

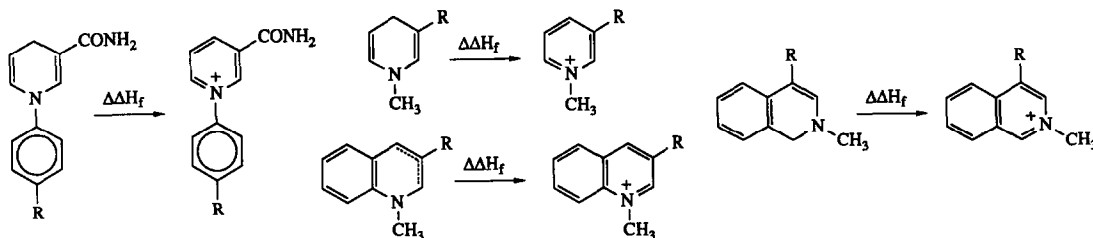
GRAPHICAL ABSTRACTS

Tetrahedron, 1992, 48, 3463

NEURAL NETWORK STUDIES 2. USE OF A NEURAL NET TO ESTIMATE OXIDATION ENERGIES FOR SUBSTITUTED DIHYDROPYRIDINES AND RELATED HETEROCYCLES

M. Brewster, M. Huang, A. Harget and N. Bodor. Ctr Drug Discovery, Coll. of Pharm., Univ. of Florida, Gainesville, FL

A perceptron-type neural net was applied to the estimation of oxidation energies for 1-substituted 1,4-dihydropyridines, dihydroquinolines and dihydroisoquinolines.



Tetrahedron, 1992, 48, 3473

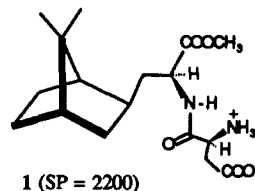
AN IMPROVED SYNTHESIS OF (S)-ASPARTYL-(7,7-DIMETHYLNORBORN-2R-YL)-(S)-ALANINE METHYL ESTER, A NEW HIGH INTENSITY ARTIFICIAL SWEETENER

Y. Yuasa^a, T. Watanabe^a, A. Nagakura^a, H. Tsuruta^a, G. A. King, III^b, J. G. Sweeny^b and G. A. Iacobucci^b

a) Central Research Laboratory, Takasago International Corporation, 5-36-31 Kamata, Ohta-ku, Tokyo 144, Japan

b) Corporate Research & Development Department, The Coca-Cola Company, P.O. Drawer 1734, Atlanta, Georgia 30301, U.S.A.

The artificial sweetener 1 was synthesized stereoselectively from (+)- α -fenchyl alcohol, in 6% overall yield through 9 steps.

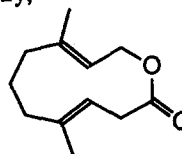


Tetrahedron, 1992, 48, 3485

Conformational Analysis of 4,8-Dimethyl-3(E),8(E)-decadien-10-olide (*E,E*-Suspensolide), a Key Component of the Pheromones of the Male Caribbean and Mexican Fruit Flies

Roman L. Wydra, Donald B. Harden and Lucjan Strekowski,* Department of Chemistry, Georgia State University, Atlanta, GA 30303, U.S.A.; Merle A. Battiste,* Department of Chemistry, University of Florida, Gainesville, FL 32611, U.S.A.; James M. Coxon,* Department of Chemistry, University of Canterbury, Christchurch 4, New Zealand

Two major conformers of suspensolide have the methyls *syn*.

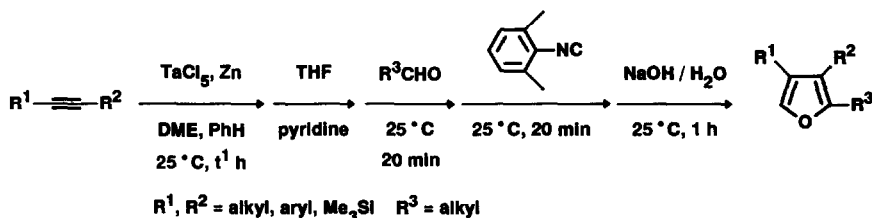


REGIOSELECTIVE SYNTHESIS OF HIGHLY SUBSTITUTED FURANS VIA TANTALUM-ALKYNE COMPLEXES

Y. Kataoka, M. Tezuka, K. Takai,* and K. Utimoto*

Department of Industrial Chemistry, Faculty of Engineering, Kyoto University, Yoshida, Kyoto 606-01, Japan

Successive treatment of tantalum-alkyne complexes, generated *in situ* from alkynes and low-valent tantalum, with aldehydes and aryl isocyanide gives 2,3,4-trisubstituted furans in good yields.

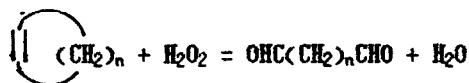


A NEW PROCESS FOR PREPARING DIALDEHYDES BY CATALYTIC OXIDATION OF CYCLIC OLEFINS WITH AQUEOUS HYDROGEN PEROXIDE

Deng Jingfa, Xu Xinhua, Chen Haiying, Jiang Anren

Department of Chemistry, Fudan University, Shanghai, P. R. China 200483

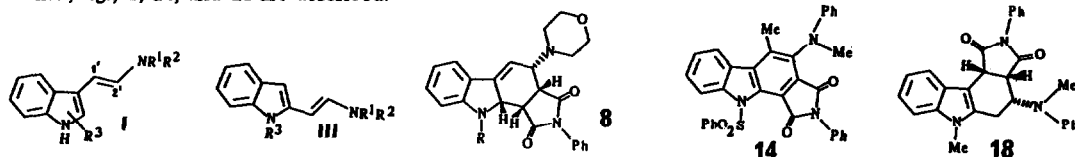
The titled reaction was catalyzed by $\text{WO}_3 \cdot n\text{H}_2\text{O}$.



A NEW ACCESS TO 2'-AMINO-SUBSTITUTED VINYLINDOLES AS DONOR-ACTIVATED HETEROCYCLIC DIENES AND THEIR FIRST DIELS-ALDER REACTIONS

U. Pindur* and C. Otto; Department of Chemistry and Pharmacy, University of Mainz, Saarstraße 21, D-6500 Mainz 1, FRG

A new strategy to some 2'-amino-substituted vinylindoles of the types I and III using a variant of the Horner-Wadsworth-Emmons reaction is reported. First Diels-Alder reactions of these indoles with *N*-phenylmaleimide to furnish, e.g., 8, 14, and 18 are described.

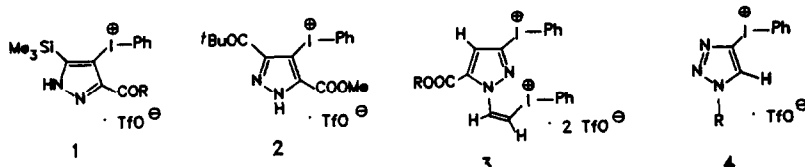


Tetrahedron, 1992, 48, 3527

1,3-DIPOLAR CYCLOADDITION REACTIONS OF α -DIAZOCARBONYL COMPOUNDS, ORGANOAZIDES, AND ETHYNYL(PHENYL)IODONIUM TRIFLATE SALTS

Gerhard Maas*, Manfred Regitz, Ulrich Moll, Rainer Rahm, Fred Krebs, Rudolf Hector
 Fachbereich Chemie, Universität Kaiserslautern, Erwin-Schrödinger-Straße, D-6750 Kaiserslautern, Germany
 Peter J. Stang, Charles M. Crittall, Bobby L. Williamson,
 Chemistry Department, University of Utah, Salt Lake City, UT 84112, USA

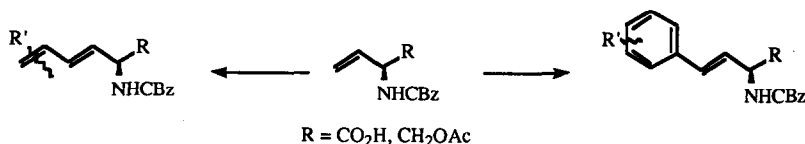
The title reaction yields (hetaryl)phenyliodonium salts such as 1-4.



Tetrahedron, 1992, 48, 3541

PALLADIUM-CATALYZED HECK COUPLINGS OF L-VINYLGLYCINE DERIVATIVES WITH VINYL AND ARYL HALIDES AND TRIFLATES.

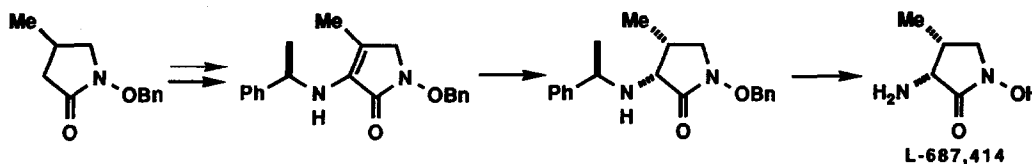
Geoffrey T. Crisp* and Peter T. Glink.
 Department of Organic Chemistry, University of Adelaide, P.O. Box 498, Adelaide, South Australia, Australia.
 Coupling of aryl and vinyl triflates with L-vinyglycine derivatives gave moderate to good yields of modified α -amino acids.



Tetrahedron, 1992, 48, 3557

Routes to 4-Substituted Analogues of the Glycine/NMDA Antagonist HA-966. Enantioselective Synthesis of (3R,4R) 3-Amino-1-Hydroxy-4-Methyl-2-Pyrrolidinone (L-687,414).

Michael Rowley,* Paul D. Leeson, Brian J. Williams, Kevin W. Moore, and Raymond Baker.
 Merck Sharp and Dohme Research Laboratories, Terlings Park, Eastwick Road, Harlow, Essex CM20 2QR, United Kingdom.
 Efficient routes of analogues of HA-966, with potential use as treatments for stroke, are described, including an enantioselective synthesis of the (+)-cis-4-methyl compound, L-687,414.



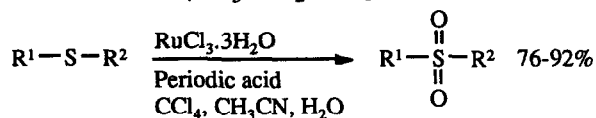
Tetrahedron, 1992, 48, 3571

SIMPLE AND EFFICIENT OXIDATION OF SULFIDES TO SULFONES USING CATALYTIC RUTHENIUM TETROXIDE

Carmen M^a Rodríguez, Jesús M. Ode, José M^a Palazón, Víctor S. Martín*

Centro de Productos Naturales Orgánicos "Antonio González", Instituto Universitario de Bio-Organica
Carretera La Esperanza, 2, 38206 La Laguna, Tenerife, SPAIN

The oxidation of sulfides to sulfones using ruthenium tetroxide as catalyst and periodic acid as stoichiometric oxidant in a biphasic system (CCl₄, CH₃CN, H₂O) is reported.



Tetrahedron, 1992, 48, 3577

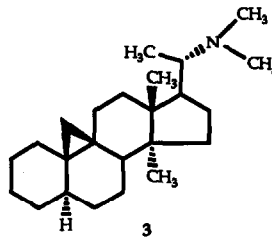
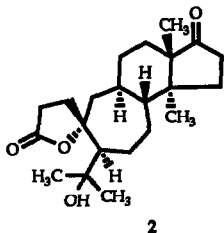
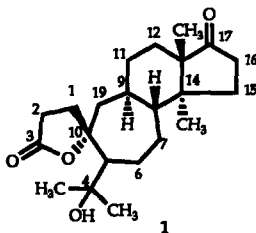
NOVEL TRITERPENOIDS FROM THE ROOTS OF *BUXUS PAPILLOSA*

Atta-ur-Rahman^{a,*}, Habib Nasir^a, Erfan Asif^a, S. Safdar Ali^a and Zahida Iqbal^a

M. Iqbal Choudhary^b and Jon Clardy^{b,*}

^aH. E. J. Research Institute of Chemistry, University of Karachi, Karachi -75270, PAKISTAN

^bBaker Laboratory, Department of Chemistry, Cornell University, Ithaca, NY 14853-1301, U. S. A.

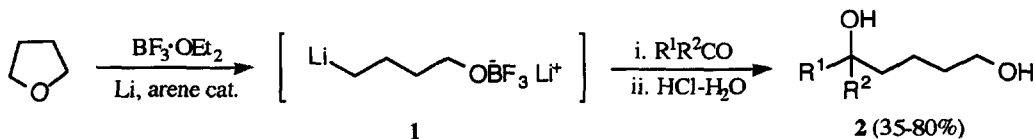


Tetrahedron, 1992, 48, 3585

ARENE-CATALYSED REDUCTIVE LITHIATION OF TETRAHYDROFURAN: IMPROVED SYNTHESIS OF 1,5-DIOLS

Diego J. Ramón and Miguel Yus*

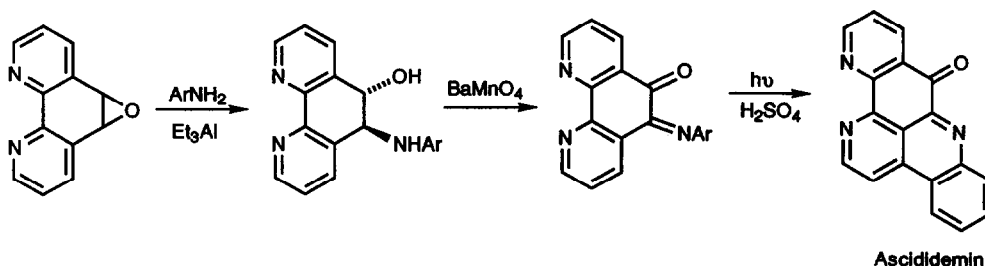
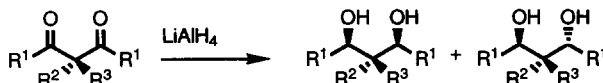
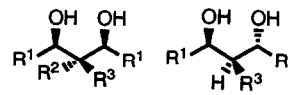
Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, 03080 Alicante, Spain



The Synthesis of Ascidiemin

Christopher J. Moody, Charles W. Rees and Robert Thomas

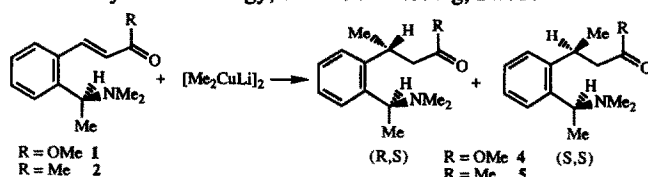
Department of Chemistry, Imperial College of Science, Technology and Medicine, London SW7 2AY, U.K.

DIASTEREOSELECTION IN THE LiAlH_4 REDUCTION OF SEVERELY HINDERED β -DIKETONES. EXAMPLES OF anti-CURTIN-HAMMETT PREEQUILIBRIUM CONDITIONSM. Moreno-Mañas,^{*} N. Gálvez, M.E. Lloris, J. Marquet, A.C. Siani; Department of Chemistry. Universitat Autònoma de Barcelona. Bellaterra. 08193-Barcelona. Spain.Reduction of α -adamantyl (and *tert*-butyl)- β -diketones occurs under anti-Curtin-Hammett preequilibrium conditions, diols meso ($\text{R}^2 = \text{H}$) and d,l being formed; whereas reduction of 3-adamantyl-3-alkylpentane-2,4-diones affords diastereoselectively the 2R,3R,4S meso diol.X-RAY, IR AND ^1H -NMR STRUCTURAL AND CONFORMATIONAL STUDY OF HIGHLY CONGESTED 2-ALKYL-1,3-DIOLS AND OF 3-(1-ADAMANTYL)PENTANE-2,4-DIONEM. Moreno-Mañas,^{a*} J.F. Piniella,^{b,*} A. Alvarez-Larena,^b N. Gálvez,^a M.E. Lloris,^a J. Marquet,^a A.C. Siani,^a G. Germain;^c Departments of Chemistry^a and Crystallography.^b Universitat Autònoma de Barcelona. Bellaterra. 08193-Barcelona. Spain. ^cUnité de Chimie Physique Moléculaire et de Cristallographie. Université de Louvain. B-1348 Louvain la Neuve. Belgium.The configuration of meso-diols ($\text{R}^1 = \text{Me}$; $\text{R}^2 = \text{H}, \text{Me}$; $\text{R}^3 = 1\text{-adamantyl}$) (X-Ray), the configurations of other meso diols and the conformations of meso and d,l diols ($\text{R}^1 = \text{Me}, \text{t-Bu}$; $\text{R}^2 = \text{H}, \text{Me}, \text{Et}$; $\text{R}^3 = 1\text{-ADA}, \text{t-Bu}, \text{c-C}_6\text{H}_{11}$) have been determined (^1H -NMR and IR).

Tetrahedron, 1992, 48, 3623

ADDITION OF Me_2CuLi TO ENONES AND ENOATES
EFFECTS OF SOLVENT AND ADDITIVES ON THE YIELD AND
STEREORELECTIVITY

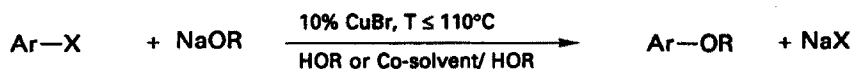
Beritte Christenson^a, Christina Ullenius^{a*}, Mikael Håkansson^b, and Susan Jagner^b,
a, Department of Organic Chemistry, b, Department of Inorganic Chemistry,
Chalmers University of Technology, S-412 96 Göteborg, Sweden



Tetrahedron, 1992, 48, 3633

Copper(I) Halide Catalysed Synthesis
of Alkyl Aryl and Heteroaryl Ethers

M. A. Keegstra, T. H. A. Peters, and L. Brandsma, Department of Preparative Organic
Chemistry of the University, Debye Institute, Padualaan 8, 3584 CH Utrecht, The Netherlands.



Ar = phenyl, 1-naphthyl, 2- or 3-thienyl, 2-furyl, 2-, or 3-pyridyl; X = Br, Cl R = alkyl with or without functional group. Polar non-protic co-solvents were used.

Tetrahedron, 1992, 48, 3653

SYNTHESIS OF C_2 -SYMMETRY 2,2'-BIPYRIDINE AND
1,10-PHENANTHROLINE CHIRAL LIGANDS BEARING THE 6,6-DIMETHYLNORPINAN-2-YL GROUP

Giorgio Chelucci, Massimo Falorni, Giampaolo Giacomelli
Dipartimento di Chimica, Università di Sassari, via Vienna 2, I-Sassari, Italy

