

## GRAPHICAL ABSTRACTS

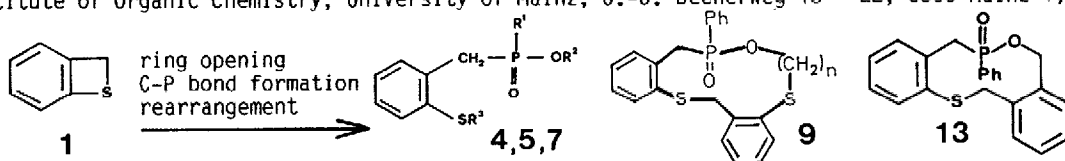
Tetrahedron Lett.30,155 (1989)

### REACTIONS OF BENZOTHIETE WITH PHOSPHORUS NUCLEOPHILES

#### - A NOVEL TYPE OF ARBUZOV REARRANGEMENT

Hans-Peter Niedermann, Heinz-Ludwig Eckes, and Herbert Meier\*

Institute of Organic Chemistry, University of Mainz, J.-J. Becherweg 18 - 22, 6500 Mainz 1, BRD

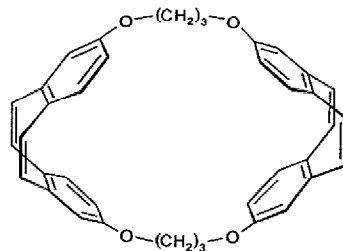


Tetrahedron Lett.30,159 (1989)

### CHANGING THE SIZE OF A CAVITY VIA AN ELECTRON-TRANSFER: SYNTHESIS AND REDUCTION OF 1,5,22,26-TETRAOXA-[5,5]-(2,8)-DIBENZO[A,E]CYCLOOCTA-TETRAENOPHANE

W. Heinz, H.-J. Räder and K. Müllen  
Dep. of Organic Chemistry, University of Mainz

The synthesis and electron transfer reactions of the title compound, the first macrocycle incorporating two cyclooctatetraene units, are described.

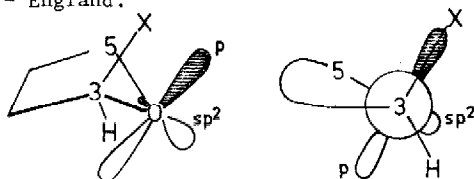


### ANOMERIC EFFECTS IN CARBOHYDRATES: NON EQUIVALENCE OF ENDOCYCLIC OXYGEN LONE PAIRS.

A.Cossé-Barbi\*, D.G. Watson\*\* and J.E. Dubois\*.

\* Institut de Topologie et de Dynamique des Systèmes de l'Université Paris 7, associé au C.N.R.S. 1, rue Guy de la Brosse, 75005 Paris - France.

\*\* Crystallographic Data Centre, University Chemical Laboratory, Lensfield Road, Cambridge, CB2 1EW - England.



- High axial orientation in furanose-like compounds.
- Conclusive evidence of a 2p lone pair anomeric effect with an endo  $sp_2$  oxygen.

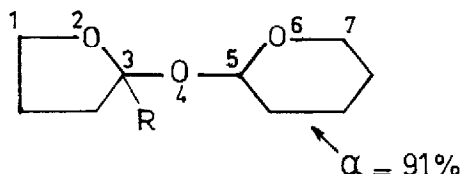
Tetrahedron Lett.30,163 (1989)

### WHEN LOCAL CROWDING REINFORCES AN ANOMERIC EFFECT.

J.E.Dubois\*, A. Cossé-Barbi\* and D.G. Watson\*\*.

\* Institut de Topologie et de Dynamique des Systèmes de l'Université Paris 7, associé au C.N.R.S., 1, rue Guy de la Brosse, 75005 Paris - France.

\*\* Crystallographic Data Centre, University Chemical Laboratory, Lensfield Road, Cambridge, CB2 1EW - England.



- On the furanose ring, the  $R \neq H$  group:
- enhances the axial orientation of pyranoses,
  - induces syn instead of anti relative positions for the two rings with regard to the C-3/O-4/C-5 plane.

Tetrahedron Lett.30,167 (1989)

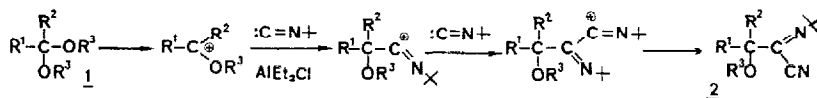
REACTION OF ISOCYANIDES. III - SYNTHESIS OF  $\beta$ -ALKOXY IMIDOYL CYANIDES FROM ACETALS.

Hélène PELLISSIER and Gérard GIL

Unité Associée au C.N.R.S. n°109 - Faculté des Sciences et Techniques  
Avenue Escadrille Normandie-Niemen - Boîte D12 - 13397 MARSEILLE CEDEX 13

Tetrahedron Lett. 30,171 (1989)

Tert-butyl isocyanide reacts with acetals, in presence of diethylaluminium chloride, to afford  $\alpha$ -iminonitriles.

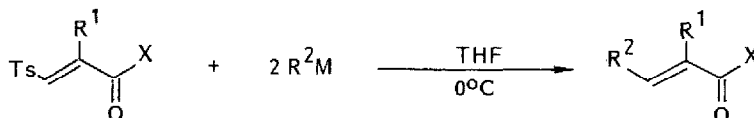


STEREOSELECTIVE SYNTHESIS OF (E)- $\beta$ -ALKYL ACRYLATES AND ACRYLAMIDES

Carmen Nájera and Miguel Yus

Departamento de Química Organometálica, Facultad de Química,  
Universidad de Oviedo, 33071 Oviedo, Spain

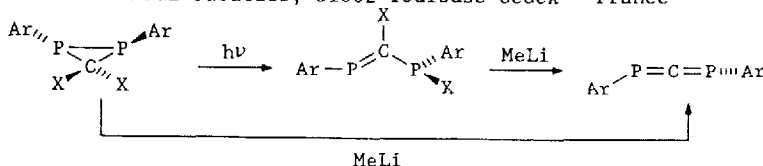
Tetrahedron Lett. 30,173 (1989)



RING OPENING OF DIPHOSPHIRANES LEADING TO 1,3-DIPHOSPHAALLENE

M. Gouygou, C. Tachon, R. El Ouatib, O. Ramarijaona, G. Etemad-Moghadam and M. Koenig \*  
U.A. 454 Université Paul Sabatier, 31062 Toulouse Cedex - France -

Tetrahedron Lett. 30,177 (1989)

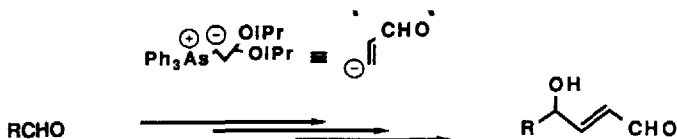


The dihalogeno-diphosphirane and its photochemical isomer, by action of MeLi lead quantitatively to 1,3-diphosphaallene.

(3,3-DIISOPROPOXYPROPYL) TRIPHENYLARSONIUM YLIDE:  
A NEW SYNTHETIC EQUIVALENT OF  $\beta$ -FORMYL VINYL ANION

P. CHABERT, J. B. OUSSET, C. MIOSKOWSKI \*  
CNRS UA 31 Faculté de Pharmacie, Université Louis Pasteur  
74, route du Rhin F- 67401 STRASBOURG

Tetrahedron Lett. 30,179 (1989)



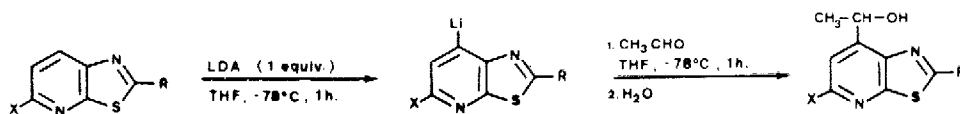
Tetrahedron Lett. 30,183(1989)

### REGIOSELECTIVE METALATION OF THIAZOLO[5,4-b]PYRIDINES

Axel Couture, Eric Huguerre and Pierre Grandclaude

Laboratoire de Chimie Organique Physique, U.A. C.N.R.S. N° 351

Université des Sciences et Techniques de Lille Flandres-Artois - 59655 Villeneuve d'Ascq, France.

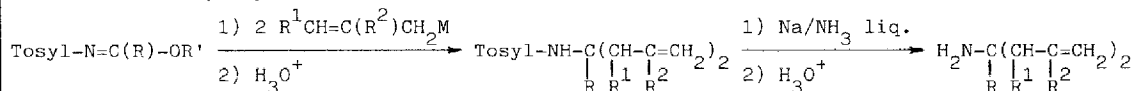


Tetrahedron Lett. 30,185 (1989)

N-tosyl iminoéthers et iminocarbonates d'alkyle :  
synthons d'amines primaires à structure ramifiée.

Francis BARBOT, Laboratoire de Chimie des Organométalliques associé au CNRS,  
Université de Poitiers, 40, avenue du Recteur Pineau, 86022 POITIERS, France.

L'action d'organométalliques allyliques  $R^1CH=C(R^2)CH_2M$  sur les N-tosyl iminoéthers et iminocarbonates d'alkyle permet d'atteindre aisément des amines primaires à structure ramifiée :



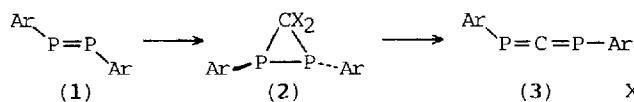
Tetrahedron Lett. 30,187 (1989)

A CONVENIENT NEW ROUTE FROM DIPHOSPHENE TO 1,3-DIPHOSPHO-  
ALLENE AND DYNAMIC NMR STUDIES OF THE 2,4,6-TRI-t-BUTYLPHENYL DERIVATIVE

Masaaki Yoshifuji,\* Shigeru Sasaki, Takashi Niitsu, and Naoki Inamoto

Department of Chemistry, Faculty of Science, The University of Tokyo, Hongo, Tokyo 113, Japan

Synthesis of diphospha-allene (3) from diphosphene (1) via diphosphirane (2).



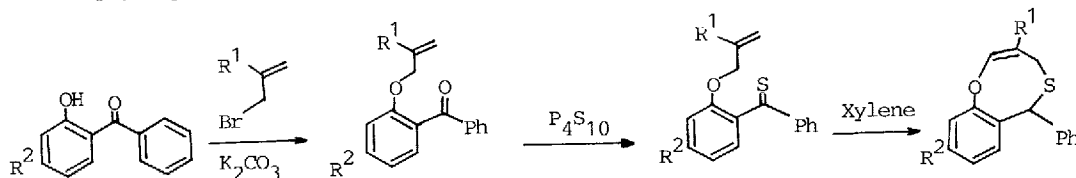
Activation parameters of the internal rotation around the P-C<sub>Ar</sub> bond in (3) are  $\Delta H^\ddagger = 12.3 \pm 0.2$  kcal/mol and  $\Delta S^\ddagger = -6.4 \pm 0.8$  e.u. at 0°C.

Tetrahedron Lett. 30,189 (1989)

INTRAMOLECULAR ENE REACTION OF UNSATURATED THIOKETONES

Shinichi Motoki,\* Tsumoru Watanabe, and Takao Saito

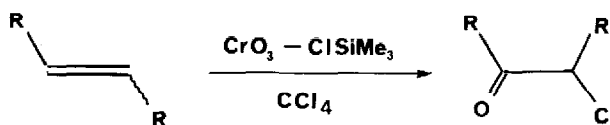
Department of Chemistry, Faculty of Science, Science University  
of Tokyo, Kagurazaka, Shinjuku-ku, Tokyo 162 JAPAN



Tetrahedron Lett.30,193(1989)

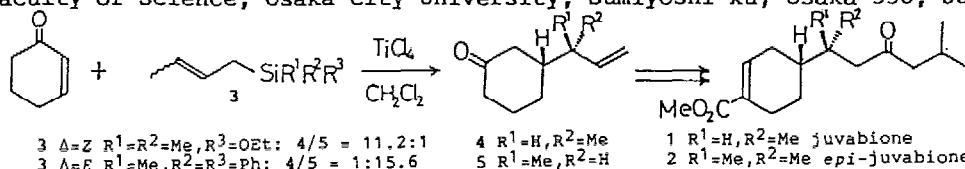
**OXIDATION OF OLEFINS USING CHROMIC ANHYDRIDE  
CHLOROTRIMETHYLSILANE. A CONVENIENT SYNTHESIS  
OF  $\alpha$ -CHLORO KETONES.**

Jong Gun Lee\* and Dong Soo Ha  
Department of Chemistry,  
Pusan National University,  
Pusan 609-735, Korea



**EFFICIENT STEREOSELECTIVE SYNTHESSES OF BOTH  
( $\pm$ )-JUVA BIONE AND ( $\pm$ )-EPI-JUVA BIONE BY NEW  
EXTRACYCLIC STEREOCONTROL METHODOLOGY**

Takashi Tokoroyama\* and Li-Rui Pan,  
Faculty of Science, Osaka City University, Sumiyoshi-ku, Osaka 558, Japan

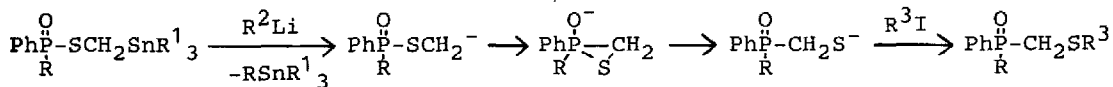


Tetrahedron Lett.30,197(1989)

Tetrahedron Lett.30,201(1989)

**THE WITTIG REARRANGEMENT OF CHIRAL PHOSPHINOTHIOLATES  
INDUCED BY THE TIN-LITHIUM TRANSMETALLATION**

Takayuki Kawashima,\* Satoshi Kojima, Takashi Miyake, and Naoki Inamoto\*  
Department of Chemistry, Faculty of Science, The University of Tokyo,  
Hongo, Bunkyo-ku, Tokyo 113, Japan



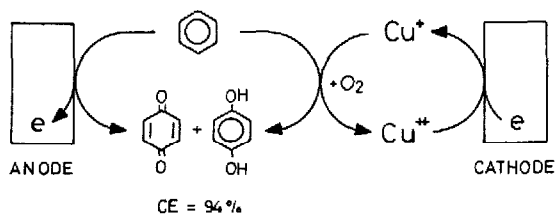
(R=1-Naphthyl, t-Bu; R<sup>1</sup>=n-Bu, Ph; R<sup>2</sup>=Me, n-Bu, Ph; R<sup>3</sup>=Me, Et)

The Wittig rearrangement proceeds with a retention of configuration.

Tetrahedron Lett.30,205(1989)

**A NOVEL PAIRED ELECTROSYNTHESIS OF p-BENZOQUINONE  
AND HYDROQUINONE FROM BENZENE**

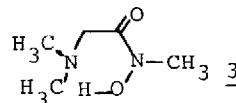
Sotaro Ito\*, Ryuichi Katayama,  
Atsutaka Kunai, and Kazuo Sasaki  
Department of Applied Chemistry,  
Hiroshima University, Saijo,  
Higashi Hiroshima 724, Japan



Tetrahedron Lett.30,207(1989)

**N-METHYL-2-DIMIETHYLAMINOACETOHYDROXAMIC ACID AS A NEW REAGENT FOR THE SELECTIVE CLEAVAGE OF ACTIVE ESTERS UNDER NEUTRAL CONDITIONS**

Mitsunori Ono\* and Isamu Itoh  
Ashigara Research Laboratories, Fuji Photo Film Co., Ltd. Minami-Ashigara, Kanagawa 250 01 Japan

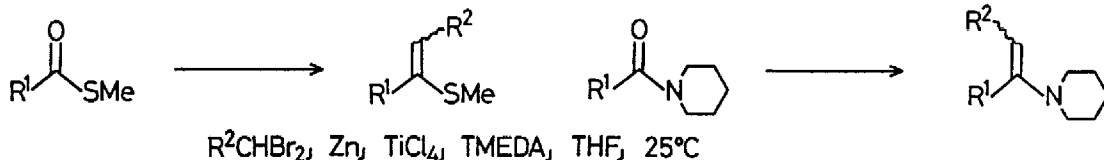


The title compound **3** serves as one of versatile bifunctional catalyst for the the selective cleavage of active esters under neutral conditions. The kinetic studies and the applications of **3** are described.

Tetrahedron Lett.30,211(1989)

**PREPARATION OF ALKENYL SULFIDES AND ENAMINES BY ALKYLIDENATION OF CARBOXYLIC ACID DERIVATIVES.**

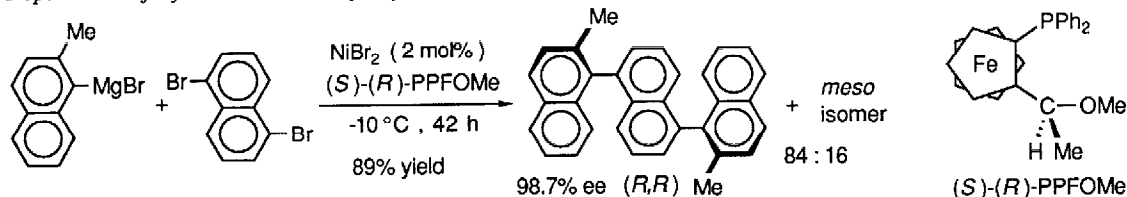
Kazuhiko Takai,\* Osamu Fujimura, Yasutaka Kataoka, and Kiitiro Utimoto  
Department of Industrial Chemistry, Kyoto University, Yoshida, Kyoto, Japan



Tetrahedron Lett.30,215(1989)

**ASYMMETRIC SYNTHESIS OF AXIALLY CHIRAL 1,1':5',1''- AND 1,1':4',1''-TERNAPHTHALENES BY ASYMMETRIC CROSS-COUPLING WITH A CHIRAL FERROCENYLPHOSPHINE-NICKEL CATALYST**

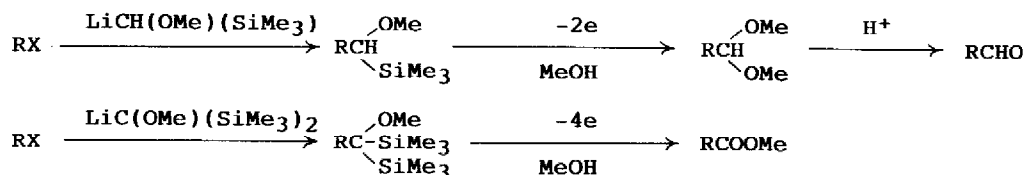
Tamio Hayashi, Keiichi Hayashizaki, and Yoshihiko Ito  
Department of Synthetic Chemistry, Kyoto University, Kyoto 606, Japan



Tetrahedron Lett.30,219(1989)

**METHOXY(TRIMETHYLSILYL)METHANE AND METHOXYBIS-(TRITETHYLSILYL)METHANE AS NEW REAGENTS FOR**

**HOMOLOGATION.** Jun-ichi Yoshida,\* Shin-ichiro Matsunaga, and Sachihiko Isoe,\*  
Institute of Organic Chemistry, Faculty of Science, Osaka City University,  
Sugimoto 3-3-138, Sumiyoshi, Osaka 558, Japan

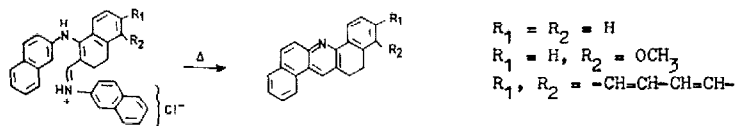


Tetrahedron Lett.30,223(1989)

## REGIOSELECTIVE CYCLISATION OF ANIL DERIVATIVES - A SHORT SYNTHESIS OF DIBENZACRIDINES

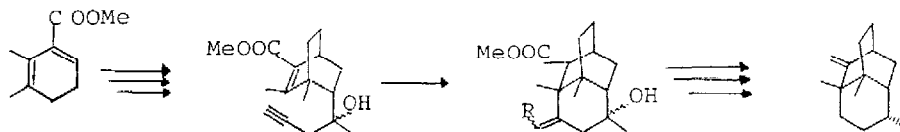
G. K. KAR, A. C. KARMAKAR AND J. K. RAY\*, Department of Chemistry, Indian Institute of Technology, Kharagpur 721302 India

One step synthesis of dihydrodibenz (a,h) acridine derivatives by thermal cyclisation of anil hydrochlorides are described.



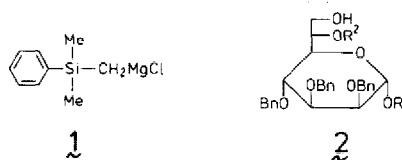
Tetrahedron Lett.30,225(1989)

## VINYL RADICAL INDUCED MICHAEL ADDITIONS: TOTAL SYNTHESIS OF (+)-SEYCHELLENE

K.Vijaya Bhaskar and G.S.R.Subba Rao\*  
Department of Organic Chemistry, Indian Institute of Science Bangalore 560 012, INDIA

Tetrahedron Lett.30,229(1989)

## A VERSATILE AND NEW STEREOSELECTIVE APPROACH TO THE SYNTHESIS OF L-GLYCERO-D-MANNO-HEPTOPYRANOSIDES

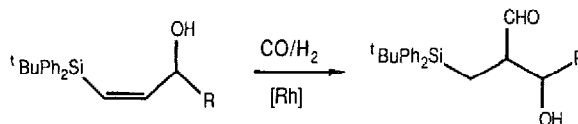
G.J.P.H. Boons, G.A. van der Marel and J.H. van Boom  
Gorlaeus Laboratories, P.O. Box 9502, 2300 RA Leiden, The NetherlandsThe Grignard reagent 1 proved to be very effective for the stereoselective synthesis of L-glycero-D-manno-heptopyranosides 2.

Tetrahedron Lett.30,233(1989)

## REGIOSELECTION IN THE HYDROFORMYLATION OF t-BUTYLDIPHENYLSILYALKENES: A NEW APPROACH TO ALDOL SYNTHESIS

M. Michael Doyle, W. Roy Jackson and Patrick Perlmutter  
Department of Chemistry, Monash University, Clayton, Victoria, Australia 3168

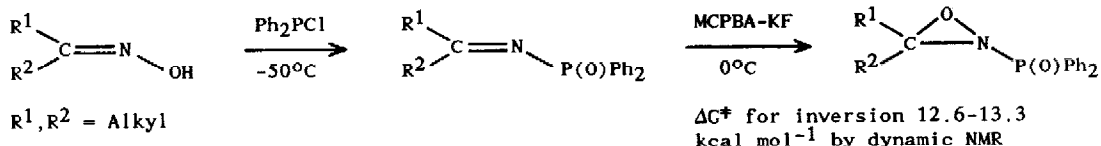
The t-butylidiphenylsilyl group can be used to achieve almost total regiocontrol in the hydroformylation of (Z)-alkenes and the method has been applied to the syntheses of aldols.



**3,3-DIALKYL-2-PHOSPHINOYL OXAZIRIDINES:  
SYNTHESIS AND DETERMINATION OF THE  
BARRIER TO NITROGEN INVERSION**

Tetrahedron Lett. 30, 235 (1989)

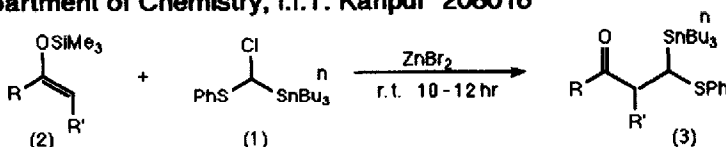
W.B. Jennings,<sup>\*a</sup> S.P. Watson<sup>a</sup> and D.R. Boyd<sup>b</sup>  
(\*a) Department of Chemistry, University of Birmingham, Birmingham B15 2TT, U.K.  
and (b) Department of Chemistry, Queen's University of Belfast, Belfast BT9 5AG, U.K.



**Phenylthiomethylstannylation of Silyl  
Enol Ethers and Silyl Dienol Ethers**

Tetrahedron Lett. 30, 239 (1989)

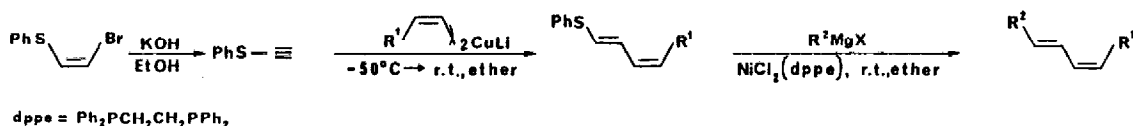
Javed Iqbal<sup>\*</sup> and (in part) Royce Mohan  
Department of Chemistry, I.I.T. Kanpur 208016



**AN EASY ROUTE TO INSECT PHEROMONES WITH A E-Z OR Z-E  
CONJUGATED DIENE STRUCTURE**

Tetrahedron Lett. 30, 243 (1989)

V. Fiandanese, G. Marchese, F. Naso<sup>\*</sup>, L. Ronzini, and D. Rotunno, Centro CNR M.I.S.O., Dipartimento di Chimica, Università di Bari, via Amendola 173, 70126 BARI, ITALY

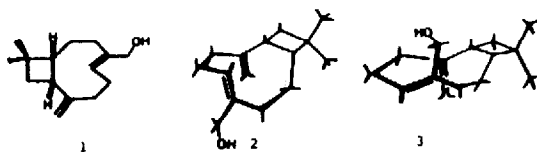


**CONFORMATIONAL ISOMERS OF 14-HYDROXY-9-EPI- $\beta$ -CARYOPHYLLENE  
ISOLATED FROM THE WOOD OF JUNIPERUS OXYCEDRUS.**

Tetrahedron Lett. 30, 247 (1989)

Alejandro F. Barrero, Juan F. Sánchez, N. Ferrol (Department of Organic Chemistry, Faculty of Sciences, Granada, Spain) and A. San Feliciano (Department of Organic Chemistry, Faculty of Pharmacy, Salamanca, Spain).

A new sesquiterpene alcohol (1) has been isolated from the essential oil of the wood of *Juniperus oxycedrus* L. Dynamic <sup>1</sup>HMR shows it to consist of two stable conformers in roughly equal amounts at room temperature. Formulas 2 and 3 are proposed for them.

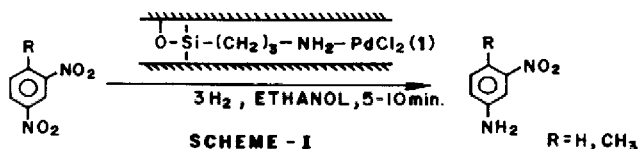


Tetrahedron Lett. 30, 251 (1989)

**SELECTIVE AND SEQUENTIAL REDUCTION OF NITROAROMATICS BY MONTMORILLONITESILYLAMINEPALLADIUM(II) COMPLEX**

K. Mukkanti, Y.V. Subba Rao and B.M. Choudary\*; Homogeneous Catalysis Discipline, R.R. Laboratory, Hyderabad 500007, India.

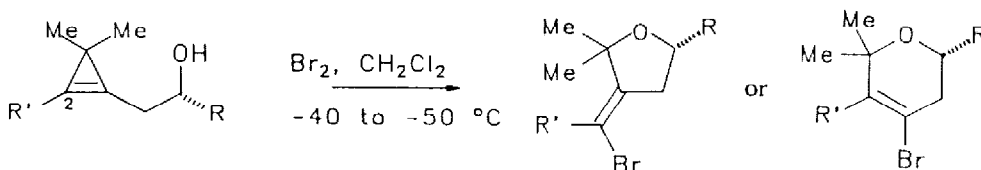
Nitroaromatics are sequentially and selectively hydrogenated in quantitative yields at room temperature and atmospheric pressure by a heterogenised homogeneous catalyst(1).



Tetrahedron Lett. 30, 253 (1989)

**A NOVEL ROUTE TO OPTICALLY ACTIVE DIHYDROPYRANS AND 3-METHYLENETETRAHYDROFURANS**

Juma'a Al-Dulayymi and Mark S. Baird,\* Department of Chemistry, University of Newcastle upon Tyne, Newcastle upon Tyne, NE1 7RU.

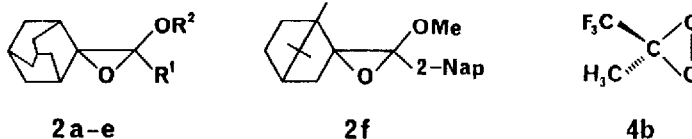


**OXIDATIONS BY METHYL TRIFLUOROMETHYL DIOXIRANE. EPOXIDATION OF ENOL ETHERS**

Tetrahedron Lett. 30, 257 (1989)

Luigino Troisi, Luigi Cassidei, Luigi Lopez, Rossella Mello, and Ruggero Curci\*  
Centro CNR "M.I.S.O", Dipartimento Chimica, Università di Bari, v. Amendola 173, Bari, Italy 70126

Spirooxiranes **2a-e** (<sup>1</sup>R = Ar; <sup>2</sup>R = Me, Ph, -CH<sub>2</sub>Ph) and *endo,exo*-**2f** could be synthesized in 92-97% yield under mild conditions, starting with the corresponding enol ethers and dioxirane **4b** as epoxidation agent.



Tetrahedron Lett. 30, 261 (1989)

**ENANTIOSELECTIVE LIPASE-CATALYSED HYDROLYSIS OF ESTERS OF EPOXY SECONDARY ALCOHOLS: AN ALTERNATIVE TO SHARPLESS OXIDATION**

Brian A. Marples\* and Mark Rogers-Evans  
Department of Chemistry, University of Technology, Loughborough, Leics. LE11 3TU, UK

Epoxy butanoates(1) (R=Et, Pr, CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>Et) are enantioselectively hydrolysed by porcine pancreatic lipase to the corresponding epoxy alcohols(2).

