Tetrahedron Lett.28,3179(1987)

PALLADIUM CATALYZED STEREOSPECIFIC MICHAEL ARYLATION OF 6-ALKYL-5,6-DIHYDRO-2H-PYRAN-2-ONES

Gerald E. Stokker

Merck Sharp & Dohme Research Laboratories, West Point, Pennsylvania 19486, U.S.A.

The Michael anylation with anyl iodides in the presence of Pd [0] resulted in stereospecific addition followed by a hydrogen abstraction from triethylamine.

Tetrahedron Lett.28,3183(1987)

EVIDENCE FOR ELECTRON TRANSFER IN REACTIONS OF NUCLEOPHILES WITH OPTICALLY ACTIVE HALIDES. A CHALLENGE TO THE $\rm S_N^2$ TRANSITION STATE.

E.C. Ashby* and Tung N. Pham

School of Chemistry, Georgia Institute of Technology, Atlanta, GA 30332

Evidence is presented which shows that several typical nucleophilic aliphatic substitution reactions are best represented by an electron transfer process.

$$RX + Y^{-} \rightarrow [Y^{*}RX^{*}] \rightarrow [Y^{*}R^{*}X^{-}] \rightarrow [Y^{*}R^{*}....X^{-}] \rightarrow Y^{*} + R^{*} + X^{-} \rightarrow RY + X^{-}$$

THE THIOXANTHONE SYSTEM AS A TEMPLATE IN FREE RADICAL RELAY CHLORINATION OF A STEROID

Ronald Breslow and Tao Guo

Department of Chemistry, Columbia University New York, NY 10027

$$II + PhICl_2 \longrightarrow HCl + PhI + III$$

Tetrahedron Lett. 28,3187(1987)

OTRDMS

USE OF A THERMALLY STABLE, OPTICALLY ACTIVE NITRILE OXIDE IN THE SYNTHESIS OF A LYNGBYATOXIN A INTERMEDIATE.

A P. KOZIKOWSKI* and X-M CHENG, Department of Chemistry, University of Pittsburgh, Pittsburgh, PA 15260

Tetrahedron Lett.<u>28</u>,3189(1987)

ALLYLIC 1,3-REARRANGEMENT OF THIOPHENYL SUBSTITUTED SULFONES

Albert Padwa*, William H. Bullock and Andrew D. Dyszlewski Department of Chemistry, Emory University, Atlanta, GA 30322 USA

Substituted thiophenyl allyl sulfones undergo a 1,3-allylic sulfonyl shift and this rearrangement has been utilized with a metallation-alkylation sequence.

The Question of the Validity of Using Radical Probes for Determining SET. The Reaction of Alkyl Halides

Tetrahedron Lett. 28,3197(1987)

with LiAlH4.
E.C. Ashby* and Tung N. Pham

School of Chemistry, Georgia Institute of Technology, Atlanta, GA 30332

The validity of using radical probes in the reaction of alkyl iodides with LiAlH $_{L}$ is clearly established.

DIELS-ALDER REACTIONS OF VINYLBICYCLO[4.1.0] HEPTENES Makoto Sakaino and Jerrold Meinwald*

Tetrahedron Lett.28,3201(1987)

Department of Chemistry, Cornell University, Ithaca, NY 14853

Dienes 1 and 2 are synthesized and found to undergo Diels-Alder

additions to quinones readily.

200

Tetrahedron Lett.28,3205(1987)

SYNTHESIS OF NUCLEOSIDE METHYLPHOSPHONOTHIOATES
Wolfgang K.-D. Brill and Marvin H. Caruthers
Department of Chemistry and Biochemistry, University of Colorado, Boulder, CO 80309 USA

Deoxydinucleotide methylphosphonothioates were synthesized regioselectively and resolved by hplc.

AN ATTEMPTED SYNTHESIS OF TRICYCLO[$8.2^{1,10}.0^{1,7}.0^{4,10}$]-1(7),4(10)-DODECADIENE

John E. McMurry and Rolf Swenson Department of Chemistry, Cornell University, Ithaca, NY 14853

Titanium-induced cyclization of the appropriate diketone yields the title compound, which undergoes rapid Cope rearrangement.

Tetrahedron Lett.28,3213(1987)

STEREOCONTROLLED SYNTHESIS OF DIAMINES FROM IODOLACTAMS

Spencer Knapp* and Anthony T. Levorse
Department of Chemistry, Rutgers University, New Brunswick, New Jersey 08903

$$O \longrightarrow \begin{array}{c} NH & \longrightarrow \\ \hline \\ DMF, 23^{\circ} \end{array} \longrightarrow \begin{array}{c} N_{3} \\ \hline \\ O \longrightarrow \\ \end{array}$$

Tetrahedron Lett.28.3217(1987)

THE UNCATALYZED CONJUGATE ADDITION REACTION OF 2-(1,3-DIOXOLAN-2-YL) ETHYLMAGNESIUM BROMIDE WITH CYCLIC $\alpha,\beta\textsubscript{-ENONES}$

Michael Sworin* and William L. Neumann Department of Chemistry, University of Missouri-St. Louis, St. Louis, Missouri 63121

SUBSTITUENT AND COORDINATION EFFECTS IN SINGLET REACTIONS OF 3-DIAZO-3H-1,2,4-TRIAZOLES WITH SUBSTITUTED BENZENES AND NITRO COMPOUNDS

Tetrahedron Lett.28,3221(1987)

J. Glinka, D. Fiscus, C. B. Rao and H. Shechter Chemistry Department, The Ohio State University, Columbus, Ohio 43210

3-Diazo-3H-1,2,4-triazoles and benzenes give carbenic products of substitution and coordination.

$$\begin{array}{c}
\stackrel{N_2}{\longrightarrow} \frac{z - c_6 H_5}{-N_2} \xrightarrow{V} \stackrel{V}{\longrightarrow} \frac{z}{N} + V \xrightarrow{C_6 H_5} z + V \xrightarrow{C_6 H_5}$$

Tetrahedron Lett.28.3225(1987)

AMIDE BOND SURROGATES: A GENERAL SYNTHETIC ROUTE TO TRANS-CARBON-CARBON DOUBLE BOND ISOSTERES.

Youe-Kong Shue, George M Carrera, Jr., and Alex M. Nadzan Neuroscience Research, Pharmaceutical Products Division Abbott Laboratories, Abbott Park, Illinois 60064

A practical synthesis toward trans-double bond replacements of amide bond pseudopeptides has been accomplished.

PHENOLIC CONSTITUENTS OF PSAMMAPLYSILLA

Emilio Quiñoà, and Phillip Crews* Department of Chemistry and Institute for Marine Studies, University of California, Santa Cruz, Ca. 95064

Two monobromo tyrosine derivatives have been isolated from a O Tonga sponge. These compounds include 3-bromo-4-hydroxyphenylacetonitrile (1) and psammaplin A (2).

Tetrahedron Lett.28.3229(1987)

2R = H

Tetrahedron Lett.28.3233(1987)

PREPARATION OF TWO NEW BIS(2-PYRIDYL)SILANE LIGANDS AND THE COPOLYMERIZATION OF MESI(2-PYRIDYL)₂(CH=CH₂) WITH STYRENE AND DIVINYLBENZENE

Michael E. Wright

Department of Chemistry and Biochemistry, Utah State University,

Logan, Utah 84322-0300

Tetrahedron Lett.28,3235(1987)

A NEW METHOD FOR THE CONVERSION OF ALDEHYDES TO METHYL ESTERS USING PYRIDINIUM DICHROMATE AND METHANOL IN DIMETHYLFORMAMIDE. Brian O'Connor and George Just*

Department of Chemistry, McGill University, Montreal, Canada H3A 2K6

A new method for the conversion of aldehydes to methyl esters using pyridinium dichromate is described.

6eq PDC 6eq MeOH

Tetrahedron Lett.28.3237(1987)

REGIOSPECIFIC SYNTHESIS OF α-METHYLENE-β-LACTAMS BY A HOMOGENEOUS PALLADIUM CATALYZED RING EXPANSION-

CARBONYLATION REACTION

Howard Alper* and Nathalie Hamel

Department of Chemistry, University of Ottawa, Ottawa, Ontario KIN 9B4 Canada

Synthesis of α -methylene- β -lactams by palladium catalyzed carbonylation of methyleneaziridines

+ co
$$\frac{Pd(PPh_3)_4 \text{ or}}{Pd(OAc)_2/PPh_3}$$

REGIOSELECTIVE GENERATION AND TRAPPING OF MONO- AND DIANIONS OF 3-ARYLSULFONYL FURANS. BIDENTATE CARBANION STABILIZATION VIA SULFONES.

George D. Hartman* and Wasyl Halczenko

Merck Sharp & Dohme Research Laboratories.

West Point, Pennsylvania 19486

Mono- and dianions of the title compounds are regionelectively generated and trapped.

Tetrahedron Lett.28,3245(1987)

Tetrahedron Lett.28,3241(1987)

THE ZIRCONOCENE INDUCED COUPLING OF BENZYNE WITH NITRILES: SYNTHESIS, STRUCTURE AND REACTIONS OF NOVEL AZAMETALLACYCLOPENTENES Stephen L. Buchwald*, Ann Sayers, Brett T. Watson and John C. Dewan

IRIDIUM PENTAHYDRIDE COMPLEX CATALYZED FORMATION OF C-C BOND BY C-H BOND ACTIVATION FOLLOWED BY OLEFIN INSERTION Yingrui Lin*, Dawei Ma and Xiyan Lu Shanghai Institute of Organic Chemistry, Academia Sinica, Shanghai, China

Shanghai Institute of Organic Chemistry,
$$CH_3OR + CH_2 = CHC(CH_3)_3 = \frac{IrH_5(i-Pr_3P)_2}{50 \circ C}$$

Tetrahedron Lett.28,3249(1987)

Tetrahedron Lett.28,3253(1987)

STEREOSELECTIVE SYNTHESIS OF THE MIDDLE (C10-C17) AND RIGHT (C18-C30) SEGMENTS, AND THEIR COUPLING TO COMPLETE A FORMAL SYNTHESIS OF THE POLYETHER ANTIBIOTIC SALINOMYCIN

Kiyoshi Horita, Satoshi Nagato, Yuji Olkawa, and Osamu Yonemiysu Fuculty of Pharmaceutical Sciences, Hokkaido University, Sapporo, 060, Japan

A formal synthesis of the polyether antibiotic salinomycin was achieved by synthesizing (C10-C30) segment which was converted to salinomycin by Kishi.

FURTHER STUDIES ON THE STEREOCHEMISTRY OF METAL ENOLATE - IMINE CONDENSATION REACTIONS Genji Iwasaki^a and Masakatsu Shibasaki^{*a,b} Genji Iwasaki^a and Masakatsu Shibasaki^{*a,b} ^aSagami Chemical Research Center, Nishi-Ohnuma, Sagamihara, Kanagawa 229, Japan and ^bFaculty of

Tetrahedron Lett.28,3257(1987)

Pharmaceutical Sciences, Hokkaido University, Sapporo 060, Japan

The zirconium enolates of 1, 2 and 3 condensed with the imine 4 in a syn selective manner, while the diethylaluminum enolates of 1 and 2 provided the anti products selectively.

Tetrahedron Lett.28,3261(1987)

CONVENIENT PREPARATION OF ACYLTRIMETHYLSILANES FROM CARBOXYLIC ACID DERIVATIVES.

J. Kang, J.H. Lee, K.S. Kim, J.U. Jeong and C. Pyun Department of Chemistry, Sogang University, Mapoku, Seoul 121, KOREA

RCOSiMe₂

HIGHLY STEREOCONTROLLED PHOTODIMERIZATION OF TETRAMETHYL-URACIL BY SMECTIC LIQUID CRYSTALLINE PHASE

Tetrahedron Lett. 28, 3263 (1987)

Tomohisa Nagamatsu, Chikako Kawano, Yasutaka Orita, and Takehisa Kunieda* Faculty of Pharmaceutical Sciences, Kumamoto University, 5-1, Oe-honmachi, Kumamoto 862,

| n-Bu Stearate | (2)/(4),Yield |
|-----------------|---------------|
| solid(5°C) | 67/33 , 98% |
| smectic(16°C) | 11/89 , 91% |
| isotropic(20°C) | 50/50 , 5% |

SYNTHESIS OF A BIOLOGICALLY ACTIVE FLUORESCENT INDOLACTAM DERIVATIVE Kazuhiro Irie, Nobuyuki Hagiwara and Koichi Koshimizu *
Department of Food Science and Technology, Faculty of Agriculture, Kyoto University, Kyoto 606, Japan

O.S. NH

(-)-7-(2-N-Dansylaminoethyl)indolactam V was prepared from

(-)-indolactam V, the fundamental structure of teleocidins.

Tetrahedron Lett.28,3271(1987)

SELENIUM, CARBON MONOXIDE, AND WATER AS A NEW REDUCTION SYSTEM: REDUCTIVE CLEAVAGE OF

DISULFIDES AND DISELENIDES TO THIOLS AND SELENOLS

Akiya Ogawa, Yutaka Nishiyama, Nobuaki Kambe, Shinji Murai, and Noboru Sonoda Department of Applied Chemistry, Faculty of Engineering, Osaka University, Suita, Osaka 565, Japan

Disulfides and diselenides were effectively reduced to the corresponding thiols and selenols with carbon monoxide and water using selenium.

$$(PhS)_2 + CO + H_2O \xrightarrow{Se} 2PhSH + CO_2$$

Tetrahedron Lett.28,3275(1987)

Tetrahedron Lett.28,3279(1987)

AN EFFICIENT SYNTHESIS OF Y-NUCLEOSIDE (WYOSINE) BY REGIOSPECIFIC METHYLATION OF ${\bf N}^4$ -DESMETHYLWYOSINE USING ORGANOZINC REAGENT.

H. Bazin, X-X. Zhou, C. Glemarec & J. Chattopadhyaya*

A new synthesis of Y-nucleoside 4 and its congener 6 is reported from 1 and 2, respectively,

REACTION OF SUPEROXIDE AND OZONATE RADICAL-IONS WITH 9,10-DICHLORO-9,10-DIPHENYLDIHYDROANTHRACENE

Alexander R. Forrester and Vemeshetti Purushotham

Chemistry Department, University of Aberdeen, Old Aberdeen AB9 2UE, Scotland

Reaction of dichlorodihydran anthracene (1) with ${\rm O_2}^{\frac{1}{2}}$ or ${\rm O_3}^{\frac{1}{2}}$ gives mixtures of the products shown.

Tetrahedron Lett.28,3283(1987)

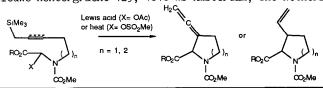
ON THE RATE MAXIMA OBSERVED IN THE ACID-HYDROLYSIS OF ALKYLHYDROXAMIC ACIDS by A J Buglass, M Dorr and M Juffkins, Department of Science, Cambs College of Arts and Technology, Cambridge CBl 1PT

The protonation equilibrium and mechanism of the reaction are discussed in terms of different acidity functions that control the key reaction steps.

Tetrahedron Lett.28,3285(1987)

INTRAMOLECULAR REACTIONS OF ACYCLIC N-ACYLIMINIUM IONS III^{1,2} SILICON ASSISTED CYCLOCONDENSATION OF GLYOXYLIC ESTERS TO PROLINE AND PIPECOLIC ACID DERIVATIVES

Hendrik H. Mooiweer, Henk Hiemstra*, Hendrikus P. Fortgens, and W.Nico Speckamp*, Laboratory of Organic Chemistry, University of Amsterdam, Nieuwe Achtergracht 129, 1018 WS Amsterdam, The Netherlands.



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