GRAPHICAL ABSTRACTS

Tetrahedron, 45, 6367, (1989)

SYNTHESIS AND PROPERTIES OF N-AMINOGUANINES

Kohfuku Kohda*, Moriyoshi Yasuda, Hiroshi Ukai, Kunihisa Baba, Yuriko Yamagata*, and Yutaka Kawazoe

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Tetrahedron, 45, 6375, (1989)

A NEW EFFICIENT SYNTHESIS OF IMIDAZOLINONES AND QUINAZOLINONES BY INTRAMOLECULAR AZA-WITTIG REACTION.

Hisato Takeuchi, Satoshi Hagiwara, and Shoji Eguchi

Institute of Applied Organic Chemistry, Faculty of Engineering, Nagoya University, Furo-cho, Chikusa-ku, Nagoya 464-01, Japan

Imidazolinones and quinazolinones were prepared by intramolecular aza-Wittig reaction in the milder conditions.

Tetrahedron, 45, 6387, (1989)

STEREOCONTROLLED SYNTHESIS OF BOTH THE ENANTIOMERS OF PHASEIC ACID AND ITS METHYL ESTER, A PIVOTAL METABOLITE OF ABSCISIC ACID

TAKESHI KITAHARA, * KAZUSHIGE TOUHARA, HIDENORI WATANABE AND KENJI MORI

Dept. of Agricultural Chemistry, The Univ. of Tokyo, 1-1-1 Yayoi, Bunkyo-ku, Tokyo, Japan Both the enantiomers of phaseic acid v and methyl ester iv were synthesized via

stereospecific addition of the side chain to the bicyclic enone il derived from chiral hydroxy ester i.

REGIO AND STEREOSELECTIVE PREPARATION OF SUBSTITUTED CYCLOPENTANONES FROM CYCLOHEXENONES UTILIZING

TRIMETHYLSTANNYLLITHIUM AS A KEY REAGENT

Tadashi Sato,* Toshiyuki Watanabe, Toshihiro Hayata, and Toru Tsukui Department of Applied Chemistry, Waseda University, Ookubo 3, Shinjuku-ku, Tokyo 169, Japan

Regio and stereoselective preparation of cyclopentanones from cyclohexenones was achieved through a reaction shown below.

TMSOTf

Tetrahedron, 45, 6409, (1989)

REGIOSELECTIVE SYNTHESIS OF RING A POLYMETHYLATED STEROIDS IN THE ANDROSTANE SERIES

Hermann Künzer,* Gerhard Sauer, and Rudolf Wieckert

Schering AG Berlin/Bergkamen.

Müllerstrasse 170-178, D-1000 Berlin 65, West Germany

The regioselective synthesis of 1 - 4 is described

2 R=Me

Tetrahedron, 45, 6427, (1989)

FIRST PRACTIONS OF VINYLINDOLES WITH DIETHYL MESOXALATE, HITROSOBENZENE, AND CHLOROSULFONYL ISOCYANATE:

NEW FUNCTIONALIZED AND [b] AND ELLATED INDOLES

Ulf Pindur* and Myung-Hwa Kim

Department of Chemistry and Pharmacy, University of Mainz, Saarstr. 21, D-6500 Mainz 1, FRG

First reactions some of 2- and 3-vinylindoles with electrophilic heterodienophiles yielding new functionalized and annellated indoles in high selectivities are described.

NEW STERPURANE SESQUITERPENOID FROM THE MEDITERRANEAN ALCYONUM ACAULE: STRUCTURE OF 3-ACETOXY-STERPURENE

G. Cimino, A. De Giulio, S. De Rosa, S. De Stefano

Istituto per la Chimica di Molecole di Interesse Biologico del CNR, Via Toiano N.6, 80072 Arco Felice, Napoli, Italy.

The new sesquiterpenoid 3-acetoxy-sterpurene (1), exhibiting the rare in nature sterpurane skeleton, has been found in *Alcyonum acaule* and characterized mainly by 2D NMR experiments.

Tetrahedron, 45, 6485, (1989)

BROMINE INDUCED AUTOXIDATION AND BROMINATION STUDIES OF CHLORINATED NORBORNENES

Gopalpur Nagendrappa

Engler-Bunte Institut, Bereich Petrochemie, Universität Karlsruhe, 7500 Karlsruhe, West Germany.

Oxygenation of 2 is effected by bromine radicals from Br₂ or HBr to give 6. Br₂/HBr addition products are also formed. Reactions of 2 and 3 are compared.

Tetrahedron, <u>45</u>, 6499, (1989)

REACTIVITY OF 3-ALKYNYLTHIO-1-ETHYL-1,2,4-TRIAZINIUM SALTS IN INTRAMOLECULAR DIELS-ALDER REACTIONS

V.N. Charushin, B. van Veldhuizen and H.C. van der Plas, Laboratory of Organic Chemistry, Agricultural University, Dreyenplein 8, 6703 HB, Wageningen, The Netherlands C.H. Stam, Laboratory of Crystallography, University of Amsterdam, Amsterdam, The Netherlands

$$C_2H_5$$
 C_2H_5
 C

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INTRAMOLECULAR DIELS-ALDER REACTIONS OF PYRIMIDINES:

SYNTHESIS OF TRICYCLIC ANNELATED PYRIDINES.

W.A.W. Stolle, A.T.M. Marcelis, A. Koetsier and H.C. van der Plas*.

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

Tetrahedron, 45, 6519, (1989)

INTRAMOLECULAR DIELS-ALDER REACTIONS OF QUATERNARY PYRA-ZINIUM SALTS AND PROTONATED PYRAZINIUM CATIONS. SYNTHESIS OF ANNELATED PYRIDINIUM SALTS AND ANNELATED PYRIDINES.

Bart Geurtsen. Dick A. de Bie and Henk C. van der Plas*, Laboratory for Organic Chemistry, Agricultural University Wageningen, Dreyenplein 8, 6703 HB Wageningen, The Netherlands

$$X = O, S, SO, Z = CH_2; \qquad X = CH_2, Z = O$$

Tetrahedron, 45, 6531, (1989)

DIELS-ALDER CYCLOADDITIONS OF 1,4-DIAZA-1,3-BUTADIENES: A MNDO INVESTIGATION

F.Orsini*, G.Sala
CNR, Centro Studio Sostanze Organiche Naturali , Dipartimento Chimica Organica e Industriale via Venezian 21, 20133 , Milano, Italy

MNDO calculations have been performed on seve ral 1,4-disubstituted-1,4-diaza-1,3-butadi<u>e</u> nes. The results are discussed in terms of both normal and inver electron demand Diels-Alder reactions.

CONFORMATIONS AND CHARGE DISTRIBUTIONS IN 1,2-DINITROSOETHYLENE AND FUROXAM: 2.-AB MITTO ELECTROSTATIC POTENTIALS AND RELATIVE BOND STRENGTHS.

Enrique Sedano, Cecilia Sarasola and Jesús M. Ugalde

Kimika Fakultatea, Euskal Herriko Unibertsitatea, P.K. 1072, 20080 Donostia, Spain.

We present and discuss ab initio bond orders and electrostatic potentials for the cis (I) and the trans (II) 1,2-dinitrosoethylene, and furoxan (iii).

(1)

(II)

Tetrahedron, 45, 6545, (1989)

A UNIQUE TRIMOLECULAR MICHAEL REACTION AND CYCLIZATION Mohmmad M. Al-Arab, Bader S. Ghanem and Alan O. Fitton

Department of Chemistry, Yarmouk University, Irbid, JORDAN and The Ramage Laboratories, Department of Chemistry and Applied Chemistry, University of Salford, Salford M5 4WT, U.K.

Synthesis of highly substituted cyclohexanols (3) via the Michael condensation of ethyl cyanoacetate and aromatic α, β -unsaturated ketones.

Tetrahedron, 45, 6553, (1989)

PYRROLE DERIVATIVES FROM α-KETOALDEHYDES

Arturo San Feliciano*, Esther Caballero, Juan.A.P.Pereira and Pilar Puebla Laboratorio de Química Farmacéutica, Facultad de Farmacia, 37007-Salamanca, Spain

Some pyrrole and Δ^2 -pyrrolin-4-one derivatives have been prepared from aketoaldehydes by reactions with enamines R1 0 from β -ketoesters or β -ketonitriles.

 $R^2 = Mc$, Et $R^1 = Ph, Me, H$

REACTION OF ADENINE NUCLEOSIDES, TOSYLATED IN THE CARBO-HYDRATE MOIETY, WITH LITHIUM TRIETHYLBOROHYDRIDE Piet Herdewijn

Rega Institute for Medical Research, Leuven, B-3000 Belgium.

The reaction of 2° , 3° -di-O-p-tolylsulphonylated adenine nucleosides with LiEt $_3$ BH was studied.

An easy synthesis of 9-(3,5-dideoxy- β -D-three-pentofuranosyl) adenine and 9- β -D-lyxofuranosyladenine is described.

Tetrahedron, 45, 6581, (1989)

ACYL RADICAL CYCLIZATIONS IN SYNTHESIS. Part 1. SUBSTITUENT EFFECTS ON THE MODE AND EFFICIENCY OF CYCLIZATION OF 6-HEPTENOYL RADICALS

D. Crich and S.M. Fortt, Dept. of Chemistry, Univ. College London, London WC1H OAJ, U.K. The effect of ether and ketal substituents at the 3 and 5 positions on the mode of 6-heptenoyl radical cyclization is studied.

