

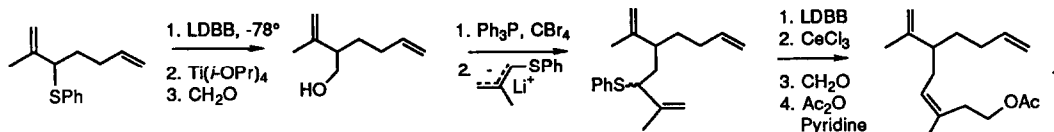
Tetrahedron, **1991**, 47, 9727

HIGHLY EFFICIENT TERPENOID PHEROMONE SYNTHESIS VIA REGIO- AND STEREOCONTROLLED PROCESSING OF ALLYL LITHIUMS GENERATED BY REDUCTIVE LITHIATION OF ALLYL PHENYL THIOETHERS

Dennis W. McCullough, M. Bhupathy, Elvio Piccolino, and Theodore Cohen*

Department of Chemistry, University of Pittsburgh, Pittsburgh, Pennsylvania 15260, U.S.A.

Extremely efficient syntheses of racemic versions of lavandulol, the Comstock mealy bug pheromone, and the California red scale pheromone (**1**) have been performed. The key step in each is the reductive lithiation of allyl phenyl thioethers by lithium *p,p'*-di-*tert*-butylbiphenylide (LDBB) to produce allyllithiums.



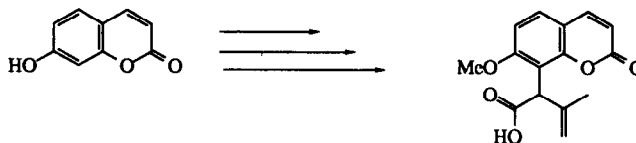
Tetrahedron, **1991**, 47, 9737

Total Syntheses of Microminutinin and Other Coumarins Through the Key Intermediate Isomurralonginol.

Steven Allison, Steven J. Burks, and Richard T. Taylor*

Chemistry Department, Miami University, Oxford, OH 45056 USA

A straightforward route to isomurralonginol from umbelliferone is described. The conversion of isomurralonginol to the naturally occurring coumarins isomurralonginol acetate, murralongin and microminutinin is discussed.



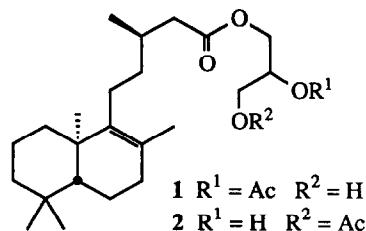
Tetrahedron, **1991**, 47, 9743

NEW DITERPENOIC ACID GLYCERIDES FROM THE ANTARCTIC NUDIBRANCH *AUSTRODORIS KERGUELENSIS*

Michael T. Davies-Coleman and D. John Faulkner*

Scripps Institution of Oceanography, University of California, San Diego La Jolla, CA 92093-0212 U.S.A.

A single specimen of the Antarctic nudibranch *Austodoris kerguelensis* contained two major glyceride esters **1** and **2**, together with three minor metabolites.

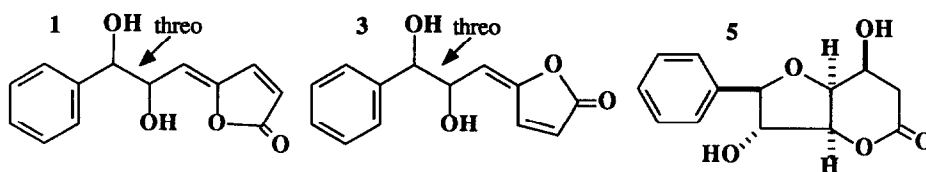


THREE NEW BIOACTIVE STYRYLLACTONES FROM *GONIOTHALAMUS GIGANTEUS* (ANNONACEAE)

Xin-ping Fang, Jon E. Anderson, Ching-er Chang, and Jerry L. McLaughlin*

Department of Medicinal Chemistry and Pharmacognosy, School of Pharmacy and Pharmacal Sciences, Purdue University, West Lafayette, IN 47907, U.S.A.

Goniobutenolides A (1) and B (3) and goniofupyrone (5) were isolated from the bark of *Goniothalamus giganteus* (Annonaceae). 1 and 3 were significantly cytotoxic to human tumor cells.



LONG RANGE EXCITON COUPLING FROM DIPYRRINONE CHROMOPHORES

Young-Seok Byun and David A. Lightner*

Dipyrrinones attached to (1*R*,2*R*)-cyclohexanediol via alkanolic acid β -substituents exhibit strong exciton coupling in their circular dichroism spectra. The bis-norxanthobilirubinate derivative (3) exhibits (+)-exciton chirality; whereas, the bis-xanthobilirubinate (1) exhibits (-) exciton chirality for the long wavelength uv-vis transition(s).

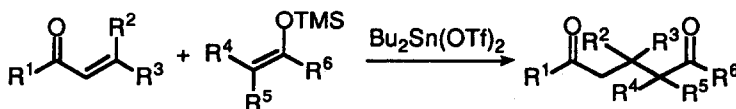
R			in CH ₂ Cl ₂
1: n = 2			$\Delta\epsilon_{439}^{\max}$ - 16 $\Delta\epsilon_{382}^{\max}$ + 22
3: n = 1			$\Delta\epsilon_{420}^{\max}$ + 38 $\Delta\epsilon_{367}^{\max}$ - 46

ORGANOTIN TRIFLATE AS PRACTICAL CATALYST FOR MICHAEL ADDITION OF ENOL SILYL ETHERS

Tsuneo Sato, Yoshiyuki Wakahara, Junzo Otera,* and Hitosi Nozaki

Department of Applied Chemistry, Okayama University of Science, Ridai-cho, Okayama 700, Japan

Michael reaction is effectively catalyzed by organotin triflate.

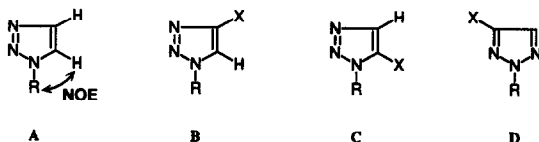


**ON THE APPLICATION OF NOE DIFFERENCE SPECTROSCOPY
FOR SPECTRAL AND STRUCTURAL ASSIGNMENTS WITH SUBSTITUTED 1,2,3-TRIAZOLES**

Wolfgang Holzer

Institute of Pharmaceutical Chemistry, University of Vienna, Währinger Straße 10, A-1090 Vienna, Austria

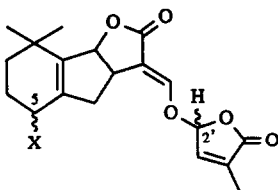
The unambiguous discrimination between signals due to H-4 and H-5 in various 1-substituted 1,2,3-triazoles of type A as well as the differentiation between triazole regioisomers B - D by means of NOE difference spectroscopy is described.



**ROUTES TO DERIVATIVES OF STRIGOL
(THE WITCHWEED GERMINATION FACTOR) MODIFIED IN THE 5-POSITION**

KATJA FRISCHMUTH, EMMANUELLE SAMSON, ANGELIKA KRANZ, PETER WELZEL,*
HEIKE MEUER, and WILLIAM S. SHELDRIK

Fakultät für Chemie der Ruhr-Universität, Postfach 102148, D-4630 Bochum (FRG)



The title compounds were prepared using nucleophilic substitution and electrophilic addition as key reactions. Methods for configurational assignment at C-5 and C-2' are presented.

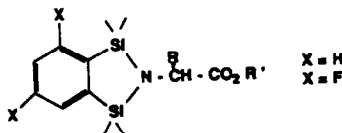
**N-bis-SILYLATION OF α -AMINO ACIDS :
"BENZOSTABASES" AS AMINO PROTECTING GROUP**

Florine Cavalier-Frontin, Robert Jacquier, Joseph Paladino and Jean Verducci.

URA 0468 : Aminoacides et peptides : synthèse, méthodologie, applications.

Université de Montpellier II - Place E.Bataillon, 34095 Montpellier, cedex 5, FRANCE.

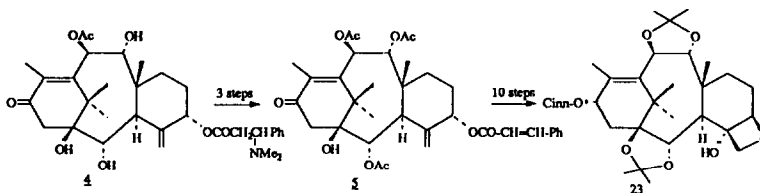
The very important steric hindrance dependence for the N-bis-silylation of amino acids is overcome using bicyclic "benzostabase" system.



THE FIRST HEMISYNTHESIS OF AN 4(20),5 OXETANE GROUP BEARING TAXANE-TYPE COMPOUND.

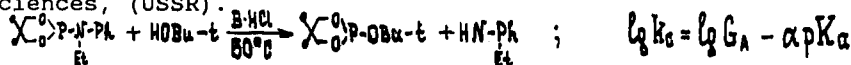
Laurent ETTOUATI, Alain AHOND*, Christiane POUPAT* and Pierre POTIER
 Institut de Chimie des Substances Naturelles, C.N.R.S., 91198 Gif/Yvette Cedex, France.

The taxine B, isolated from the yew leaves, has been used to prepare a taxane-type compound bearing an 4(20),5 oxetane group and an 13 α esterifiable hydroxyle.

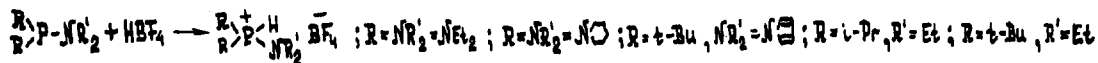


NATURE OF THE ACID-CATALYZED ALCOHOLYSIS OF AMIDES OF TRIVALENT-PHOSPHORUS ACIDS.

E.E.Nifanteyev^a, M.K.Gratchev^a, S.Yu.Burmistrov^a, L.K.Vasyanina^a, M.Yu.Antipin^b, Yu.T.Struchkov^b; ^aV.I.Lenin Pedagogical State University of Moscow, (USSR), Institute of Organoelement Compounds, USSR Academy of Sciences, (USSR).



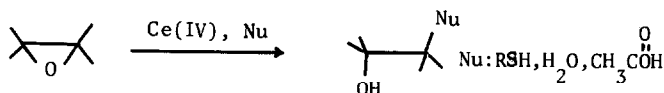
The general acid catalysis was established through the use of the Brønsted equation for the acid-catalyzed of amides P(III). Various amides P(III) form the P-protonated salts with HBF₄.



CERIC AMMONIUM NITRATE, AN EFFICIENT CATALYST FOR MILD AND SELECTIVE OPENING OF EPOXIDES IN THE PRESENCE OF WATER, THIOLS AND ACETIC ACID.

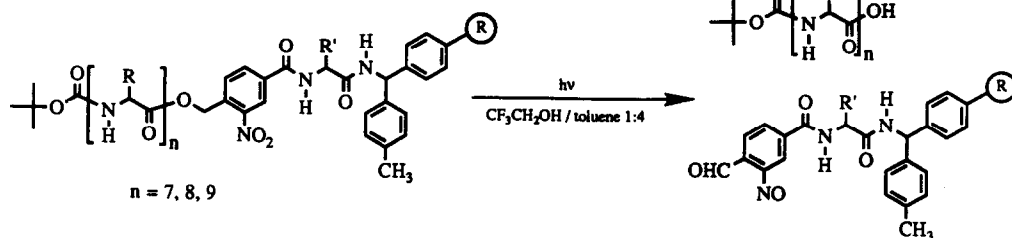
N. Iranpoor, I. Mohammad Pour Baltork, F. Shiriny Zardaloo.
 Department of Chemistry, Shiraz University, Shiraz, Iran.

Ce(IV) as Ceric Ammonium Nitrate is used as an efficient catalyst for ring opening of epoxides in the presence of water, thiols and acetic acid.



CONVERGENT SOLID-PHASE PEPTIDE SYNTHESIS. X. SYNTHESIS AND PURIFICATION OF PROTECTED PEPTIDE FRAGMENTS USING THE PHOTOLABILE Nbb-RESIN.

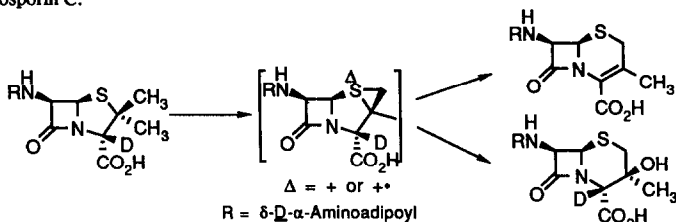
Paul Lloyd-Williams, Margarida Gairí, Fernando Albericio* and Ernest Giral, Universitat de Barcelona, E-08028 Barcelona, Spain.



CEPHALOSPORIN BIOSYNTHESIS: A BRANCHED PATHWAY SENSITIVE TO AN ISOTOPE EFFECT

Jack E. Baldwin, Robert M. Adlington, Nicholas P. Crouch, Christopher J. Schofield, Nicholas J. Turner and in part Robin T. Aplin. The Dyson Perrins Laboratory and the Oxford Centre for Molecular Sciences, University of Oxford, South Parks Road, Oxford, OX1 3QY.

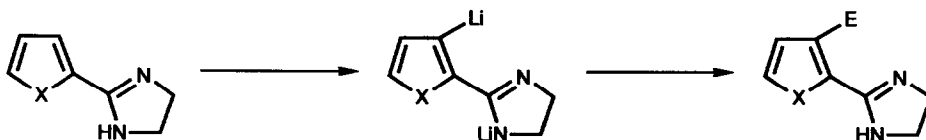
A kinetic isotope effect has been used to promote production of a shunt metabolite formed during the ring expansion of penicillin N to deacetoxycephalosporin C.



DIRECTED METALLATION STUDIES ON 2-(2-HETEROARYL)IMIDAZOLINES: SYNTHESIS OF SOME NOVEL 2,3-DISUBSTITUTED THIOPHENES AND FURANS

Derek J. Chadwick and David S. Ennis*
The Robert Robinson Laboratories, University of Liverpool, P.O. Box 147, Liverpool L69 3BX, U.K.

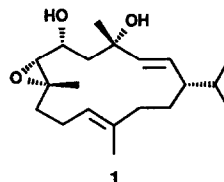
2-(2-Heteroaryl)imidazolines have been prepared and metallation studies have shown the imidazoline group to be a strong director of ortho-lithiation.



CONFORMATIONAL ANALYSIS OF A 7,8-EPOXYCEMBRANOID

Jan-Eric Berg,^a Aatto Laaksonen^b and Inger Wahlberg^c^aDepartment of Structural Chemistry, Arrhenius Laboratory, University of Stockholm, S-10691 Stockholm, Sweden. ^bDepartment of Physical Chemistry, Arrhenius Laboratory, University of Stockholm, S-10691 Stockholm, Sweden. ^cReserca AB, S-11884 Stockholm, Sweden.

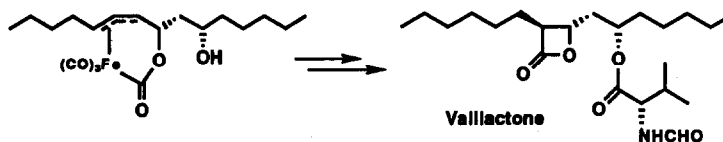
An analysis of the solution conformation of the tobacco cembranoid **1** has been performed by using NMR methods, molecular mechanics calculations and molecular dynamics simulations. The solid state structure has been determined by X-ray analysis.

THE USE OF π -ALLYLTRICARBONYLIRON LACTONE COMPLEXES IN THE SYNTHESIS OF THE β -LACTONE ESTERASE INHIBITOR (-)-VALILACTONE.

Roderick W. Bates, Rosalina Fernández-Moro and Steven V. Ley*

Department of Chemistry, Imperial College of Science, Technology and Medicine London; SW7 2AY, UK

The synthesis of Valilactone is reported employing the oxidation of π -allyltricarboxyliron lactone complexes.

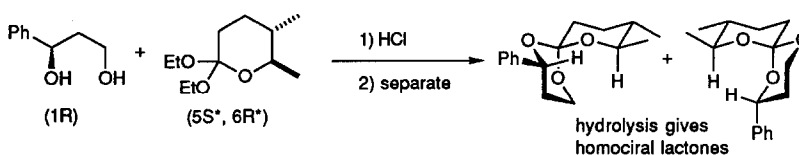


A Method for the Chromatographic Resolution of Tetrahydropyran-2-ones

Philip Ashworth, Shiddappa L. Belagali, Sharon Casson, Anna Marczak, and Philip Kociński*

Chemistry Department, The University, Southampton, SO9 5NH, UK

The spirocyclic ortholactones prepared from certain tetrahydropyran-2-ones (valerolactones) and (1R)-1-phenylpropan-1,3-diol are readily separable by flash chromatography on silica gel. Hydrolysis of the resolved ortholactones then provides the pure homochiral lactones.



SYNTHESIS OF NOVEL AMPHIPHILIC DIACETYLENES

SYNTHESIS OF NOVEL AMPHIPHILIC DIBLOCKED POLYESTERS WITH AMINO OR AMMONIUM FUNCTIONALITY

Department of Organic Chemistry, Agricultural University Wageningen,
Dreijenplein 8, 6703 HB Wageningen, The Netherlands

The Cadiot-Chodkiewicz coupling of mono- and dipropargylamines with iodododecyne gave 1 and 3. These amines were converted into the corresponding amphiphilic quaternary ammonium salts 7 and 8.

