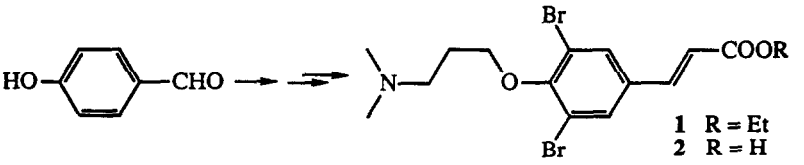
Tetrahedron, **1991**, *47*, 1809

TWO NEW DIBROMOTYROSINE DERIVATIVES FROM THE CARIBBEAN SPONGE *PSEUDOCERATINA CRASSA*

Katharina E Kassühlke and D. John Faulkner*
Scripps Institution of Oceanography (A-012F), UC San Diego, La Jolla, CA 92093, USA

The title compounds were isolated from the sponge and were synthesized from 4-hydroxybenzaldehyde

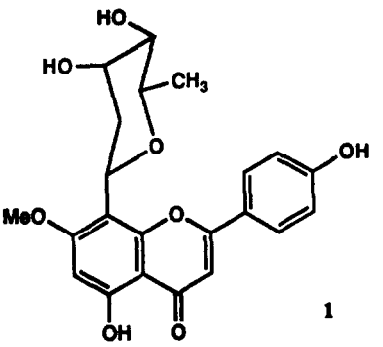


Tetrahedron, **1991**, *47*, 1815

ACICULATIN, A NOVEL FLAVONE-C-GLYCOSIDE WITH DNA BINDING ACTIVITY FROM *CHRYSOPOGON ACICULATIS*

B K Carte'*, D E Berry, S Carr, C, DeBrosse, M.E Hemling, L. MacKenzie, P. Offen and J.W. Westley,
SmithKline Beecham Pharmaceuticals
PO Box 1539, King of Prussia, PA 19406-0939

A novel flavone-C-glycoside, aciculatin (**1**), has been isolated from the CH_2Cl_2 extract of *C aciculatis* (Poaceae) collected in the Philippines. The structure of **1** was determined by analysis of spectral data. Aciculatin exhibits cytotoxicity towards KB cells that is reduced by an order of magnitude in the presence of exogenous DNA indicating that **1** binds to DNA. DNA binding assays indicated an apparent K_d of 15 - 50 μM for binding of **1** to calf thymus DNA



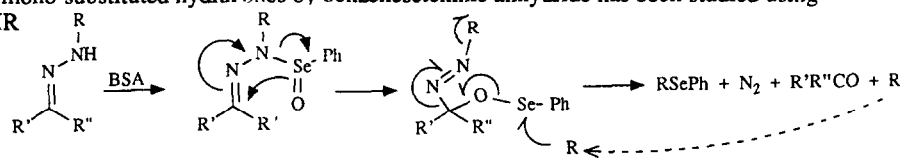
1

Tetrahedron, **1991**, *47*, 1823

On The Reactions of Benzeneseleninic Anhydride With Monosubstituted Hydrazones. Evidence for Radical Pathways

Derek H. R Barton, Takashi Okano and Shyamal I Parekh
Department of Chemistry, Texas A & M University, College Station, Texas 77843

The oxidation of mono-substituted hydrazones by benzeneseleninic anhydride has been studied using ^{77}Se and ^{13}C NMR

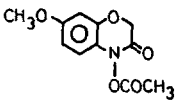


Tetrahedron, **1991**, *47*, 1837

A MULTI-CENTERED ELECTROPHILE FORMED FROM A UNIQUE BIOACTIVE CYCLIC HYDROXAMIC ACID, 4-HYDROXY-7-METHOXY-2H-1,4-BENZOXAZIN-3(4H)-ONE

Yuichi Hashimoto,[1] Takayoshi Ishizaki[2] and Koichi Shudo[2]
1) Institute of Applied Microbiology, University of Tokyo
2) Faculty of Pharmaceutical Sciences, University of Tokyo
Bunkyo-ku, Tokyo 113, Japan

Reactions of 4-acetoxy-7-methoxy-2H-1,4-benzoxazin-3(4H)-one (AMBOA), a possible active metabolite of the title compound, with nucleophiles including amino acid derivatives and nucleic acids were investigated.

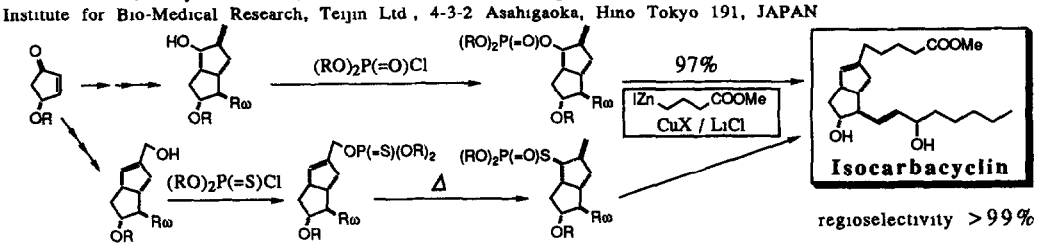


AMBOA

Tetrahedron, **1991**, *47*, 1861

SHORT SYNTHESES OF ISOCARBACYCLINS BY A REGIOSELECTIVE S_N2' ALKYLATION OF BICYCLIC SYNTHONS WITH ZINC-COPPER REAGENTS

Toshio Tanaka,* Kiyoshi Bannai, Atsuo Hazato, Masahiro Koga, Seizi Kurozumi, and Yoshinori Kato
Institute for Bio-Medical Research, Teijin Ltd., 4-3-2 Asahigaoka, Hino Tokyo 191, JAPAN

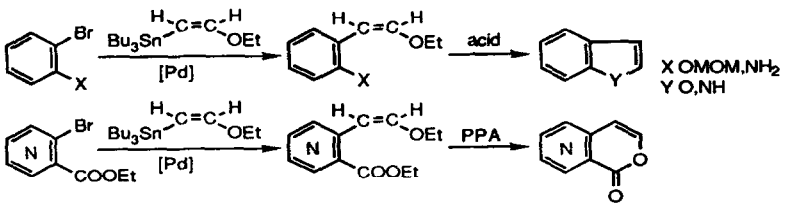


regioselectivity >99%

Tetrahedron, **1991**, *47*, 1877

CONDENSED HETEROAROMATIC RING SYSTEMS. XVIII. PALLADIUM-CATALYZED CROSS-COUPLING REACTION OF ARYL BROMIDES WITH (*Z*)-1-ETHOXY-2-TRIBUTYLSTANNYLETHENE AND ITS UTILIZATION FOR CONSTRUCTION OF CONDENSED HETERAROMATICS

Takao Sakamoto, Yoshinori Kondo, Akito Yasuhara, and Hiroshi Yamanaka
Phamaceutical Institute, Tohoku University, Aobayama, Aoba-ku, Sendai 980, Japan

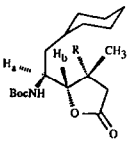


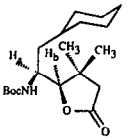
Tetrahedron, **1991**, *47*, 1887

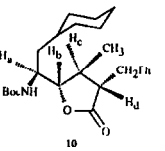
A CONVENIENT APPROACH TO HYDROXYETHYLENE DIPEPTIDE ISOSTERS AS BUILDING BLOCKS FOR ENZYME INHIBITORS

H -E Radunz[a,*], V Eiermann[b], G. Schneider[a], A. Riehtmüller [a]; [a]E Merck, Department of Pharmaceutical Chemistry, [b]Central Analytical Laboratory, Frankfurter Str. 250, W-6100 Darmstadt, Germany

Starting from enantiomerically pure α-amino ketones, the γ-lactones **6**, **7**, **8** and **10** were stereoselectively synthesized in two or three steps.





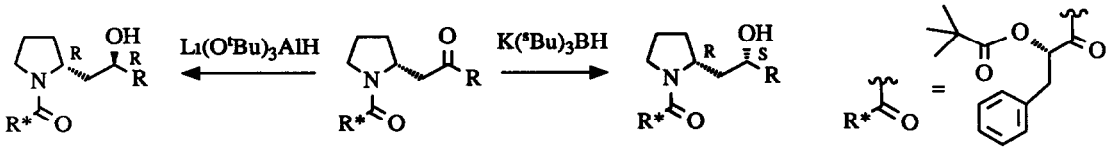


Tetrahedron, **1991**, *47*, 1895

CHELAT- UND NICHT-CHELAT-KONTROLLIERTE REDUKTIONEN VON β-AMIDO-KETONEN: SYNTHESE NICHT-RACEMISCHER 1,3-AMINOALKOHOLE MIT PYRROLIDINSTRUKTUR

KLAUS TH WANNER* und GEORG HÖFNER
Institut fur Pharmazie der Freien Universität Berlin, Königin-Luise-Str. 2+4, 1000 Berlin 33, BRD

A synthetic sequence for the preparation of 1,3-aminoalcohols of high enantiomeric purity is described that is based on the stereodivergent reduction of optically active amidoketones as a key step

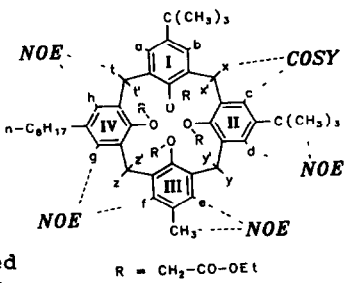


Tetrahedron, **1991**, *47*, 1911

ASYMMETRICALLY SUBSTITUTED CALIX[4]ARENES; A TWO-DIMENSIONAL ^{1}H NMR STUDY OF A TETRAESTER DERIVATIVE IN THE CONE-CONFORMATION

Lucia Zetta[a)], Artur Wolff[b)], Walter Vogt[b)], Karl-Ludwig Platt[c)], and Volker Bohmer[b*)]
a) Istituto di Chimica delle Macromolecole del CNR, I-20133 Milano, Italy
b) Institut fur Organische Chemie,
c) Institut fur Toxikologie,
Joh. Gutenberg Universitat, D-6500 Mainz, Germany

A strong distortion of the cone-conformation is induced by slightly different p-substituents in the tetraester-derivative of a calix[4]arene, while the Na^+-complex shows a regular shape.

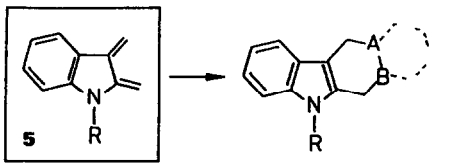


Tetrahedron, **1991**, *47*, 1925

N-BENZOYLINDOLE-2,3-QUINODIMETHANE: DIELS-ALDER REACTIVITY AND SYNTHETIC APPLICATIONS FOR [b]ANNELLATED INDOLES

M. Haber and U. Pindur*; Department of Chemistry and Pharmacy, University of Mainz, Saarstrasse 21, D-6500 Mainz 1, Federal Republic of Germany

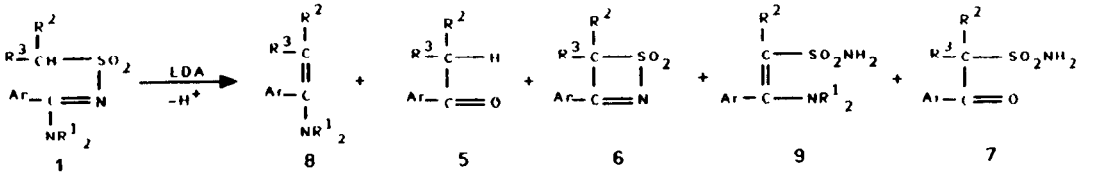
Diels-Alder reactions of *in situ* generated *N*-benzoylindole-2,3-quinodimethane (**5**) to give a variety of new [b]annellated indoles and functionalized carbazoles are described. Reactivity aspects are also discussed.



Tetrahedron, **1991**, *47*, 1937

N-SULFONYLAMIDINES. PART III. NEW REARRANGEMENT REACTION OF N-ALKYLSULFONYL-AMIDINES SYNTHESIS OF ENAMINES, β-AMINOSULFONYL-ENAMINES AND 4H-THIAZETE-S,S-DIOXIDES.

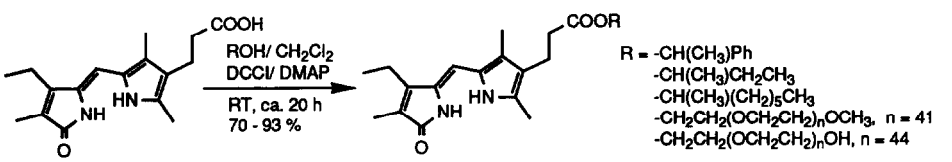
F Clerici[a)*], D Pocar, A Rozzi Istituto Chim Org , Fac Farmacia, Univ Milano, Italy
a) Pres address G E T , Rep Ricerche Chim ,V Alighieri 73, Sanremo, Italy



Tetrahedron, **1991**, *47*, 1945

SYNTHESIS OF DIPYRRINONE ESTERS USING CARBODIIMIDE REAGENTS

F R Trull[a,*] and D A Lightner[b], [a]Universitat de Barcelona (Catalunya, Spain), and [b]University of Nevada-Reno (USA)

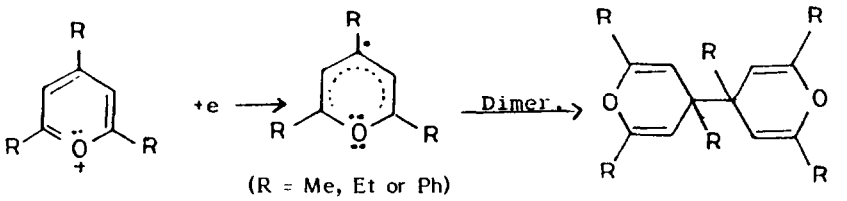


From the secondary alcohols, both the (rac) - (±) -, (R) - (+) - and (S) - (-) - ester derivatives were prepared

Tetrahedron, **1991**, *47*, 1957

POLAROGRAPHIC REDUCTION OF PYRYLIUM SALTS

M.I. Ismail, Department of Chemistry, Faculty of Science, Ain Shams University, Abbassia, Cairo (Egypt).

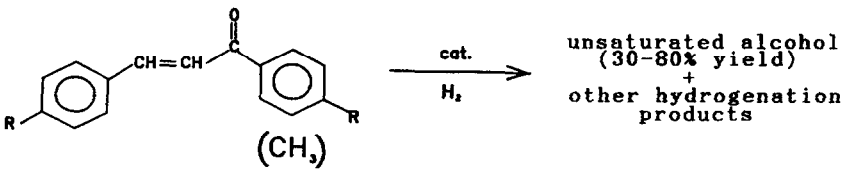


(R = Me, Et or Ph)

Tetrahedron, **1991**, *47*, 1965

EFFECT OF CHARGE DISTRIBUTION ON SELECTIVE HYDROGENATION OF CONJUGATED ENONES CATALYZED BY IRIDIUM COMPLEXES.

Roberto Spogliarich, Erica Farnetti and Mauro Graziani
Dipartimento di Scienze Chimiche, Universita' di Trieste
Via A. Valerio 22, 34127 Trieste (Italy).



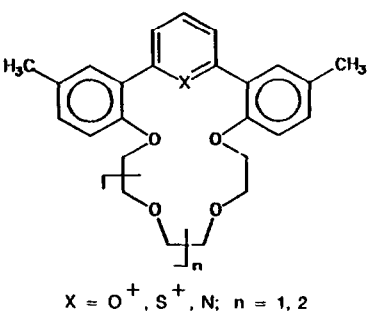
Chemo- and enantioselectivity in this reaction is studied with different substituent groups. Electronic and steric influences are discussed.

Tetrahedron, **1991**, *47*, 1977

SYNTHESIS AND CONFORMATIONAL ASPECTS OF CORANDS INCORPORATING PYRYLIUM, THIOPYRYLIUM AND PYRIDINE SUBUNITS

G. Doddi,* G. Ercolani,* and P. Mencarelli*

Centro C.N.R. di Studio sui Meccanismi di Reazione and Dipartimento di Chimica, Università "La Sapienza", 00185 Roma, Italy

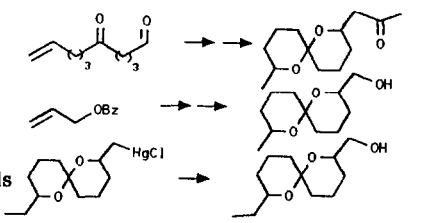


X = O^+, S^+, N; n = 1, 2

Tetrahedron, **1991**, *47*, 1985

MERCURY (II)-MEDIATED ROUTES TO SIDE-CHAIN FUNCTIONALISED SPIROACETALS LUCHE-BARBIER CHEMOSELECTIVE ADDITIONS TO KETOALDEHYDES

James J DeVoss, Joanne F Jamie, Joanne T Blanchfield, Mary T Fletcher, Michael G O'Shea and William Kitching*
Department of Chemistry, The University of Queensland, Qld Australia 4072

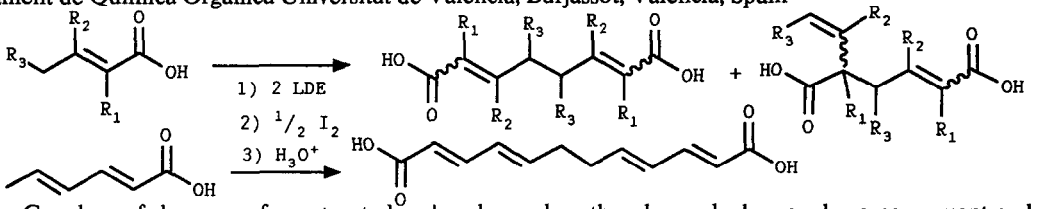


Chemoselective addition of allyl and propargyl bromides to ketoaldehydes under Luche-Barbier conditions, followed by oxymercuration-cyclisation and reductive demercuration affords functionalised spiroacetals Oxidative demercuration and related routes to some 1,7-dioxaspiro[5 5]undecanols are illustrated

Tetrahedron, **1991**, *47*, 1997

IODINE OXIDATIVE COUPLING OF DIENE AND TRIENE-DIOLATES OF UNSATURATED CARBOXYLIC ACIDS.

M J Aurell, S Gil, M Parra, A Tortajada, and R Mestres*
Departament de Química Orgànica Universitat de València, Burjassot, València, Spain

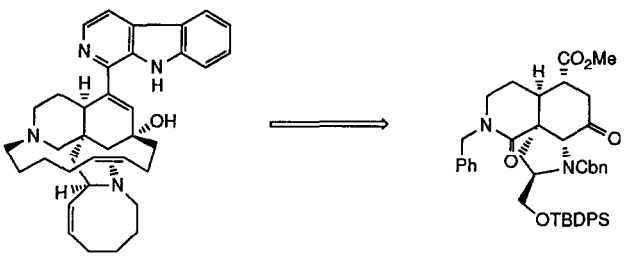


Oxidative Coupling of dianions of unsaturated carboxylic acids with iodine, which provides a convenient and facile preparation of γ,γ- and ε,ε-dicarboxylic acids, apparently occurs through SET substitution of intermediate iodo-carboxylates

Tetrahedron, **1991**, *47*, 2005

SYNTHESIS OF THE HOMOCHIRAL "TRICYCLIC HEART" OF MANZAMINE A

K M J Brands, A A P Meekel and U K Pandit, University of Amsterdam, The Netherlands

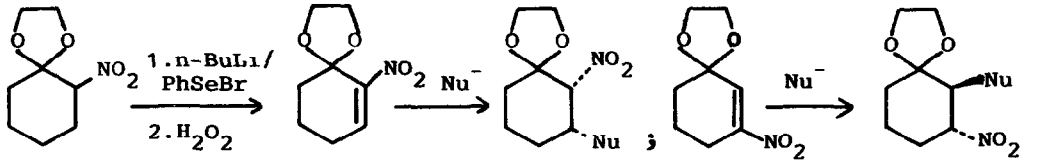


Tetrahedron, **1991**, *47*, 2027

REACTION OF 2-NITRO AND 3-NITRO-2-CYCLOHEXENONE ACETALS: PREPARATION OF USEFUL INTERMEDIATES

Yashwant D. Vankar*, Anita Bawa and G.Kumaravel
Department of Chemistry, Indian Institute of Technology, Kanpur 208016, INDIA

The title compounds react with a variety of nucleophiles to form useful intermediates. Synthesis of 2-nitro-2-cyclohexenone acetal has been reported for the first time.



Nu : Nucleophile

Tetrahedron, **1991**, *47*, 2041

ON THE DIRECT METALATION OF ISOPRENE

P A A. Klusener, L Top and L Brandsma*
University of Utrecht The Netherlands