GRAPHICAL ABSTRACTS

Tetrahedron, 45, 5051 (1989)

PREPARATION OF (R)-VERATRYL- AND (R)-(3-METHOXYBENZYL)SUCCINATES

Jean-Pierre Barnier, Luis Blanco, Eryka Guibé-Jampel and Gérard Rousseau Laboratoire des Carbocycles, I.C.M.O., Bât. 420, Université de Paris-Sud, 91405 Orsay (France)

MeO COOMe
$$H_2O$$
, Lipase P P $PH=7.2$ P $PH=7.2$ PH

PHOTO-FRIES REARRANGEMENTS IN N-SULPHONYL-

Tetrahedron, 45, 5059 (1989)

CARBAZOLES

Amit Chakrabarti, Goutam K. Biswas and D.P. Chakraborty^t
Department of Chemistry, Bose Institute,
93/1, A.P.C.Road, Calcutta-700009, India.

Photo-Fries rearrangements of N-sulphonylcarbazoles 1(a-c) into 1-sulphonyl,2(a-c) and 3-sulphonyl, 3(a-c) carbazoles, respectively, have been investigated.

Tetrahedron, 45, 5065(1989)

LASER POWERED HOMOGENEOUS DECOMPOSITION OF METHYL ACRYLATE AND METHACRYLATE

Josef Pola

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The decomposition is dominated by acyl-oxygen cleavage and has radical-chain mechanism.

REACTION OF SeO₂ WITH DIENES: 1. LINALYL ACETATE

A. San Feliciano*, M. Medarde, J. L. López, J. A. P. Pereira, E. Caballero and A. Perales[†].

Department of Organic Chemistry, Faculty of Pharmacy, 37007. Salamanca, Spain.

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The reaction of SeO₂ with linally acetate in alcoholic media affords some Se-containing substances. An explanation for their formation is presented.

Tetrahedron 45, 5073 (1989)

Tetrahedron, 45,5081(1989)

CONFORMATIONAL ANALYSIS OF N-(1-METHOXYCARBONYLETHYL)- Δ^4 -THIAZOLINE-2-THIONES BY TEMPERATURE-DEPENDENT CIRCULAR DICHROISM AND NMR SPECTROSCOPY AND BY MOLECULAR MECHANICS CALCULATIONS

Jan Roschester and Jan Sandström Division of Organic Chemistry 3, Chemical Center, P.O. Box 124, S-221 00 Lund, Sweden

The conformational equilibria in seven N-(1-methoxycarbonylethyl)-thiazoline-2-thiones are studied by temperaturedependent ¹H NMR and CD spectra and by semiempirical cal-

Tetrahedron, 45, 5101 (1989)

THE PREPARATION OF DIFLUOROMETHYLENEPHOSPHONATE ANALOGUES OF GLYCOLYTIC PHOSPHATES. APPROACHING AN ISOSTERIC AND ISOELECTRONIC PHOSPHATE MIMIC. R.D. Chambers, R. Jaouhari and D. O'Hagan Department of Chemistry, University of Durham, Durham, DH1 3LE.

The synthesis of glycolytic phosphate analogues (I) and (II) incorporating a difluoromethylenephosphonate moiety.

Tetrahedron, 45, 5109 (1989)

STEREO-CONTROLLED SYNTHESIS OF ERYTHRONOLIDES A AND B FROM 1.6-ANHYDRO-β-D-GLUCOPYRANOSE (LEVOGLUCOSAN). SKELETÓN ASSEMBLY IN $(c_0-c_1^3)+(c_7-c_8)+(c_7-c_6)$ SEQUENCE. N.K.Kochetkov,A.F.Sviridov,3 M.S.Ermölenko,D.V.Yashunsky,and V.S.Borodkin N.D.Zelinsky Inst.of Org.Chem.,Acad.of Sciences of the USSR,

Moscow, USSR

Stereospecific syntheses of erythronolides A(2) and B(3) have Ho been accomplished starting from levoglucosan(T) in a uniform synthetic sequence.

R=H 3

Tetrahedron, 45, 5141 (1989)

A CONCISE THIAZOLE MEDIATED SYNTHESIS OF L-(-)-RHODINOSE FROM (S)-ETHYL LACTATE. THE THIAZOLE ROUTE TO DEOXYSUGARS.

A. Dondoni, G. Fantin, M. Fogagnolo, and P. Pedrini

Dipartimento di Chimica, Laboratorio di Chimica Organica, Università, Ferrara, Italy

A synthesis of L-(-)-Rhodinose from ethyl lactate via sequential one- and two-carbon chain elongation with thiazole derivatives.

NEW DITERPENES FROM <u>SALVIA TEXANA</u>. CHEMICAL AND BIOGENETIC ASPECTS

Antonio G. González, Zahira E. Aguiar, Javier G. Luis and Angel G. Ravelo C.P.N.O. Antonio González, Univ. La Laguna, 38206 Tenerife, Canary Islands

Two new diterpenes, 1 and 5b, were characterized. The trans-formation of 1 into 5b points HO. to 1 being an intermediate in the biogenesis of 5b.

$$\begin{array}{c}
0_{2} \\
(1) ----> (5b) \\
h \nu
\end{array}$$

Tetrahedron, 45, 5215 (1989)

A NEW SYNTHETIC ROUTE TO (\pm) -FORSKOLIN

Michael J. Begley, David R. Cheshire, Timothy Harrison, John Hutchinson, Peter L. Myers and Gerald Pattenden.* Department of Chemistry, The University, Nottingham, NG7 2RD. A new synthetic route to forskolin (1), which features

A new synthetic route to forskolin (1), which features intramolecular radical-cyclisation in tandem with intramolecular Mukaiyama aldolisation to elaborate the key functionalised <u>trans</u>-decalin intermediate (2), is described.

(2)

Tetrahedron, 45, 5247 (1989)

Tetrahedron, 45, 5263 (1989)

RADICAL CYCLISATIONS ONTO 2(5H)-FURANONE AND MALEATE
ELECTROPHORES. AN APPROACH TO THE SPIRO- AND LINEARFUSED γ-LACTONE RING SYSTEMS FOUND IN THE GINKGOLIDES
Timothy Harrison, Gerald Pattenden,* and Peter L. Myers
Department of Chemistry, The University Nottingham, NG7 2RD.
Radical cyclisations allow facile synthesis of

Radical cyclisations allow facile synthesis of spiro- and linear-fused γ -lactone ring systems found in the ginkgolides (1).

RD. HO OH HO OH BUT

O H OH

(1)

(2)

A NEW PALLADIUM CATALYZED SYNTHESIS OF <u>CIS</u>, <u>EXO</u>-2,3-DIARYLSUBSTITUTED BICYCLO[2.2.1] HEPTANES OR BICYCLO[2.2.1] HEPT-2-ENES

Marta Catellani, Gian Paolo Chiusoli and Stefano Concari Istituto di Chimica Organica dell'Università, Viale delle Scienze, I-43100 Parma, Italy A Pd-catalyzed cis, exo bis-arylation of adjacent carbon atoms in bicyclo [2.2.1] hept-2-ene or bicyclo [2.2.1] hepta-2,5-diene is described ($X = -CH_2CH_2$ -, -CH=CH).

A

+ ArBr + NaBPh,

Pd cat

Ar + BPh₃ + NaBr

INTRAMOLECULAR DIELS-ALDER REACTIONS OF 2-(ALKYNYL)-PYRIMIDINES AND 2-(ALKYNYL)PYRIDINES

A.E. Frissen, A.T.M. Marcelis, G. Geurtsen, D.A. de Bie and H.C. van der Plas,

Laboratory of Organic Chemistry, Agricultural University, Dreyenplein 8, 6703 HB Wageningen, The Netherlands

$$R_1$$
 R_2
 R_1
 R_2
 R_3
 R_4
 R_5
 R_6
 R_7
 R_8
 R_8
 R_8
 R_8
 R_8
 R_9
 R_9

Intramolecular Diels-Alder reactions of pyrimidines and pyridines carrying an ω-alkynyl side-chain are described. The influence of electronic and steric effects on the rate of above cyclization reactions is discussed.

Tetrahedron, 45, 5163 (1989)

AN AB INITIO THEORETICAL STUDY OF THE STRUCTURE AND STABILITY OF 1-FLUORO-PROPENIDE AND 1,1-DIFLUOROPROPENIDE AND OF THE CORRESPONDING MONOMERIC LITHIATED SPECIES.

Glauco Tonachini and Carlo Canepa, Istituto di Chimica Organica, Universita

di Torino, via Pietro Giuria 7, I-10125 Torino, Italy.

The electron distribution and HOMO polarization are responsible for the a selectivity shown by 1,1-difluoroallyllithium (X=F) toward both hard and soft electrophiles; 1-fluoroallyllithium (X=H) is predicted to show a less pronounced preference for the same site.

> O-Li+ O-Li+ RR'C=O + (FXCCHCH₂)-Li+ ---> RR'C-CFX-CH=CH₂ + FXC=CH-CH₂-CRR'

> > Tetrahedron, 45, 5175 (1989)

INSECT ANTIFEEDANTS FROM AZADIRACHTA INDICA (PART 5): CHEMICAL MODIFICATION AND SRUCTURE

ACTIVITY RELATIONSHIPS OF AZADIRACHTIN AND SOME RELATED LIMONOIDS.

Steven V. Ley,* James C. Anderson, Wally M. Blaney, Philip S. Jones, Zev Lidert, E. David Morgan, Nicholas G. Robinson, Dinos Santafianos, Monique S. J. Simmonds and Peter L. Toogood.

Chemical modifications of azadirachtin (1) and related limonoids have been performed and the products assessed as antifeedants. General comments are made regarding the structural dependency of the antifeedant effect.

Tetrahedron, 45, 5193(1989)

REACTIONS OF SODIUM CYANOBOROHYDRIDE WITH BENZOTHLA ZOLIUM AND Δ^2 -THIAZOLINIUM CATIONS. FORMATION OF BENZOTHIAZOLINES, THIAZOLIDINES AND STABLE THIAZABOROLES.

Harjit Singh^{*}, (in part) Rakesh Sarin, Kamaljit Singh, Rosalinda Contreras[†]and Guillermo Uribe *Department of Chemistry, Guru Nanak Dev University, Amritsar - 143005, India

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The Synthesis of Indolizidine and Quinolizidine Ring Systems by Free Radical Cyclization of 4-Aza-6-methoxycarbonyl-5-hexenyl Radicals

Athelstan L.J. Beckwith and Steven W. Westwood Resarch School of Chemistry, Austalian Naional University Canberra, A.C.T. 2601, Australia

Some mechanistic aspects and the synthetic potential of this cyclization are presented.

Tetrahedron, 45, 5283 (1989)

STUDIES IN MARINE CEMBRANOLIDE SYNTHESIS:

A SYNTHESIS OF 2,3,5-TRISUBSTITUTED FURAN INTERMEDIATES FOR LOPHOTOXIN AND PUKALIDE. Ian Paterson,* Mark Gardner, University Chemical Laboratory, Lensfield Rd, Cambridge CB2 1EW, UK. and Bernard J. Banks, Pfizer Central Research, Sandwich, Kent CT13 9NJ, UK.

Tetrahedron, 45, 5293 (1989)

CATALYSIS BY ALKALI AND ALKALINE-EARTH METAL IONS IN NUCLEOPHILIC ATTACK OF METHOXIDE ION ON CROWN ETHERS BEARING AN INTRA-ANNULAR ACETOXY GROUP

R. Cacciapaglia, S. Lucente, and L. Mandolini* Università La Sapienza Roma, Italy

A.R. van Doorn, D.N. Reinhoudt,* and W. Verboom University of Twente, Enschede, The Netherlands

Rates of reactions of methoxide ion with crown ethers bearing an intra-annular acetoxy group are markedly enhanced by alkali and alkaline-earth metal bromides as a result of much stronger interactions of the metal ion with transition state than with reactants.