Tetrahedron, 1993, 49, 10205

The Preparation and Some Reactions of a Benzotriazole Substituted Vinamidinium Salt. John T. Gupton*, Hicks, Stanton Q. Smith, A. Denise Main, Scott A. Petrich, and Doug R. Wilkinson, Department of Chemistry, University of Central Florida, Orlando, Sikorski*, 32816. James A. Monsanto Corporate Research, Chesterfield Parkway North, St. Louis, Missouri 63198. Alan R. Katritzky*, Department of Chemistry, University of Florida, Gainesville, Florida 32611. Abstract: A three step synthesis of a novel 2-(1-benzotriazolyl)vinamidinium salt is described along with its direct conversion to a series of novel, benzotriazole-substituted heterocycles.

Tetrahedron, 1993, 49, 10219

[1+4] Cycloaddition of Vinyl Isocyanates with Isocyanides. Construction of Functionally Elaborate Pyrrolinone Derivatives.

James H. Rigby, * Maher Qabar, Gulzar Ahmed and Robert C. Hughes Department of Chemistry, Wayne State University Detroit, Michigan 48202

Reaction of alkyl isocyanides with vinyl isocyanates affords highly functionalized pyrrolinone and hydroxindole products via a novel [1+4] cyclization process.

$$\bigcap_{NCO} + :C=N-Cy \xrightarrow{RT} \bigvee_{M\in CN} \bigcap_{H} O$$

SPIRO B-LACTAM THIADIAZOLINE AND TRIAZOLINE SYSTEMS. COMPARISON WITH THE CHEMISTRY OF SPIRO B-LACTAM OXADIAZOLINES

Tetrahedron, 1993, 49, 10229

Michel Zoghbi and John Warkentin*
Department of Chemistry, McMaster University, Hamilton, Ontario L8S 4M1

The spirocyclic β-lactam triazoline, thiadiazoline, and oxadiazoline show reactivities decreasing in that order. The triazoline could not be isolated, the thiadiazoline decomposes slowly in solution at room temperature, and the oxadiazoline decomposes at 100 °C.

o o o

$$\begin{array}{c|c}
O & O & O \\
PhCH_{2}-N & Ph & O & Ph\\
N & X & A & PhCH_{2}-N & Ph\\
N & X & A & PhCH_{2}-N & Ph\\
N & Y & A & PhCH_{2}-N & Ph\\
\end{array}$$
Products

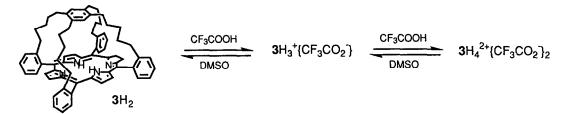
 $X = NCH_2Ph$, O, S

Studies on a Hydrocarbon Capped Free Base Tetraphenylporphyrin and its Conjugate Acids - First Observation of a Monoprotonated Tetraphenylporphyrin {CapTPP(H₃+)CF₃CO₂-}

Órn Almarsson, Andrei Blaskó and Thomas C Bruice*

Department of Chemistry, University of California at Santa Barbara, Santa Barbara, CA 93106

Abstract: ¹H-NMR and visible absorbtion spectroscopic titrations of a unique hydrocarbon capped porphyrin 3H₂ with trifluoroacetic acid in chloroform establish the formation of a stable monoprotonated porphyrin species 3H₃+{CF₃CO₂-}.



Tetrahedron, 1993, 49, 10253

Synthesis of Monoterpene Lactones, (+)-Boschnialactone and (+)-Isoiridomyrmecin, Starting from L-(+)-Arabinose

Daisuke Tanaka, Tomoko Yoshino, Isao Kouno, Masaaki Miyashita, and Hiroshi Irie* Faculty of Pharmaceutical Sciences, Nagasaki University, Nagasaki, 852, Japan



(1) (+)-Boschnialactone (2) (+)-Isoıridomyrmecin

A new method for preparation of optically active γ substituted $\alpha\beta$ -unsaturated δ -lactones starting from L-(+)-arabinose and syntheses of two monoterpene lactones, (+)-boschnialactone and (+)-isoiridomyrmecin, by its application are described

TOTAL SYNTHESIS OF (±)-ACORADIENE

Tetrahedron, 1993, 49, 10263

VIA RADICAL CYCLIZATION

Yao-Jung Chen* and Wen-Yuan Lin

Department of Chemistry, National Chung Hsing University, Taichung, Taiwan 400, Republic of China

A new synthetic approach towards the total synthesis of (\pm) -acoradiene via free radical cyclization for the construction of the spiro[4.5] decane nucleus has been completed

$$\bigvee_{NO_2} \longrightarrow \bigvee_{IIO} \bigvee_{NO_2} \longrightarrow \bigvee_{OII} \longrightarrow \bigvee_{IIO} \bigvee_{I$$

7

N-PHENYLPYRROLE:

A KINETIC. THOUGH NOT THERMODYNAMIC PREFERENCE FOR DILITHIATION

Ferenc FAIGL and Manfred SCHLOSSER *

Institut de Chimie organique, Université de Lausanne, Switzerland

THE ENE REACTION OF PHOSPHAALKYNES WITH PENTACARBONYL-TUNGSTEN COMPLEXES OF PHOSPHAALKENES 1

Tetrahedron, 1993, 49, 10279

A Marinetti^{a,*}, L Ricard^a, F Mathey^a, M Slany^b and M Regitz^{b,*},

Heteroatomes et Coordination, DCPH, Ecole Polytechnique,

F-91128 Palaiseau Cedex, France Fachbereich Chemie der Universität Kaiserslautern,

Erwin-Schrödinger-Straße, D-6750 Kaiserslautern, Germany

The so far unknown ene reaction between (CO)₅W-complexes of phosphaalkenes (9,11,13, enes) and phosphaalkynes (1, enophiles) leads chemoselectively to the formation of the diphosphanes 10, 12, 14, having unsaturated units in 1,4position

9,11,13

SYNTHESIS AND CHARACTERIZATION OF SOME P-MENTHYLPHOSPHETANES, A NEW CLASS OF **ELECTRON-RICH CHIRAL PHOSPHINES**

Tetrahedron, 1993, 49, 10291

A. MARINETTI* and L. RICARD

Laboraroire "Hétéroatomes et Coordination", CNRS URA 1499 DCPH, Ecole Polytechnique, 91128 Palaiseau Cedex, France

 $R = H, CH_2Ph, Br$

A general approach to the synthesis of diastereomerically pure, chiral phosphetanes I is outlined.

A FORMAL NEW ACCESS TO THE BENZO[C]PHENANTHRIDINE ALKALOIDS, SYNTHESIS OF NITIDINE AND O-METHYL FAGARONINE ANALOGUES

Yves L. Janin; Emile Bisagni* URA 1387 CNRS, Institut Curie Bat. 110, Centre Universitaire, 91405 Orsay, France

Tetrahedron, 1993, 49, 10317

EFFICIENT ROUTES TO 2,3-EPOXYALCOHOLS FROM CYCLOALKENYL KETONES, VIA CYCLOALKENYL ALCOHOLS

Charles M. Marson,* Andrew J. Walker, Jane Pickering, Steven Harper, Roger Wrigglesworth and Simon J. Edge Department of Chemistry, The University, Sheffield, S3 7HF, U.K.

$$\begin{array}{c|c} HO \\ \hline HCO_2H \\ \hline \end{array}$$

Tetrahedron, 1993, 49, 10339

LEWIS ACID MEDIATED REACTIONS OF 2,3-EPOXYALCOHOLS: AN EFFICIENT STEREOCONTROLLED ROUTE TO POLYCYCLIC DIOLS

Charles M. Marson,* Steven Harper, Andrew J. Walker, Jane Pickering, Jonathan Campbell, Roger Wrigglesworth and Simon J. Edge

Department of Chemistry, The University, Sheffield, S3 7HF, U.K

DIASTEREOSELECTIVITY IN THE ADDITION OF GRIGNARD REAGENTS

TO KETONES CONTROLLED BY THE 1,3-DITHIANE 1-OXIDE ASYMPTETRIC BUILDING BLOCK

Philip C. Bulman Page, * Jeremy C. Prodger, and Donald Westwood Robert Robinson Laboratories, Department of Chemistry,

University of Liverpool, Oxford Street, Liverpool, L69 3BX, England

Tetrahedron, 1993, 49, 10369

LEWIS ACID MEDIATED ADDITION OF 2-ACYL-1,3-DITHIANES TO $\alpha.\beta\text{-}U\text{NSATURATED}$ KETONES:

SYNTHESIS OF CYCLOHEXENEDIONE MONO-DITHIOACETALS

P. C. Bulman Page, * A. P. Marchington, L. J. Graham, S. A. Harkin, † and W. W. Wood †
Department of Chemistry, University of Liverpool, Oxford Street, Liverpool, L69 3BX, England †Shell Research Ltd., Sittingbourne Research Centre, Sittingbourne, Kent ME9 8AG, England

2-Acyl-1.3-dithianes undergo Lewis acid-mediated addition to enones to provide δ -diketones which suffer base-catalyzed intramolecular aldol reaction to produce cyclohexendione monoacetals

Tetrahedron, 1993, 49, 10387

ONE-STEP SYNTHESIS OF C-2 DIALKYLAMINO-SUBSTITUTED 2',3'-O-ANHYDRO-LYXO-URIDINES: FIRST REPORT ON THE OPENING OF 2,2'-O-ANHYDRO-BRIDGE OF 2,2'-O-ANHYDROURIDINE BY SECONDARY AMINES.

K. Sakthivel, S. Bera and T. Pathak* Bioorganic Chemistry Unit, Organic Chemistry Division (Synthesis), National Chemical Laboratory, Pune 411008, India.

GNETULIN, A DIMER OF 3',4,5'-TRIHYDROXY-3-METHOXYSTILBENE FROM GNETUM ULA

A. Zaman^a,*, J.D. Connolly^b, M.A. Khan^a, C. Lavaud^c, G. Massiot^c, J.-M. Nuzıllard^c, M. Rahman^a, D.S. Rycroft^b and Z.S. Siddiqui^a; ^aAligarh Muslim University, (India), ^bUniversity of Glasgow, (UK), ^cURA CNRS 492, University of Reims, (France)

Structure (1) has been assigned to Gnetulin, a dimer of 3',4,5'-trihydroxy-3-methoxystilbene, isolated from Gnetum ula

RO OR OME

Tetrahedron, 1993, 49, 10397

Studies on Terpenoids and Steroids. Part 27.

Structure of a D:A-Friedo-oleanane Triterpenoid from Salacia reticulata and Revision of the Structures of Kokoonoi and Kokzeylanoi Series of Triterpenoids

A.A. Leslie Gunatulaka,* Bhavani Dhanabalasingham, Veranja Karunaratne,
Department of Chemistry, University of Peradeniya, Peradeniya, Sri Lanka
Tohru Kikuchi* and Yasuhiro Tezuka,
Peragraph Institute for Wakan Valu. Toyonga Madical & Phomogonitael University

Research Institute for Wakan-Yaku, Toyama Medical & Pharmaceutical University, Sugitani, Toyama 930-01, Japan

Application of extensive 2D and NOE difference NMR spectroscopy aided the elucidation of the structure of *epi*-kokoondiol from *Salacia reticulata* as 1 and led to the revision of the structures of *Kokoona* triterpenoids, kokoondiol, kokoononol, kokzeylanol, kokoonol and kokzeylanonol as 2, 3, 4, 5, and 6, respectively

 $\begin{array}{lll} 1 \; R_1 = H \; ; \; R_2 = \alpha - OH, \beta - H \\ 2 \; R_1 = H \; ; \; R_2 = \beta - OH, \alpha - H \\ 3 \; R_1 = H \; ; \; R_2 = H_2 \\ \end{array} \quad \begin{array}{lll} 4 \; \; R_1 = H \; ; \; R_2 = O \\ 5 \; \; R_1 = OH \; ; \; R_2 = H_2 \\ \end{array}$

SYNTHESIS OF *AMBROX*® FROM (-)-SCLAREOL AND (+)-cis-ABIENOL

Tetrahedron, 1993, 49, 10405

Alejandro F. Barrero,* Enrique J. Alvarez-Manzaneda, Joaquín Altarejos, Sofía Salido and José M. Ramos Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Granada, 18071 Granada (Spain)

(-)-Ambrox® (III) has been synthesized from (-)-sclareol (I), in 3 steps by 2 different approaches, in 72% and 58% overall yield, respectively, and from (+)-cis-abienol (II) in a 2 step reaction (84% overall yield).

LITHIATION OF 1-PHENYLSULFENYL-4-PENTEN-1-YNES AND REACTIONS WITH ELECTROPHILES.

Saverio Florio,** Ludovico Ronzini, b Erbana Epifani b and Riccardo Sgarra b

- a) Dipartimento Farmaco-Chimico, Università di Bari, Via Orabona 4, 70125 Bari, Italy;
- b) Dipartimento di Biologia, Università di Lecce, Via Monteroni, 73100 Lecce, Italy.

$$PhSC = CCH_2CH = CH_2 \xrightarrow{1) \text{ n-BuLi}} PhS + PhS = E$$

45-97% overall yield; E=H₂O, D₂O, MeI, Ketones, Aldehydes

Tetrahedron, 1993, 49, 10421

SYNTHESIS OF VINCA ALKALOIDS AND RELATED COMPOUNDS, PART LXVIII. TWO DIASTEREOISOMERIC ASPIDOSPERMA-EBURNEA TYPE BIS-INDOLES: THEIR SYNTHESIS AND STRUCTURE REVISITED

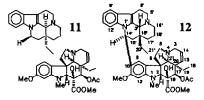
Katalin Honty, Csaba Szántay Jr., Pál Kolonits, Ádám Demeter, band Csaba Szántay

^a Technical University, Department of Organic Chemistry, H-1521,

Budapest, Gellért tér 4, Hungary.

b Chemical Works of Gedeon Richter, Spectroscopic Research Centre, H-1475, Budapest, POB 27, Hungary.

With the aim of clarifying their previously incorrectly depicted structure, the indole-indoline type compounds 11 and 12 were synthesized via different routes.



AROMATIC ALDEHYDE METHYLHYDRAZONES AND NITRILE OXIDE. CRYSTAL STRUCTURE OF 3,6-DIPHENYL-4-METHYL-6H-1,2,4,5-

Tetrahedron, 1993, 49, 10427

OXATRIAZINE.
Francesco Risitano,* a Giovanni Grassi, Francesco Foti, Giuseppe Bruno, Francesco Nicolo'. b

a) Istituto di Chimica dei Composti eterociclici, Università, Vill S Agata 98166 Messina, Italy b) Dipartimento di Chimica Inorganica, Analitica e Struttura Molecolare, Università, Vill. S. Agata 98166 Messina, Italy

Reaction of methylhydrazones 1 with nitrile oxide affords Z-adducts 2, which, depending on the reaction procedure and the substituents, can undergo either isomerization to 3 or tautomerization to 4 or irreversible cyclization to 5

Tetrahedron, 1993, 49, 10435

PETROSYNOL AND PETROSOLIC ACID, TWO NOVEL NATURAL INHIBITORS OF THE REVERSE TRANSCRIPTASE OF HUMAN IMMUNODEFICIENCY VIRUS FROM PETROSIA SP.

SARA ISAACS¹, SHOSHANA LOYA², YOEL KASHMAN¹, YOSSI LOYA³ AND AMNON HIZI² ¹School of Chemistry, ²School of Medicine, ³Department of Zoology, Tel-Aviv University, Ramat Aviv 69978, ISRAEL

Petrosynol and the novel petrosolic acid (2) were isolated from a marine sponge. The gross structure of 2 was determined by NMR spectroscopy.