GRAPHICAL ABSTRACTS

Tetrahedron Lett.30,2461(1989)

LIGHT INDUCED HALOGENATIVE DECARBOXYLATION OF THIOHYDROXAMIC ESTERS.

William G. Dauben*, Bruce A. Kowalczyk, Dominique P. Bridon Department of Chemistry, University of California, Berkeley, CA 94720.

The generality of light initiated halogenative decarboxylation of thiohydroxamic esters was studied.

Tetrahedron Lett.30,2465(1989)

SYNTHESIS OF (-)-REISWIGIN A. ASSIGNMENT OF ABSOLUTE AND RELATIVE CONFIGURATION.

Barry B. Snider* and Yang Ke

Department of Chemistry, Brandeis University, Waltham, MA 02254-9110

CARBANION-ACCELERATED CLAISEN REARRANGEMENTS 5. STUDIES ON STEREOCONTROL WITH PHOSPHORUS-STABILIZED ANIONS

Tetrahedron Lett.<u>30</u>,2469(1989)

Scott E. Denmark*, G. Rajendra† and John E. Marlin

Roger Adams Laboratory, Department of Chemistry, University of Illinois, Urbana, IL 61801

The diastereoselectivity of rearrangement was found to be strongly dependent on counterion and N-substituent R. Anion control elements are discussed.

Tetrahedron Lett.30,2473(1989)

FRAGMENTATION OF CYCLOPROPYLMETHOXYCHLOROCARBENE: FORMATION OF CYCLOPROPYLCARBINYL/CHLORIDE ION PAIRS, R. A. Moss, G. J.

Ho, and B. K. Wilk, Department of Chemistry, Rutgers, The State University of New Jersey, New Brunswick, New Jersey 08903

Tetrahedron Lett.30,2477(1989)

REACTIONS OF ≪-AMINOESTER IMINES WITH NITROSOBENZENE

- H. Rodríguez C.*, A. Márquez V. and C. A. Chuaquib
- a: Depto. Química Orgánica, Fac. Ciencias Químicas y Farm. U. de Chile. Casilla 233. Santiago. Chile.
- b: Radiation Application Research Branch, Atomic Energy of Canada Research Establishment. Pinawa, Manitoba. Canada, ROE 1LO.

The Diels-Alder Reaction of 1-azadienes. The Effect of an α -Cyano Substituent

Tetrahedron Lett.30,2481(1989)

Min Teng and Frank W. Fowler*

Department of Chemistry, State University of New York, Stony Brook NY 11794

N-Acyl- α -cyano-1-azadienes have been observed to be reactive and *anti* selective dienes in the intramolecular hetero Diels-Alder reaction.

Tetrahedron Lett.30,2485(1989)

RECEPTORS FOR URIC ACIDS. 2. A CAUTIONARY OBSERVATION. T. Ross Kelly*, Mark T. Bilodeau, Gary J. Bridger and Chen Zhao Department of Chemistry, Boston College, Chestnut Hill, MA 02167 USA

Receptor 4 was designed to exceed the affinity of 1 for uric acid 2. The synthesis of 4 and its binding with 2 are described.

Tetrahedron Lett.30,2489(1989)

THE FIRST EXAMPLE OF A LARIAT ETHER THAT FORMS A PSEUDO-SANDWICH COMPLEX

Hyunsook Yoo, Hongming Zhang Jerry L. Atwood, and George W. Gokel* Departments of Chemistry, 'University of Alabama, University, AL 35486 and University of Miami, Coral Gables, FL 33124 U.S.A.

Tetrahedron Lett.30,2493(1989)

B-SILYL CARBENES

Xavier Creary * and You-Xiong Wang
Department of Chemistry, University of Notre Dame, Notre Dame, Indiana 46556

The SiMe₃ group migrates readily to carbenic centers and also promotes migration of the exo-hydrogen to the carbenic center in β-trimethylsilyl substituted norbornyl carbenes.

STEREOCHEMICAL STUDIES ON ESPERAMICINS: DETERMINATION OF THE ABSOLUTE CONFIGURATION OF ISOPROPYLAMINO SUGAR MOLETY

J. Golik*, H. Wong, D.M. Vyas, T.W. Doyle Bristol-Meyers Company, Pharmaceutical Research and Development Division, 5 Research Parkway, P.O. Box 5100 Wallingford, Connecticut 06492

The absolute configuration of $\underline{3}$ was determined as $\underline{\alpha}$ -L-three - pentapyranosyl by comparing CD spectra of 4 to those of two synthesised antipodal glycosides.

Tetrahedron Lett.30,2497(1989)

<u>3</u>: R=H

4: R=p-BrPhNHCO

Tetrahedron Lett.30,2501(1989)

A Strategy for Radical Annulation Based on Allyl and Vinyl Stannanes

Dennis P. Curran* and Paul A. van Elburg

Department of Chemistry, University of Pittsburgh, Pittsburgh, PA 15260, USA

E-{(t-butyldimethylsilyl)methylene|cyclopentanes have been prepared by a new [3+2] radical annulation strategy starting from Z-1-t-butyldimethylsilyl-2-trimethylstannyl-4-iodo-1-butene and electron deficient alkenes.

Tetrahedron Lett.30,2505(1989)

CYCLOHEXYL SPIRO-FUSED HYDROXY TETRONIC ACID DERIVATIVES FROM VITAMIN C A.J. Poss* and M.H. Brodowski Department of Chemistry, SUNY at Buffalo, Buffalo, NY

Tetrahedron Lett.30,2509(1989)

Tetrahedron Lett.30,2513(1989)

A SIMPLE SYNTHESIS OF 2-VINYLINDOLES

John E. Macor*, Michael E. Newman, and Kevin Ryan Central Research Division, Pfizer Inc.

Groton, CT 06340

A two step synthesis of 2-vinylindoles is described.

KINETIC RESOLUTION OF RACEMIC β, γ -EPOXY ESTERS WITH PIG LIVER ESTERASE (PLE, E.C. 3.1.1.1.)

Peter Mohr, Lukas Rösslein, Christoph Tamm*

Institut für Organische Chemie der Universität Basel, St.-Johanns-Ring 19, CH-4056 Basel

$$R^2$$
 COOMe PLE R^2 COOM R^3 COOM R^3 R^3 R^3

 R^1 , R^3 = H, Me R^2 = H, Me, CH₂COOMe

E-values and absolute configurations were determined.

Tetrahedron Lett.30,2517(1989)

BATZELLINES A, B, AND C. NOVEL PYRROQUINOLINE ALKALOIDS FROM THE SPONGE Batzella Sp.

Shinichi Sakemi and Hao H. Sun, Harbor Branch Oceanographic Institution, Inc., 5600 Old Dixie Highway, Fort Pierce, Florida 34946, USA, Charles W. Jefford and Gérald Bernardinelli, Department of Organic Chemistry and Laboratory of Crystallography, University of Geneva, 1211 Geneva 4, Switzerland

The structure of batzelline A (1) was determined by X-ray and those of B and C deduced by comparison of their spectral data with that of 1.

SOLID-PHASE SYNTHESIS OF MODIFIED OLIGODEOXYRIBONUCLEOTIDES (etrahedron Lett.30,2521(1989)
WITH AN ACRIDINE DERIVATIVE OR A THIOPHOSPHATE GROUP AT
THEIR 3'END

U. Asseline and Nguyen T. Thuong Centre de Biophysique Moléculaire, C.N.R.S.

1A, Avenue de la Recherche Scientifique 45071 - ORLEANS Cedex 2, France

AN EASY SYNTHESIS OF 2'-DEOXY-B-DISACCHARIDES Michel Trumtel, Alain Veyrières and Pierre Sinav Ecole Normale Supérieure, Laboratoire de Chimie,

Tetrahedron Lett. 30, 2529 (1989)

UA 1110, 24 rue Lhomond, 75231 PARIS CEDEX 05 - FRANCE.

A fully stereoselective synthesis of various 2'-deoxv-8-disaccharides using 1,2-trans-di-0acetyl monosaccharides as glycosyl donors is described.

GLYCOSYLATIONS WITH N-FORMYLAMINO SUGARS : A NEW APPROACH TO 2'-DEOXY-B-DISACCHARIDES.

Tetrahedron Lett.30 2533(1989)

Paolo Tavecchia, Michel Trumtel, Alain Veyrières and Pierre Sinay *. Ecole Normale Supérieure, Laboratoire de Chimie, UA 1110, 24, rue Lhomond, 75231 PARIS CEDEX 05 - FRANCE.

Glycosylation of various alcohols with derivatives of N-formylglucosamine, followed by dehydration of the formamido group and radical reduction, leads to 2'-deoxy-β-disaccharides in a fully stereoselective manner.

CONVENIENT SYNTHESES OF SUBSTITUTED PYRANOID GLYCALS FROM THIOPHENYL GLYCOSIDES AND GLYCOSYL PHENYLSULFONES. Alfonso Fernandez-Mayoralas, Alberto Marra, Michel Trumtel, Alain Veyrières and Pierre Sinay *.

Ecole Normale Supérieure, Laboratoire de Chimie, UA 1110, 24 rue Lhomond, 75231 PARIS CEDEX 05 - FRANCE.

PhCH,0

Li naphtalenide THF. -78°C 95%

PhCH_O

R = SPh or SO,Ph An efficient synthesis of pyranoid glycals from thiophenylglycosides or glycosyl phenylsulfones with acid or base labile protecting groups is described.

A STEREOSELECTIVE ACCESS TO THE BASIC SKELETON OF PHYLLOCLADANE Tetrahedron Lett. 30 2541 (1989) TYPE DITERPENES: [3+2], [2+2+2], and [4+2] CYOLOADDITION:

Tetrahedron Lett.30,2537(1989)

Jean-Pierre GOTTELAND and Max MALACRIA*

Laboratoire de Chimie Organique I, associé au ONPS, Université Claude Bernard, ESCIL - 43 Bd du 11 Novembre 1918, 69622 VILLEURBANE, France.

Tetrahedron Lett.30,2545(1989)

SYNTHESIS OF (±)-HEPOXILIN A3 UTILIZING ARSONIUM YLIDES

P. CHABERT^a, C. MIOSKOWSKIa^{*}, J.R. FALCK^b

^aUniversité Louis Pasteur, Laboratoire de Chimie Bio-organique associé au CNRS, Faculté de Pharmacie, 74, route du Rhin 67400 STRASBOURG Cédex FRANCE. ^bDepartments of molecular Genetics and Pharmacology, University of Texas Southwestern Medical Center, DALLAS, TEXAS 75235 USA.

An efficient synthesis of the title compound from 1-heptyne and δ -valerolactone was realized by a convergent strategy exploiting the unique properties of arsonium ylides.

Tetrahedron Lett.30,2549(1989)

TRANSPOSITION-2,3 DE WITTIC DIASTEREOSPECIFIQUE EN SERIE ARENE CHROME TRICARBONYLE

J. BROCARD", M. MAHMOUDI, L. PELINSKI et L. MACTEJEWSKI

Laboratoire de Synthèse Organique, Université des Sciences et Techniques de Lille Flandres Artois - 59655 Villeneuve d'Ascq. France

The 2,3-Wittig rearrangement of ortho substituted benzyl chrome tricarbonyl allyl ethers has been shown to exhibit a remarkably high degree of (RR,SS) diastercoselection.

$$CH_{2}O \longrightarrow CH_{2}O \longrightarrow CH_{2}OH$$

$$C_{Cr(CO)_{3}}CH_{2}OH$$

$$C_{Cr(CO)_{3}}CH_{2}OH$$

$$C_{CO}OH$$

$$C_{CO}OH$$

$$C_{CO}OH$$

$$C_{CO}OH$$

$$C_{CO}OH$$

$$C_{CO}OH$$

ISOLATION OF AN INTERMEDIATE OF FORMOSE REACTION CATALYZED BY THIAMIN-HC1

Tetrahedron Lett.30,2553(1989)

Hiroyuki Saimoto, Kazuya Kotani, Yoshihiro Shigemasa, Makoto Suzuki,† Ken-ich Harada† Department of Industrial Chemistry, Faculty of Engineering, Tottori University, Tottori 680, Japan †Faculty of Pharmacy, Meijo University, Nagoya 468, Japan

ASYMMETRIC HYDROLYSIS OF d1 3-(1-BENZOYLOXY-ETHYL)-AZETIDINONE DERIVATIVE AND CHEMICAL CONVERSION TO CARBAPENEM

Tetrahedron Lett.30,2555(1989)

K.Hirai*, S.Miyakoshi and A.Naito.

New Lead Res. and Fermentation Res. Lab. Sankyo Co., Ltd., Shinagawa-ku, Tokyo 140

SC.H, dt -Benzoate (dt-1) was hydrolysed into R-alcohol 2 by Bacillus subtilis which was further transformed chemically into 3 and carbapenem.

SELECTIVE OXIDATION OF ALCOHOLS BY MANGANATES

Kwan Soo Kim*, Sangjae Chung, In Haeng Cho, and Chi Sun Hahn Department of Chemistry, Yonsei University, Seoul 120-749, Korea

Selective oxidation of alcohols was possible with K₂MnO₄ under phase-transfer catalysis conditions, BaMnO₄-Al₂O₃-CuSO₄·5H₂O, or K₂MnO₄-Al₂O₃-CuSO₄·5H₂O. Especially, BaMnO₄-Al₂O₃-CuSO₄·5H₂O showed remarkable selectivities.

Tetrahedron Lett.<u>30</u>,2559(1989)

"TEMPLATE EFFECTS" ON CALIXARENE CONFORMATIONS
THROUGH HOST-GUEST-TYPE INTERACTIONS
Takashi Arimura, Michio Kubota, Koji Araki,
Seiji Shinkai, and Tsutomu Matsuda
Department of Organic Synthesis, Faculty of
Engineering, Kyushu University, Fukuoka 812, Japan

The conformational change in p-sulfonatocalix[4]arene (1) in water is subject to the "guest template effect" of cations, especially to that of organic ammonium cations.

Tetrahedron Lett.30,2567(1989)

CLEAVAGE OF A NUCLEOSIDIC OXETANE WITH CARB-ANIONS: SYNTHESIS OF A HIGHLY PROMISING CANDI-

DATE FOR ANTI-HIV AGENTS-__A PHOSPHONATE ISOSTERE OF AZT 5'-PHOSPHATE

Hiromichi Tanaka, Mariko Fukui, Kazuhiro Haraguchi, Mariko Masaki, and Tadashi Me Miyasaka* School of Pharmaceutical Sciences, Showa University, Hatanodai 1-5-8. Shinagawa-ku, Tokyo 142

A phosphonate analogue of AZT 5'-phosphate was synthesized from an oxetane nucleoside.

Tetrahedron Lett.30,2571(1989)

HYDROGEN-BONDING. PART 6. A THERMODYNAMICALLY-BASED SCALE OF SOLUTE HYDROGEN-BOND BASICITY

Michael H. Abraham, Priscilla L. Grellier and David V. Prior, Department of Chemistry, University of Surrey, Guildford, $GU2\ 5XH$.

Jeffrey J. Morris and Peter J. Taylor, TCI Pharmaceuticals Division, Mereside Alderley Park, Macclesfield, SK10 4TG.

Christian Laurence and Michel Berthelot; Laboratoire de Spectrochimie Moleculaire, Faculte des Sciences et Techniques, 2 Rue de la Houssiniere, 44072 Nantes, Françe.

A thermodynamically-based scale of solute hydrogen-bond basicity, $\log K_{\rm H}^{\rm H}$, has been set up, using log K values in the complexation of solutes against reference acids in tetrachloromethane. Values of log $K_{\rm H}^{\rm H}$ have been obtained for over 500 solutes.

OPTICAL RESOLUTION OF [1,1'-BINAPHTHALENE]-2,2'-DITHIOL

Tetrahedron Lett.30,2575(1989)

Fulvio Di Furia, a Giulia Licini, a Giorgio Modena and Ottorino De Lucchib

^aCentro di Studio sui Meccanismi di Reazioni Organiche del CNR, Dipartimento di Chimica Organica dell'Università, via Marzolo 1, 1-35131 Padova, Italy. ^bDipartimento di Chimica dell'Università, via Vienna 2, I-07100 Sassari, Italy

Almost optically pure (e.e. > 98%) [1,1'-binaphthalene]-2,2'-dithiol (2) is obtained by resolution of racemic 2 via the transformation of the sulfidryl functions into the corresponding thioethers 3 which are asymmetrically oxidized to diastercomeric chiral monosulfoxides 4 and then reconverted into 2

CLAIMED 6R/6S ALLENE ISOMERIZATION IN CAROTENOIDS

Tetrahedron Lett.30,2577(1989)

IS GEOMETRICAL 9-TRANS/9-CIS ISOMERIZATION
Terje Bjørnland, Gerhard Englert, Kurt Bernhard and Synnøve Liaaen-Jensen Organic Chemistry Laboratories, University of Trondheim-NTH, N-7034 Trondheim, Norway Central Research Units and Cept. Vitamin and Nutritional Research, Hoffmann-La Roche, Basel

Detailed 1H NMR have demonstrated that the presumed (§) allene isomers of carotenoids are geometrical isomers with the <u>cis</u> bond adjacent to the (<u>R</u>) allenic bond.

PALLADIUM-CATALYSED COUPLING OF ARYL AND VINYL TRIFLATES OR HALIDES WITH 2-ETHYNYLANILINE: AN EFFICIENT ROUTE TO

Tetrahedron Lett.30,2581(1989)

FUNCTIONALYZED 2-SUBSTITUTED INDOLES

A. Arcadi^a, S. Cacchi^{b*}, F. Marinelli^a

a) Dpt. di Chim., Ing. Chim. e Materiali, Via Assergi 4, 67100 L'Aquila (Italy). b) Dpt. di Studi di Chim. e Tecnologia delle Sostanze Biologicamente Attive, Università "La Sapienza",

P.1e A. Moro 5, 00185 Roma (Italy)

R = vinyl, aryl, heteroaryl
X = OTf, I, Br

A CONCISE APPROACH TO THE MORPHINAN SKELETON USING A TANDEM INTRAMOLECULAR FURAN DIELS-ALDER / RADICAL CYCLISATION STRATEGY

Tetrahedron Lett.30,2585(1989)

Harry Finch, *a Laurence M. Harwood, *b Graeme M. Robertson, and Richard C. Sewell, b

a Glaxo Group Research Ltd., Park Road, WARE, SG12 0DJ. b Dyson Perrins Laboratory, University of Oxford, South Parks Road, OXFORD OXI 3QY.

A sequence involving an intramolecular Diels-Alder reaction of a furan diene possessing an allenic amide dienophilic moiety, followed by radical induced annelation of the resultant cycloadduct, permits access to material possessing a functionalised morphinan skeleton.

$$X \xrightarrow{\text{NMe}} X \xrightarrow{\text{NMe}} X \xrightarrow{\text{Br}} X \xrightarrow{\text{B$$

Tetrahedron Lett.30,2589(1989) FACILE CYCLOADDITION OF 2-PHENYLSULFONYL 1,3-DIENES TO INDOLES Jan-E. Bäckvall,* Niklas A. Plobeck and Seppo K. Juntunen Department of Organic Chemistry, University of Uppsala, Box 531, S-751 21 Uppsala, Sweden Cycloaddition of 2-phenylsulfonyl 1,3-dienes to 1-indolylmagnesium iodide afforded, after workup, tetrahydrocarbazole systems. 1) benzene-ether 2) H₂O, H⁺ $R_1 = H$, Me, $R_4 = H$, Me R = H, OMe