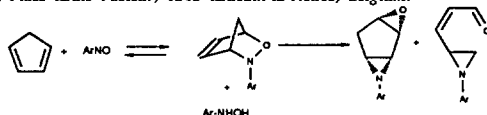


*Tetrahedron*, 1991, 47, 8323

**EPOXY-EPIMINATION OF CYCLIC CONJUGATED DIENES-VII-**

CYCLOADDITION OF NITROSO-HALOGENOBENZENES TO CYCLOPENTADIENE FOLLOWED BY REARRANGEMENT TO EPOXY-EPIMINO- AND  $\gamma$ - $\delta$ -EPIMINO-PENTADIENAL DERIVATIVES VIA N-O AND C-C BOND BREAKING.

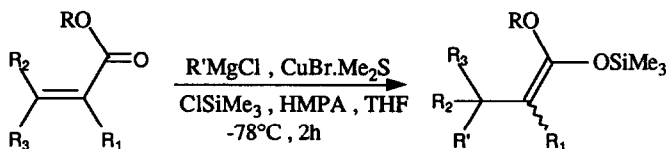
Daniel Rousselle, Eric Francotte, Jeannine Feneau-Dupont, Bernard Tinant, Jean P. Declercq and Heinz G. Viehe\*  
*Laboratoire de chimie organique et Laboratoire de chimie physique et de cristallographie, Université Catholique de Louvain1, Place Louis Pasteur, 1348 Louvain-la-Neuve, Belgium.*



*Tetrahedron*, 1991, 47, 8331

**CONJUGATE ADDITION OF GRIGNARD REAGENTS TO  $\alpha,\beta$ -UNSATURATED ESTERS : PREPARATION OF ALKYL-SILYLKETENEACETALS.**

A. MAGOT-CUVRU, L. BLANCO\* and J. DROUIN, Laboratoire des Carbocycles, I.C.M.O., Bât. 420, Université de Paris-Sud, 91405 Orsay Cedex (France)



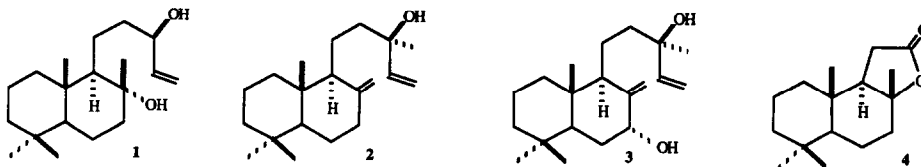
R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>
H	H	H
H	H	Me
Me	H	H
H	Me	Me

*Tetrahedron*, 1991, 47, 8339

**Microbial Transformation of Diterpenes: Hydroxylation of Sclareol, Manool and Derivatives by *Mucor plumbeus***

G.Aranda \*<sup>a</sup>, M.S.El Kortbi <sup>a</sup>, J.-Y.Lallemand <sup>a</sup>, A.Neuman <sup>b</sup>, A.Hampumi <sup>c</sup>, I.Facon <sup>c</sup> and R.Azerad <sup>c</sup>  
<sup>a</sup> Lab. de Synthèse Organique, Ecole Polytechnique, 91128-Palaiseau; <sup>b</sup> Lab. de Chimie Bioorganique Structurale, rue M.Cachin, 93012-Bobigny; <sup>c</sup> Lab de Chimie et Biochimie Pharmacologiques et Toxicologiques, Univ.R.Descartes, 45 rue des Saints-Pères,75006-Paris, France.

A series of regio- and stereoselectively hydroxylated derivatives was obtained, sometimes in high yields, by microbial oxidation of labdane-derived diterpenes as sclareol (1), manool (2), 7 $\alpha$ -hydroxymanol (3) or sclareolide (4).



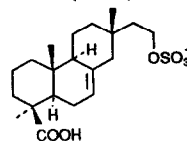
ISOLATION AND STRUCTURE OF HYMATOXINS B - E  
AND OTHER PHYTOTOXINS FROM *HYPOXYLON MAMMATUM*, FUNGAL PATHOGEN OF LEUCE POPLARS

K. Borgschulte<sup>a,b</sup>, S. Rebuffat<sup>a</sup>, W. Trowitzsch-Kienast<sup>b</sup>, D. Schomburg<sup>b</sup>, J. Pinon<sup>c</sup> and B. Bodo<sup>a\*</sup>

<sup>a</sup>Laboratoire de Chimie, URA CNRS 401, Muséum national d'Histoire naturelle, 63, rue Buffon 75005 Paris (France). <sup>b</sup>Gesellschaft für Biotechnologische Forschung mbH, Mascheroder Weg 1, 3300 Braunschweig (Germany).

<sup>c</sup>Laboratoire de Pathologie forestière, CNRF, Champenoux, 54280 Seichamps (France).

Hymatoxins B-E and 3,4,5- and 3,4,8-trihydroxynaphthalenones were isolated from a culture filtrate of the plant pathogenic fungus *H. mammatum*, and their structures determined by spectral methods.

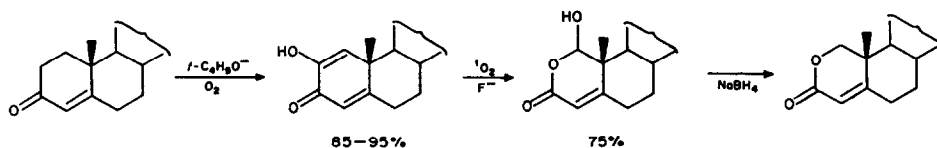


Hymatoxin C

THE PHOTOSENSITIZED OXIDATION OF  $\alpha$ -KETO ENOLS:  
A SINGLET OXYGEN APPROACH TO 2-OXASTEROIDS

Aryeh A. Frimer<sup>\*</sup>, Shlomo Ripstos, Vered Marks, Gladis Aljadeff,  
Judith Hameiri-Buch and Pessia Gilinsky-Sharon

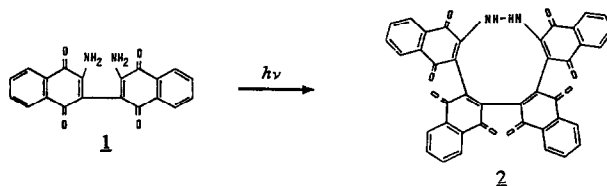
The Ethel and David Resnick Chair in Active Oxygen Chemistry  
The Department of Chemistry, Bar-Ilan University Ramat Gan 52900, Israel



PHOTOLYSIS OF 3,3'-DIAMINO-2,2'-BI-NAPHTHOQUINONYL

Frans J.C. Martins<sup>\*</sup>, Agatha M. Viljoen, Stefanus J. Strydom, Louis Fourie and Philuphus L. Wessels  
Department of Chemistry, Potchefstroom University for CHE, Potchefstroom 2520, South Africa

Sunlight irradiation of **1** in acetic anhydride produced **2**. Structure elucidation from FAB-MS, <sup>1</sup>H and <sup>13</sup>C study.

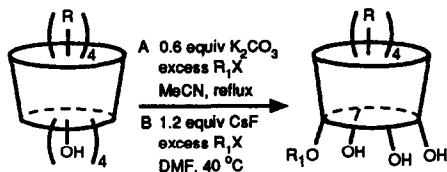


## SYNTHESIS OF MONOALKYLATED CALIX[4]ARENES VIA DIRECT ALKYLATION

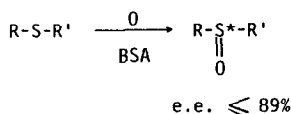
Leo C. Groenen,<sup>a</sup> Bianca H. M. Ruël,<sup>a</sup> Alessandro Casnati,<sup>b</sup> Willem Verboom,<sup>a</sup>  
 Andrea Pochini,<sup>b</sup> Rocco Ungaro,<sup>b</sup> and David N. Reinhoudt<sup>a,\*</sup>

<sup>a</sup>Laboratory of Organic Chemistry, University of Twente, P. O. Box 217,  
 7500 AE Enschede, The Netherlands, and <sup>b</sup>Institute of Organic Chemistry,  
 University of Parma, Viale delle Scienze, 43100 Parma, Italy

Monoalkylated calix[4]arenes can be obtained in good yields  
 via direct alkylation of the unsubstituted calix[4]arenes. The  
 use of a weak base is essential.

ENANTIOSELECTIVE OXIDATION OF SULPHIDES TO SULPHOXIDES IN  
THE PRESENCE OF BOVINE SERUM ALBUMIN.

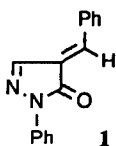
S. Colonna<sup>a\*</sup>, N. Gaggero<sup>a</sup>, M. Leone<sup>a</sup>, P. Pasta<sup>b</sup> - <sup>a</sup>Dipartimento di Chimica Organica e Industriale  
 Università di Milano, Italy; <sup>b</sup>Istituto di Chimica degli Ormoni, CNR, Milano, Italy.



The enantioselective oxidation of organic sulphides with BSA, as chiral auxiliary, and in situ  
 generated dioxiranes or caroate has been examined.

LITHIUM PERCHLORATE CATALYSIS OF THE HETERO  
DIELS-ALDER REACTION: A SPECIFIC LITHIUM CATION  
EFFECT.

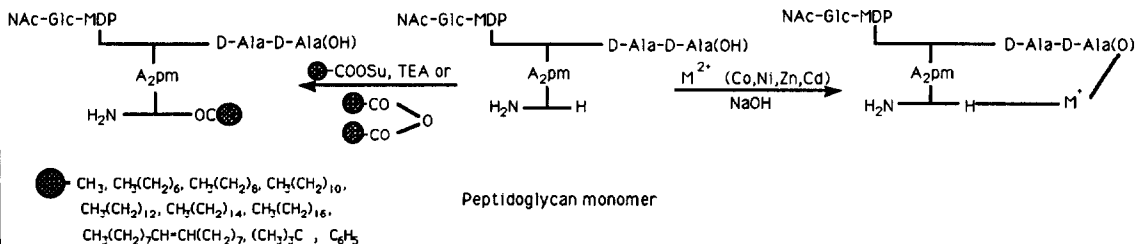
G. Desimoni, G. Faita, P.P. Righetti, and G. Tacconi.  
 Dipartimento di Chimica Organica dell'Università, V.le Taramelli 10, 27100 Pavia, Italy.



The effect of lithium perchlorate in differing solvents on the rate of the hetero  
 Diels-Alder reaction between benzylidene-pyrazolone **1** and ethyl vinyl ether  
 was kinetically investigated. All salt-solvent mixtures converge to the same  
 $k_{rel}$  value and this evidence strongly supports a catalysis promoted by the  
 lithium cation acting as a Lewis acid. The nature of the interaction between  
 catalyst and solvent was also investigated.

**SYNTHESIS AND BIOLOGICAL ACTIVITIES OF SOME PEPTIDOGLYCAN MONOMER DERIVATIVES**

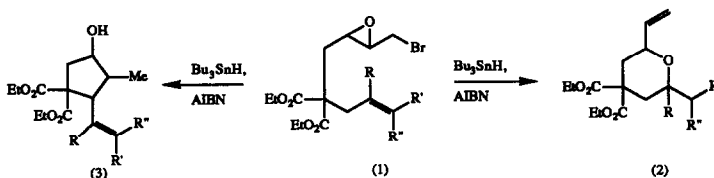
B Šušković, Z Vajtner, R Naumski. Pliva, Research Department, 41000 Zagreb, Yugoslavia



**INTRAMOLECULAR REACTIONS OF ALLYLOXY RADICALS FEATURING SIX-CENTRED TRANSITION STATES; REGIOCHEMISTRY AND STEREOCHEMISTRY.**

Michael J. Begley, Neil Housden, Amanda Johns and John A. Murphy\*, Department of Chemistry, University of Nottingham, University Park, Nottingham NG7 2RD

Radical-induced conversions of the bromoepoxides (1) to tetrahydropyrans (2) and cyclopentanols (3) have been studied

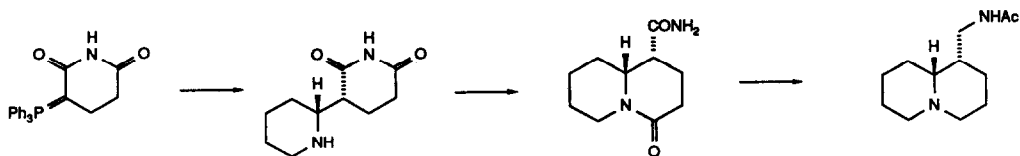


**Biomimetic Synthesis of Quinolizidine Alkaloids**

Martin J. Wanner and Gerrit-Jan Koomen\*

Laboratory of Organic Chemistry, University of Amsterdam, The Netherlands

Quinolizidine alkaloids are synthesized from glutarimide ylids via a piperidine ring transformation that is based on the lupinine biosynthesis.

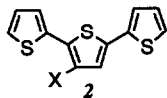


**SELECTIVE AND EFFICIENT SYNTHESSES OF PHOTOTOXIC  
2,2':5',2"-TERTHIOPHENE DERIVATIVES BEARING  
A FUNCTIONAL SUBSTITUENT IN THE 3'- OR THE 5-POSITION**

Renzo Rossi, Adriano Carpita, Maurizio Ciofalo, and Vito Lippolis

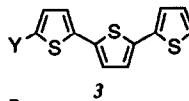
*Dipartimento di Chimica e Chimica industriale - Università di Pisa - Via Risorgimento 35, I-56126 Pisa, ITALY*

Efficient and selective procedures involving Pd-mediated carbon-carbon bond forming reactions have been developed to prepare 2,2':5',2"-terthiophene derivatives of general formula **2** and **3**.



**2a**: X = OC<sub>2</sub>H<sub>5</sub>

**2b**: X = SCH<sub>3</sub>



**3d**: Y = CH=CH<sup>E</sup>-CONH-*i*-Bu    **3g**: Y = CONH-*i*-Bu

**3a**: Y = CHF<sub>2</sub>

**3b**: Y = OCH<sub>3</sub>

**3e**: Y = Br

**3h**: Y = C≡C-(CH<sub>2</sub>)<sub>2</sub>-CH=CH<sup>E</sup>-CONH-*i*-Bu

**3c**: Y = CH=CH<sup>E</sup>-COOEt    **3f**: Y = COOEt