily available L-(S)-erythrulose (1) is a suitable precursor for C3-chirons related to (S)-glyceraldehyde (3) (e.g. 4, 5).



Tetrahedron Lett.28,4759(1987)

L-(S)-ERYTHRULOSE : THE SYNTHESIS OF (R)-1,2,4-BUTANETRIOL AND OF SOME RELATED C4 CHIRONS

E. Van der Eycken, H. De Wilde, L. Deprez and Maurits Vandewalle*
State Univ. Ghent, Lab. Organic Synthesis, Krijgslaan, 281 (S4), B-9000 GENT (Belgium)

L-(S)-Erythrulose (1) is transformed in (R)-1,2,4-butanetriol (2) and related chiral building blocks (e.g. 3, 6, 11).