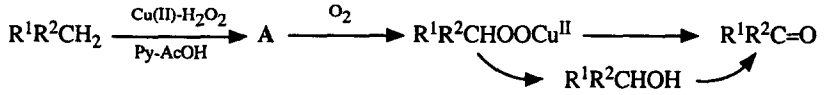
GRAPHICAL ABSTRACTS

Tetrahedron, **1992**, *48*, 2895

THE FUNCTIONALISATION OF SATURATED HYDROCARBONS. PART XXI. THE Fe(III)-CATALYZED AND THE Cu(II)-CATALYZED OXIDATION OF SATURATED HYDROCARBONS BY HYDROGEN PEROXIDE: A COMPARATIVE STUDY

Barton, D.H.R.*; Beviere, S.D.; Chavasiri, W.; Csuhai, E. and Doller, D.*
Department of Chemistry, Texas A&M University, College Station, Texas 77843-3255, USA.



Mechanistic studies show that the ketonisation of saturated hydrocarbons by Cu(II)-H_2O_2 or Cu^0/O_2 in pyridine-acetic acid follows the pathway *alkane* ⟶ *intermediate* A ⟶ *alkyl hydroperoxide* ⟶ *ketone* and *alcohol*.

Tetrahedron, **1992**, *48*, 2911

N-HYDROXYAMINOMETHYLENEPHOSPHONATES: THE REACTION OF HYDROXYLAMINES WITH ALDEHYDES AND SECONDARY PHOSPHITES

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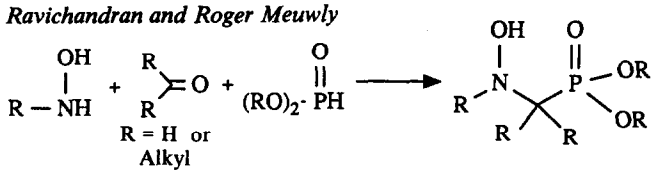

Tetrahedron, **1992**, *48*, 2919

SYNTHESIS OF CAMALEXIN AND RELATED PHYTOALEXINS

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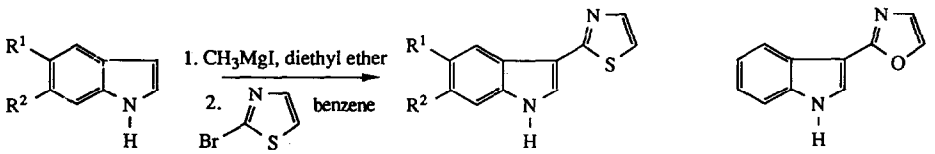
A number of 3-(2'-thiazoyl)indoles and 3-(2'-oxazolyl)indole have been prepared and the antifungal activity of these 3-alkylindoles has been examined.



Tetrahedron, **1992**, *48*, 2925

New Approach to Chiral 5,5-Disubstituted Tetronic Acids. Enantioselective Synthesis of (-)-Vertinolide

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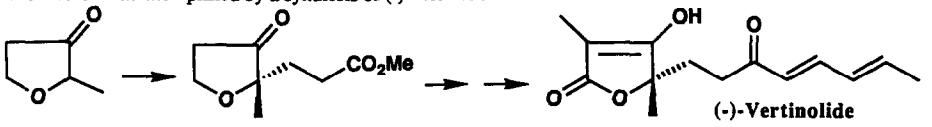
Laboratoire de chimie Organique , Faculté de Pharmacie.5, rue J.B.Clément, 92296 Châtenay-Malabry Cedex (France).

2,2 Disubstituted-4,5-dihydrofuranones obtained by an asymmetric Michael addition were converted into chiral tetronic acids. The method was exemplified by a synthesis of (-)-vertinolide.



Tetrahedron, **1992**, *48*, 2935

AN ATTEMPT ON THE SYNTHESIS OF THE CLAVAM SKELETON FROM GLYCALS AND ISOCYANATES

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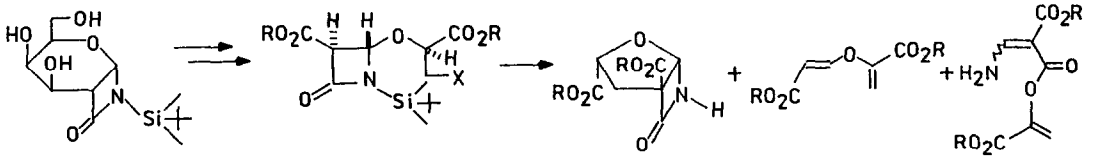
N-Protected 2-C:1-N-carbonyl-2-deoxy-glycopyranosylamines were subjected to the two-step oxidation to afford dicarboxylic acids. Unsuccessful attempts on transformation the diacids into compounds possessing the clavam skeleton were described.

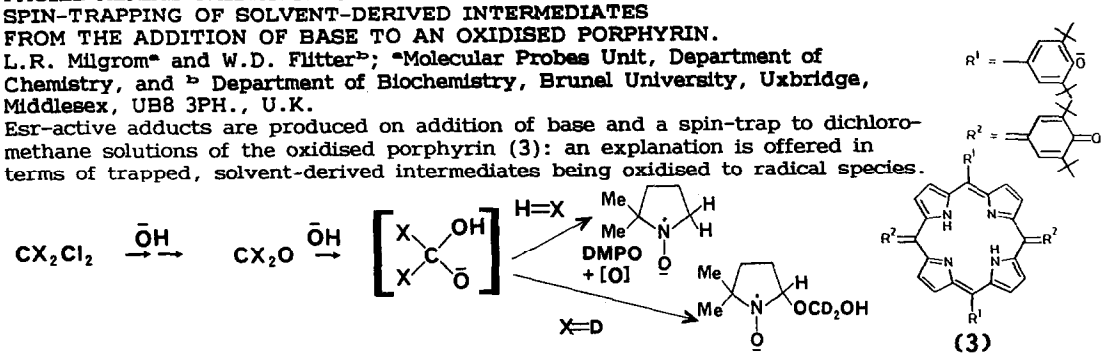


Tetrahedron, **1992**, *48*, 2951

FACILE AERIAL OXIDATION OF A PORPHYRIN. PART 12. SPIN-TRAPPING OF SOLVENT-DERIVED INTERMEDIATES FROM THE ADDITION OF BASE TO AN OXIDISED PORPHYRIN.

L.R. Milgrom[a] and W.D. Flitter[b]; [a]Molecular Probes Unit, Department of Chemistry, and [b] Department of Biochemistry, Brunel University, Uxbridge, Middlesex, UB8 3PH., U.K.

Esr-active adducts are produced on addition of base and a spin-trap to dichloromethane solutions of the oxidised porphyrin (3): an explanation is offered in terms of trapped, solvent-derived intermediates being oxidised to radical species.

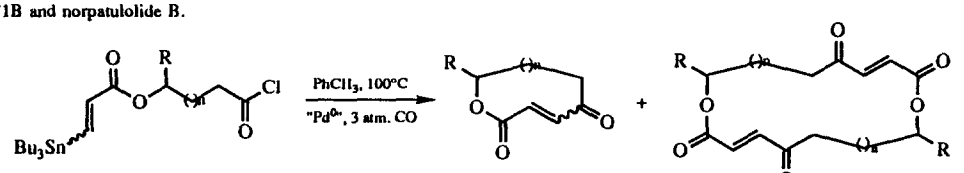


Tetrahedron, **1992**, *48*, 2957

INTRAMOLECULAR Pd^0-CATALYSED CROSS COUPLING; A DIRECT ROUTE TO γ-OXO-α,β-UNSATURATED MACROCYCLES.

Jack E. Baldwin, Robert M. Adlington and Steve H. Ramcharitar.
The Dyson Perrins Laboratory, University of Oxford, South Parks Road, Oxford, OX1 3QY.

Intramolecular Pd^0-catalysed cross coupling of acid chlorides and *Z*- and *E*- β-stannylalkenoates has provided a new and an efficient route to 10-20 membered γ-oxo-α,β-unsaturated macrolides. The method has been used to synthesise the macrocyclic framework of the antibiotic A26771B and norpatulolide B.



R=H, CH_3, C_6H_{13} n=3-13 (15-70%) n=3 (58%)