

GRAPHICAL ABSTRACTS

Tetrahedron, 1993, 49, 8969

DIRECT SYNTHESIS OF DIALLYL SULFIDES FROM ALLYL ALCOHOLS AND HEXAMETHYLDISILATHIANE

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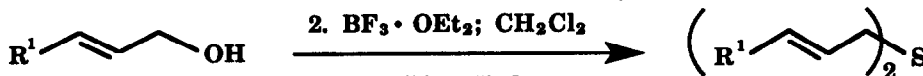
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1. Me₃SiSSiMe₃

2. BF₃·OEt₂; CH₂Cl₂

3. NaHCO₃; H₂O



R¹ = alkyl, aryl

(60–90%)

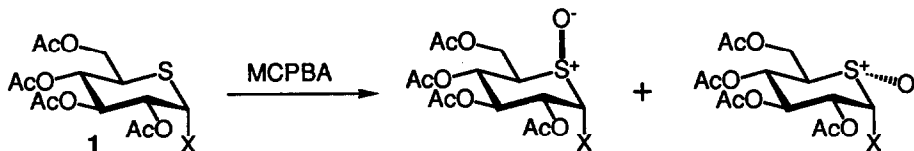
Reaction of allyl alcohols (1.0 equiv) with hexamethyldisilathiane (–0.55 equiv) in the presence of BF₃·OEt₂ (0.8–1.1 equiv) gave diallyl sulfides in 60–90% yields.

FACTORS INFLUENCING STEREOSELECTIVITY OF SULFUR OXIDATION: SUBSTITUENT EFFECTS ON THE OXIDATION OF 5-THIOGLYCOPYRANOSE DERIVATIVES

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Linear free energy relationship between stereoselectivity in the oxidation of 1 and the substituent X was studied.

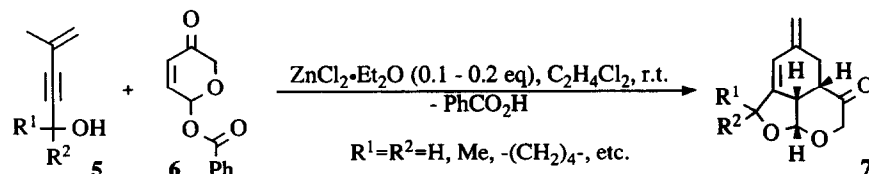


Tetrahedron, 1993, 49, 8977

The Intramolecular Enyne Diels-Alder Reaction. Stereoselective Construction of Tricyclic Dioxadienones and Mechanistic Outline.

H. M. R. Hoffmann*, D. Krumwiede, B. Mucha, H. H. Oehlerking and G. W. Prahst

Department of Organic Chemistry, University of Hannover, Schneiderberg 1 B, D-30167 Hannover, Germany



R¹=R²=H, Me, -(CH₂)₄, etc.

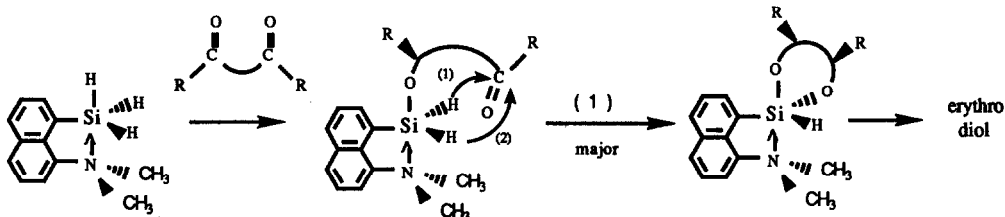
The enyne-ene cycloisomerization is investigated from a preparative and mechanistic viewpoint. The mechanistic origin of the resulting type I and type II dienes is proposed.

Tetrahedron, 1993, 49, 8999

INTRAMOLECULAR NUCLEOPHILIC CATALYSIS. STEREOSELECTIVE HYDROSILYLATION OF DIKETONES AND α -HYDROXYKETONES.

Robert, J.P. Corriu*, Gérard F. Lanneau and Zhifang Yu.

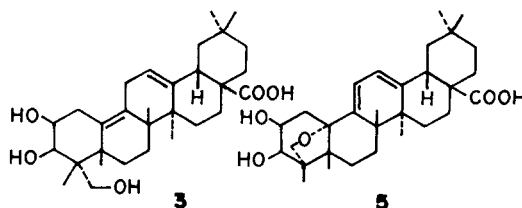
Laboratoire Hétérochimie et Aminoacides, Associé au CNRS n° 1097, Département de Chimie Organique Fine, Université de Montpellier II, Sciences et Techniques du Languedoc, F 34095 Montpellier Cedex 05 - France.

 Diketones are selectively reduced to erythro diols via hydrosilylation with a pentacoordinated aminoarylsilane. The α -hydroxyketones give the initial dehydrocondensation of the hydroxyl group followed by intramolecular hydrosilylation of the carbonyl moiety.

NOVEL MIGRATED OLEANANE TRITERPENOID SAPOGENINS FROM *MIMUSOPS ELENGI*

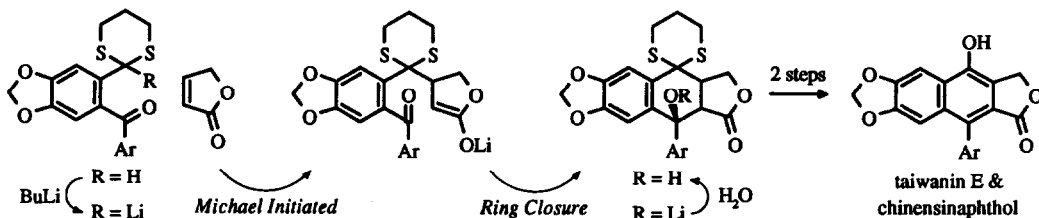
Sucharita Sen, Miranjan P. Sahu and Shashi B. Mahato*

Indian Institute of Chemical Biology, 4 Raja S.C. Mullick Road, Jadavpur, Calcutta - 700 032, India.

Two new pentacyclic triterpene acids, mimosopic acid (3) and mimosopsic acid (5) possessing the novel migrated oleanane skeleton, mimosopane were isolated.


MICHAEL INITIATED RING CLOSURE REACTIONS IN NATURAL PRODUCT SYNTHESIS: A CONCISE ENTRY TO THE PODOPHYLLINS.

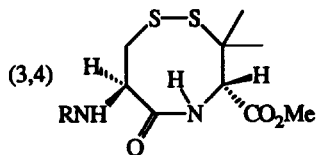
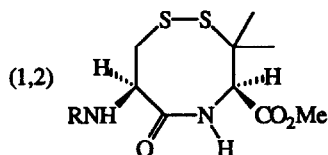
David C. Harrowven, Department of Chemistry, University of Wales, Bangor, Gwynedd, LL57 2UW, U.K.



THE SYNTHESIS AND CONFORMATIONAL ANALYSIS OF A PAIR OF DIASTEREOMERIC, CONFORMATIONALLY CONSTRAINED PEPTIDES WITH OPPOSITE AMIDE BOND GEOMETRIES

Sabrina Cumberbatch, Michael North*, and Guiseppe Zagotto
Department of Chemistry, University of Wales, Bangor, Gwynedd, LL57 2UW

Peptides (1) and (2) contain a *cis* amide bond whilst the diastereomeric peptides (3) and (4) have a *trans* amide bond within the eight membered ring as determined by nmr spectroscopy.



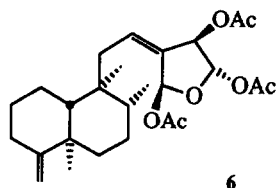
1) and 3) R=BOC
2) and 4) R= CF₃CO

NEO-CLERODANE DITERPENOIDS FROM AERIAL PARTS OF LINARIA SAXATILIS VAR. GLUTINOSA.

Arturo San Feliciano^a, Marina Gordaliza^{a*}, Jose M. Miguel del Corral^a, María L. de la Puente^a, Santiago García-Granda^b and Miguel A. Salvado^b.

^aDepartamento de Química Orgánica. Facultad de Farmacia. Universidad de Salamanca. Campo Charro s/n. E-37007 Salamanca. Spain.

^bDepartamento de Química Física y Analítica. Facultad de Química. Universidad de Oviedo. Julián Clavería s/n. E-33006 Oviedo. Spain.

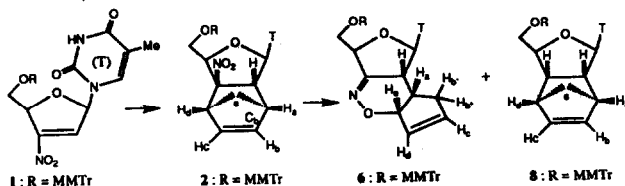


Abstract: The structures of natural neo-clerodanes highly functionalised at the side chain are assigned

DIELS-ALDER REACTION OF 2',3'-UNSATURATED-3'-NITRO-THYMIDINE. FIRST CHEMICAL EVIDENCE OF NITROXIDE RADICAL FORMATION IN THE RADICAL-PROMOTED DENITRATION REACTION

N. Hossain, J. Plavec, C. Thibaudeau & J. Chattopadhyaya*
Department of Bioorganic Chemistry, Box 581, Biomedical Center, University of Uppsala, S-751 23 Uppsala, Sweden

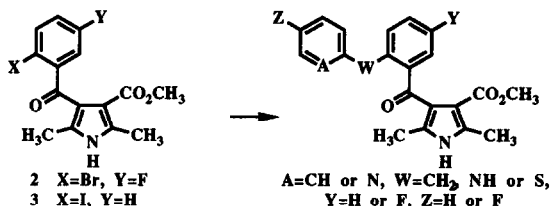
Diels-Alder reaction of nitro-olefin 1 has been used for the first time to yield various unique fused 2',3'-dideoxy-2',3'-bis-substituted nucleosides (e.g. 2) which upon *n*-Bu₃SnH promoted denitration reaction give fused 4H-5,6-dihydro-1,2-oxazine derivative (e.g. 6) along with 3'-denitrated product (e.g. 8).



A NEW SYNTHESIS OF FPL 64176 AND ANALOGUES: THE DISCOVERY OF BENZOYLPIRROLE CALCIUM CHANNEL ACTIVATORS WITH LOW NANOMOLAR POTENCY

Andrew J. G. Baxter* and Simon J. Teague. Department of Medicinal Chemistry, Fisons plc, Pharmaceutical Division, Research and Development Laboratories, Bakewell Road, Loughborough, Leicestershire LE11 0RH, United Kingdom.

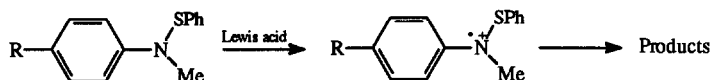
Heavy metal assisted halogen displacement on 2-halobenzoylpyrroles (2 and 3) leads to a simple synthesis of FPL 64176 (1) and a variety of analogues (4-10). The difluoro derivative (4), EC₅₀ 1nM, and the amino linked analogue (7), EC₅₀ 2.7nM, are presently the most potent calcium channel activators known.



THE REACTION OF BENZENESULFENANILIDES WITH LEWIS ACIDS: INVOLVEMENT OF RADICAL CATION INTERMEDIATES.

Loris Grossi and Pier Carlo Montecchi Dipartimento di Chimica Organica "A. Mangini", Viale Risorgimento 4, 40136 Bologna, Italy

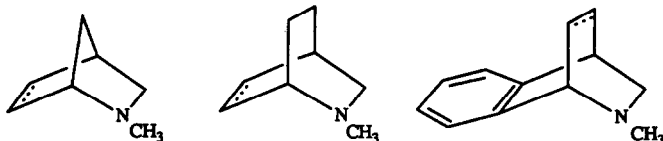
4-Substituted N-methylbenzenesulfenilides react with Lewis acids to afford radical cation intermediates, some of which could be detected by e.p.r. spectroscopy.



NMR STUDIES OF N-METHYL DERIVATIVES OF THE 2-AZABICYCLO[2.2.1]HEPTYL AND -[2.2.2]OCTYL RING SYSTEMS; KINETIC PROTONATION IN THE DETERMINATION OF INVERTOMER PREFERENCES

Djaballah Belkacemi and John R. Malpass,* Department of Chemistry, University of Leicester, Leicester LE1 7RH, U.K.

Analysis of the ¹H, ¹³C, and ¹⁵N NMR spectra for N-methyl derivatives of the title amines and the corresponding protonated amines leads to estimates of invertomer preferences.

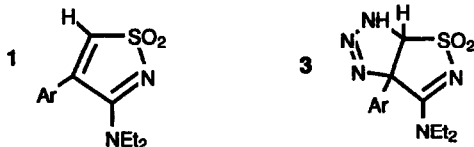


ISOTHIAZOLES. PART II. REACTIONS OF 3-DIETHYLAMINO-4-(4-METHOXY-PHENYL)-ISOTHIAZOLE-1,1-DIOXIDE WITH SODIUM AZIDE.

 Oliviero Carugo^a, Francesca Clerici^{ab} and Donato Pocar^b.

^a) Dipartimento di Chimica Generale, Università di Pavia, Via Taramelli 12, I-27100 Pavia, Italy.

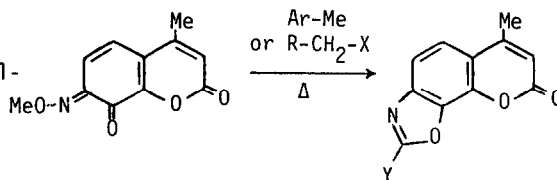
^b) Istituto di Chimica Organica, Facoltà di Farmacia, Università di Milano, Via Venezian 21, I-20133 Milano, Italy.

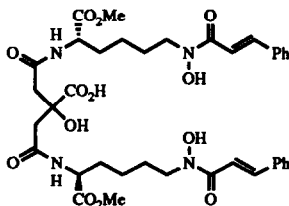
 3-Diethylamino-4-(4-methoxyphenyl)-isothiazole-1,1-dioxide **1**, reacts with NaN₃ affording **3** and other products deriving from **3** or from the addition of the reaction solvent. Reaction mechanisms are discussed.

1-8H-PYRANO[3,2-g]BENZOXAZOL-8-ONES FROM 7-METHOXYIMINO-4-METHYLCHROMENE-2,8-DIONE

 D.N.Nicolaidis^{a*}, C.Bezergiannidou-Balouctsi^a, K.E.Litinas^a
 E.Malamidou-Xenikaki^a, D.Mentzafos^b and A.Terzis^b.

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^bNational Research Center of Physical Sciences "DEMOKRITOS" 153 10, Aghia Paraskevi, Greece.

 Ar = Ph, 4-MeC₆H₄, 4-MeOC₆H₄, 4-Pyridyl-
 R = Ph, PhCO, MeCO, EtOCO,
 X = Cl, Br, COOEt,
 Y = H, Ar, Me, COMe, CPh, COOEt,

SYNTHESIS OF THE HYDROXAMATE SIDEROPHORE NANNOCHELIN A

 Gerard C. Mulqueen, Gerald Pattenden,* and Donald A. Whiting
 Department of Chemistry, The University, Nottingham, NG7 2RD


OXIDATION CHEMISTRY OF 5,6-DIHYDROXY-2-METHYLINDOLE

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*Department of Organic and Biological Chemistry, University of Naples,
Via Mezzocannone 16, I-80134 Naples, Italy.*

Oxidation of 5,6-dihydroxy-2-methylindole leads to a complex mixture of oligomers, the major of which were characterised as the trimers 8-10 and five related dimers.

