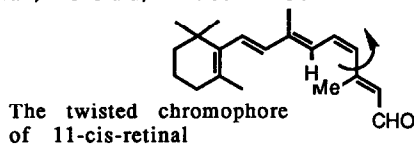
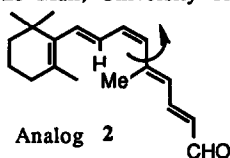
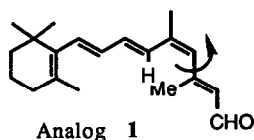


GRAPHICAL ABSTRACTS

*Tetrahedron, 1991, 47, 3711*

**11-METHYL-9-DEMETHYLRETINAL AND 11-METHYL-9,13-DIDEMETHYLRETINAL. Effect of Altered Methyl Substitution Pattern on Polyene Conformation, Photoisomerization and Formation of Visual Pigment Analogs.** by Leticia U. Colmenares & Robert S. H. Liu\*  
Department of Chemistry, 2545 The Mall, University of Hawaii, Honolulu, HI 96822 USA



**RESTRICTED BOND ROTATION AND FLUORESCENCE FOLLOWING PHOTOEXCITATION OF DIPYRRINONES**

Jin-Shi Ma and David A. Lightner\*

Weakly fluorescing dipyrinones can be converted to strongly fluorescing pigments by connecting the lactam and pyrrole nitrogens with a  $-CH_2-$  group so as to inhibit  $4Z \rightarrow 4E$  C=C isomerization.

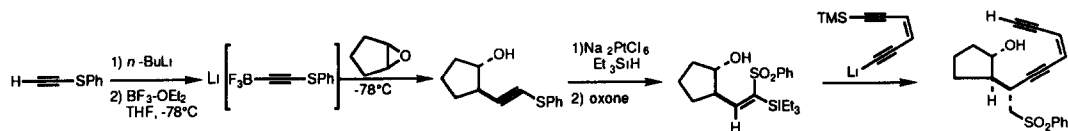


*Tetrahedron, 1991, 47, 3727*

**Diastereoselective Heteroconjugate Addition of Acetylenic Derivatives**

Angkana Herunsalee, Minoru Isobe\* and the late Toshio Goto

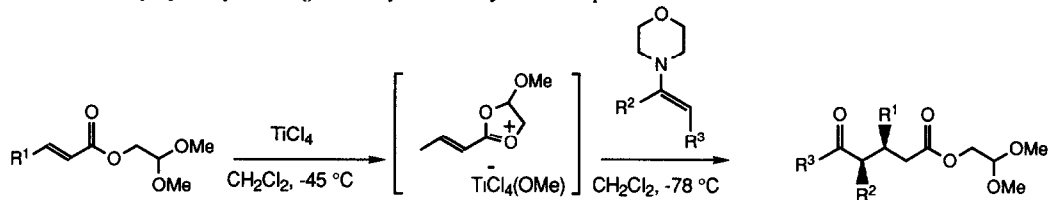
Laboratory of Organic Chemistry, School of Agriculture, Nagoya University, Chikusa, Nagoya 464-01, Japan



THE HIGHLY SYN-SELECTIVE MICHAEL REACTION OF ENAMINES WITH 2-(1-ALKENYL)-1,3-DIOXOLAN-2-YLIUM CATIONS GENERATED FROM 2,2-DIMETHOXYETHYL 2-ALKENOATES *IN SITU*

Shigeru Machida, Yukihiro Hashimoto, Kazuhiko Saigo,\* Jun-ya Inoue, and Masaki Hasegawa

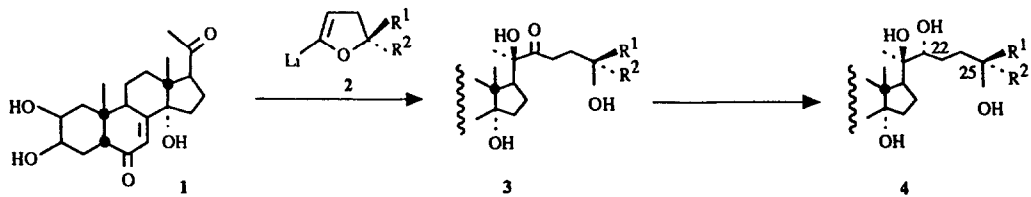
Department of Synthetic Chemistry, Faculty of Engineering,  
The University of Tokyo, Hongo, Bunkyo-ku, Tokyo 113, Japan



A FACILE ROUTE TO 20-HYDROXYECDYSONE AND SIDE CHAIN HOMOLOGUES FROM POSTSTERON

UDO HEDTMANN, RALF KLINTZ, KURT HOBERT, JADWIGA FRELEK, IONTSCHO VLAHOV, and PETER WELZEL\*  
Fakultät für Chemie der Ruhr-Universität, Postfach 102148, D-4630 Bochum (FRG)

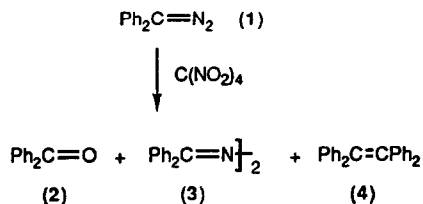
A flexible approach to ecdysteroids, chain elongated at C-26 and C-27, is reported. Key features are the addition of 5-lithio 2,3-dihydrofurans (**2**) to poststeron (**10**) and a stereoselective reduction of the 22-OO group.



Oxygen Transfer by Dissociative Electron Transfer. Reaction of Tetranitromethane with Diazo Compounds and Sulfides

Waldemar Adam\* and Maria Elena González-Nuñez, Institute of Organic Chemistry,  
University of Würzburg, Am Hubland, D- 8700 Würzburg, Germany

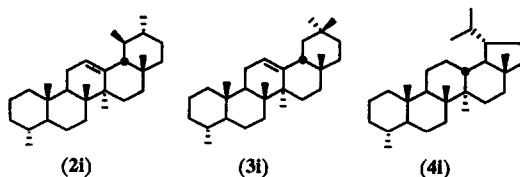
In the absence of oxygen, diphenyldiazomethane is oxidized by  $C(NO_2)_4$  to afford benzophenone, its azine and tetraphenylethylene by involving the triad  $[1^+; NO_2; \cdot C(NO_2)_3]$ ; also sulfides undergo this dissociative ET process.



**CHARACTERISATION OF 24-NOR-TRITERPENOIDS OCCURRING IN SEDIMENTS AND CRUDE OILS BY COMPARISON WITH SYNTHESIZED STANDARDS**

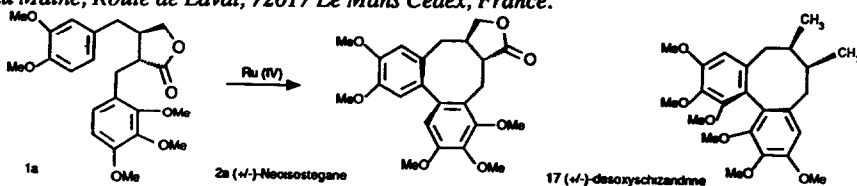
Torren M. Peakman<sup>a,\*</sup>, H. Lo ten Haven<sup>a</sup>, Jürgen Rullkötter<sup>a</sup> and Joseph A. Curiale<sup>b</sup>  
<sup>a</sup>Forschungszentrum Jülich GmbH, D-5170 Jülich, FRG. <sup>b</sup>UNOCAL Inc., P.O. Box 76, Brea, CA 92621, U.S.A.

24-nor-Urs-12-ene (2i), 24-nor-olean-12-ene (3i) and related double bond isomers, and 24-nor-lupane (4i), have been identified in sediments and crude oils by comparison with standards.



**Ruthenium Dioxide in Fluoro Acid Medium: I. A New Agent in the Biaryl Oxidative Coupling. Application to the Synthesis of Non Phenolic Bisbenzocyclooctadienes Lignan Lactones.**

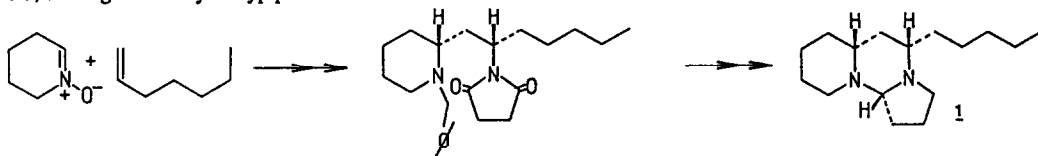
Y. Landais, J.-P. Robin\* and A. Lebrun. *Département de Chimie, Institut Universitaire de Technologie Université du Maine, Route de Laval, 72017 Le Mans Cédex, France.*



**STEREOSELECTIVE TOTAL SYNTHESIS OF (+)-TETRAPONERINE-8**

P. Merlin, J.C. Braekman\*, D. Dalozé.

Lab. of Bio-organic Chemistry, Fac. Sciences, University of Brussels, Av. F.D. Roosevelt 50 - 1050 Brussels - Belgium  
 A stereocontrolled total synthesis of the ant alkaloid (+)-tetraponerine-8 (1) has been achieved in 7 steps and 28% overall yield, starting from 1-hydroxypiperidine.

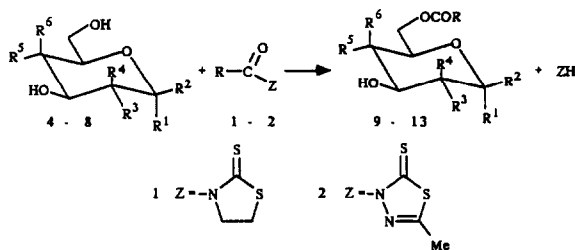


SUGAR CHEMISTRY WITHOUT PROTECTING GROUPS-III. A FACILE  
CHEMICAL SYNTHESIS OF 6-O-ACYL-D-GLYCOPYRANOSIDES AND METHYL-  
6-O-ACYL-D-GLYCOPYRANOSIDES

Krystyna BACZKO and Daniel PLUSQUELLEC \*

Laboratoire de Chimie Organique et des Substances Naturelles,  
associé au CNRS, ENSCR, Avenue du général Leclerc,  
F-35700 RENNES

- 4: methyl-  $\alpha$ -D-glucoside  
5: methyl-  $\alpha$ -D-mannoside  
6: methyl-  $\beta$ -D-galactoside  
7:  $\alpha$ -D-glucose  
8:  $\alpha$ -D-galactose

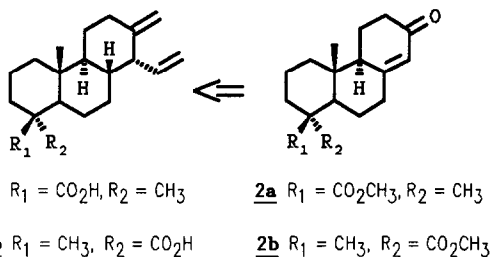


SYNTHESIS OF (-)-AURICULARIC ACID AND ITS C-4 EPIMER  
THE ABSOLUTE CONFIGURATION OF AURICULARIC ACID

A. Abad,\* M. Arnó,\* M. Peiró and R. J. Zaragoza

Departamento de Química Orgánica. Universitat de Valencia  
Dr. Moliner 50, 46100 Burjassot, Valencia, Spain.

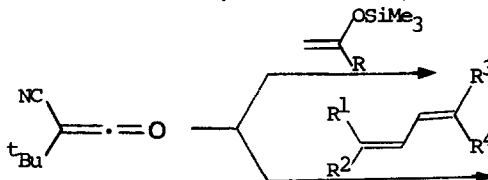
(-)-Auricularic acid (**1a**) and its C-4 epimer (**1b**) have  
been synthesised from (**2a**) and (**2b**), respectively.  
The absolute configuration of natural auricularic  
acid is established as (4*R*, 5*S*, 8*S*, 9*R*, 10*S*, 14*S*).



ADDITION REACTIONS OF TERT-BUTYLCYANOKETENE TO SILYL  
ENOL ETHER AND CONJUGATED DIENES.

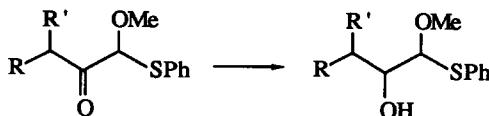
Abdulrahman H. Al-Husaini, Ikhtiar Khan and Sk. Asrof Ali  
Chemistry Dept., King Fahd University of Petroleum & Minerals, Dhahran 31261, Saudi Arabia.

A study of the addition reactions  
of tert-butylcyanoketene with several  
1-aryl-1-trimethylsilyloxyethenes and  
acyclic conjugated dienes has been  
carried out.



**CHELATION AND NON-CHELATION CONTROLLED STEREOSELECTIVE REDUCTION OF  $\alpha$ -METHOXY- $\alpha$ -PHENYLTHIO KETONES.**

R. Annunziata, M. Cinquini, F. Cozzi, A. Fuchicello.  
Dipartimento di Chimica Organica - Università di Milano - Italy.



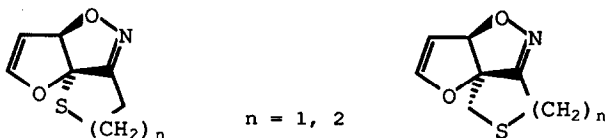
The reduction of some diastereoisomerically pure  $\alpha$ -methoxy- $\alpha$ -phenylthio ketones (R=alkyl, aryl; R'=alkoxy, alkyl) by  $Zn(BH_4)_2$  and DIBAL-H is discussed and rationalized.

**REGIO- AND STEREOCONTROL IN THE INTRAMOLECULAR NITRILE OXIDE CYCLOADDITION TO 2-FURYLTHIOL- AND 2-FURYLMETHANETHIOL DERIVATIVES.**

R. Annunziata, <sup>a</sup>M. Cinquini, <sup>a</sup>F. Cozzi, <sup>a</sup>L. Raimondi, <sup>a</sup>G. Licini. <sup>b</sup>

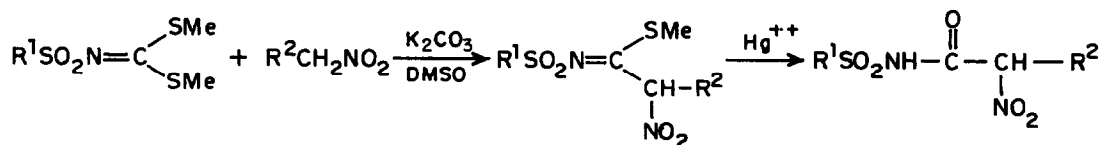
a: Università di Milano. b: Università di Padova (Italia).

2-Furyl- and 2-furylmethyl nitrosulphides undergo a totally regiocontrolled intramolecular cycloaddition to give *cis*-fused products in high yield.



**SYNTHESIS AND TAUTOMERISM OF 1-ARYLSULFONAMIDO-1-METHYLTHIO-2-NITROETHYLENES : CONVERSION TO N-ARYLSULFONYL NITROACETAMIDES**

S.P.MAYBHATE, A.R.A.S.DESHMUKH AND S RAJAPPA\*  
National Chemical Laboratory, Pune 411 008, India



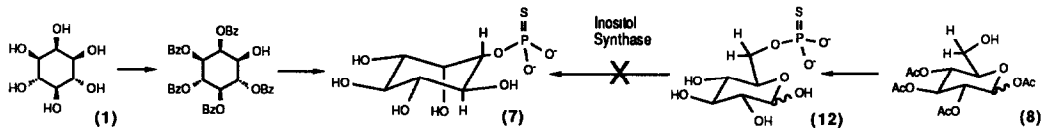
**SYNTHESIS OF D- AND L- MYO-INOSITOL PHOSPHOROTHIOATE, SUBSTRATES FOR INOSITOL MONOPHOSPHATASE**

Graham R. Baker<sup>a</sup>, David C. Billington<sup>b</sup> and David Gani<sup>a\*</sup>

<sup>a</sup> Chemistry Department, The University, Southampton, SO9 5NH, U.K.,

Present Address. Chemistry Department, The Purdie Building, The University, St. Andrews, Fife, KY16 9ST, U.K

<sup>b</sup> Merck, Sharp and Dohme, Neuroscience Research Centre, Terlings Park, Eastwick Road, Harlow, Essex, CM20 2QR U K



Each enantiomer of the title compound (7) was synthesised from *myo*-inositol (1). The glucose phosphorothioate (12) was not converted to (7) by inositol synthase