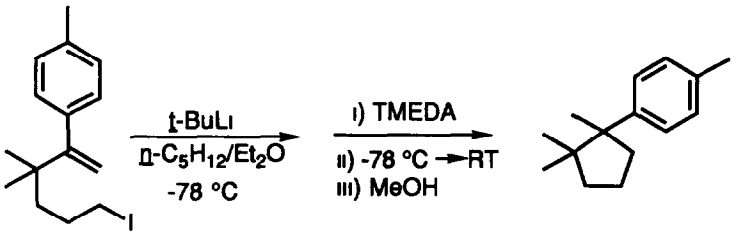
Tetrahedron, **1991**, *47*, 7727

CONSTRUCTION OF A STERICALLY CONGESTED CARBON FRAMEWORK VIA 5-HEXENYLLITHIUM CYCLIZATION. SYNTHESIS OF (±)-CUPARENE

William F Bailey* and Atmaram D Khanolkar
Department of Chemistry, University of Connecticut, Storrs, Connecticut 06269-3060

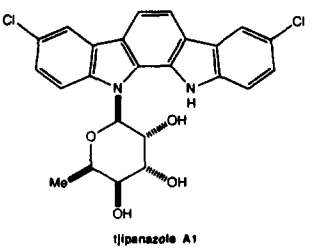


Tetrahedron, **1991**, *47*, 7739

Tjipanazoles, New Antifungal Agents from the Blue-Green Alga *Tolypothrix tjipanasensis*

Rosanne Bonjouklian,* Tim A Smitka, Larry E Doolin, R Michael Molloy, Manuel Debono, Stacey A Shaffer, Richard E Moore,* Jeffrey B Stewart, and Gregory M L Patterson
Lilly Research Laboratories, Indianapolis, Indiana and Department of Chemistry, University of Hawaii at Manoa, Honolulu, Hawaii 96822

Bioassay-directed isolation of the lipophilic extract of *Tolypothrix tjipanasensis* (strain DB-1-1) has led to the isolation and structure determination of fifteen new N-glycosides of indolo[2,3-a]carbazoles designated tjipanazoles A1, A2, B, C1, C2, C3, C4, D, E, F1, F2, G1, G2, H and I Tjipanazole I is the only compound having the pyrrolo[2,3-c] ring of previously described indolo[2,3-a]carbazoles



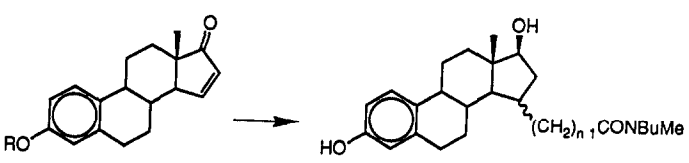
tjipanazole A1

Tetrahedron, **1991**, *47*, 7751

SYNTHESIS OF 17β-ESTRADIOL DERIVATIVES WITH N-BUTYL, N-METHYL ALKYLAMIDE SIDE CHAIN AT POSITION 15

Donald Poirier, Yves Mérand and Fernand Labrie*
MRC Group in Molecular Endocrinology, CHUL Research Center and Laval University, Quebec GlV 4G2, Canada.

The synthesis of new derivatives of 17β-estradiol with N-butyl, N-methyl alkylamide side chains at position 15 is described

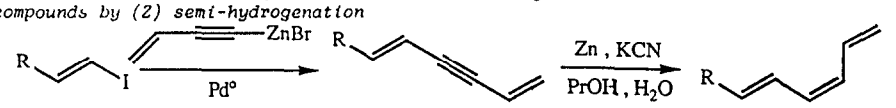


Tetrahedron, **1991**, *47*, 7767

STEREOSPECIFIC SYNTHESIS OF 1,5-DIEN-3-YNES AND 1,3,5-TRIENES
APPLICATION TO THE STEREOCHEMICAL IDENTIFICATION OF TRIENIC SEX PHEROMONES

Frédérique Tellier, Charles Descoins INRA, Laboratoire des Médiateurs Chimiques, Domaine de Brouessy, F-78114 Magny-les-Hameaux Raymond Sauvêtre CNRS, Laboratoire de Chimie des Organo-éléments, tour 45, Université P et M Curie, 4 place Jussieu, F-75252 Paris Cedex 05

1,5-dien-3-ynes are obtained by a palladium-catalyzed cross-coupling reaction between butenynyl zinc bromide and an adequate iodoalkene The dienynes are converted into the trienic compounds by (Z) semi-hydrogenation



Tetrahedron, **1991**, *47*, 7775

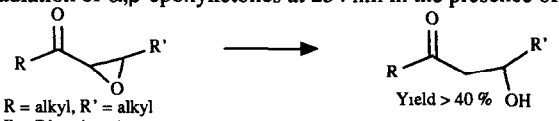
FORMATION OF β-HYDROXYKETONES FROM α,β-EPOXYKETONES BY PHOTOINDUCED SINGLE ELECTRON TRANSFER REACTIONS

J Cossy*[a], A Bouzide[a], S Ibhi[a], P Aclinou[b]

a) Laboratoire de Chimie Organique associé au CNRS, ESPCI 10 rue Vauquelin 75231 Paris Cedex 05 - France

b) Laboratoire des réarrangements thermique et photochimique associé au CNRS UFR Sciences, Moulin de la Housse, 51 Reims - France

Irradiation of α,β-epoxyketones at 254 nm in the presence of triethylamine afforded β-hydroxyketones

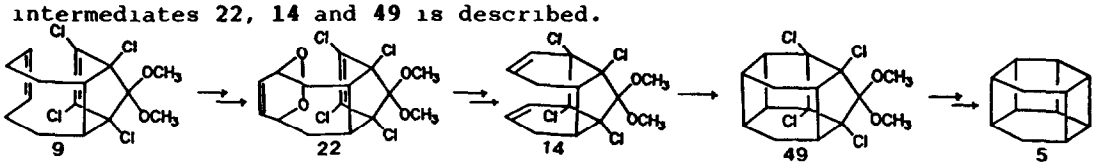


Tetrahedron, **1991**, *47*, 7783

SYNTHETIC STUDIES TOWARDS PRISMANES: SECO-[6]-PRISMANE

Goverdhan Mehta* and S. Padma
School of Chemistry, University of Hyderabad, Hyderabad - 500 134, India.

The first synthesis of seco-[6]-prismane 5, the closest, one-bond-away secologue of [6]-prismane from the readily available Diels-Alder adduct 9 of 1,5-cyclooctadiene and dimethoxytetrachlorocyclopentadiene via the key intermediates 22, 14 and 49 is described.

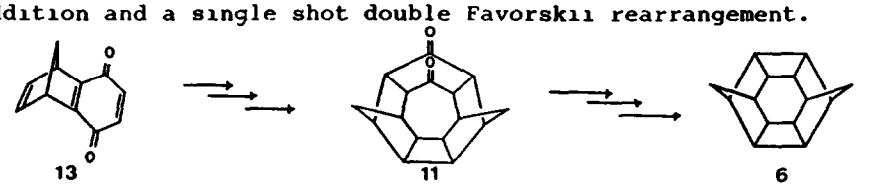


Tetrahedron, **1991**, *47*, 7807

SYNTHETIC STUDIES TOWARDS PRISMANES: 1,4-BISHOMO-[6]-PRISMANE ("GARUDANE")

Goverdhan Mehta* and S. Padma
School of Chemistry, University of Hyderabad, Hyderabad - 500 134, India

The first synthesis of 1,4-bishomo-[6]-prismane 6, the true, face-to-face dimer of norbornadiene is delineated from 13. The key chemical operations are regio- and stereoselective Ti^{+3} reduction, intramolecular 2+2-photocycloaddition and a single shot double Favorskii rearrangement.

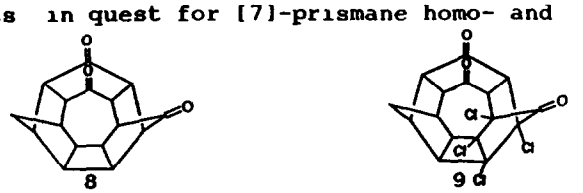


Tetrahedron, **1991**, *47*, 7821

SYNTHETIC STUDIES TOWARDS PRISMANES: EXPLORATORY EFFORTS EN ROUTE TO [7]-PRISMANE HOMO- AND SECOLOGUES

Goverdhan Mehta*, S. Hari Krishna Reddy and S. Padma
School of Chemistry, University of Hyderabad, Hyderabad - 500 134, India

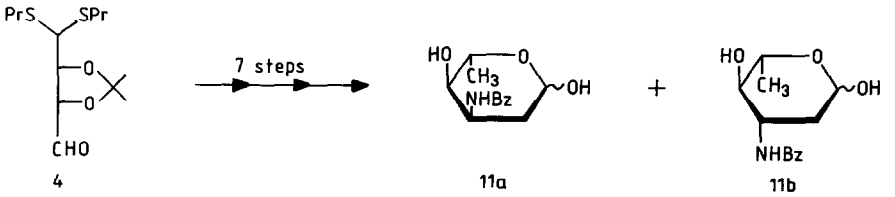
Novel heptacyclic triones **8** and **9** have been synthesised and a series of probing experiments in quest for [7]-prismane homo- and secologues are described.



Tetrahedron, **1991**, *47*, 7837

TARTRALDEHYDES III SYNTHESIS OF N-BENZOYL--L-RISTOSAMINE AND -L-ACOSAMINE

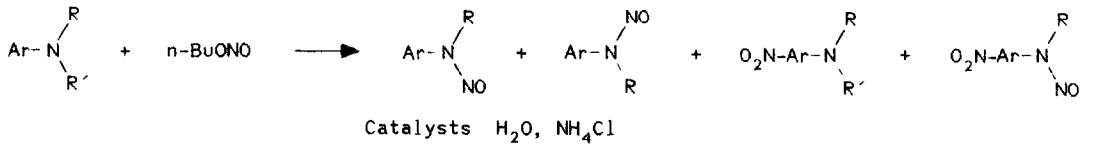
Imre Kovács, Pál Herczegh* and Ferenc J. Sztaricskai*
Research Group for Antibiotics, Hungarian Academy of Sciences, H-4010 Debrecen, P O Box 70 , Hungary



Tetrahedron, **1991**, *47*, 7845

N-DEALKYLATION-N-NITROSATION OF TERTIARY AROMATIC AMINES
BY n-BUTYL NITRITE

Giancarlo Verardo, Angelo G Giumanini* and Paolo Strazzolini
Department of Chemistry, University of Udine, I-33100 Udine, Italy

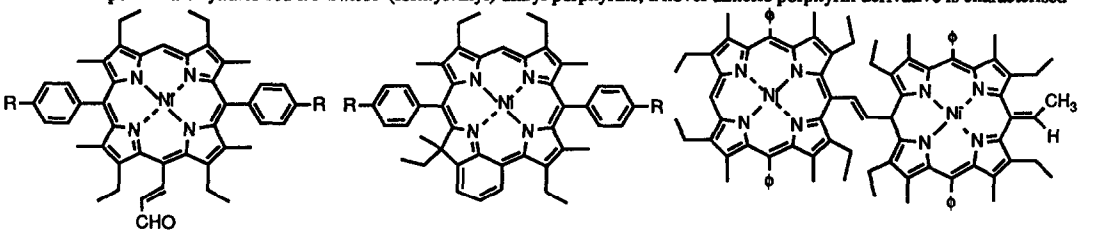


Tetrahedron, **1991**, *47*, 7853

5,15-DIARYL SUBSTITUTED BENZOCHLORINS - SYNTHESIS AND STRUCTURE

Maxwell J. Gunter* and **Byron C. Robinson**,
Department of Chemistry, The University of New England, Armidale, NSW 2351, Australia, and
Jacqueline M. Gulbis and **Edward R.T. Tiekink**, Department of Physical and Inorganic Chemistry, The University of Adelaide, Adelaide, SA 5001, Australia.

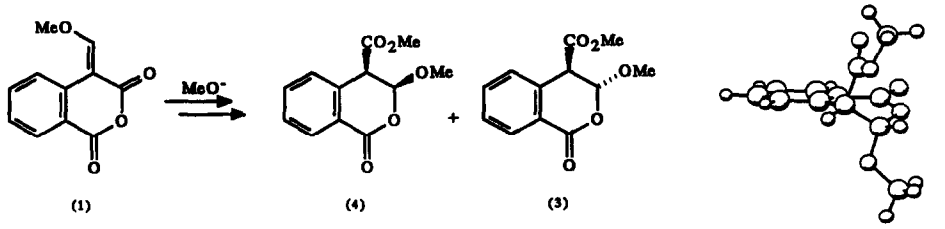
The title compounds are synthesised from *meso*-(formylvinyl) diaryl porphyrins, a novel dimeric porphyrin derivative is characterised



Tetrahedron, **1991**, *47*, 7869

ALKOXIDE-INDUCED RING-OPENING OF METHOXYMETHYLIDENE-SUBSTITUTED HOMOPHTHALIC ANHYDRIDE PART 2 STRUCTURE AND CONFORMATIONAL ANALYSIS OF THE DIHYDROISOCOUMARIN PRODUCTS

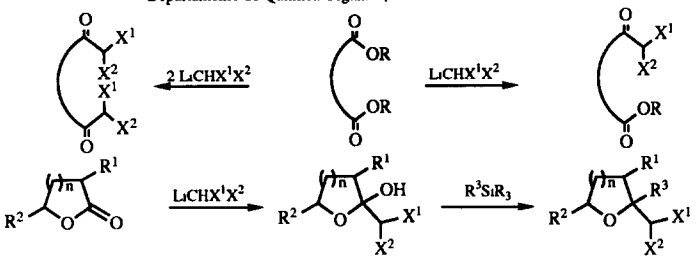
Michael G Hutchings[a], A. Margaret Chippendale[a], Renuka Shukla[b], and Mary McPartlin[b] [a]*ICI Specialties Research Centre, Blackley, Manchester M9 3DA, UK* [b]*School of Chemistry, The Polytechnic of North London, Holloway Road, London N7 8DB, UK*



Tetrahedron, **1991**, *47*, 7875

RECTIVITY OF *IN SITU* GENERATED DIHALOMETHYLLITHIUM TOWARDS DICARBOXYLIC ACID DIESTERS AND LACTONES: SYNTHETIC APLICATIONS

José Barluenga [a*] Luján Llavona,[a] Miguel Yus,[b] and José M. Concellón[a]
[a]Departamento de Química Organometálica, Universidad de Oviedo Spain
[b]Departamento de Química Orgánica, Universidad de Alicante

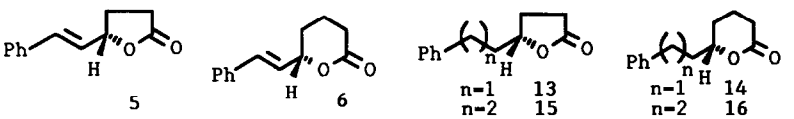


Tetrahedron, **1991**, *47*, 7887

BAKER'S YEAST REDUCTION OF ARYLALKYL AND ARYLALKENYL γ- AND δ-KETO ACIDS.

Mario Aquino,[a] Silvia Cardani,[a] Giovanni Fronza,[a] Claudio Fuganti*,[a] Rosalino Pulido Fernandez,[b] Auro Tagliani.[a]
a.Dip.di Chim.del Politecnico,Centro CNR per la Chimica delle Sost. Org. Naturali, 20133 Milano. b.Dep.de Quim.Organomet.,Fac.de Quim.,Univ.de Oviedo, 33071 Oviedo, Spain.

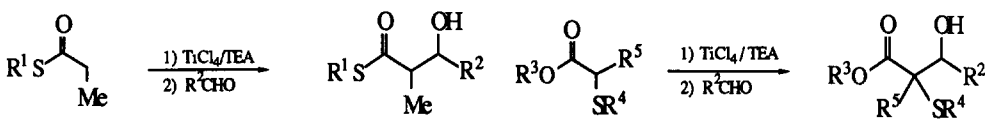
γ- and δ-lactones **5,6,13-16** were synthesized via baker's yeast reduction of the corresponding keto acids. The δ-lactones were obtained in ee% higher than the γ-one and ranging from 70 to 100%.



Tetrahedron, **1991**, *47*, 7897

DIASTEREOSELECTIVE ALDOL CONDENSATION OF DIRECTLY GENERATED TITANIUM ENOLATES OF ACTIVATED ESTERS.

R Annunziata, M Cinquini, F Cozzi, P G Cozzi, and E Consolandi
Centro C N R and Dipartimento di Chimica Organica e Industriale dell'Università, Milano, Italy



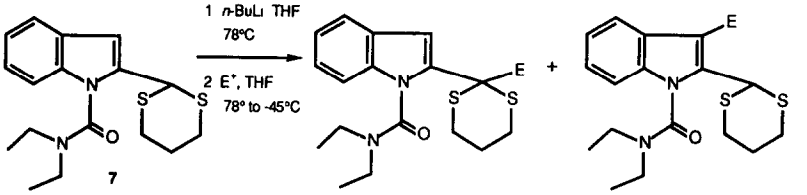
R^1=Ar, t-Bu, R^2= Ph, n-Pr, i-Pr, R^3= Et, t-Bu, R^4=n-Bu, Ph, R^5=H, Me

Tetrahedron, **1991**, *47*, 7911

Synthesis and Reactivity of 2-(1,3-Dithian-2-yl)indoles
IV [1] Influence of the *N,N*-Diethylcarbamoyl Indole Protecting Group

Josep Castells, Yves Troin, Anna Diez, and Mano Rubiralta*
Laboratory of Organic Chemistry, Faculty of Pharmacy, University of Barcelona 08028 Barcelona, Spain
David S Grierson and Henri-Philippe Husson
Institut de Chimie des Substances Naturelles du C N R S , F-91198 Gif sur Yvette, France

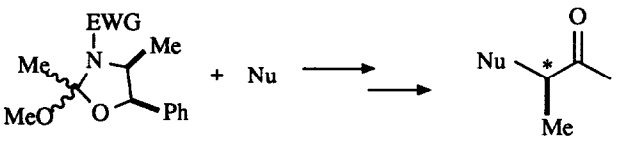
The effect of the *N,N*-diethylcarbamoyl indole protecting group on the reactivity of 2 (1,3-dithian-2-yl)indole **7** in front of a series of electrophiles is reported



Tetrahedron, **1991**, *47*, 7925

HYGHLY STEREOSELECTIVE ACETYLATIONS VIA NOREPHEDRINE DERIVED OXAZOLIDINES.

Anna Bernardi, Marcello Cavicchioli, Giovanni Poli, Carlo Scolastico* and Atanas Sidjimov
Dipartimento di Chimica Organica e Industriale, Centro CNR per lo Studio delle Sostanze Organiche Naturali, Università di Milano, via Venezian 21, 20133 Milano, Italy



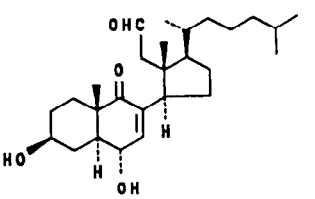
Tetrahedron, **1991**, *47*, 7937

STRUCTURE ELUCIDATION AND SYNTHESIS OF 3β,6α-DIHYDROXY-9-OXO-9,11-SECO-5α-CHOLEST-EN-11-AL, A NOVEL 9,11-SECOSTEROL FROM THE SPONGE SPONGIA OFFICINALIS

ANNA MIGLIUOLO, VINCENZO PICCIALLI and DONATO SICA*

Dipartimento di Chimica Organica e Biologica, Universita' degli Studi di Napoli, Via Mezzocannone 16, I-80134 Napoli, Italy

The 9,11-secosterol 1 has been isolated from the marine sponge Spongia officinalis The structure of 1, deduced from spectral data, has been confirmed by synthesis



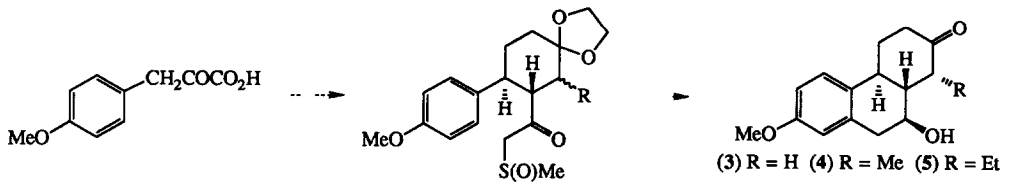
1

Tetrahedron, **1991**, *47*, 7951

Structural Parallels Between the Cardiotonic Steroids and the *Erythrophleum* Alkaloids - I. Synthesis of Phenanthrenone Precursors to Novel *Erythrophleum* Alkaloid Analogues

Robert W Baker, John R Knox and Dan H Rogers
School of Chemistry, The University of Western Australia, Nedlands, Western Australia, 6009

The phenanthrenones (3), (4) and (5), precursors to analogues of the *Erythrophleum* alkaloids, have been synthesised from *p*-methoxyphenylpyruvic acid

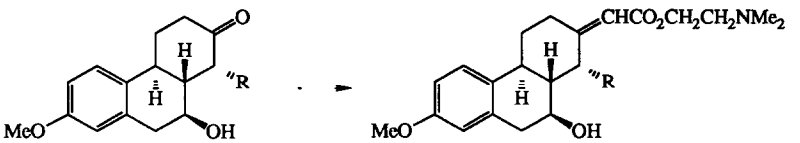


Tetrahedron, **1991**, *47*, 7965

Structural Parallels Between the Cardiotonic Steroids and the *Erythrophleum* Alkaloids - II. Synthesis and Na^+,K^+-ATPase Inhibitory Activity of Novel *Erythrophleum* Alkaloid Analogues

Robert W Baker, John R Knox, Brian W Skelton and Alan H White
School of Chemistry, The University of Western Australia, Nedlands, Western Australia, 6009

The synthesis and Na^+,K^+ATPase inhibitory activity of a series of *Erythrophleum* alkaloid analogues (R = H, Me, Et, *E* and *Z* isomers, enantiomers) is reported

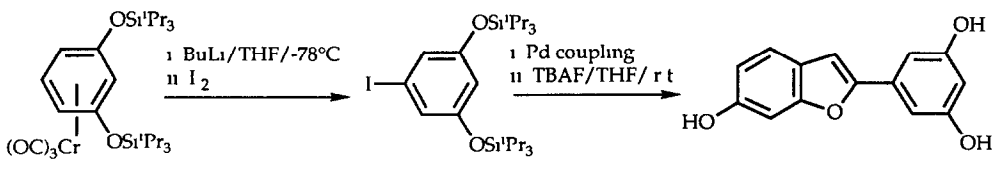


Tetrahedron, **1991**, *47*, 7981

Transition Metal Directed Synthesis of Moracin M, a Phytoalexin of *Morus alba* Linn

Inderjit S Mann, David A Widdowson*, Department of Chemistry, Imperial College, London SW7 2AY, U K John M Clough, ICI Agrochemicals, Jealott s Hill Research Station, Bracknell, Berks RG12 6EY, U K

2-(5-Resorcinyl)benzofurans, as moracin M (ex *Morus alba* Linn), have been synthesised by the palladium catalysed cross coupling of 2-trimethylstannyl- or 2-bromo/iodo benzofurans with the appropriately functionalised 5-iodoresorcinols



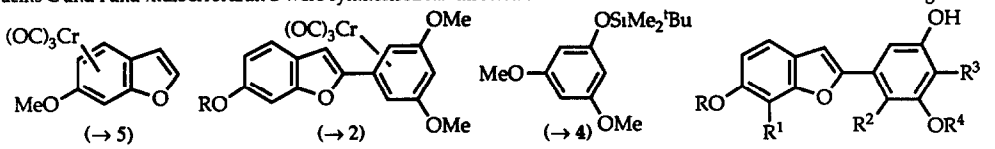
Moracin M

Tetrahedron, **1991**, *47*, 7991

Transition Metal Mediated Synthesis of Some Prenylated Phytoalexins of *Morus alba* Linn.

Inderjit S Mann, David A Widdowson*, Department of Chemistry, Imperial College, London SW7 2AY, U K John M Clough, ICI Agrochemicals, Jealott's Hill Research Station, Bracknell, Berks RG12 6EY, U K.

Moracins C and I and mulberrofuran B were synthesised *via* directed functionalisation of resorcinol and benzofuran rings



2, Moracin C R = R^1 = R^2 = H, R^3 = prenyl, R^4 = Me **4**, Moracin I R = R^1 = R^3 = H, R^2 = prenyl, R^4 = Me

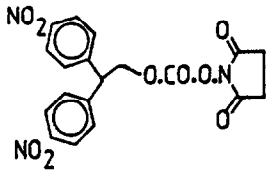
5, Mulberrofuran B R = Me, R^1 = geranyl, R^2 = R^3 = R^4 = H

Tetrahedron, **1991**, *47*, 8001

A BASE-LABILE PROTECTING GROUP FOR PEPTIDE SYNTHESIS: 2,2-BIS(4'-NITROPHENYL)ETHAN-1-OXYCARBONYL URETHANES

Robert Ramage, Alexander J. Blake, Michael R. Florence, Thomas Gray, Gilles Raphy and Peter L. Roach

Department of Chemistry, University of Edinburgh, West Mains Road, Edinburgh EH9 3JJ



10

2,2-Bis(4'-nitrophenyl)ethyl-N-succinimidyl carbonate (**10**) affords base-labile N^{α}-Bnpeoc derivatives of amino acids for use in solid phase peptide synthesis

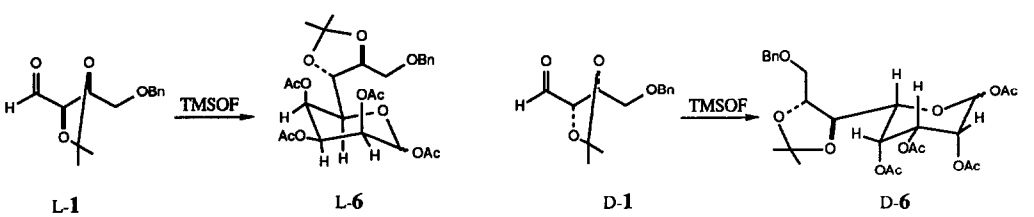
Tetrahedron, **1991**, *47*, 8025

Highly Stereoselective Total Synthesis of Octopyranose Derivatives

Gloria Rassu,* Pietro Spanu, Giovanni Casiraghi, and Luigi Pinna

Dipartimento di Chimica dell'Università and IATCAPA, CNR, I-07100 Sassari, ITALY

L-*threo*-D-*talo*- and D-*threo*-L-*talo*-Octose derivatives **L-6** and **D-6** were synthesized from **L-1** and **D-1** and 2-(trimethylsiloxy)furan (TMSOF) in five individual steps



L-**1** L-**6** D-**1** D-**6**

Tetrahedron, **1991**, *47*, 8031

REACTIONS OF COPPER(II) β-DIKETONATES UNDER FREE RADICAL CONDITIONS. PREPARATION OF HIGHLY CONGESTED β-DIKETONES

M.E. Lloris, N. Gálvez, J. Marquet, M. Moreno-Mañas;* Department of Chemistry. Universitat Autònoma de Barcelona. Bellaterra. 08193-Barcelona. Spain

Copper(II) diketonates react with alkyl bromides and with benzoyl peroxide under free radical conditions.