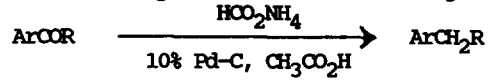
Tetrahedron Lett.29,3741(1988)

REDUCTION OF ALDEHYDES AND KETONES TO METHYLENE DERIVATIVES USING AMMONIUM FORMATE AS A CATALYTIC HYDROGEN TRANSFER AGENT

Siya Ram* and Leonard D. Spicer
P.E.T. Facility/Nuclear Medicine, Departments of Radiology and Biochemistry,
Duke University Medical Center, Durham, NC 27710

A rapid reduction of aromatic aldehydes and ketones to methylene derivatives using HCO_2NH_4 is described.

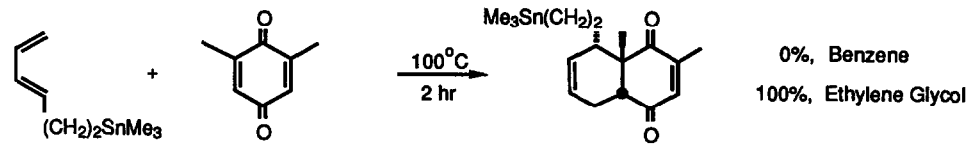


Tetrahedron Lett.29,3745(1988)

MOLECULAR AGGREGATION AND ITS APPLICABILITY TO SYNTHESIS THE DIELS-ALDER REACTION

Tambra Dunams,William Hoekstra, Michael Pentaleri and Dennis Liotta*
Department of Chemistry, Emory University, Atlanta, Georgia 30322

The rates of intermolecular Diels-Alder are significantly increased if these reactions are carried out in ethylene glycol

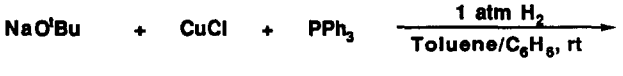


Tetrahedron Lett.29,3749(1988)

SIMPLIFIED, "ONE-POT" PROCEDURE FOR THE SYNTHESIS OF [(Ph3P)CuH]6, A STABLE COPPER HYDRIDE FOR CONJUGATE REDUCTIONS

Donna M Brestensky, Dave E Huseland, Colleen McGettigan, and Jeffrey M Stryker*
Department of Chemistry, Indiana University, Bloomington, Indiana 47405

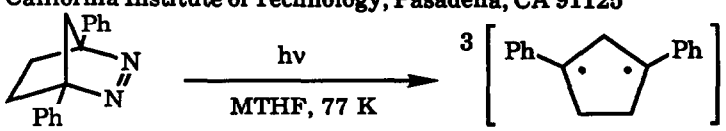
A simplified procedure for the synthesis of $[(Ph_3P)CuH]_6$, a versatile reagent for conjugate reductions of α,β-unsaturated carbonyl compounds, has been developed



Tetrahedron Lett.29,3753(1988)

1,3-DIPHENYL-1,3-CYCLOPENTANEDIYL: A REMARKABLY STABLE LOCALIZED BIRADICAL

Frank D. Coms and Dennis A. Dougherty*
Division of Chemistry and Chemical Engineering, 164-30,
California Institute of Technology, Pasadena, CA 91125



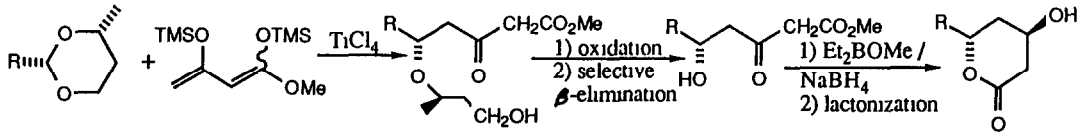
$|D|/hc = 0.045\ cm^{-1}$

$|E|/hc = 0.001\ cm^{-1}$

Tetrahedron Lett.29,3757(1988)

ASYMMETRIC SYNTHESIS VIA ACETAL TEMPLATES. 15. THE PREPARATION OF ENANTIOMERICALLY PURE MEVINOLIN ANALOGS

W. S Johnson and A. B. Kelson, Department of Chemistry, Stanford University, Stanford, California 94305 USA and J D Elliott, Department of Medicinal Chemistry, Smith Kline and French Laboratories, P. O Box 1539, King of Prussia, Pennsylvania 19406-0939 USA

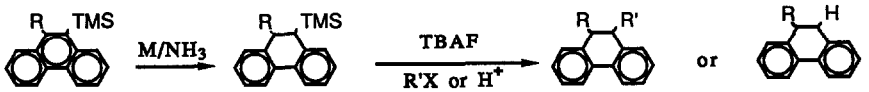


Tetrahedron Lett.29,3761(1988)

SILICON MODIFIED REDUCTION AND REDUCTIVE ALKYLATION-APPLICATION TO THE PHENANTHRENE SYSTEM

Peter W. Rabideau* and Zbigniew Marcinow
Department of Chemistry, Indiana University-Purdue University at Indianapolis
Indianapolis, IN 46223

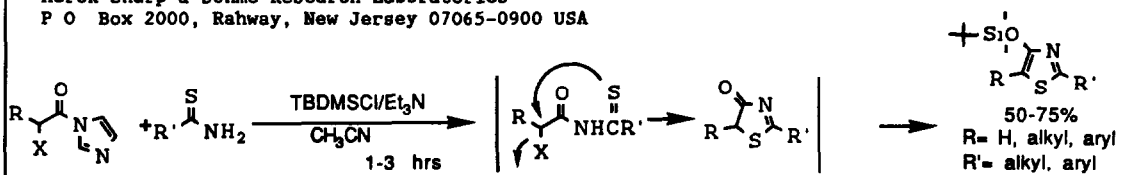
A trimethylsilyl group is used to control metal-ammonia reduction in phenanthrenes, and is later removed and replaced with either H or alkyl.



Tetrahedron Lett.29,3765(1988)

A NOVEL ONE-POT SYNTHESIS OF SUBSTITUTED 4-t-BUTYLDIMETHYLSILYLOXY-THIAZOLES

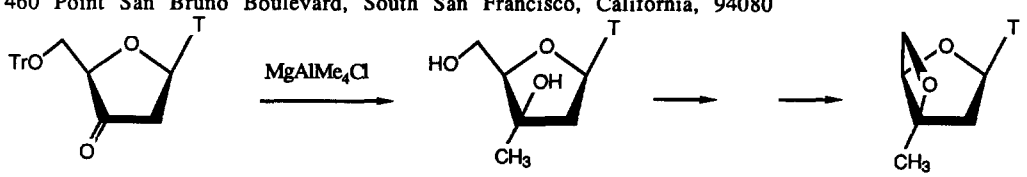
I E. Kopka
Medicinal Chemistry of Immunology and Inflammation
Merck Sharp & Dohme Research Laboratories
P O Box 2000, Rahway, New Jersey 07065-0900 USA



Tetrahedron Lett.29,3769(1988)

THE DIRECT CONVERSION OF 5'-O- TRITYL-3'-KETO-2'-DEOXYTHYMIDINE TO 1-(3-METHYL-BETA-D-2-DEOXYXYLOSYL)THYMINE

Thomas R Webb, Genentech Inc , Department of Molecular Biology
460 Point San Bruno Boulevard, South San Francisco, California, 94080

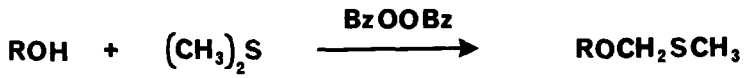


Tetrahedron Lett.29,3773(1988)

A MILD METHOD FOR THE CONVERSION OF ALCOHOLS TO METHYLTHIOMETHYL ETHERS

Julio C. Medina, Magalie Salomon and Keith S. Kyler*
Department of Chemistry, University of Miami,
Coral Gables, FL 33124 USA

A simple method for the conversion of alcohols to their methylthiomethyl ethers using methyl sulfide and benzoyl peroxide is described.

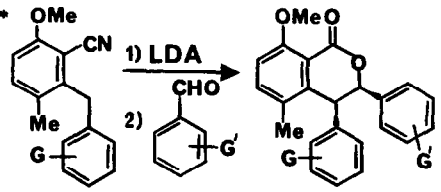


Tetrahedron Lett.29,3777(1988)

A STEREOCONTROLLED SYNTHESIS OF cis-3,4-DIARYLISOCHROMAN-1-ONES THROUGH DIASTEREOSELECTIVE REACTION OF BENZALDEHYDES AND α-LITHIO-2-CYANODIARYLMETHANE INTERMEDIATES

Lori Crenshaw, Subhash P Khanapure, Upali Siriwardane and Edward R Biehl*
Department of Chemistry, Southern Methodist University, Dallas, TX 75275

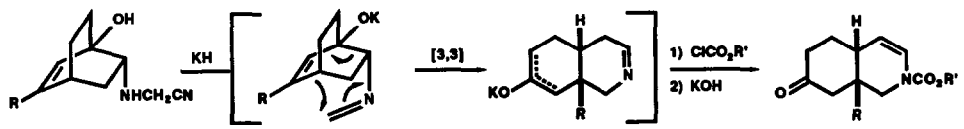
A highly diastereoselective reaction of benzaldehydes and α-lithio-2-cyanodiarylmethanes is reported. Using this approach a stereocontrolled synthesis of *cis*-3,4-diarylisochroman-1-ones is described



Tetrahedron Lett.29,3781(1988)

STUDIES DIRECTED TOWARDS GELSEMINE. A NEW SYNTHESIS OF HIGHLY FUNCTIONALIZED *CIS*-HYDROISOQUINOLINES

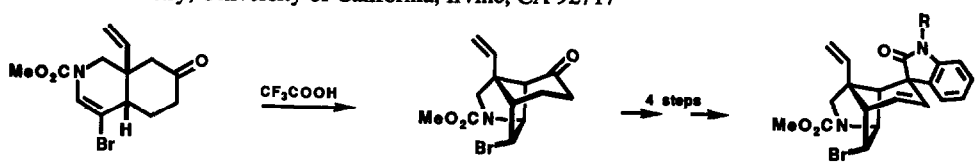
William Earley, E Jon Jacobsen, G. Patrick Meier, Taeboem Oh and Larry E Overman*
Department of Chemistry, University of California, Irvine, CA 92717



Tetrahedron Lett.29,3785(1988)

SYNTHESIS STUDIES DIRECTED TOWARD GELSEMINE. PREPARATION OF AN ADVANCED PENTACYCLIC INTERMEDIATE

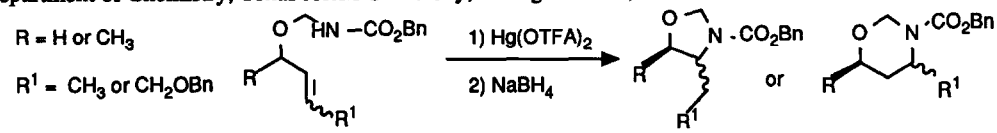
William G Earley, Taeboem Oh and Larry E. Overman*
Department of Chemistry, University of California, Irvine, CA 92717



Tetrahedron Lett.29,3789(1988)

SELECTIVITY IN THE AMINATION OF ALLYLIC ALCOHOLS via INTRAMOLECULAR AMIDOMERCURATION

Kenn E Harding* and Donald R Hollingsworth
Department of Chemistry, Texas A&M University, College Station, Texas 77843



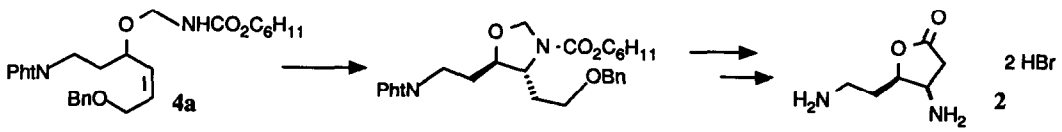
The effect of oxygen substitution at R^1 and of the geometry of the double bond on the regiochemistry and stereochemistry of intramolecular amidomercuration were established

Tetrahedron Lett.29,3793(1988)

STEREOSELECTIVE SYNTHESIS OF (±)-*threo*-γ-HYDROXY-β-LYSINE LACTONE

Kenn E Harding* and Do-hyun Nam
Department of Chemistry, Texas A&M University, College Station, TX 77843

A stereoselective synthesis of the lactone **2** of racemic *threo*-γ-hydroxy-β-lysine using intramolecular amidomercuration of acylaminomethyl ether **4a** is reported



Tetrahedron Lett.29,3797(1988)

REDUCTION OF ALLENIC ALCOHOLS BY *SACCHAROMYCES CEREVISIAE*

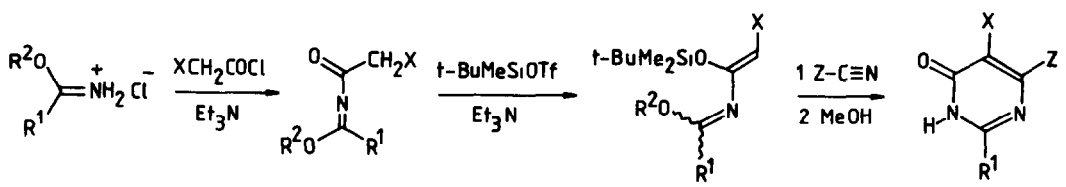
G GIL[1] E FERRE[1] M BARRE[1] and J LE PETIT[2]
1 - Unité Associée au C N R S n°109 , 2 - Laboratoire de Microbiologie
Faculté des Sciences et Techniques - Avenue Escadrille Normandie-Niemen - 13397 MARSEILLE CEDEX 13

α-Allenic alcohols are reduced by *Saccharomyces cerevisiae* into the corresponding β-ethylenic ones, whereas β-allenic alcohols undergo an isomerization leading to their γ-acetylenic counterparts

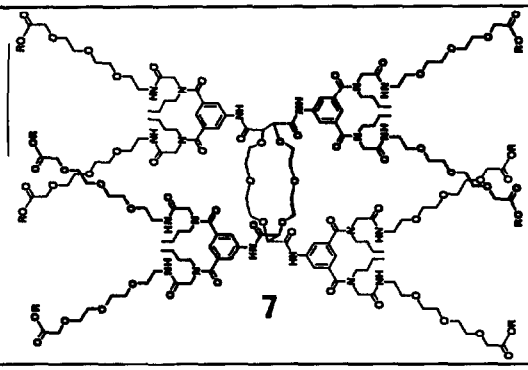
Tetrahedron Lett.29,3799(1988)

A DIELS-ALDER ROUTE TOWARDS PYRIMIDIN-4-ONES

Ph. Bayard, F. Sainte, R. Beaudegnies and L. Ghosez*
Laboratoire de Chimie Organique de Synthèse, Université Catholique de Louvain
Place L. Pasteur, 1 - B-1348 Louvain-La-Neuve, BELGIUM.



Tetrahedron Lett.29,3803(1988)



7

THE "CHUNDLE" APPROACH TO MOLECULAR CHANNELS SYNTHESIS OF A MACROCYCLE-BASED MOLECULAR BUNDLE"

Ludovic Jullien and Jean-Marie Lehn*
Collège de France, 11 Place Marcelin Berthelot, 75005 Paris

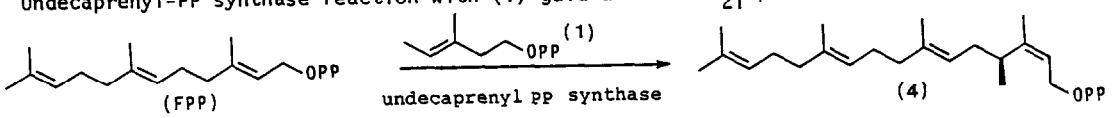
Molecule 7 has been synthesized, it represents an approach to molecular channels combining a bundle of oligo(oxyethylene) chains with a macrocyclic core.

Tetrahedron Lett.29,3807(1988)

NOVEL BEHAVIOR OF UNDECAPRENYL DIPHOSPHATE SYNTHASE TOWARD AN ARTIFICIAL SUBSTRATE. FORMATION OF THE (S)-4-METHYL DERIVATIVE OF Z,E,E-GERANYLGERANYL DIPHOSPHATE

Tanetoshi Koyama, Michio Ito, Shin-ichi Ohnuma, and Kyozo Ogura*
Chemical Research Institute of Non-Aqueous Solutions
Tohoku University, Sendai, 980, Japan

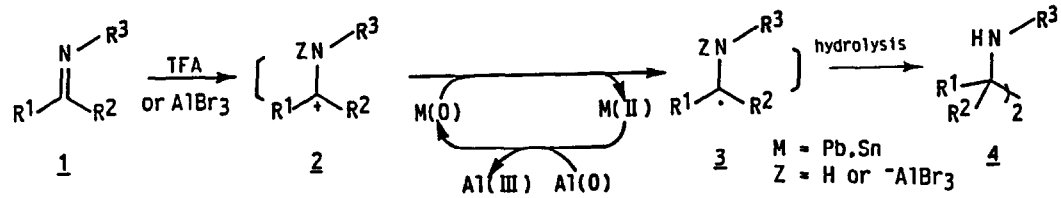
Undecaprenyl-PP synthase reaction with (1) gave a chiral C_{21} product,(4) exclusively.



Tetrahedron Lett.29,3811(1988)

REDUCTIVE DIMERIZATION OF IMINES IN A Pb/Al BIMETAL REDOX SYSTEM

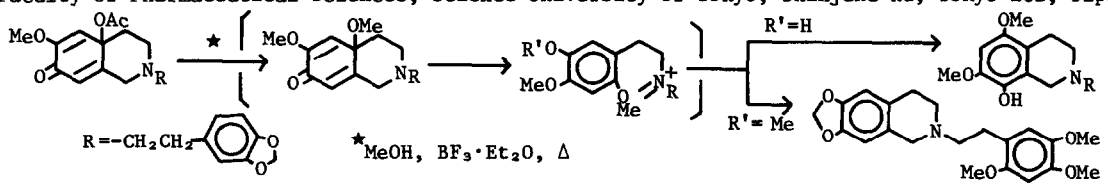
Hideo Tanaka, Hamid Dhimane, Hiroyuki Fujita, Youichi Ikemoto, and Sigeru Torii*
Department of Applied Chemistry, School of Engineering, Okayama University, Okayama 700, Japan



Tetrahedron Lett.29,3815(1988)

A FRAGMENTATION REACTION OF 4a-ACETOXY-6-METHOXY-2-METHYL-7-OXO-1,2,3,4,4a,7-HEXAHYDROISOQUINOLINE

H. Hara, T. Akiba, T. Miyashita, O. Hoshino, and B. Umezawa*
Faculty of Pharmaceutical Sciences, Science University of Tokyo, Shinjuku-ku, Tokyo 162, Japan

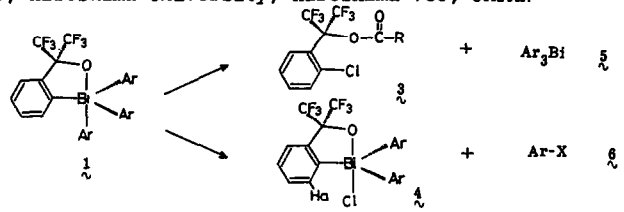


SYNTHESIS AND HALOGENOLYSIS OF STABLE PENTACOORDINATE BISMUTH COMPOUNDS (10-Bi-5): FORMATION OF 1-CHLORO-1,1-DIARYL-3,3-BIS(TRIFLUOROMETHYL)-3H-2,1-BENZOXABISMOLES

Tetrahedron Lett.29,3817(1988)

Kin-ya Akiba,* Keisuke Ohdoi, and Yohsuke Yamamoto
Department of Chemistry, Faculty of Science, Hiroshima University, Hiroshima 730, JAPAN

Hypervalent bismuth compound (1; a:Ar= p-$CH_3C_6H_4$, b:Ar=p-$CF_3C_6H_4$) reacted with succinyl chloride to give 3 (84%) and 5a (61%) and with sulfuryl chloride to afford 4 and 6 quantitatively. 4a reacted with p-$CF_3C_6H_4Li$ to give 1c where one of Ar is substituted for p-$CF_3C_6H_4$ group.

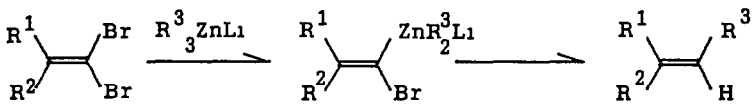


Tetrahedron Lett.29,3821(1988)

GENERATION AND ALKYLATION REACTION OF 1-BROMO-ALKENYLZINCATE

Toshiro Harada, Daiji Hara, Kazuhiro Hattori, and
Akira Oku*, Department of Chemistry, Kyoto Institute of Technology, Kyoto, Sakyo-ku 606, Japan

A novel alkylation reaction of 1,1-dibromoalkenes via a zincate-type carbenoids is reported

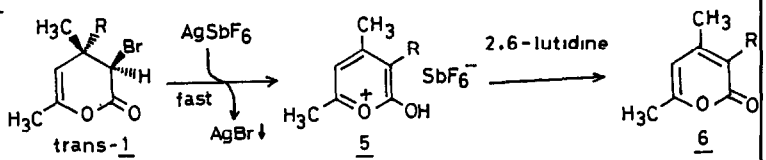


SYNTHESIS OF 3-ARYL- OR 3-ALKENYL-4,6-DIMETHYL-2-PYRONES BY SILVER ION PROMOTED REARRANGEMENT OF 4-ARYL- OR 4-ALKENYL-3-BROMO-4,6-DIMETHYL-3,4-DIHYDRO-2-PYRONES

Tetrahedron Lett.29,3825(1988)

Takashi KUME, Hideharu IWASAKI, Yohsuke YAMAMOTO, and Kin-ya AKIBA*
Department of Chemistry, Faculty of Science, Hiroshima University, Hiroshima 730, JAPAN

Debromination of 4-aryl- or 4-alkenyl-3-bromo-4,6-dimethyl-3,4-dihydro-2-pyrone (1) with $AgSbF_6$ induced rearrangement of the aryl or alkenyl group to afford the corresponding 2-pyrone (6) in high yield.

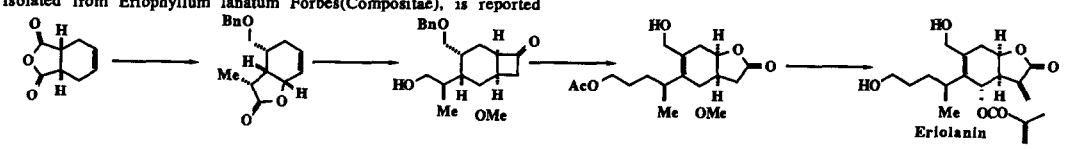


Tetrahedron Lett.29,3829(1988)

A NOVEL ANTILEUKEMIC SESQUITERPENE LACTONE. SYNTHESIS OF RACEMIC ERIOLANIN

Takeshi Wakamatsu,* Nobuhide Miyachi, Fumihiro Ozaki,
Masakatsu Shibasaki, and Yoshio Ban
Faculty of Pharmaceutical Sciences,Hokkaido University, Sapporo 060, Japan

The synthesis of dl-eriolanin 1, highly oxygenated 1,10-seco-eudesmanolide isolated from Eriophyllum lanatum Forbes(Compositae), is reported



Tetrahedron Lett.29,3833(1988)

PHOTOCHEMICAL CARBONYLATION OF ALKYL IODIDES IN THE PRESENCE OF VARIOUS METAL CARBONYLS

Teruyuki Kondo, Yasushi Tsuji, and Yoshihisa Watanabe*
Department of Hydrocarbon Chemistry, Faculty of Engineering, Kyoto University, Sakyo-ku, Kyoto 606, Japan

$$R\text{-}I + CO + R'OH \xrightarrow[\text{r.t., 10 h, -HI}]{\text{UV, [M]-}K_2CO_3} R\text{-}COO\text{-}R' \quad (63\text{-}88\ \%)$$

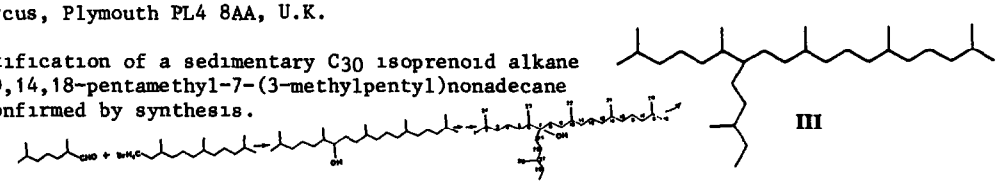
R=alkyl, [M]= Group VII, VIII metal carbonyl

Tetrahedron Lett.29,3837(1988)

SYNTHESIS OF A NOVEL HIGHLY BRANCHED C_{30} SEDIMENTARY HYDROCARBON

J.N. Robson and S.J. Rowland*
Department of Environmental Sciences, Plymouth Polytechnic, Drake Circus, Plymouth PL4 8AA, U.K.

The identification of a sedimentary C_{30} isoprenoid alkane as 2,6,10,14,18-pentamethyl-7-(3-methylpentyl)nonadecane III is confirmed by synthesis.



III

Tetrahedron Lett.29,3841(1988)

A NOVEL APPROACH TO THE 5a-ARYLDECAHYDRO-2-BENZAZEPINE SKELETON

Sheetal Handa[a], Keith Jones[a]*, and Christopher G Newton[b]
[a]Department of Chemistry, King's College London, Strand, London WC2R 2LS
[b]May and Baker Ltd, Dagenham, Essex, RM10 7XS

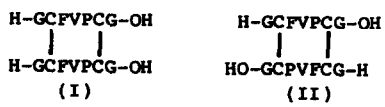
Summary *Trienes (3) are prepared and their intramolecular cyclisation to give the 5a-aryloctahydrobenzazepines (6) is described*

Tetrahedron Lett.29,3845(1988)

UTEROGLOBIN-LIKE PEPTIDE CAVITIES I. SYNTHESIS OF ANTIPARALLEL AND PARALLEL DIMERS OF BIS-CYSTEINE PEPTIDES

M. Ruiz-Gayo, F. Albericio*, M. Pons, M. Royo, E. Pedroso, and E. Giralt*.
Department of Organic Chemistry, University of Barcelona, Martí i Franquès 1, 08028-Barcelona, Spain.

Syntheses of parallel (I) and antiparallel (II) dimers of bis-cysteine peptides using four different protecting groups (Fm, Acm, Npys, p-MeBzl) for the cysteine side chain are described.

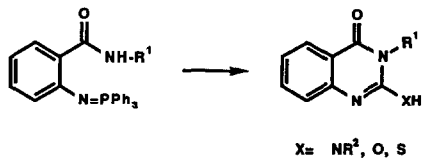


Tetrahedron Lett.29,3849(1988)

HETEROCYCLIC SYNTHESIS VIA TANDEM AZA-WITTIG REACTION HETEROCUMULENE-MEDIATED ANNULATION REACTION NEW METHODOLOGY FOR THE PREPARATION OF QUINAZOLINE DERIVATIVES

Pedro Molina*, Mateo Alajarín, and Angel Vidal
Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Murcia, Spain

Iminophosphorane (2) react with isocyanates, carbon dioxide and carbon disulphide to give quinazoline derivatives

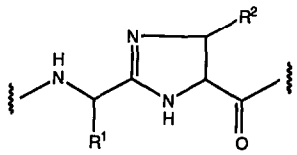


Tetrahedron Lett.29,3853(1988)

AMIDE BOND ISOSTERES: IMIDAZOLINES IN PSEUDOPEPTIDE CHEMISTRY

Raymond C.F. Jones* and Gary J. Ward
Department of Chemistry, The University, Nottingham, NG7 2RD, U.K.

The 2-imidazoline ring is incorporated as an amide bond replacement into pseudodi-, pseudotri-, and pseudo-pentapeptides.

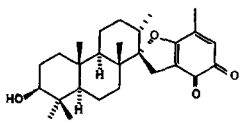


Tetrahedron Lett.29,3857(1988)

MARINE TOXINS SYNTHESIS OF THE SPIRO-BENZOQUINONEFURAN UNIT IN STYPOLDIONE

Paul V. Fish, Gerald Pattenden* and S.T Hodgson
Department of Chemistry, The University, Nottingham, NG7 2RD.

A synthesis of the unusual spiro-benzoquine unit present in the marine toxin stypoldione (1) is described.



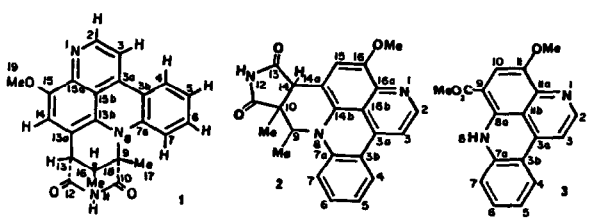
(1)

Tetrahedron Lett.29,3861(1988)

ALKALOID METABOLITES OF THE MARINE TUNICATE EUDISTOMA SP.; SEGOLINE A, ISOSEGOLINE A AND NOR-SEGOLINE

A Rudi, Y. Benayahu, I Goldberg and Y Kashman*
Tel Aviv University, Ramat-Aviv 69978, ISRAEL

The structure of segoline A(1) isosegoline A (2) and nor segoline (3) has been established

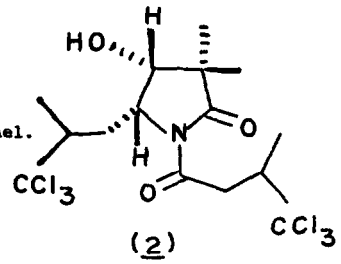


Tetrahedron Lett.29,3863(1988)

DYSIDAMIDE, A NOVEL HEXACHLORO-METABOLITE FROM A RED SEA SPONGE *DYSIDEA SP.*

T. Gebreyesus[a*], T. Yosief[a], S. Carmely[b] and Y. Kashman[b*].
[a]Chemistry Department, AAU, P.O.Box 1176, Addis Ababa, Ethiopia.
[b]School of Chemistry, Tel Aviv University, 69 978 Tel Aviv, Israel.

A new polychlorinated metabolite of a *Dysidea sp.* from the Red Sea has been characterized as dysidamide (2) by MS, 1D and 2D NMR spectroscopy.



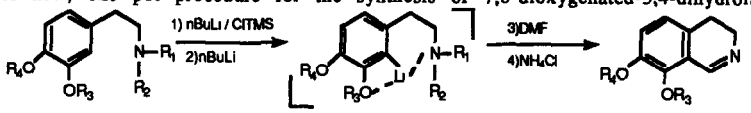
(2)

Tetrahedron Lett.29,3865(1988)

REGIOSELECTIVE SYNTHESIS OF 7,8-DIOXYGENATED-3,4-DIHYDROISOQUINOLINES BY METALATION OF ß-PHENETHYLAMINES

Carlos Lamas, Luis Castedo and Domingo Domínguez
Dpto de Química Orgánica Facultad de Química y Sección de Alcaloides del C S I C Santiago de Compostela Spain

A new, one pot procedure for the synthesis of 7,8-dioxygenated-3,4-dihydroisoquinolines is described

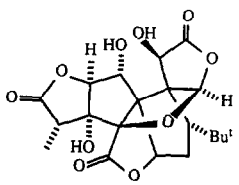


Tetrahedron Lett.29,3869(1988)

RADICAL CYCLISATIONS ONTO 2(5H)-FURANONE AND MALEATE ELECTROPHORES LEADING TO SPIRO- AND LINEAR-FUSED γ-LACTONE RING SYSTEMS

Timothy Harrison, Gerald Pattenden,* and Peter L. Myers
Department of Chemistry, The University, Nottingham, NG7 2RD.

Radical cyclisations allow facile syntheses of spiro- and linear-fused γ-lactone ring systems found in the ginkgolides (1).



(1)