

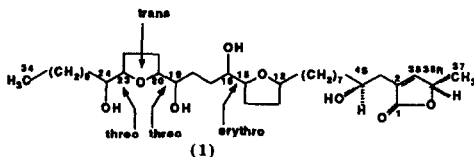
## GRAPHICAL ABSTRACTS

Tetrahedron, 45, 6941, (1989)

**BULLATALICIN, A NOVEL BIOACTIVE ACETOGENIN FROM  
ANNONA BULLATA (ANNONACEAE)**

Yu-hua Hui, J. Kent Rupprecht, Jon E. Anderson, Ya-mei Liu, David L. Smith, Chung-ger Chang, and Jerry L. McLaughlin\*  
Department of Medicinal Chemistry and Pharmacognosy, School of Pharmacy and Pharmaceutical Sciences, Purdue University,  
West Lafayette, Indiana 47907

Bullatalicin (1), from the bark of *Annona bullata* (Annonaceae), showed potent ( $ED_{50} < 10^{-7}$  mcg/ml) and selective cytotoxic activities for certain human tumor cell lines

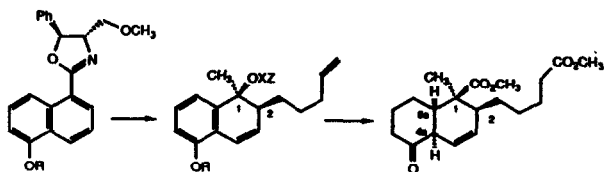


Tetrahedron, 45, 6949, (1989)

**ASYMMETRIC ADDITION TO CHIRAL NAPHTHALENES 5.  
AN APPROACH TO THE CHLOROTHRICOLIDE SYSTEM**

A.I. Meyers\*, G.P. Roth, C.D. Rithner  
Department of Chemistry, Colorado State  
University, Fort Collins, CO 80523 USA

A route to the title compound  
is outlined using asymmetric  
addition of 1-lithio-4-pentene  
to the chiral naphthalene.

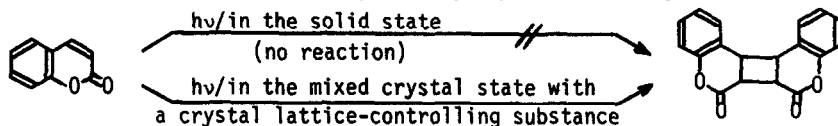


Tetrahedron, 45, 6979, (1989)

**SOLID-STATE PHOTODIMERIZATION OF COUMARIN IN THE  
PRESENCE OF A CRYSTAL LATTICE-CONTROLLING SUBSTANCE.**

Ji-ben Meng,<sup>+</sup> De-chao Fu,<sup>+</sup> Xin-Kan Yao,<sup>#</sup> RU-JI WANG,<sup>#</sup> and Teruo Matsuura\*

<sup>+</sup>Department of Chemistry and <sup>#</sup>Centre Laboratory, Nankai University, Tianjin, China, and  
<sup>\*</sup>Department of Synthetic Chemistry, Faculty of Engineering, Kyoto University, Yoshida,  
Kyoto 606, Japan.



Tetrahedron, 45, 6987, (1989)

THE ANOMERIC EFFECT OF THE CARBOETHOXY GROUP  
IN OXYGEN AND SULPHUR CONTAINING HETEROCYCLES

C. Tschierske, H. Köhler, H. Zschke, E. Kleinpeter<sup>(\*)</sup>

Sektion Chemie der Martin-Luther-Universität Halle-Wittenberg, Weinbergweg 16,  
DDR-4050 Halle(Saale), G D R

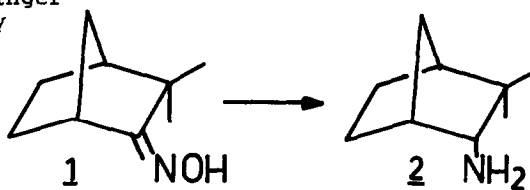
The anomeric effect of carboethoxy in some 1,3-dioxane- and 1,3-oxathiane-2-carboxylates has been estimated by employing empirical steric correlation factors to be ca. 4 kJ/mol per single oxygen. Beside the 6-membered ring interconversion, a second conformational equilibrium about the ring-COOR bond has been identified from unusual solvent dependences of the different compounds; relevant preferred conformers have been assigned owing to special  $\pi_{CO}/3d(S)$  orbital interactions. Chemical shift arguments parallel the conclusions obtained.

Tetrahedron, 45, 6999, (1989)

A STUDY OF SELECTIVE OXIME REDUCTION METHODS

The title compound 2 is easily available by selective reduction of oxime 1 with  $TiCl_4/NaBH_4$  or  $Na^+/nC_3H_7OH$ .

H. Spreitzer, G. Buchbauer and Ch. Püringer  
Institute of Pharmaceutical Chemistry  
University of Vienna,  
Währingerstr. 10  
A-1090 Vienna



Tetrahedron, 45, 7003, 1989)

DETERMINATION OF THE ABSOLUTE CONFIGURATION OF  $\alpha$ -DAMASCONE AND  $\alpha$ -IONONE FROM BLACK TEA BY  
ENANTIOSELECTIVE CAPILLARY GAS CHROMATOGRAPHY

Wilfried A. König<sup>a</sup>, Petra Evers<sup>a</sup>, Ralph Krebber<sup>a</sup>, Stefan Schulz<sup>a</sup>, Charles Fehr<sup>b</sup>, and  
Gunther Ohloff<sup>b</sup>

<sup>a</sup>Institut für Organische Chemie, Universität Hamburg, D-2000 Hamburg 13, FRG

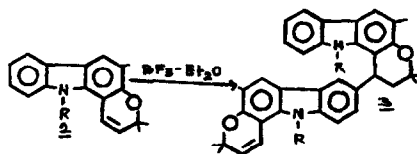
<sup>b</sup>Firmenich SA, Research Laboratories, CH-1211 Geneva 8, Switzerland

Tetrahedron, 45, 7007, (1989)

**A NOVEL ACCESS TO BIS-CARBAZOLE ALKALOIDS:  
SUBSTITUENT EFFECT ON THE EFFICIENCY AND REGIO-  
SELECTIVITY IN  $\text{BF}_3\text{-Et}_2\text{O}$  MEDIATED INTERMOLECULAR COUPLING OF PYRANOCARBAZOLE  
ALKALOIDS**

Amit Chakrabarti and D.P.Chakraborty\*  
Department of Chemistry, Bose Institute,  
93/1, A.P.C. Road, Calcutta-700009, India.

Pyranocarbazoles 2(a-c) afforded  
binary pyranocarbazoles 3(a-c) under  
 $\text{BF}_3\text{-Et}_2\text{O}$  mediated reaction condition  
at room temperature.

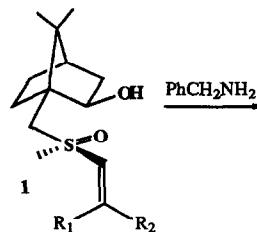


Tetrahedron, 45, 7013, (1989)

**CONJUGATE ADDITION OF AMINES TO  
(R<sub>S</sub>)-10-ISOBORNYL VINYL SULFOXIDES.**

S. G. Pyne, P. Bloem, R. Griffith, Department of Chemistry,  
University of Wollongong, Wollongong, N.S.W. 2500, Australia.

The conjugate addition of chiral (E) and (Z) (R<sub>S</sub>)-10-Isobornyl vinyl  
sulfoxides (1) with benzylamine is described.

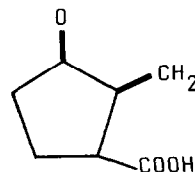


Tetrahedron, 45, 7023, (1989)

**TOTAL SYNTHESIS OF (±)-SARKOMYCIN**

Marian Mikołajczyk\* and Piotr Bałczewski  
Centre of Molecular and Macromolecular Studies  
PAS, 90-363 Łódź, Sienkiewicza 112, Poland

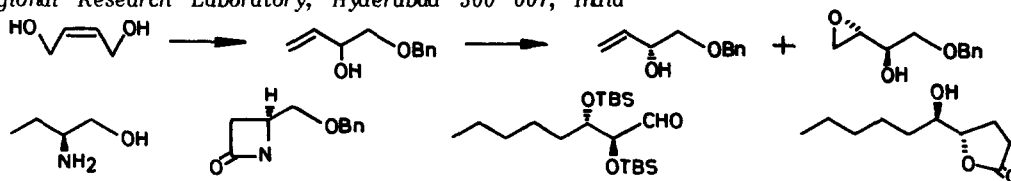
(±)-Sarkomycin is prepared from 2-phenylthiomethyl-  
cyclopentenone in four steps in 13% overall yield.



Tetrahedron, 45, 7031, (1989)

**3-BUTENE-1,2-DIOL: AN ATTRACTIVE PRECURSOR FOR THE SYNTHESIS OF ENANTIOMERICALLY PURE ORGANIC COMPOUNDS**

A V Rama Rao, D S Bose, M K Gurjar & T Ravindranathan  
Regional Research Laboratory, Hyderabad 500 007, India

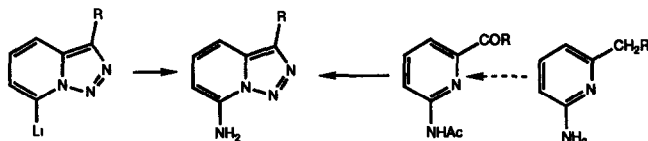


Tetrahedron, 45, 7041, (1989)

**TRIAZOLOPYRIDINES. PART 9. THE SYNTHESIS OF 7-AMINOTRIAZOLO(1,2,3)TRIAZOLO(1,5-a)PYRIDINES**

Belen Abarca\*, Amparo Asensio, Gumos Jones\*, and Deborah J. Molat

Departments of Chemistry, Universities of Valencia, Spain, and Keele, England



Syntheses of 7-aminotriazolopyridines from lithiotriazolopyridines or 6-aminopyridines

Tetrahedron, 45, 7049, (1989)

**ONE ELECTRON OXIDATIONS OF BENZYL AND 2-PHENYLETHYL PHENYL ETHERS. THE FATE OF THE INTERMEDIATE RADICAL CATIONS**  
E. Bacicocchi,<sup>a\*</sup> A. Piermatti,<sup>b</sup> C. Rol,<sup>b</sup> R. Ruzziconi,<sup>b</sup> G.V. Sebastiani,<sup>b</sup> Dip. di Chimica, Università di Roma<sup>a</sup> and Perugia<sup>b</sup>, Italy

The relative weight of the various reaction paths available to



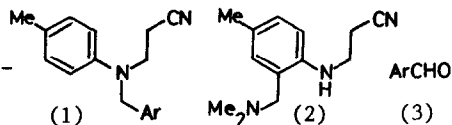
has been investigated by a study of chemical ( $Ce^{IV}$ ), electrochemical and photochemical one electron oxidations of benzyl phenyl and 2-phenylethyl phenyl ethers.

OBSERVATIONS ON THE VILSMEIER REACTION Part 2. THE ANOMALOUS REACTION OF N-BENZYL N-CYANOETHYL-4-METHYL-ANILINE DERIVATIVES.

A. P. Shawcross and S. P. Stanforth\*

Department of Chemical &amp; Life Sciences, Newcastle upon Tyne Polytechnic, Newcastle upon Tyne, NE1 8ST.

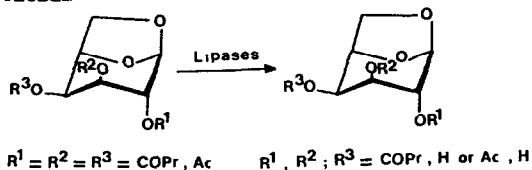
The reaction of a series of title anilines (1) under Vilsmeier conditions was investigated. Only perfluorobenzyl derivatives showed normal formylation while other fluoro compounds gave mixed results and other substituents gave amine (2) and aldehyde (3).

REGIOSELECTIVE DEACYLATION OF 1,6-ANHYDRO- $\beta$ -D-GALACTOPYRANOSE DERIVATIVES CATALYZED BY SOLUBLE AND IMMOBILIZED LIPASES

A. Ballesteros\*, M. Bernabé, C. Cruzado M. Martín-Lomas\*, and C. Otero

Instituto de Catálisis and Instituto de Química Orgánica. CSIC, 28006-Madrid, Spain.

Depicted acyl-1,6-anhydrogalactopyranoses on treatment with lipases afforded partially deacylated derivatives.

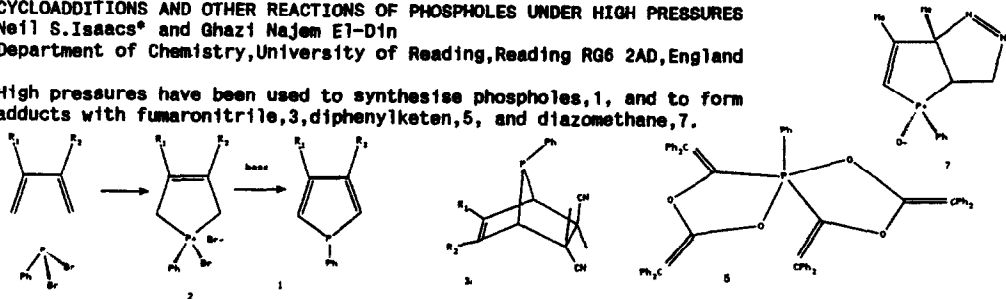


## CYCLOADDITIONS AND OTHER REACTIONS OF PHOSPHOLES UNDER HIGH PRESSURES

Neil S. Isaacs\* and Ghazi Najem El-Din

Department of Chemistry, University of Reading, Reading RG6 2AD, England

High pressures have been used to synthesise phospholes, 1, and to form adducts with fumaronitrile, 3, diphenylketen, 5, and diazomethane, 7.

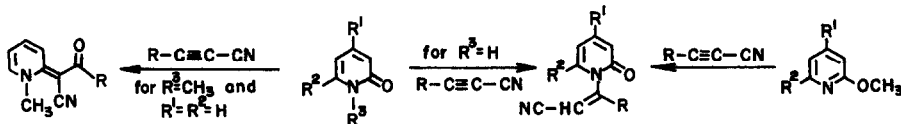


Tetrahedron, 45, 7093, (1989)

**AROMATIC VS DIENE REACTIVITY OF 2(1H)-PYRIDINONE  
AND ITS DERIVATIVES**

R. Yadla, H. Rehman and Jampani Madhusudana Rao \*  
Indian Institute of Chemical Technology, Hyderabad 500007, India.

and  
V.K. Mahesh, Department of Chemistry, University of Roorkee, Roorkee 247667, India.

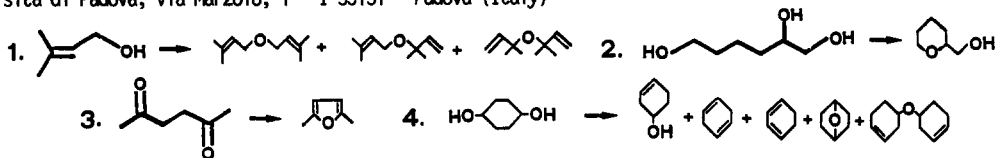


Tetrahedron, 45, 7099, (1989)

**ORGANOTIN AS ETHERIFICATION CATALYSTS. III. ETHERIFICATIONS AND  
HYDRO-HYDROXY-ELIMINATIONS PROMOTED BY BUTYL TIN TRICHLORIDE**

Daniele Marton, Pierangelo Slaviero and Giuseppe Tagliavini \*  
Dipartimento di Chimica Inorganica, Metallorganica e Analitica,  
Università di Padova, via Marzolo, 1 - I 35131 - Padova (Italy)

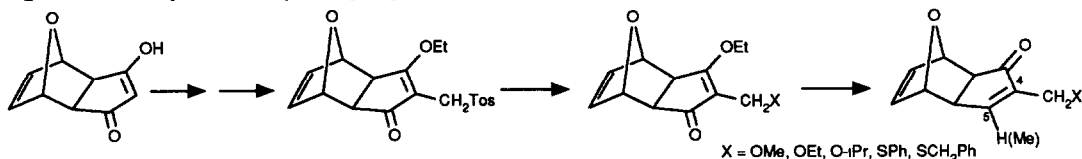
Many dehydration processes, such as 1, 2, 3  
and 4, are mediated by butyltin trichloride.



Tetrahedron, 45, 7109, (1989)

**SYNTHESIS OF 4- AND 5-SUBSTITUTED 10-OXATRICYCLO-  
[5.2.1.0<sup>2,6</sup>]DECADIENONES. FUNCTIONALIZATION OF THE  
CYCLO-ADDUCT OF FURAN AND CYCLOPENTEN-1,4-DIONE.**

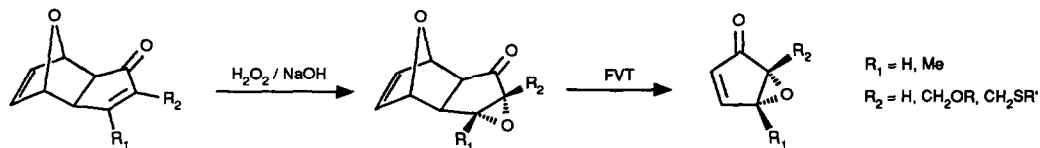
Adrie A. M. Houwen-Claassen, A. J. H. Klunder, M. G. Kooy, J. Steffann and B. Zwanenburg\*, Department of  
Organic Chemistry, University of Nijmegen, Toernooiveld, 6525 ED NIJMEGEN, The Netherlands.



Tetrahedron, 45, 7134, (1989)

**SYNTHESIS OF CYCLOPENTADIENONE EPOXIDES FROM 10-OXATRICYCLODECADIENONES.**

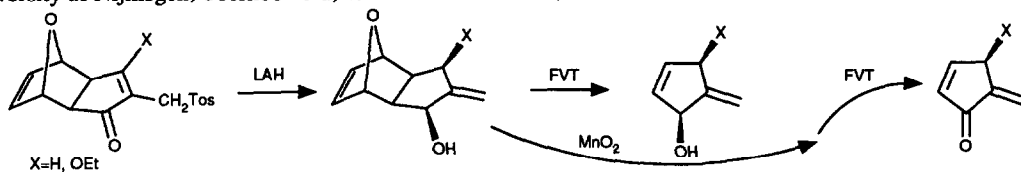
Adrie A. M. Houwen-Claassen, A. J. H. Klunder and B. Zwanenburg\*,  
Department of Organic Chemistry, University of Nijmegen, Toernooiveld, 6525 ED NIJMEGEN, The Netherlands.



Tetrahedron, 45, 7149, (1989)

**SELECTIVE BIS-HYDRIDE REDUCTION OF TOSYLMETHYL-SUBSTITUTED TRICYCLIC ENONES BY LITHIUM ALUMINIUM HYDRIDE. SYNTHESIS OF  $\alpha$ -METHYLENE CYCLOPENTENONDS.**

Adrie A. M. Houwen-Claassen, A. J. H. Klunder and B. Zwanenburg\*, Department of Organic Chemistry, University of Nijmegen, Toernooiveld, 6525 ED NIJMEGEN, The Netherlands.

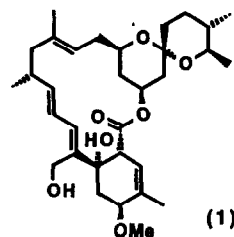


Tetrahedron, 45, 7161, (1989)

**A HIGHLY CONVERGENT TOTAL SYNTHESIS OF THE SPIROACETAL MACROLIDE (+)-MILBEMYCIN  $\beta_1$**

Steven V. Ley\*, Neville J. Anthony, Alan Armstrong, M. Gabriella Brasca, Trafford Clarke, David Culshaw, Christine Greck, Peter Grice, A. Brian Jones, Barry Lygo, Andrew Madin, Richard N. Sheppard, Alexandra M. Z. Slawin and David J. Williams.  
Department of Chemistry, Imperial College of Science, Technology and Medicine,  
London SW7 2AY, U.K

The total synthesis of the natural product (+)-milbemycin  $\beta_1$  (1) is reported.



(1)

SYNTHESIS OF 1-OXABICYCLIC  $\beta$ -LACTAM PRECURSORS FROM  
4,6-O-BENZYLIDENE-D-ALLAL

Zbigniew Kaźuza and Marek Chmielewski\*

Institute of Organic Chemistry, Polish Academy of Sciences, 01-224 Warsaw, POLAND

