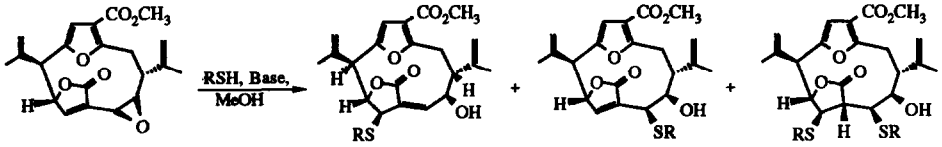
Tetrahedron, **1994**, *50*, 9223

THIOPHILIC REACTIONS OF PSEUDOPTEROLIDE: POTENTIAL IMPLICATIONS FOR ITS BIOLOGICAL ACTIVITY.

Sunaina Sharma,* Thomas M. Mesic and Robin A. Martin (in part), Department of Chemistry, The University of Western Ontario, London, ONT Canada N6A 5B7

Reactions of sulfhydryl groups of a number of thiol-containing substances with pseudopterolide lead to a 1,4-, 1,2- or a diadduct.

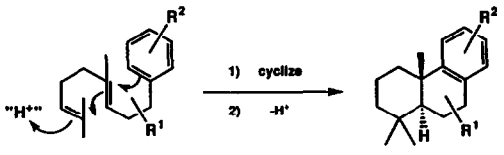


Tetrahedron, **1994**, *50*, 9229

Polyene Cascade Cyclizations Mediated by $BF_3{\cdot}CH_3NO_2$. An Unusually Efficient Method for the Direct, Stereospecific Synthesis of Polycyclic Intermediates via Cationic Initiation at Non-functionalized 3° Alkenes. An Application to the Total Synthesis of (±)-Taxodione.

Scott R. Harring and Tom Livinghouse*, Department of Chemistry and Biochemistry, Montana State University, Bozeman, Montana 59717, USA

Convenient stock solutions of BF_3 gas in nitromethane have been shown to promote "H^+ catalyzed" polyene cyclizations that proceed with excellent levels of regio- and stereocontrol. The utilization of these new conditions for cationic polycyclization in a concise total synthesis of the antineoplastic agent (±)-taxodione is described.

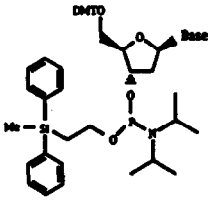


Tetrahedron, **1994**, *50*, 9255

SYNTHESIS OF OLIGONUCLEOTIDES VIA PHOSPHORAMIDITE APPROACH UTILIZING 2-DIPHENYLMETHYLSILYLETHYL (DPSE) AS A PHOSPHORUS PROTECTING GROUP

Vasulinga T. Ravikumar*, Tadeusz K. Wyrzykiewicz & Douglas L. Cole
Isis Pharmaceuticals, 2292, Faraday Ave., Carlsbad, CA 92008

Abstract: 2-Diphenylmethylsilylethyl (DPSE) is a new protecting group for the internucleotidic bonds in the synthesis of oligonucleotides by the phosphoramidite approach. This group is stable to acidic conditions and can be removed under mild conditions using aqueous ammonium hydroxide.



Tetrahedron, **1994**, *50*, 9267

$S_{RN}1$ Reactions of 7-Iodobicyclo[4.1.0]heptane with Carbanions. A Novel Stereoselective C–C Bond Formation on Cyclopropane Rings

Mónica A. Nazareno, and Roberto A. Rossi*
Depto Química Orgánica, Fac. Cs. Químicas, Univ. Nacional de Córdoba, Suc. 16, CC 61, 5016 Córdoba, Argentina

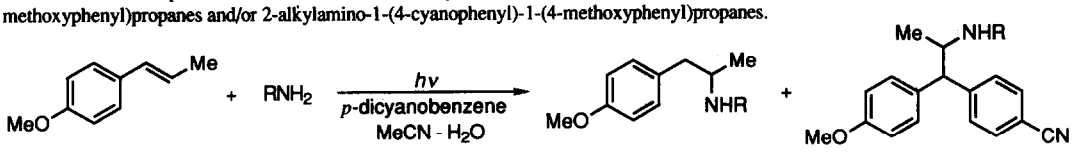
R = COPh, CO-2-$C_{10}H_7$, NO_2 >>

Tetrahedron, **1994**, *50*, 9275

Photoinduced Nucleophilic Addition of Ammonia and Alkylamines to Methoxy-Substituted Styrene Derivatives

Toshiaki Yamashita,*[a] Toshihiro Isami,[b] Kimiko Tanabe,[b] Masahide Yasuda,*[b] and Kensuke Shima[b]
[a]Department of Industrial Chemistry, Miyakonojo National College of Technology, Miyakonojo, Miyazaki 885, Japan
[b]Department of Materials Science, Faculty of Engineering, Miyazaki University, Gakuen-Kibanadai, Miyazaki 889-21, Japan

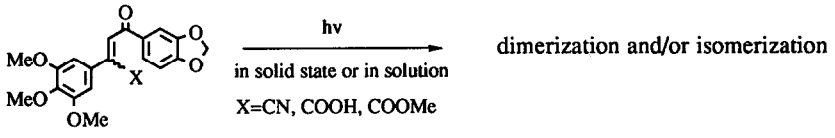
Photoinduced nucleophilic addition of ammonia and alkylamines to methoxy-substituted styrene derivatives gave 2-alkylamino-1-(4-methoxyphenyl)propanes and/or 2-alkylamino-1-(4-cyanophenyl)-1-(4-methoxyphenyl)propanes.



Tetrahedron, **1994**, *50*, 9287

PHOTOCHEMISTRY OF 2-(3,4,5-TRIMETHOXYPHENYL)-4-(3,4-METHYLENEDIOXYPHENYL)-4-OXO-2-BUTENONITRILE (β-CYANOCHALCONE) AND ITS RELATED COMPOUNDS.

Tsutomu Ishikawa,* Nobuyuki Koseki, Tomoko Furukawa, Eri Sakurada (nee Kawanabe), Chiharu Koseki, Yuki Saito, the late Koreharu Ogata, Takashi Harayama and Hisashi Ishii
Faculty of Pharmaceutical Sciences, Chiba University, 1-33 Yayoi, Inage, Chiba 263, Japan

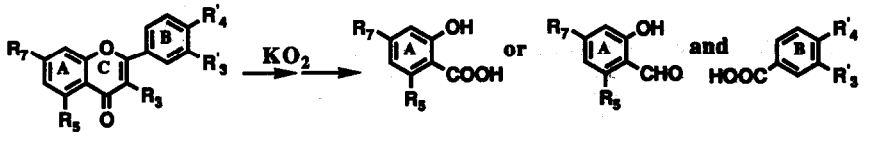


Tetrahedron, **1994**, *50*, 9303

Activité anti-oxydante des flavonoïdes: réactivité avec le superoxyde de potassium en phase hétérogène

C. Tournaire[a], M. Hocquaux[b], I. Beck[b], E. Oliveros[c]*M. T. Maurette[a]* ([a] Lab. IMRCP, Université Paul Sabatier, Toulouse, France; [b] Société l'Oréal, Aulnay-sous-Bois, France; [c] c/o Umweltmesstechnik, Engler-Bunte-Institut, Universität Karlsruhe, Germany)

Oxidation of flavonols by potassium superoxide (KO_2) yields acids and aldehydes due to the opening of ring C. Flavones, flavanones or flavanes induce superoxide dismutation without being oxidized.

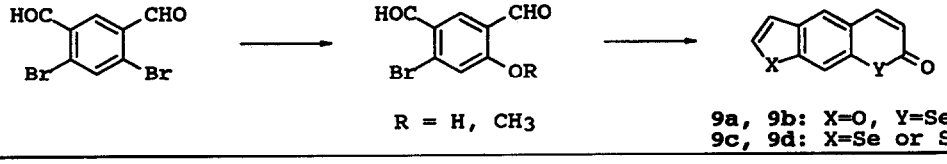


Tetrahedron, **1994**, *50*, 9315

Synthesis of Monosulphur and Monoselenium Analogues of Psoralen

Andreas E. Jakobs,* Léon E. Christiaens and Marcel J. Renson,
Université de Liège. Chimie Organique Hétérocyclique
Bat. B6. Sart Tilman 4000 Liège (Belgium)

The psoralen analogues containing one atom of sulphur or selenium in place of the endocyclic oxygen atoms are synthesized starting from 4,6-dibromoisophthalaldehyde.

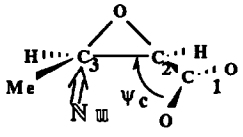


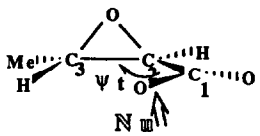
Tetrahedron, **1994**, *50*, 9325

Etude par la Modélisation Moléculaire de la Régiosélectivité de l'Ouverture des Acides Glycidiques par les Amines Aliphatiques

F. Grosjean [a-b], M. Huché [b], M. Larchevêque [a], J.J. Legendre b, Y. Petit* [a]

[a] Laboratoire de Synthèse Organique, associé au CNRS; [b] Laboratoire de Modélisation Appliquée à la Chimie et aux Procédés
Ecole Nationale Supérieure de Chimie de Paris, 11 rue Pierre et Marie Curie, 75231-Paris-Cedex-05, France.





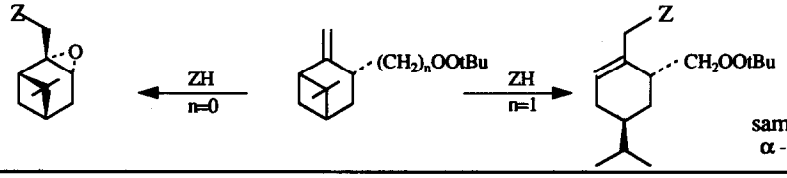
Par des calculs quantiques AM1 il est montré que les acides glycidiques substitués en *cis* s'ouvrent en C3 à cause des interactions entre le nucléophile et le carboxylate qui pour ces isomères prend une conformation *décalée*.

Tetrahedron, **1994**, *50*, 9335

KINETIC ASPECT OF INTRAMOLECULAR HOMOLYTIC SUBSTITUTIONS DECOMPOSITION OF UNSATURATED PEROXIDES DERIVED FROM PINANE

Evelyne MONTAUDON * et Marie-Josèphe BOURGEOIS

Institut du Pin, Université Bordeaux 1, 351 cours de la Libération, 33405 Talence Cedex, France.

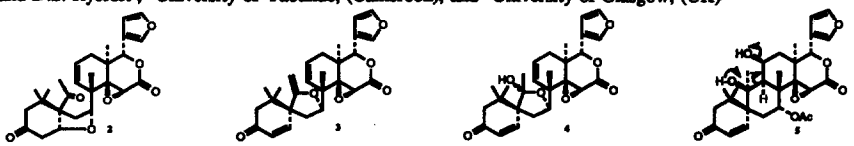


same results are obtained from α - pinenic structure

Tetrahedron, **1994**, *50*, 9343

LIMONOIDS FROM *CARAPA GRANDIFLORA* (MELIACEAE)

J.F. Ayafor[a,*], S.F. Kimbu[a], B.T. Ngadjui[a], T.M. Akam[a], E. Dongo[a], B.L. Sondengam[a], J.D. Connolly[b] and D.S. Rycroft[b]; [a]University of Yaoundé, (Cameroon), and [b]University of Glasgow, (UK)

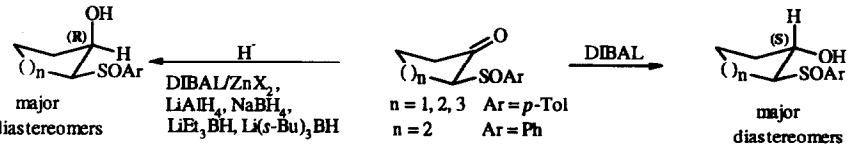


Three representatives of a new group of tetranortriterpenoids with a novel C-9, C-10 cleaved carbon skeleton, carapolides C 2, D 3 and E 4 have been obtained from *C. grandiflora*,. These limonoids appear to be derived biogenetically from the tetranortriterpenoid spirolactone 5, also present in the extract, by ring cleavage of the C-9, C-10 bond through a Retro-Prins reaction. Two nomilin derivatives, 7 and 8 were also isolated.

Tetrahedron, **1994**, *50*, 9355

Stereoselective Hydride Reductions of Chiral 2-*p*-Tolylsulfinylcycloalkanones

A. B. Bueno,[a] M. C. Carreño,[a] J. L. García Ruano,[a] B. Peña,[a] A. Rubio[a] and M. A. Hoyos[b]
[a]Departamento de Química (C-I); [b]Departamento de Química Agrícola y Geoquímica (C-VI)
Universidad Autónoma de Madrid, Cantoblanco, 28049-Madrid, SPAIN

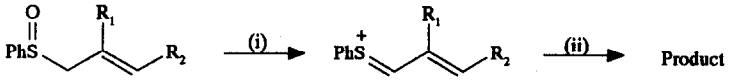


Tetrahedron, **1994**, *50*, 9365

ALLYLATION WITH PUMMERER-GENERATED SUBSTITUTED VINYLTHIONIUM IONS.

Roger Hunter [a*], Joseph P. Michael[b], Clive D. Simon[b] and Daryl S. Walter[b]. a: Department of Chemistry, University of Cape Town, Rondebosch 7700, South Africa; b: Department of Chemistry, University of the Witwatersrand, Johannesburg, 2001, South Africa.

Pummerer-generated substituted vinylthionium ions as allylating agents.



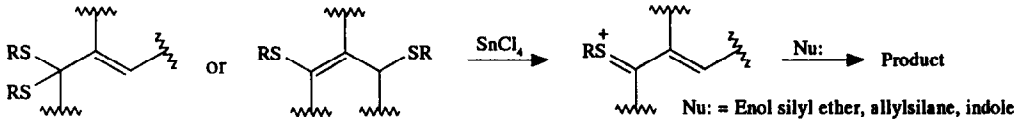
(i) TMSOTf / EtN(i-Pr)$_2$ / CH_2Cl_2 / -78°C ; (ii) Enol silyl ether. R_1 = H, CH_2TMS ; R_2 = SPh, Ph.

Tetrahedron, **1994**, *50*, 9377

ALLYLATION WITH SUBSTITUTED VINYLTHIONIUM IONS FROM $SnCl_4$ IONISATION OF 1,3- AND 3,3-BIS(ALKYL / PHENYLTHIO)PROPENES.

Roger Hunter [a*], Joseph P. Michael[b] and Daryl S. Walter[b]. a: Department of Chemistry, University of Cape Town, Rondebosch 7700, South Africa; b: Department of Chemistry, University of the Witwatersrand, Johannesburg, 2001, South Africa.

Substituted vinylthionium ions as allylating agents from $SnCl_4$ ionisation of 1,3- and 3,3-bis(alkylthio/arylthio)propenes.



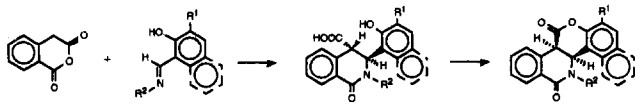
Nu: = Enol silyl ether, allylsilane, indole

Tetrahedron, **1994**, *50*, 9399

SYNTHESIS OF 11H-4b,10b-DIHYDRO[1]BENZOPYRANO[4,3-c]ISOQUINOLINE-6,11(5H)-DIONES AND 13H-6c,12b-DIHYDRONAPHTO[1',2':5,6]PYRANO[4,3-c]ISOQUINOLINE-8,13(7H)-DIONE FROM HOMOPHTHALIC ANHYDRIDE AND N-(2-HYDROXY-ARYLIDENE)ALKYLAMINES

A. Georgieva[a], E. Stanoeva[a], K. Karamfilova[a], S. Spassov[b], O. Angelova[c], M. Haimova [*,a], N. De Kimpe [*,d], M. Boelens[d]

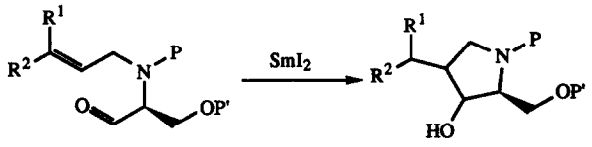
[a] University of Sofia, 1, J.Bourchier Av., 1126 Sofia, BULGARIA; [b] Institute of Organic Chemistry, 1113 Sofia, BULGARIA; [c] Institute of Applied Mineralogy, 92, Rakovski Str., 1000 Sofia, BULGARIA; [d] University of Gent, Coupure Links 653, B-9000 Gent, BELGIUM



Tetrahedron, **1994**, *50*, 9411

THE SYNTHESIS OF SUBSTITUTED PYRROLIDINES BY A SAMARIUM(II) MEDIATED RING CLOSURE.1

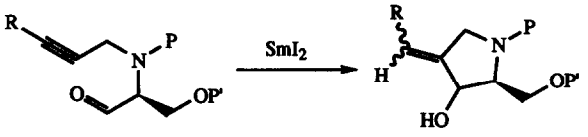
J.E. Baldwin, S. C. Mackenzie Turner and M.G. Moloney.
The University of Oxford, Dyson Perrins Laboratory, South Parks Road, Oxford.



Tetrahedron, **1994**, *50*, 9425

THE SYNTHESIS OF SUBSTITUTED PYRROLIDINES BY A SAMARIUM(II) MEDIATED RING CLOSURE.2

J.E. Baldwin, S. C. Mackenzie Turner and M.G. Moloney.
The University of Oxford, Dyson Perrins Laboratory, South Parks Road, Oxford.

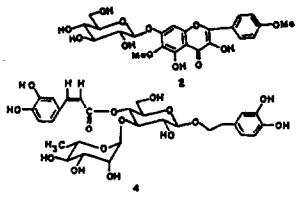


Tetrahedron, **1994**, *50*, 9439

POTENTIAL ANTITUMOR AGENTS FROM *LANTANA CAMARA* : STRUCTURES OF FLAVONOID-, AND PHENYLPROPANOID GLYCOSIDES

Shashi B. Mahato[a*], Niranjan P. Sahu[a], Subodh K. Roy[a] and Om P. Sharma[b]

[a]Indian Institute of chemical Biology, 4 Raja S.C. Mullick Road, Calcutta-700 032, India, [b]Biochemistry Laboratory, Indian Veterinary Research Institute, Regional Station, Palampur (H.P.) 176 061, India.



A novel flavonol glycoside, camaraside (**2**) and a new phenylpropanoid glycoside, lantanaside (**4**) have been isolated from the leaves of *Lantana camara*.

Tetrahedron, **1994**, *50*, 9447

Photoredox Reactions of Polypyridyl Chromium(III) Complexes with Arylthioacetic Acids in Acetonitrile and Aqueous Media

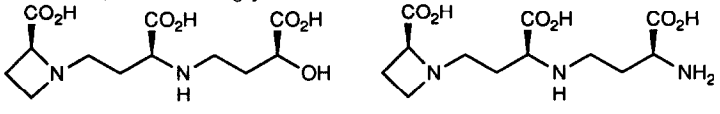
George Allen Gnanaraj,[a] Seenivasan Rajagopal*[a] and Chockalingam Srinivasan[b]
[a]School of Chemistry, [b]Department of Materials Science,
Madurai Kamaraj University, Madurai-625 021 India.

The photoredox reactions of Cr(III)-polypyridyl complexes with arylthioacetic acids in acetonitrile and arylthioacetate ions in aqueous media have been studied and interpreted in terms of appropriate schemes.

Tetrahedron, **1994**, *50*, 9457

Total Synthesis of 2'-Deoxymugineic Acid and Nicotianamine

Fumiyoshi Matsuura, Yasumasa Hamada,* and Takayuki Shioiri*
Faculty of Pharmaceutical Sciences, Nagoya City University, Tanabe-dori, Mizuho-ku, Nagoya 467, JAPAN



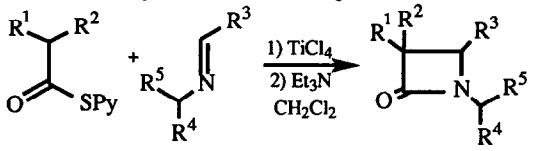
2'-deoxymugineic acid (**4**) nicotianamine (**5**)

Total synthesis of the unique phytosiderophores, 2'-deoxymugineic acid (**4**) and nicotianamine (**5**), have been achieved from the β-tyrosine derivatives using its aryl groups as the carboxyl synthon.

Tetrahedron, **1994**, *50*, 9471

STEREOSELECTIVE SYNTHESIS OF β-LACTAMS BY CONDENSATION OF THE TITANIUM ENOLATES OF 2-PYRIDYL THIOESTERS WITH IMINES BEARING A CHIRAL AUXILIARY.

Annunziata, R.; Benaglia, M.; Cinquini, M.; Cozzi, F.; Raimondi, L.
Centro CNR and Dipartimento di Chimica Organica e Industriale - Università di Milano (Italy)



R^1, R^2= H,Alkyl,Alkoxy
R^3= Aryl,Alkenyl,Alkyl
R^4, R^5 = Aryl,Alkyl, Alkoxyalkyl,COOMe

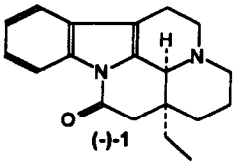
β-Lactams are obtained stereoselectively from imines bearing a chiral auxiliary and 2-pyridylthioesters.

Tetrahedron, **1994**, *50*, 9487

INDOLE ALKALOIDS. A COMBINED CHEMICAL AND ENZYMATIC ROUTE FOR EBURNANE RING CONSTRUCTION: FORMAL SYNTHESIS OF (-)-EBURNAMONINE

Giovanni Palmisano,* Paolo D'Annibale, and Marco Santagostino
Dipartimento di ChimicaOrganica ed Industriale
Centro CNR per lo Studio Sostanze Organiche Naturali,
Via Venezian 21, 20133 Milano, Italy

A stereocontrolled formal synthesis of (-)-Eburnamonine 1, a tetracyclic indole alkaloid used as antihypertensive drug, has been achieved through a combined chemical and enzymatic strategy.

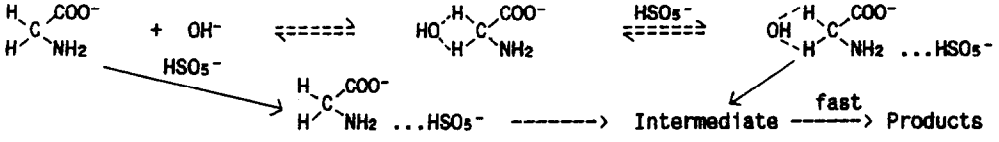


(-)-1

Tetrahedron, **1994**, *50*, 9495

INFLUENCE OF SUBSTITUENTS ON THE MECHANISM OF OXIDATION OF AMINO ACIDS

M.S.Ramachandran* and D.Easwaramoorthy, School of Chemistry, Madurai Kamaraj University Madurai - 625 021, India.
and
D.Suresh Kumar, PMT College, Melaneelithanallur, India

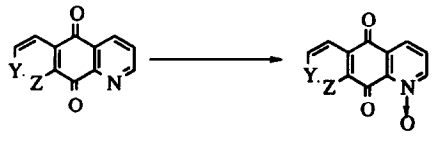


Tetrahedron, **1994**, *50*, 9505

N-OXIDES OF AZAANTHRAQUINONES

Blanca Ocaña, Modesta Espada and Carmen Avendaño. Departamento de Química Orgánica y Farmaceútica. Facultad de Farmacia. Universidad Complutense. 28040 Madrid. Spain.

A procedure is described for the efficient N-oxidation of heterocyclic quinones, which represents a considerable improvement over previous, multi-step methods.



Z-Y : CH=CH, NH-C=O

Tetrahedron, **1994**, *50*, 9511

THE PHOTOCHEMICALLY INDUCED OXIDATION OF ANILINE BY HYDROPEROXIDES: AN ELECTRON PARAMAGNETIC RESONANCE STUDY. PART II.

Loris Grossi
Dipartimento di Chimica Organica "A.Mangini"
Viale Risorgimento, 4 - 40136 Bologna, Italy.

The radical intermediates detected by EPR allow postulation of a reliable reaction mechanism confirming PhNO as the product of the first step of oxidation of aniline and PhNH(·) as its radical precursor.

$$PhNH_2 + ROOH \xrightarrow{h\nu} Ph\dot{N}H + ROO\cdot \longrightarrow PhNO$$