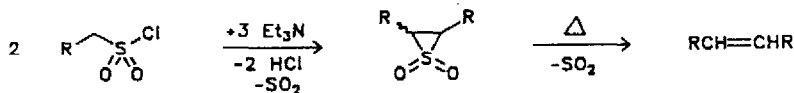


GRAPHICAL ABSTRACTS

SYMMETRISCHE ALKENE ÜBER EPISULFONE  
AUS PRIMÄREN SULFONYLCHLORIDEN

Tetrahedron Lett. 30, 3131 (1989)

Günter Opitz\*, Thomas Ehlis, Karlheinz Rieth  
Organisch-Chemisches Institut der Universität,  
Im Neuenheimer Feld 270, D-6900 Heidelberg, Bundesrepublik Deutschland



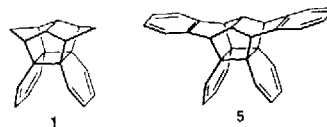
R= H, Alk. Ar.

DOMINO and PINCER CYCLOADDITIONS with syn-o,o'-DIBENZENES  
SCOPE and  $\pi$ -FACIAL STEREOSELECTIVITY

Tetrahedron Lett. 30, 3133 (1989)

Wolf-Dieter Fessner, Clemens Grund, Horst Prinzbach,  
Chemisches Laboratorium der Universität Freiburg i.Br.

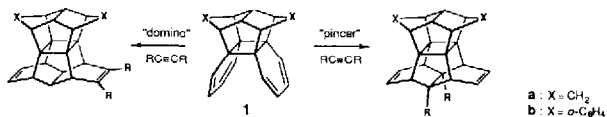
The syn-o,o'-dibenzene units in **1** and **5** capture  
a range of dienophiles with changing  $\pi$ -facial  
stereoselectivity.



DOMINO and PINCER CYCLOADDITIONS with syn-o,o'-DIBENZENES  
PRESSURE DEPENDENCE and MECHANISTIC IMPLICATIONS

Tetrahedron Lett. 30, 3137 (1989)

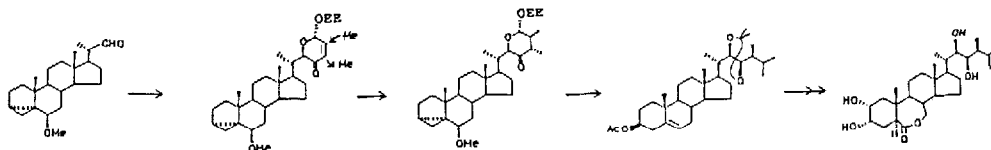
Frank-Gerrit Klärner, Uwe Artschwager-Perl, Fakultät für Chemie der Univer-  
sität Bochum.- Wolf-Dieter Fessner, Clemens Grund, Rolf Pinkos, Johann-Peter  
Melder, H. Prinzbach, Chemisches Laboratorium der Universität Freiburg i.Br.



STEREOCONTROLLED SYNTHESIS OF THE BRASSINOLIDE  
SIDE CHAIN VIA A PYRANONE DERIVATIVE

Tetrahedron Lett. 30, 3141 (1989)

Tetsuji Kametani,† Katsuyuki Keino, Masaharu Kigawa, Masayoshi Tsubuki, and Toshio Honda\*  
Institute of Medicinal Chemistry, Hoshi University, Ebara 2-4-41, Shinagawa-ku, Tokyo 142,  
Japan

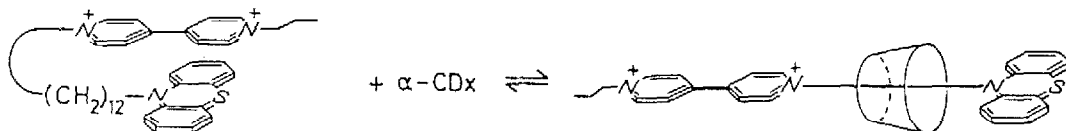


Tetrahedron Lett. 30, 3143 (1989)

ANOMALOUSLY STABLE CYCLODEXTRIN COMPLEXES OF PHENOTHIAZINE-VIOLOGEN LINKED COMPOUNDS WITH A LONG SPACER CHAIN

H. Yonemura, H. Saito, S. Matsushima, H. Nakamura, and T. Matsuo\* Department of Organic Synthesis, Faculty of Engineering, Kyushu University, Fukuoka 812, Japan

Distinct NMR signals due to stable cyclodextrin (CDx) complexes were detected by the use of phenothiazine-violegen linked compounds.

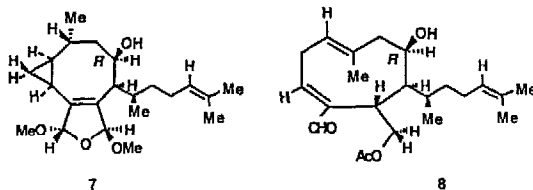


Tetrahedron Lett. 30, 3147 (1989)

ABSOLUTE CONFIGURATIONS OF MARINE DITERPENES POSSESSING A XENICANE SKELETON. AN APPLICATION OF AN ADVANCED MOSHER'S METHOD

Ikuko Ohtani, Takenori Kusumi, Midori O. Ishitsuka, and Hiroshi Kakisawa\* Department of Chemistry, The University of Tsukuba, Tsukuba, Ibaraki, Japan 305

By means of Mosher's method using  $^1\text{H}$  NMR spectroscopy at 500 MHz the absolute configurations of marine diterpenes, 7 and 8, have been elucidated.

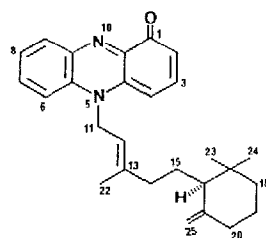


Tetrahedron Lett. 30, 3151 (1989)

STRUCTURE OF PHENAZINOMYCIN, A NOVEL ANTITUMOR ANTIBIOTIC

Shinji Funayama, Shigeru Eda, Kanki Komiyama and Satoshi Omura\*; The Kitasato Institute, and School of Pharmaceutical Sciences, Kitasato University, 5-9-1 Shirokane, Minato-ku, Tokyo 108, Japan

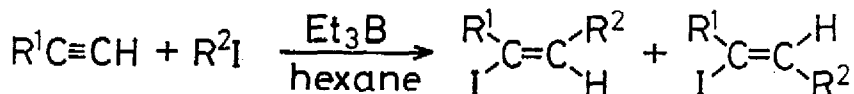
Takashi Tokunaga; Pharmaceutical Research Laboratories, Japan Tobacco Inc., 6-2 Umegaoka, Midori-ku, Yokohama 227, Japan



Tetrahedron Lett. 30, 3155 (1989)

TRIETHYLBORANE-INDUCED RADICAL ADDITION OF ALKYL IODIDES TO ACETYLENES

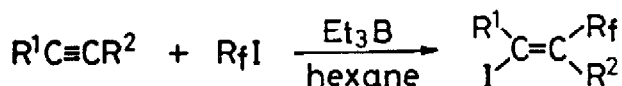
Yoshifumi Ichinose, Shin-ichiro Matsunaga, Keigo Fugami, Koichiro Oshima, and Kiitiro Utimoto\* Department of Industrial Chemistry, Faculty of Engineering Kyoto University, Sakyo-ku, Kyoto, 606 Japan



Tetrahedron Lett. 30, 3159 (1989)

**TRIETHYLBORANE-INDUCED STEREOSELECTIVE  
RADICAL ADDITION OF PERFLUOROALKYL IODIDES  
TO ACETYLENES**

Yoshihiro Takeyama, Yoshifumi Ichinose, Koichiro Oshima,\* and  
Kiitiro Utimoto  
Department of Industrial Chemistry, Faculty of Engineering,  
Kyoto University, Sakyo-ku, Kyoto 606, Japan

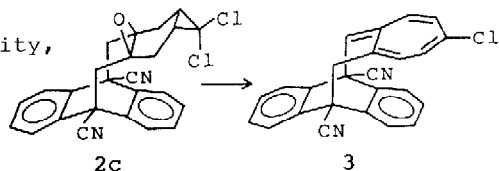


Tetrahedron Lett. 30, 3163 (1989)

**1,11-*o*-BENZENO[2]ORTHO CYCLO[1](6,8)HEPTAFULVENOPHANE  
A NEW ROUTE TO HEPTAFULVENE FROM 8,8-DICHLORO-3-ALKYL-  
4-OXATRICYCLO[5,1,0,0<sup>3</sup>,0<sup>3</sup>]OCTANE**

Y. Fukazawa,\* T. Okajima, and S. Usui,  
Department of Chemistry, Hiroshima University,  
Hiroshima 730, Japan

The title compound **3** was obtained by  
treating dichloro-epoxide (**2c**) with  
TiCl<sub>4</sub> in benzene solution.



Tetrahedron Lett. 30, 3167 (1989)

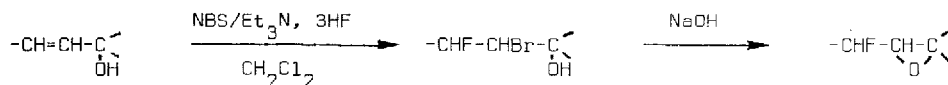
BROMOFLUORATION DES ALCOOLS ALLYLIQUES PAR NBS/Et<sub>3</sub>N, 3HF :

UNE VOIE SIMPLE D'ACCES AUX EPIFLUORHYDRINES.

Ikram CHEHIDI, Mohamed Moncef CHAABOUNI et Ahmed BAKLOUTI\*

Département de Chimie, Faculté des Sciences de Tunis,

Campus Universitaire 1060 TUNIS, TUNISIE.

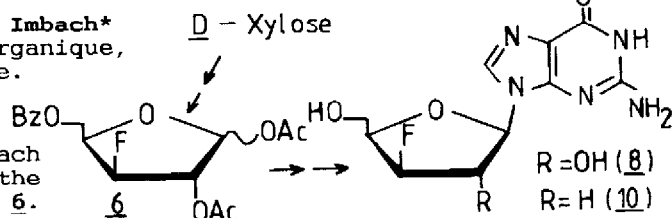


Tetrahedron Lett. 30, 3171 (1989)

**SYNTHESIS OF 9-(3-DEOXY- AND 2,3-DIDEOXY-3-  
FLUORO- $\beta$ -D-XYLOFURANOSYL)GUANINES AS POTENTIAL  
ANTIVIRAL AGENTS**

G. Gosselin, F. Puech and J.L. Imbach\*  
USTL, Laboratoire de Chimie Bioorganique,  
34060 Montpellier-Cédex 1, France.

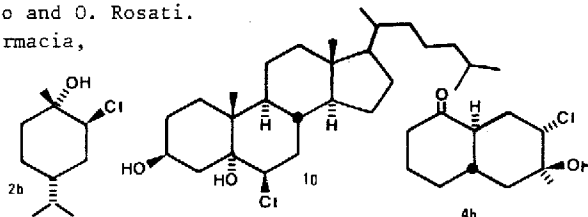
The first synthesis of the  
title compounds **8** and **10** was ac-  
complished by a multi-step approach  
involving prior preparation of the  
suitably protected fluorosugar **6**.



## TRANS 1,2-FUNCTIONALIZATION OF CYCLOALKENES USING SELENIUM INTERMEDIATES.

P. Ceccherelli\*, M. Curini, M.C. Marcotullio and O. Rosati.  
Istituto di Chimica Organica, Facoltà di Farmacia,  
Università degli Studi, Perugia, Italy.

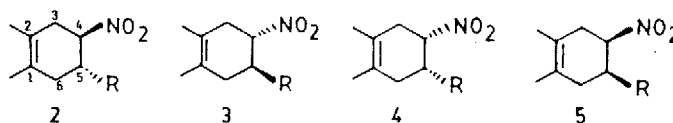
Trisubstituted olefins react with excess PhSeCl to give corresponding trans chlorohydrins (2b, 4b, 10) in a completely regio- and stereospecific fashion.



## ENANTIOSELECTIVE SYNTHESIS OF CYCLOHEXENE NITROALDEHYDES

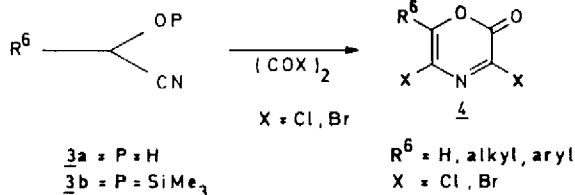
M. Ch. Moreno, J. Plumet, E. Román, and J. A. Serrano\*, Departamento de Química Orgánica, Universidad de Extremadura, 06071 Badajoz, Spain; M. L. Rodríguez and C. Ruiz Pérez, Centro de Productos Naturales Orgánicos "Antonio González", Universidad de La Laguna, Carretera de la Esperanza, 2, 38206 La Laguna, Tenerife, Spain.

2-5 (R=CHO) have been obtained via Diels-Alder reaction with sugar-nitroolefins as chiral dienophiles.



## SYNTHESIS OF 3,5-DIHALOGENO-2H-1,4-OXAZIN-2-ONES FROM CYANOHYDRINES

L. Meerpoel and G. Hoornaert, Department of Chemistry, KULeuven, B-3030 Leuven, Belgium

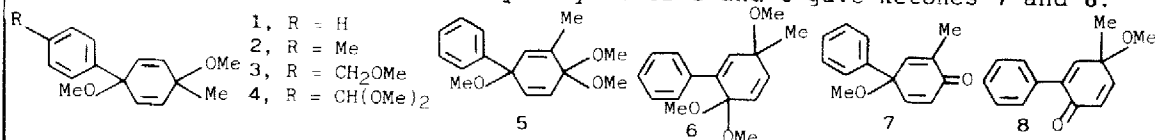


## ANODIC OXIDATION OF ALKYLATED BIPHENYLS.

## SYNTHETIC ROUTES TO CERTAIN CYCLOHEXA-1,4-DIENES

Isidoro Barba\*, Rafael Chinchilla and Cecilia Gómez. División de Química Orgánica, Universidad de Alicante, P.O. Box 99, Alicante, Spain.

Anodic methoxylation of 3-phenyltoluene, 4-phenyltoluene and 4,4'-dimethylbiphenyl afforded the new dienes 1-6. Hydrolysis of 5 and 6 gave ketones 7 and 8.

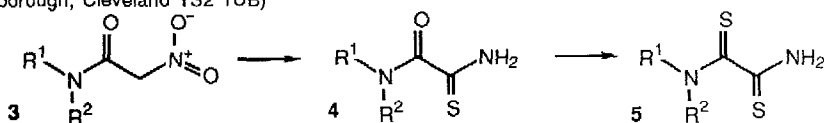


**THE REACTION OF NITROACETAMIDES WITH THIONATION REAGENTS SYNTHESIS OF MONO- AND DITHIO- OXALIC ACID DIAMIDES**

Tetrahedron Lett. 30, 3189 (1989)

By Philip A. Harris<sup>#</sup>, Arthur Jackson<sup>+</sup>, and John

A. Joule<sup>#\*</sup> (<sup>#</sup> Chemistry Department, Manchester University, Manchester, M13 9PL; <sup>+</sup> Fine Organics Ltd., Seal Sands, Middlesborough, Cleveland TS2 1UB)



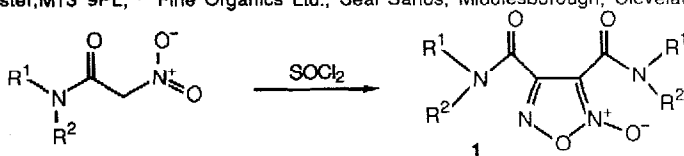
Nitroacetamides, **3**, react with thionation reagents to give amide-thioamides, **4**, then dithiodiamides, **5**.

**THE FORMATION OF FUROXAN-3,4-DICARBOXAMIDES FROM NITROACETAMIDES**

Tetrahedron Lett. 30, 3193 (1989)

By Philip A. Harris<sup>#</sup>, Arthur Jackson<sup>+</sup>, and John A. Joule<sup>#\*</sup> (<sup>#</sup> Chemistry Department,

Manchester University, Manchester, M13 9PL; <sup>+</sup> Fine Organics Ltd., Seal Sands, Middlesborough, Cleveland TS2 1UB)



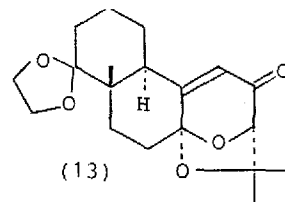
Secondary and tertiary nitroacetamides are converted, by treatment with thionyl chloride at room temperature, directly into furoxan-3,4-dicarboxamides, **1**.

**TOWARDS PASPALICINE : SYNTHESIS OF RINGS D-G**

Amin Ali and J. Edwin Saxton<sup>\*</sup>

School of Chemistry, The University of Leeds, Leeds LS2 9JT

The synthesis of the  $\beta$ -pyrone ketal (**13**), which constitutes rings D-G of the mould metabolite paspalicine, is described.



Tetrahedron Lett. 30, 3197 (1989)

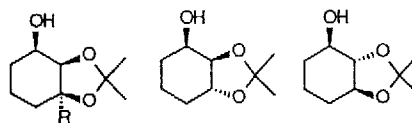
**THE SYNTHESIS OF CHIRAL ISOPROPYLIDENE DERIVATIVES OF 1,2,3-CYCLOHEXANETRIOLS BY ENZYMATIC DIFFERENTIATION**

Tetrahedron Lett. 30, 3201 (1989)

L. Dumortier, J. Van der Eycken and M. Vandewalle<sup>\*</sup>

State Univ. Gent, Dept. Org. Chem., Krijgslaan, 281 (S4), B-9000 GENT (Belgium)

Some 2,3-O-isopropylidene-1-cyclohexanols have been obtained with high % ee by enzymatic hydrolysis of corresponding esters.

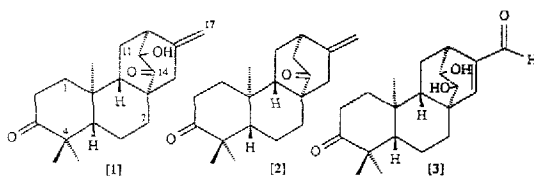


R = H or Me

## NEW OXIDISED ENT-ATISENE DITERPENES FROM EUPHORBIA FIDJIANA

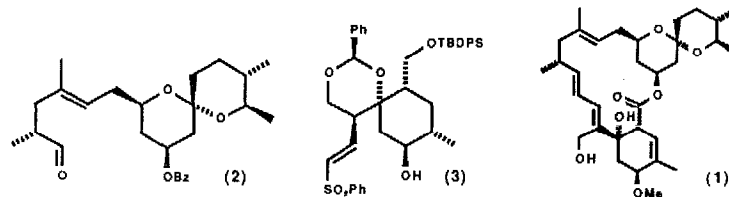
A.R. LaT, R.C. Cambie\*, P.S. Rutledge, P.D. Woodgate, C.E.F. Rickard and G.R. Clark  
 Department of Chemistry, University of  
 Auckland, Auckland, New Zealand

Euphorbia fidjiana heartwood has yielded the oxygenated *ent*-atisane diterpenoids [1], [2], and [3].

TOTAL SYNTHESIS OF (+) - MILBEMYCIN  $\beta_1$ 

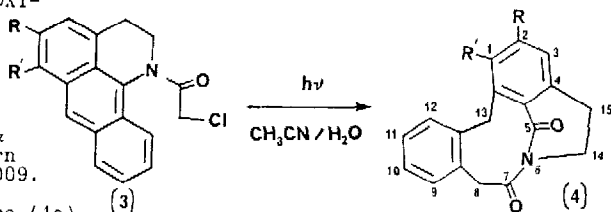
Neville J. Anthony, Alan Armstrong, Steven V. Ley\* and Andrew Madin.  
 Department of Chemistry, Imperial College of Science, Technology and  
 Medicine, London SW7 2AY, U.K.

The successful sulphone anion stabilised coupling of a monocyclic C-1 to C-10 unit (3) with the "northern hemisphere" C-11 to C-25 fragment (2) of the milbemycin produces a compound which may be further elaborated in fourteen steps to the macrocyclic natural product (+) - milbemycin  $\beta_1$  (1).

PHOTOLYSIS OF CHLOROACETAMIDES AS A ROUTE TO NEW 2,8-BRIDGED ISOQUINOLINE DERIVATIVES. X-RAY CRYSTAL STRUCTURE OF 8,13-DIHYDRO-2-METHOXY-4,6-ETHANODIBENZ[*c*,*f*]AZONINE-5,7-DIONE.

J.B. Bremner<sup>a</sup>, W. Jaturonrusmee<sup>a</sup>,  
 L.M. Engelhardt<sup>b</sup>, and A.H. White<sup>b</sup>.  
<sup>a</sup>Department of Chemistry, University of  
 Tasmania, GPO Box 252C, Hobart, Tasmania,  
 Australia 7001. <sup>b</sup>Department of Physical &  
 Inorganic Chemistry, University of Western  
 Australia, Nedlands, Western Australia 6009.

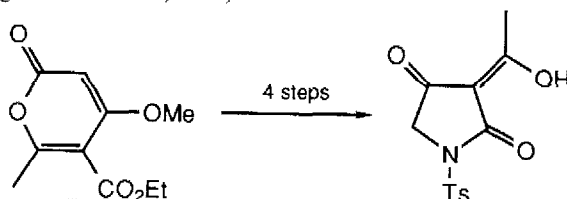
a) R=OMe, R'=H b) R=R'=OMe X-ray structure (4a)



## A NEW STRATEGY FOR THE SYNTHESIS OF 3-ACYLTETRAMIC ACIDS

Raymond C.F. Jones \* and Jacqueline M. Patience  
 (Chemistry Department, Nottingham University, Nottingham NG7 2RD, U.K.)

The potential of pyrones as precursors to 3-acyltetramic acids has been demonstrated by the conversion of 5-ethoxycarbonyl-4-methoxy-6-methyl-2-pyrone into a 3-acyltetramic acid.

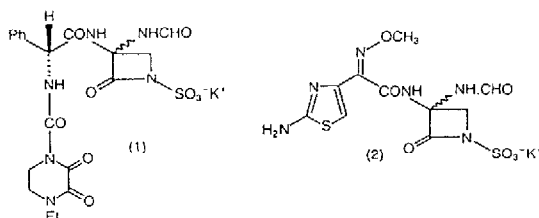


Tetrahedron Lett. 30, 3219 (1989)

**SYNTHESIS OF NOVEL 3-FORMAMIDO-3-ACYLAMINO-MONOBACTAMS**

Clive L. Branch, Stephen C. Finch\*, and Michael J. Pearson.  
Beecham Pharmaceuticals, Research Division,  
Brockham Park, Betchworth, Surrey,  
RH3 7AJ, England.

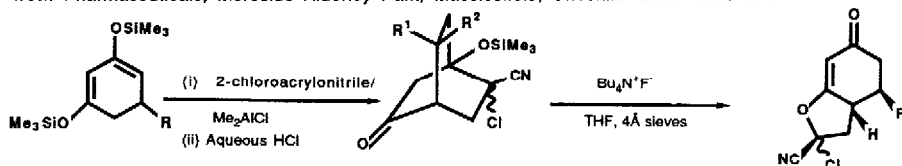
The syntheses and antibacterial activities of the acylamino monobactams (1) and (2) are described.



Tetrahedron Lett. 30, 3223 (1989)

**LEWIS ACID CATALYSED CYCLOADDITION OF 1,3-BISTRIMETHYLSILOXYCYCLOHEXADIENES TO 2-CHLOROACRYLONITRILE. NOVEL REARRANGEMENT OF THE RESULTING ADDUCTS TO CYCLOHEXENONES.**

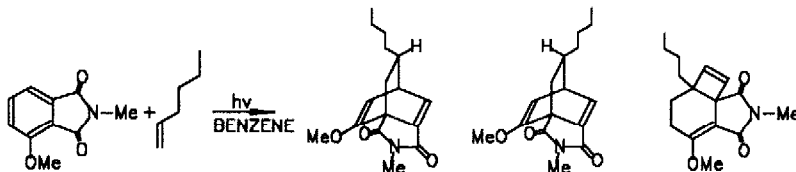
Richard S.J. Clark<sup>§</sup>, Andrew B. Holmes<sup>§\*</sup>, and Victor G. Matassa<sup>†</sup>  
<sup>§</sup>University Chemical Laboratory, Lensfield Road, Cambridge CB2 1EW, U.K.  
<sup>†</sup>I.C.I. Pharmaceuticals, Mereside Alderley Park, Macclesfield, Cheshire SK10 4TG. U.K.



Tetrahedron Lett. 30, 3225 (1989)

**ORTHO- AND PARA-PHOTOCYCLOADDITIONS OF 3-METHOXY-N-METHYLPHthalimide TO n-HEXENE**

R. Suau<sup>†</sup>, R. García Segura and F. Sosa Olaya  
Dpto. de Química Orgánica. Facultad de Ciencias. Universidad de Málaga. 29071-MALAGA. SPAIN.



Tetrahedron Lett. 30, 3229 (1989)

**COBALT-MEDIATED REACTIONS. A NEW SYNTHETIC APPROACH TO β-, γ- and δ-LACTAMS**

G. Bryon Gill, Gerald Pattenden\* and Stephen J. Reynolds

Department of Chemistry, The University, Nottingham, NG7 2RD

A new synthesis of β-lactams from carbamylcobalt salophens is described.

