GRAPHICAL ABSTRACTS

Tetrahedron Lett.29,5459(1988)

THE DIRECTED ORTHO METALATION TO ARYL-ARYL CROSS COUPLING. A GENERAL REGIOSPECIFIC SYNTHESIS OF PHENANTHROLS

Jian-min Fu, M. J. Sharp, and V. Snieckus*, Guelph-Waterloo Centre for Graduate Work in Chemistry, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1

Tetrahedron Lett.29,5463(1988)

THE DIRECTED METALATION CONNECTION TO ARYL-ARYL CROSS COUPLING. REGIOSPECIFIC SYNTHESIS OF PHENANTHRIDINES, PHENANTHRIDINONES AND THE BIPHENYL ALKALOID ISMINE

M. A. Siddiqui and V. Snieckus, Guelph-Waterloo Centre for Graduate Work in Chemistry, University of Waterloo,

Tetrahedron Lett.29,5467(1988)

A FACILE METHOD FOR THE SYNTHESIS OF β -CHLOROALKYL SULFIDES USING DIMETHYL SULFOXIDE ACTIVATED BY PHENYL DICHLOROPHOSPHATE OR PHOSPHORUS OXYCHLORIDE

Hsing-Jang Liu* and James M. Nyangulu

Department of Chemistry, The University of Alberta, Edmonton, Alberta, Canada T6G 2G2

A simple procedure has been developed for the transformation of alkenes to β -chloroalkyl sulfides using dimethyl sulfoxide activated with phenyl dichlorophosphate or phosphorus oxychloride.

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A NEW PROCEDURE FOR DETHIOACETALIZATION Hsing-Jang Liu* and Virginia Wiszniewski

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A simple procedure has been developed for the conversion of thioacetals to the corresponding carbonyl compounds using the combination of phenyl dichlorophosphate, dimethylformamide and sodium iodide.

Tetrahedron Lett.29,5475(1988)

synthesis of (s)- \underline{N}^1 -(3-hydroxy-2-phosphonylmethoxy)propyl-

CYTOSINE ((S)-HPMPC), R.Webbll,* J.Wos, J.Bronson and J. Martin, Bristol-Myers, Wallingford, Connecticut 06492-7660

(S)-HPMPC 1 has been synthesized by direct cesium carbonate promoted alkylation of cytosine with an appropriately constructed glycerol phosphonate side chain.

Tetrahedron Lett.29,5479(1988)

2-MERCAPTOBENZOTHIAZOLE--AN IMPROVED REAGENT FOR THE REMOVAL OF METHYL PHOSPHATE PROTECTING GROUPS FROM OLIGODEOXYNUCLEOTIDE PHOSPHOTRIESTERS.

Alex Andrus and Serge Beaucage

Beckman Instruments Inc., 1050 Page Mill Road, Palo Alto, CA 94303

2-Mercaptobenzothiazole and diisopropylethylamine in N-methylpyrrolidinone efficiently removes methyl phosphate protecting groups from deoxynucleotide phosphotriesters. This odorless reagent can substitute for hazardous thiophenol in oligonucleotide synthesis.

O P O B iPr₂NEL, NMP

0=1-0-

Tetrahedron Lett. 29,5483 (1988)

A NOVEL SYNTHESIS OF 4-ALKYL-4-(4-METHOXYPHENYL)CYCLOHEX-2-EN-1-ONES AND THE SCELETIUM ALKALOID, O-METHYLJOUBERTIAMINE. Louis D. Schulte and Reuben D. Rieke*

Department of Chemistry, University of Nebraska-Lincoln Lincoln, Nebraska 68588-0304 U.S.A.

MeO OMe
$$\frac{1}{2}$$
 1 RX $\frac{1}{2}$ 1 TFAA MeO $\frac{1}{2}$ 1 RX - MeOTf, ExOTf or allyIOTs

Tetrahedron Lett.29,5487(1988)

ENZYMATIC FORMATION OF AN ISOPEPTIDE BOND INVOLVING THE $\epsilon\textsc{-}\textsc{amino}$ Group of Lysine

Hiroshi Kitaguchi, Dar-Fu Tai, and Alexander M. Klibanov*

Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA 02139 U.S.A.

RCOOCH₂ CH₂ Cl + H₂ N(CH₂)₄ CH(NH₂)COOC(CH₃)₃ hydrolase in anhydrous organic solvents

Tetrahedron Lett.29,5489(1988)

NOVEL MARINE SPONGE DERIVED AMINO ACIDS 7.

fenestin B (2)

THE FENESTINS
Siraj Omar⁺, Laura Tenenbaum⁺, Lawrence V. Manes[#], and
Phillip Crews⁺*

HDepartment of Chemistry and Institute for Marine Sciences, University of California, Santa Cruz, Ca. 95064⁺, and Syntex Research, Palo Alto Ca. 94043

Cyclic peptides, fenestins A (1), B (2) and a known diketopiperazine, cyclo-(L-Pro-L-Val) (3) are reported from the sponge Leucophloeus fenestrata.

NEW SYNTHESIS OF SPIRO-BENZOPYRAN AMINO ACIDS BY

Frank J. Urban

fenestin A (1)

Pfizer Central Research, Groton, Connecticut 06340

INTRAMOLECULAR AMIDOALKYLATION

Tetrahedron Lett.29,5497(1988

Tetrahedron Lett.29,5493(1988)

ENANTIOSPECIFIC SYNTHESIS OF ISOMERIC 8,9,12-TRIHYDROXYEICOSA-5(Z),10(E),14(Z)-TRIENOIC ACIDS

Pendri Yadagiri, Dong-Soo Shin, and J.R. Falck*

Departments of Molecular Genetics and Pharmacology, University of Texas Southwestern Medical Center, Dallas, Texas 75235 USA

Five stereoisomers of the 8,9,10-trihydroxy eicosanoid isolated from platelets were prepared by β -oxido ylide homologation of a carbohydrate-derived precursor.

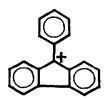
Tetrahedron Lett.29,5501(1988)

ON THE ¹H-NMR SPECTRA OF HIGHLY CHARGED MULTI-TRIPHENYLMETHYLIUM IONS

C. F. Wilcox*, Department of Chemistry, Cornell University, Ithaca, NY 14853-1301, USA; D. Hellwinkel*, H. Stahl, H. G. Gaa and M. Dörner, Organisch-chemisches Institut der Universität, D-6900 Heidelberg, FRG

A Hückel model is presented for calculating the downfield ¹H-NMR shifts of highly charged multi-tritylium ions and the contrasting *upfield* shifts of the corresponding fluorenylium ions.





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Department of Chemistry, The University of Alberta, Edmonton, Alberta, Canada T6G 2G2

A simple procedure has been developed for the conversion of thioacetals to the corresponding carbonyl compounds using the combination of phenyl dichlorophosphate, dimethylformamide and sodium iodide.

CARBOCYCLES FROM CARBOHYDRATES:

A SIMPLE ROUTE TO AN ENANTIOMERICALLY PURE PROSTAGLANDIN

INTERMEDIATE. Pascale Bélanger and Petpiboon Prasit *

Merck Frosst Centre for Therapeutic Research, P.O. Box 1005, Pointe Claire-Dorval, Québec, Canada.

(±)MODHEPHENE AND (±)ISOCOMENE VIA CASCADE REARRANGEMENT

Lutz Fitjer*, Andreas Kanschik and Marita Majewski Institut für Organische Chemie der Universität Göttingen, Tammannstr. 2, D-3400 Göttingen, Germany

Dispiro[3.0.4.2] undecane 1 has been synthesized and rearranged to (±)modhephene 2 and triquinane 3 under kinetic control, and to (±)isocomene 4 and triquinane 5 under thermodynamic control.

Tetrahedron Lett. 29,5525 (1988

Tetrahedron Lett. 29,5529 (1988)

CATALYTIC INTRAMOLECULAR 2-(4-ALKENYL)ALLYLPALLADIUM INSERTIONS

Wolfgang Oppolzer * , Rolf E. Swenson and Jean-Marc Gaudin Département de Chimie Organique, Université de Genève, CH-1211 Genève 4, Switzerland Pd(0)-catalyzed cyclizations $\underline{I} \to \underline{III}$ proceed, via an allylpalladium species (e.g. \underline{II}), with high regio- and stereoselectivity which is opposite to the type-II-magnesium-ene process.

$$R = \sum_{Q_2 \in Q_2 \in Q_2} X = \sum_{Q_2 \in Q_2 \in Q_2} X = \sum_{Q_2 \in Q_2 \in Q_2} X = \sum_{Q_2 \in Q_2} X = \sum_{Q_2$$

Tetrahedron Lett. 29,5533 (1988)

AN EFFICIENT ROUTE TO HOMOLOGATED PYRANOSIDIC CONJUGATED ENALS.

Catherine Burnouf, J. Cristobal Lopez*, Maria de los A. Laborde, Alain Olesker and Gabor Lukacs*. Institut de Chimie des Substances Naturelles du CNRS, 91198 Gif-sur-Yvette, France.

Homologated pyranosidic conjugated enals were prepared in excellent yields from α -alkoxy vinyl ethers by mild acidic treatment.

AN EFFICACIOUS SYNTHESIS OF OPTICAL ACTIVE

2-METHYL-1,2-HEXANEDIOLS

Humberto Cervantes-Cuevas and Pedro Joseph-Nathan*

Departamento de Química del Centro de Investigación y de Estudios Avanzados, Instituto Politécnico Nacional, P.O. Box 14-740, Mexico City, 07000 México.

ACIDITY CONSTANTS OF PROTONATED SIMPLE CARBONYL COMPOUNDS:

Tetrahedron Lett.29,5541(1988)

COMMENTS ON LITERATURE DATA AND INDIRECT ESTIMATES

by Jean Toullec

I.T.O.D.Y.S., Université Paris 7/C.N.R.S., 1 rue Guy de la Brosse, Paris, France

 pK_a values, more realistic than literature data, are estimated from rate and equilibrium constants for acid-catalysed keto-enol tautomerisation.

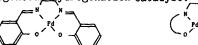
Tetrahedron Lett.29,5545(1988)

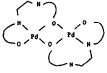
SELECTIVE HYDROGENATION BY A NOVEL PALLADIUM(II) COMPLEX

James M. Kerr and Colin J. Suckling*
Department of Pure and Applied Chemistry, University of Strathclyde, 295, Cathedral Street,

Glasgow G1 1XL, Scotland, and Peter Banfield, ICI Plc Organics Division, Blackley, Manchester

A novel insoluble green complex (3) has been prepared and found to be an active and selective hetereogeneous hydrogenation catalyst.





Tetrahedron Lett.29,5549(1988)

2, 3-UNSATURATED C-GLUCOPYRANOSIDES: A GUIDELINE TO THE ANOMERIC CONFIGURATIONAL ASSIGNMENT

Giovanni Casiraghi, Mara Cornia, Lino Colombo, Gloria Rassu,

Giovanna Gasparri Fava, Marisa Ferrari Belicchi, and Lucia Zetta

Dipartimento di Chimica dell'Università,

Via Vienna, 2 I-07100 Sassari, Italy

Tetrahedron Lett. 29,5553 (1988)

CATALYSED IPSO REPLACEMENT OF PHENOLIC ETHERS BY GRIGNARD REAGENTS

by Robert A.W. Johnstone and W. Neil McLean (Department of Organic Chemistry, University of Liverpool, Liverpool L69 3BX).

The cross-coupling of tetrazolyl ethers of phenols (ArOR) with Grignard reagents gives alkyl or aryl substituted arenes.

 $ArOR + R'MgX \rightarrow ArR' + [MgXOR]$

Tetrahedron Lett.29,5557(1988)

KINETIC ESR FOR SELF REACTIONS OF PERFLUOROALKYL ETHER PEROXYRADICALS

A. Faucitano, A. Buttafava, F. Martinotti.

Dipartimento di Chimica Generale dell'Università, V.le Taramelli, 12 - PAVIA (Italy)

G. Marchionni, R.J. De Pasquale

Montefluos - Bollate (Milano)

2 RR'CF00° == [RR'CF0000CFRR'] -- M.P.

Decay rate constants determined by kinetic ESR. Strong fluorine substituents effects observed.

Tetrahedron Lett. 29,5561 (1988)

NEW STRATEGY FOR RACEMIZATION OF 2-AMINO-1,3-PROPANEDIOLS, KEY INTERMEDIATES FOR THE SYNTHESIS OF ANTIBIOTIC DRUGS.

Claudio Giordano*, Silvia Cavicchioli, Silvio Levi, Marco Villa.

Istituto di Ricerca Chimica "G. Zambon"

Zambon Group S.p.A. via Cimabue 26, 20032 Cormano-MI-Italy

threo- $\underline{2b}$ (1S,2S) threo- $\underline{2a}$ (1R,2R), $\underline{2b}$ (1S,2S)

Tetrahedron Lett.29,5565(1988)

PALLADIUM CATALYSED TANDEM CYCLISATION-ANION CAPTURE PROCESSES.
STEREOSPECIFIC GROUP TRANSFER FROM ORGANOTIN REAGENTS.
Barry Burns, Ronald Grigg, Piniti Ratananukul, Visuvanathar
Sridharan, Paul Stevenson, Sukanthini Sukirthalingam and Tanachat Worakun
Department of Chemistry, The Queen's University of Belfast, Belfast, BT9 5AG, Northern Ireland.

Tandem cyclisation-anion capture from organotin reagents is a powerful new method for the regio-and stereo-specific generation of tetra-substituted olefins and for the rapid assembly of polyfunctional carbo- and hetero-cyclic compounds.