#### **GRAPHICAL ABSTRACTS**

Tetrahedron, 1990, 47, 1

# GLYCOSYL-INOSITOL DERIVATIVES III. SYNTHESIS OF HEXOSAMINE-INOSITOL-PHOSPHATES RELATED TO PUTATIVE INSULIN MEDIATORS.

William K. Berlin, Wen-Sheng Zhang, and T. Y. Shen.

University of Virginia, Department of Chemistry, Charlottesville, Va., 22901.

The resolved disaccharides, 4-Q-( $\alpha$ -D-glucopyranosyl)-D-myo-inositol-1-phosphate and 4-Q-( $\alpha$ -D-galactopyranosyl)-D-chiro-inositol-1-phosphate, related to putative insulin mediator and glycosyl phosphatidyl inositol have been synthesized.

Tetrahedron, 1990, 47, 21

# SYNTHESIS OF 6-O-(2-AMINOETHYL)-D,L-MYO-INOSITOL-1,2-CYCLIC-PHOSPHATE: A MODEL OF A PUTATIVE INSULIN SECOND MESSENGER

Jeff E. Cobb\* and M. Ross Johnson, Glaxo Inc., Five Moore Drive, Research Triangle Park, NC 27709 The titled compound was synthesised as a potential insulinomimetic in 15 steps from myo-inositol.

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Tetrahedron, 1990, 47, 31

Promolecules for Characterizing Stereochemical

Relationships in Non-Rigid Molecules.

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Fuji Photo Film Co., Ltd., Minami-Ashigara,

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#### STUDY OF THE REACTION OF SODIUM AMIDE IN LIQUID AMMONIA

WITH HEXAHYDRO-(1H)-2-BENZAZONINIUM SALTS: ACCESS TO 2-AZA(7)METACYCLOPHANES

Didier Barbry, Damien Spanneut, Bruno Hasiak and Daniel Couturier,

Lab.Synthese Organique, Univ.Sc. et Techn. de Lille FA ,59655 Villeneuve d'Ascq Cedex FRANCE

Title compound 3 is one of the major compounds of transposition of 1 by sodium amide

Tetrahedron, 1990, 47, 53

#### REACTIVITY OF IMINOPHOSPHORANES TOWARDS SOME SYMMETRICAL

DICARBONYLDICHLORIDES: SYNTHESES AND MECHANISMS

Thierry Aubert, Michel Farnier, and Roger Guilard\*

Laboratoire de Synthèse et d'Electrosynthèse Organométallique (U.A. 33), 21100 Dijon, France.

In situ generated iminophosphoranes react with various dicarbonyl dichlorides to afford known or new heterocycles in a one-pot procedure. Mechanisms of formation are discussed.

Tetrahedron, 1990, 47, 61

STRUCTURE ELUCIDATION OF RP 63834, A NEW MACROCYCLIC LACTONE ANTIBIOTIC, BY THE CONCERTED USE OF HOMO AND HETERONUCLEAR

2D NMR SPECTROSCOPY

D. Fréchet, M. Danzer, F.Debu, B. Monegier du Sorbier, D.Reisdorf, C.Snozzi and M. Vuilhorgne. Rhône Poulenc Santé, Service d'Analyse Structurale, Centre de Recherches de Vitry-Alfortville, 13 quai Jules Guesde, 94400 Vitry-sur-Seine, France.

C63H111O20N3

## DIELS ALDER REACTIONS OF P-CHLORO (BISTRIMETHYLSILYL) METHYLENE PHOSPHINE.

M. Abbari, P. Cosquer, F. Tonnard, Y.Y.C. Yeung Lam Ko and R. Carrié. Université de Rennes I, 35042 Rennes Cédex.

The methylene phosphine of the title reacts with electron poor or rich functionalized dienes to give adducts whose structures are determined by NMR. The regioselectivity of the reactions is discussed.

F one or two substituents: alkyl, aryl or (and) fonctional group.

Tetrahedron, 1990, 47, 83

## CATALYSIS BY ZWITTERIONIC MICELLES IN AROMATIC

NUCLEOPHILIC SUBSTITUTION REACTION

A. Cipiciani, S. Primieri, Dipartimento di Chimica, Università di Perugia Via Elce di Sotto 8, Perugia 06100 (ITALY)

The kinetics of reaction of OH with 1-chloro-2,4-dinitronaphthalene in presence of N,N-dimethyl-N-tetradecylglycine(DTG) and N,N-dimethyl-N-hexadecylglycine(DHG) were studied.Rate effects were compared with those obtained in the presence of normal cationic micelles.

$$\begin{array}{c} \text{CI} \\ \text{NO}_2 \\ \text{+ OH}^- \\ \text{+ OH}^- \\ \end{array} \begin{array}{c} \text{NO}_2 \\ \text{+ CI}^- \\ \text{in presence of} \end{array} \begin{array}{c} \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \end{array} \begin{array}{c} \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \end{array}$$

Tetrahedron, 1990, 47, 91

#### CHEMICAL-MICROBIOLOGICAL SYNTHESIS OF 68-EU-DESMANOLIDES BY CURVULARIA LUNATA CULTURES FROM EUDESMANES WITH FUNCTIONS AT C-1 AND C-6.

A. García-Granados\*, A. Martínez, M. E. Onorato, F. Rivas and J.M. Arias Departamento de Química Orgánica. Facultad de Clencias. Universidad de Granada. Spain.

Biotransformation of several 1,6-difunctionalized eudesmanes by Curvularia lunata.

Tetrahedron, 1990, 47, 103

# ENZYMIC ACYLATION OF SUGARS. RATIONALE OF THE REGIOSELECTIVE BUTYRYLATION OF SECONDARY HYDROXY GROUPS OF D- AND L-GALACTO AND MANNOPYRANOSIDES.

Diego Colombo, # Fiamma Ronchetti, #\* and Lucio Toma+

\*Dipartimento di Chimica e Biochimica Medica, Università di Milano, Via Saldini 50, 20133 Milano (Italy);
\*Dipartimento di Chimica Organica, Università di Pavia, Viale Taramelli 10, 27100 Pavia (Italy).

Methyl 6-O-butyryl-α-D- and -L-galactopyranoside and methyl 6-O-butyryl-α-D- and -L-mannopyranoside, which present three contiguous secondary hydroxy groups in different orientations, have been acylated using three hydrolytic enzymes, Porcine pancreatic, Candida cylindracea, and Pseudomonas fluorescens lipases in organic solvents. Some generalization of the obtained results is discussed.

Tetrahedron, 1990, 47, 111

## THE REACTIONS OF HALOGENATED PHENYLNITROMETHANES WITH TRIETHYL PHOSPHITE

Helen Burgess and John A. Donnelly\*
Department of Chemistry, University College, Dublin 4, Ireland

PhCX<sub>2</sub>NO<sub>2</sub> 
$$(EtO)_3P$$
 | PhC  $=$  N  $\rightarrow$  O | + PhCN + EtX + (EtO)<sub>3</sub>PO |

X = Br or Cl | PhNHCONHPh + PhCONHPh + PhNH<sub>2</sub>

Tetrahedron, 1990, 47, 121

#### RING CLOSURE OF THE 6-METHYLENECYCLODECYL RADICAL

Athelstan.L.J. Beckwith\*, Vincent W. Bowry, and Carl. H. Schiesser, Research School of Chemistry, Australian National University, Canberra.

$$\frac{\text{CH}_2}{\text{at 80}^{\circ}\text{C}} \qquad \frac{k_c \sim 1 \times 10^{10} \text{s}^{-1}}{\text{at 80}^{\circ}\text{C}} \qquad \frac{\text{CH}_2 \cdot \text{CH}_2 \cdot \text{C}}{\text{cis/trans} \sim 3} \qquad Z = H \text{ or } O - N$$

$$\frac{\text{Cis/trans} \sim 3}{\text{Me Me}} \qquad \frac{\text{Me Me}}{\text{Me}}$$

### SYNTHESIS FROM A HEPTONOLACTONE AND EFFECT ON GLYCOSIDASES

OF (1S,2R,6R,7S)-1,2,6,7-TETRAHYDROXYPYRROLIZIDINE

A. J. Fairbanks, G. W. J. Fleet, \* A. H. Jones, I. Bruce, S. Al Daher, \* I. Cenci di Bello, \* B. Winchester, \*
Dyson Perrins Laboratory and Oxford Center for Molecular Sciences, South Parks Road, Oxford OX1 3QY <sup>a</sup>Department of Clinical Biochemistry, Institute of Child Health, 30 Guilford Street, London WC1N 1EH

Tetrahedron, 1990, 47, 139

The Use of a Combined Annulation - Ring Cleavage Strategy for the Synthesis of Seven, Eight And Nine - Membered Rings. Thomas V. Lee\*, John R. Porter and Frances S. Roden. School of Chemistry, The University, Bristol, BS8 1TS, England. Medium sized rings can be prepared via a combined annulation-ring cleavage strategy.

Tetrahedron, 1990, 47, 149

Efficient, mild and Regioselective conversion of Thiiranes to Alkoxy and Acetoxy Disulphides and Dithianes with Ce(IV) Based Oxidants.

#### N. Iranpoor, J. Owji Chemistry Department, Shiraz University, Shiraz, Iran.

Ring opening and dimerization of thiiranes to their corresponding alkoxy and acetoxy disulphides or dithianes are performed with different Ce(IV) Based Oxidants.

Tetrahedron, 1990, 47, 155

ENANTIOSELECTIVE SYNTHESIS OF A KAINOID ANALOGUE BY COBALT MEDIATED CYCLISATION Jack E. Baldwin, Mark G. Moloney, and Andrew F. Parsons Dyson Perrins Laboratory, University of Oxford. OX1 3QY U.K.

A synthesis of a kainoid analogue is described.