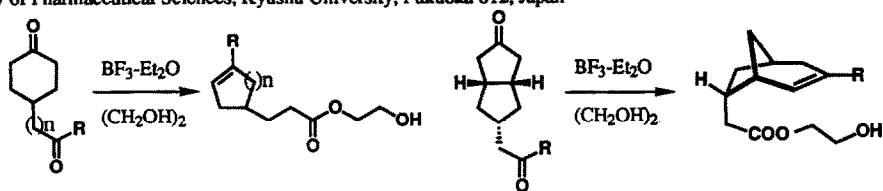


## GRAPHICAL ABSTRACTS

*Tetrahedron*, 1992, 48, 4517

### DRASTIC RING TRANSFORMATION REACTIONS OF FUSED BICYCLIC RINGS TO BRIDGED BICYCLIC RINGS

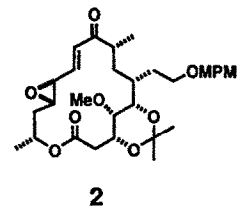
Takayoshi Yamamoto, Toshiko Eki, Shinji Nagumo, Hiroshi Suemune, and Kiyoshi Sakai\*  
Faculty of Pharmaceutical Sciences, Kyushu University, Fukuoka 812, Japan



*Tetrahedron*, 1992, 48, 4525

### Conformational Analysis of the 16-Membered Epoxyenone and Complete Stereoselection in the Reduction of its C9 Carbonyl Group, the Key Reaction in the Synthesis of Maridonolides

Tomohiro Matsushima,<sup>a</sup> Noriyuki Nakajima,<sup>a</sup> Osamu Yonemitsu,<sup>\*,a</sup> and Tadashi Hata<sup>b</sup>  
Faculty of Pharmaceutical Sciences, Hokkaido University,<sup>a</sup> Kita-12, Nishi-6, Sapporo 060, Japan  
Analytical and Metabolic Research Laboratories, Sankyo Co., Ltd.,<sup>b</sup> 1-2-58, Hiromachi, Shinagawa-ku, Tokyo 140, Japan



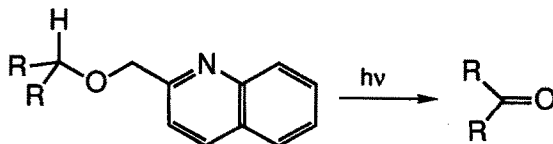
The conformational analysis of two distinct conformational isomers of **2** and the complete stereoselective reduction of its C9 carbonyl group are described.

*Tetrahedron*, 1992, 48, 4533

### QUINALDYL ETHERS AS LATENT CARBONYL FUNCTIONS

Vatcharin Rukachaisirikul, Ulrich Koert, and Reinhard W. Hoffmann  
Fachbereich Chemie der Philipps-Universität, Hans Meerwein Str. W-355 Marburg, GERMANY

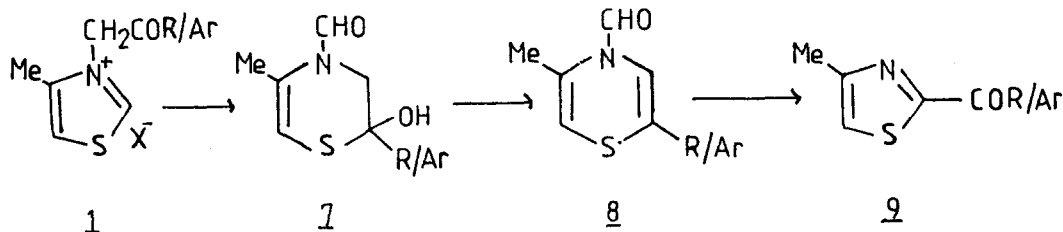
Alcohols may be "protected" as quinaldine ethers. Subsequent photolysis leads to a direct formation of a ketone function



*Tetrahedron*, 1992, 48, 4545

**AQUEOUS BASE INDUCED SELECTIVE TRANSFORMATIONS OF  
3-(2-OXOALKYL) THIAZOLIUM CATIONS**

Harjit Singh, Damanjit Singh and Subodh Kumar, Department of Chemistry,  
Guru Nanak Dev University, Amritsar - 143 005.

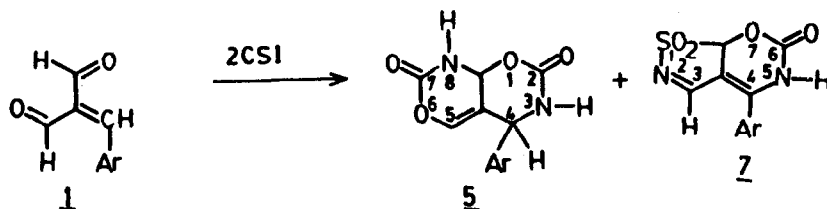


3-(2-Oxoalkyl) thiazolium cations with appropriate concentration of aqueous sodium hydroxide undergo above sequential transformations to thiazines/thiazoles.

*Tetrahedron*, 1992, 48, 4551

**CYCLOADDITION OF CHLOROSULFONYL ISOCYANATE WITH  
ARYLMETHYLENEMALONALDEHYDES**

Joseph Daniel and Durga Nath Dhar\*  
Department of Chemistry, Indian Institute of Technology, Kanpur, India



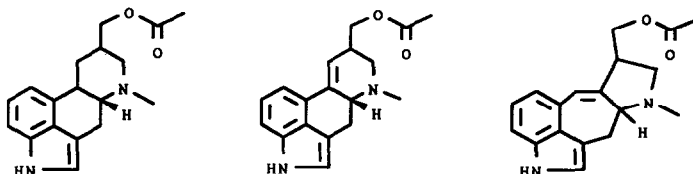
CSI = O=C=N-SO<sub>2</sub>Cl, Ar = *p*-ClC<sub>6</sub>H<sub>4</sub>, *p*-BrC<sub>6</sub>H<sub>4</sub>, *o*-ClC<sub>6</sub>H<sub>4</sub>, *p*-MeC<sub>6</sub>H<sub>4</sub>, *p*-NO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>

*Tetrahedron*, 1992, 48, 4555

**DIASTEREOSPECIFIC FORMATION OF 6-N-OXIDE ERGO-  
LINES: A <sup>1</sup>H NMR STUDY OF THE CONFIGURATION  
AT NITROGEN**

M. Ballabio\*, P. Sbraletta, S. Mantegani, E. Brambilla  
R&D/Farmitalia C. Erba, Erbamont Group, via dei Gracchi 35, 20146 Milano (Italy)

The N-oxides of seven analogous ergoline/ene derivatives were prepared and their stereochemistry at nitrogen determined by <sup>1</sup>H NMR analysis.

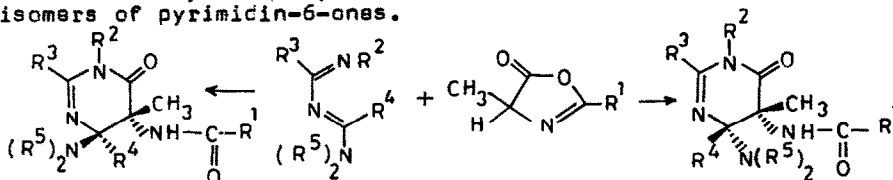


*Tetrahedron*, 1992, 48, 4567

DIAZABUTADIENES IN HETEROCYCLIC SYNTHESSES. PREPARATION OF PYRIMIDIN-6-ONES BY REACTION OF 4-DIALKYLAMINO-1,3-DIAZA-1,3-BUTADIENES WITH 2-OXAZOLIN-5-ONES

Bir Sain, Satyendra P. Singh & Jagir S. Sandhu\* ; Division of Drugs and Pharmaceutical Chemistry; Regional Research Laboratory, Jorhat 785006, INDIA.

Reaction of 4-dialkylamino-1,3-diazabutadienes with 2-oxazolin-5-ones yielded stereoisomers of pyrimidin-6-ones.

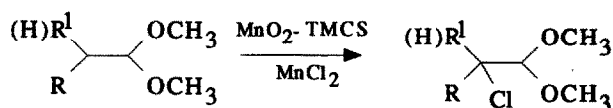


*Tetrahedron*, 1992, 48, 4579

ACETAL CHLORINATION WITH  $MnO_2$ -TRIMETHYLCHLOROSILANE

F. Bellesia, M. Boni, F. Ghelfi\*, R. Grandi, U. M. Pagnoni and A. Pinetti

Dipartimento di Chimica dell'Università, Via Campi 183, I-41100 Modena, (Italy).



$\alpha$ -chloroacetals are obtained from acetals in good yields with the reagent system  $MnO_2$ -trimethylchlorosilane in  $CH_3OH-CH_3CN$  (1:1) under mild conditions.

*Tetrahedron*, 1992, 48, 4587

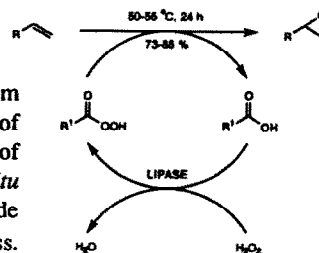
Lipase Catalyzed Synthesis of Peroxycarboxylic Acids and

Lipase Mediated Oxidations.

Fredrik Björkling\*, Hans Frykman<sup>§</sup>, Sven Erik Godtfredsen, and Ole Kirk

Novo Nordisk A/S, Novo Allé, DK-2880 Bagsværd, Denmark

Lipase catalyzed synthesis of long chain peroxycarboxylic acids from hydrogen peroxide and free carboxylic acid was investigated. A 51% yield of peroxytetradecanoic acid was achieved when using a two phase system of toluene and water. The peroxy acids thus formed were applied for *in situ* oxidation of alkenes, for example, a quantitative yield of cyclohexene oxide and a 94% yield of 1-hexadecene oxide was achieved in a solvent-free process.

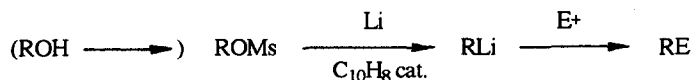


*Tetrahedron*, 1992, 48, 4593

**NAPHTHALENE-CATALYSED LITHIATION OF ALLYLIC AND BENZYLIC MESYLATES: A NEW METHOD FOR ALLYL, METHALLYL, AND BENZYL LITHIUM**

D. Guijarro, B. Mancheño and M. Yus\*

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, Apdo. 99, 03080 Alicante, Spain



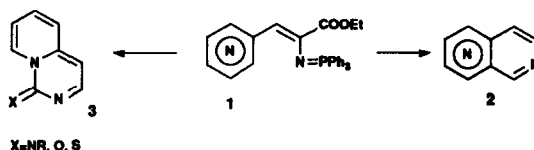
[R=allyl, methallyl, benzyl; Ms=SO<sub>2</sub>Me]

*Tetrahedron*, 1992, 48, 4601

**IMINOPHOSPHORANE-MEDIATED ANNELENATION OF A PYRIDINE RING INTO A PREFORMED PYRIDINE ONE: SYNTHESIS OF NAPHTHYRIDINE, PYRIDO[1,2-c]PYRIMIDINE AND PYRIDO[1,2-c]QUINAZOLINE DERIVATIVES.**

Pedro Molina\*, Enrique Aller, Angeles Lorenzo  
Departamento de Química Orgánica, Facultad de Química,  
Universidad de Murcia, Campus de Espinardo,  
30071-Espinardo, Murcia, Spain.

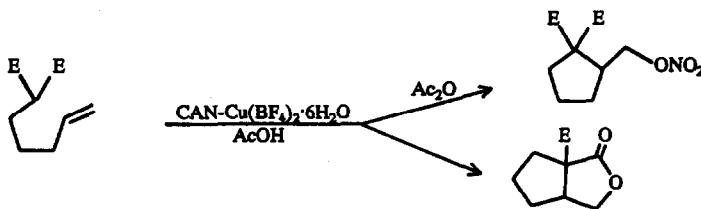
Aza Wittig-type reaction of iminophosphoranes 1, derived from 3- and 4-formylpyridines, with heterocumulenes leads to naphthyridines 2, whereas iminophosphoranes derived from 2-formylpyridines affords pyrido[1,2-c]pyrimidines 3.



*Tetrahedron*, 1992, 48, 4617

**CERIUM(IV) AMMONIUM NITRATE PROMOTED OXIDATIVE CYCLIZATION OF DIMETHYL 4-PENTENYLMALONATE**

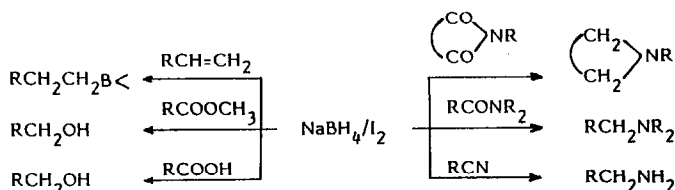
E.Bacocchi\*, A. Belli Paolobelli<sup>b</sup> and R. Ruzziconi<sup>b</sup>: \*Dipartimento di Chimica, Università "La Sapienza", 00185 Roma,  
<sup>b</sup>Dipartimento di Chimica, Università di Perugia, 06100 Perugia, Italy



*Tetrahedron*, 1992, 48, 4623

**CONVENIENT METHODS FOR THE REDUCTION OF AMIDES, NITRILES, CARBOXYLIC ESTERS, ACIDS AND HYDROBORATION OF ALKENES USING  $\text{NaBH}_4/\text{I}_2$  SYSTEM**

A.S. Bhanu Prasad, J.V. Bhaskar Kanth and Mariappan Periasamy\*  
School of Chemistry, University of Hyderabad, Hyderabad 500 134, India



*Tetrahedron*, 1992, 48, 4629

**STUDIES ON QUINONES. 24. REARRANGEMENT OF DIELS-ALDER ADDUCTS OF ACTIVATED QUINONES UNDER ACIDIC CONDITIONS**

Francisco Fariña,<sup>a</sup> M. Carmen Paredes,<sup>a</sup> and Jaime Valderrama<sup>b</sup>. <sup>a</sup>Instituto de Química Orgánica General, C.S.I.C., 28006 Madrid, Spain, and <sup>b</sup>Facultad de Química, Pontificia Universidad Católica de Chile, Santiago, Chile.



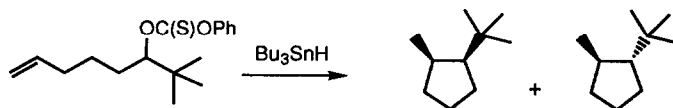
Acid catalysed rearrangements of adducts (a) of substituted benzoquinones ( $\text{R}=\text{EWG}$ ) afford benzofuran derivatives (b). Alcohol (c), in the presence of silica gel and an alcohol, rearranges to give a benzodifuran derivative (d).

*Tetrahedron*, 1992, 48, 4641

**RING CLOSURE OF 2,2-DIMETHYLOCT-7-EN-3-YL RADICAL: A SYSTEM EXHIBITING UNUSUAL SOLVENT DEPENDENCE**

Athelstan L. J. Beckwith, Matthew D. Cliff and Carl H. Schiesser\*  
Department of Chemical Sciences, Deakin University, Geelong, Victoria, Australia, 3217 and  
Research School of Chemistry, Australian National University, GPO Box 4, Canberra, A.C.T., Australia, 2601.

Reaction of O-(2,2-dimethyloct-7-en-3-yl)-O-phenylthionocarbonate with tri-*n*-butyltin hydride (AIBN initiator) gives *cis*- and *trans*-1-*tert*-butyl-2-methylcyclopentane (*trans/cis* = 3.1 in hexane at 25°C). The stereoselectivity displays the usual temperature dependence and is improved when solvent polarity is increased (*trans/cis* = 5.9 in 1-propanol at 25°C).

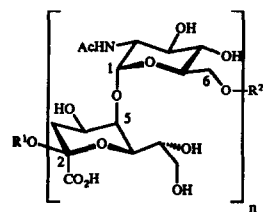


**Synthesis of a Cell Wall Component of *Haemophilus*  
(*Actinobacillus*) *Pleuropneumoniae* Serotype 5**

P.A.M. van der Klein, W. Filemon, G.J.P.H. Boons, G.H. Veeneman,  
G.A. van der Marel and J.H. van Boom.

Gorlaeus Laboratories, P.O. Box 9502, 2300 RA Leiden, The Netherlands.

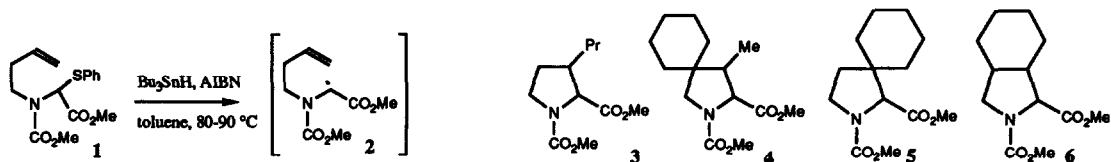
A stereoselective route to the KDO-containing disaccharide II of  
the capsular polysaccharide I from *Haemophilus* (*Actinobacillus*)  
*Pleuropneumoniae* serotype 5 is reported.



I  $R^1 = R^2 = H$   
II  $R^1 = (CH_2)_3NH_2$ ,  $R^2 = H$ ,  $n = 1$

**REDUCTIVE CYCLIZATION OF CARBON-CENTERED  
GLYCINE RADICALS; A NOVEL SYNTHETIC ROUTE TO CYCLIC  $\alpha$ -AMINO ACIDS**

Peter M. Esch, Henk Hiemstra,\* Richard F. de Boer, and W. Nico Speckamp\*  
Department of Organic Chemistry, University of Amsterdam, Nieuwe Achtergracht 129, 1018 WS Amsterdam, The Netherlands



Reductive cyclizations of several  $\alpha$ -(phenylthio)glycine derivatives 1 are reported. The intermediates 2 are relatively stable captodative radicals, but reactive enough for olefin cyclization to produce as main products structurally interesting analogues of proline (e.g. 3-6).