GRAPHICAL ABSTRACTS

Synthesis of ¹³C Enriched Sialyllactones and Their

Tetrahedron Letters, 1997, 38, 1865

Characterization Using Isotope Edited Inverse Detected NMR Spectroscopy. Jacquelyn Gervay,* Nellie N. Mamuya, and R. Andrew Barber, Dept. of Chemistry, The University of Arizona, Tucson, Arizona 85721

¹³C enriched sialyllactones were prepared and characterized using isotope edited NMR spectroscopy.

Tetrahedron Letters, 1997, 38, 1869

STEREOSELECTIVE SYNTHESIS OF CONFORMATIONALLY RESTRICTED

ANALOGUES OF ASPARTIC AND GLUTAMIC ACIDS FROM ENDOCYCLIC ENECARBAMATES. Marcos J.S. Carpes, Paulo C.M.L.Miranda, Carlos R.D.Correia*. Instituto de Química, UNICAMP, Campinas, 13083-970, São Paulo, Brasil. Conformationally restricted analogues of aspartic and glutamic acids were prepared in good overall yields from five-membered endocyclic enecarbamates.

$$R''''$$
 N R'''' N CO_2H R''' N CO_2H R'''' N CO_2H R''' N CO_2H R''' R''' R''' R''' R''' R''' R'' R''' R'' R''' R''' R''' R''' R''' R''' R''' R'' R''' R'' R''' R'' R''

Tetrahedron Letters, 1997, 38, 1873

cyclo-SEM. A New Carbonyl Protecting Group
Bruce H. Lipshutz,*, Paul Mollard, Craig Lindsley, and Virginia Chang
Department of Chemistry, University of California, Santa Barbara, CA 93106-9510

Protection of aldehydes and kétones

Tetrahedron Letters, 1997, 38, 1877

Thermal Migration of an Ethynyl Group From One Benzene Ring to Another by Reversible Vinylidene C-H Insertion.

Lawrence T. Scott* and Atena Necula

Department of Chemistry, Merkert Chemistry Center, Boston College, Chestnut Hill, MA 02167-3860

The title reaction has been found to occur at high temperatures in the gas phase.

Deprotect with LiBF4

v

ACETAL AND KETAL DEPROTECTION USING MONTMORILLONITE K10: THE FIRST SYNTHESIS OF SYN-4,8-DIOXATRICYCLO[5.1.0.0^{3,5}]-2,6-OCTANEDIONE

Elisabeth C. L. Gautier, ^a Andrew E. Graham, ^b Alexander McKillop, ^a Stephen P. Standen ^b and Richard J. K. Taylot^{b, e}

^aSchool of Chemical Sciences, University of East Anglia, Norwich NR4 7TJ, UK ^bDepartment of Chemistry, University of York, Heslington, York YO1 5DD, UK

Tetrahedron Letters, 1997, 38, 1885

Reaction of Tetracarbonyl(π -allyl)manganese with Carbon Nucleophiles

William S. Vaughan, Henry H. Gu and Keith F. McDaniel* Department of Chemistry, Ohio University, Athens, Ohio 45701

The reaction of tetracarbonyl(π -allyl)manganese with carbon nucleophiles followed by oxidation provides allylated products in 44-95% yield.

$$\left\langle \left(-Mn(CO)_4 \right. \frac{1. \, Nu^{-}}{2. \, O_2} \right. \left. \right\rangle^{Nu} + / or \left. \left(\right)^{2} \frac{Nu}{2} \right\rangle^{Nu}$$

A STEREOSELECTIVE TOTAL SYNTHESIS OF (-)-RISHITIN. Jiong Chen and John N. Marx,* Department of Chemistry and Biochemistry, Texas Tech University, Lubbock, TX 79409

Tetrahedron Letters, 1997, 38, 1889

The key step in a new convergent synthesis of (-)-rishitin, a phytoalexin from diseased potato tubers, is the vinyl radical cyclization of 20 to 21, which proceeds with a stereoselectivity of 10:1 for the desired isomer.

A New Synthesis of (±)-Mesembrine Involving the Intramolecular Nucleophilic Attack of an Allyl Anion on a Carbonyl Function of an Imide

Tetrahedron Letters, 1997, 38, 1893

P.Rajagopalan
Chemical and Physical Sciences Division, The DuPont merck Pharmaceutical Company, Wilmington, DE 19880-0500
When treated with cesium fluoride in dimethyl formamide, the known 5 furnished 6 which was converted to

racemic mesembrine (9) in two steps.

OMe
OMe

Solid Phase Synthesis of Ureas of Secondary Amines via Carbamoyl Chloride

Gary T. Wang*, Yuanwei Chen, Sheldon Wang, Richard Sciotti and Thomas Sowin. Department of Combinatorial Chemistry, Pharmaceutical Discovery, Abbott Laboratories, Abbott Park, IL 60064

THALLIUM TRINITRATE MEDIATED RING CONTRACTION OF MONOCYCLIC KETONES: STEREOCHEMICAL ASPECTS.

Helena M. C. Ferraz and Luiz F. Silva Jr.. Instituto de Química, Universidade de São Paulo, C.P. 26077, CEP 05599-970- São Paulo- SP, Brasil.

Tetrahedron Letters, 1997, 38, 1899

$$\begin{array}{c|c}
\hline
 & TTN/CH_2Cl_2 \\
\hline
 & r.t. \\
\hline
 & R
\end{array}$$

$$\begin{array}{c}
\hline
 & CO_2H_1\\
\hline
\end{array}$$

Thallium trinitrate promotes stereo and regioselective ring contraction of 3-alkyl and 4- alkyl cyclic ketones in good yields.

COMPETITION OF DEPROTONATION AND TIN-LITHIUM EXCHANGE IN THE GENERATION OF A GLYCOSYL DIANION

Tetrahedron Letters, 1997, 38, 1903

Matthias Hoffmann, Horst Kessler*, Institut für Organische Chemie und Biochemie der Technischen Universität München, Lichtenbergstr. 4, D-85747 Garching, Germany.

The deprotonation and tin-lithium exchange of **1X** are not completely separated when BuLi is used as base. This is elucidated by deuteration experiments. Decoupling of the two reactions is possible by MeLi*LiBr for deprotonation and BuLi for tin-lithium exchange.

1. base, -78°C, THF 2. BuLi, -65°C 3. methanol BnO O X

1X

X = H, D

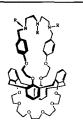
2X

SYNTHESIS OF TWO CALIX[4]ARENES IN 1,3-ALTERNATE CONFORMATION CONTAINING HARD AND SOFT ION BINDING SITES.

Wanlapa Aeungmaitrepirom, Zouhair Asfari, and Jacques Vicens E. C. P. M., Laboratoire de Chimie des Interactions Moléculaires Spécifiques, associé au C. N. R. S. 1, rue Blaise Pascal, F-67008, Strasbourg, France

It is reported the synthesis of ligands 6 and 8 combining one calix[4]arene unit in the 1,3-alternate conformation and crown ether and aza crown ether elements. Preliminary complexations are given.

Tetrahedron Letters, 1997, 38, 1907



8 R = H

SYNTHESIS AND CHARACTERIZATION OF A NEW SERIES OF [12]aneN₃ TYPE MACROCYCLES. STRUCTURES OF TWO

PROTONATED METAL-FREE LIGANDS. Patricia Hubsch-Weber and Marie-Thérèse Youinou*. Laboratoire de Chimie des Métaux de Transition et de Catalyse, Associé au C.N.R.S., Université Louis Pasteur, Institut Le Bel, 4 rue Blaise Pascal, 67000 Strasbourg, France.

The synthesis of a family of monotopic and ditopic ligands possessing a [12]aneN₃ synthon as well as the X-ray characterization of two of them in their protonated form are reported.

KINETIC RESOLUTION OF SECONDARY ALCOHOLS MEDIATED BY RABBIT GASTRIC LIPASE

Tetrahedron Letters, 1997, 38, 1915

Jean-Yves Legros, Martial Toffano, Sally K.Drayton, Michael Rivard and Jean-Claude Fiaud, Laboratoire de Synthèse Asymétrique Associé au C.N.R.S. (URA n° 1497), Institut de Chimie Moléculaire d'Orsay, Bâtiment 420 Université de Paris-Sud, 91405 Orsay, France.

Others tested arylmethyl carbinols showed poor to moderate enantiodifferentiation (E
$$\leq$$
 23)

MeO

(E), ee > 99.5%

Others tested arylmethyl carbinols showed poor to moderate enantiodifferentiation (E \leq 23)

SYNTHESIS AND ELECTROCHEMICAL PROPERTIES OF FUSED [3,4]FURANO-TETRATHIAFULVALENES

Tetrahedron Letters, 1997, 38, 1919

- Y. Siquot, A. P. Frère, A., T. Nozdryn, J. Cousseau, M. Sallé, M. Jubault, J. Ordunab,
- J. Garínb and A. Gorgues, a*
- a Laboratoire d'Ingénierie Moléculaire et Matériaux Organiques, associé au CNRS, Université d'Angers, 2 Bd Lavoisier, F-49045 Angers, France
- b Departamento de Química Orgánica, ICMA Universidad de Zaragoza, CSIC, E-50009 Zaragoza, Spain

The synthesis of the first fused [3,4]Furano-TTFs is described and their electrochemical behaviours are examinated.

HYDROPHOSPHINATION OF α,β -unsaturated esters by primary phosphine-boranes; a useful entry

Tetrahedron Letters, 1997, 38, 1923

TO SYMMETRICAL AND UNSYMMETRICAL PHOSPHINE-BORANES K. Bourumeau, A.C. Gaumont* and J.M. Denis, Synthèse et Electrosynthèse Organiques, UMR CNRS 6510, Université de Rennes 1, F-35042 Rennes, France.

PREPARATION AND REACTIVITY OF FUNCTIONALIZED ARYL AND ALKENYLMANGANESE HALIDES

Tetrahedron Letters, 1997, 38, 1927

Ingo Klement^{a,b}, Heinz Stadtmüller^a, Paul Knochel^b* and Gérard Cahiez^a*

a/ Ecole Supérieure de Chimie Organique et Minérale, Département de Chimie, 13 Boulevard de l'Hautil, F-95092 Cergy-Pontoise, France. b/ Fachbereich Chemie der Philipps-Universität Marburg, Hans-Meerwein Strasse, D-35032 Marburg, Germany.

Tetrahedron Letters, 1997, 38, 1931

PHOTOSELECTIVE BOND CLEAVAGE OF TRICYCLO[5.3.1.0^{1,7}]UNDECANE DERIVATIVES. A FACILE ENTRY TO CARBOCYCLIC TAXANE [A,B] RING SYSTEM

Janine Cossy , S. BouzBouz

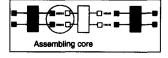
Laboratoire de Chimie Organique, Associé au CNRS, ESPCI, 10 rue Vauquelin, 75231 Paris Cedex 05 - France The selective control of cyclopropyl bond cleavage of tricyclo[5.3.1.0^{1,7}]undecan-2-one by photochemical electron transfer produces a new approach to the construction of the carbon skeleton of the [A,B] ring system of the carbocyclic frame of taxane.

Tetrahedron Letters, 1997, 38, 1933

MOLECULAR TECTONICS V: MOLECULAR RECOGNITION IN THE FORMATION OF MOLECULAR NETWORKS BASED ON HYDROGEN BONDING AND ELECTROSTATIC INTERACTIONS

Olivier Félix, Mir Wais Hosseini*, André De Cian, Jean Fischer Institut de Chimie, Université Louis Pasteur, 4, rue Blaise Pascal, F-67000 Strasbourg, France

The formation of α -molecular networks based on dihapto mode of H-bonding was investigated in the solid state using bis-cyclic amidinium dications and acetylenedicarboxylate dianion. It has been demonstrated that the formation of networks depends strongly on the structure of the components. A proper disposition of H-bond donor and acceptor sites indeed leads to the formation of infinite molecular assemblies in the crystalline phase.



Tetrahedron Letters, 1997, 38, 1937

SYNTHESIS AND PRELIMINARY EVALUATION OF A NEW CLASS OF FLUORINATED AMPHIPHILES DESIGNED FOR IN-PLANE

IMMOBILISATION OF BIOLOGICAL MACROMOLECULES

Pierre Held, Franck Lach, Luc Lebeau and Charles Mioskowski

Université Louis Pasteur de Strasbourg - Laboratoire de Synthèse Bioorganique associé au CNRS - 74, route du Rhin - BP 24 67 401 Illkirch Cedex - France

A series of fluorinated amphiphilic derivatives of vitamin A analogues was prepared to perform two-dimensional crystallisation experiments with retinoic acid receptors.

Electrosynthesis of 3-Thienylzinc Bromide from 3-Bromothiophene via a Nickel Catalysis.

C. Gosmini*, J.Y. Nédélec and J. Périchon

Laboratoire C.N.R.S. d'Electrochimie, Catalyse et Synthèse Organique, 2, rue Henri-Dunant 94320 Thiais, France

$$\begin{array}{c}
Br & e', Mg \text{ anode} \\
\hline
DMF, RT \\
\hline
ZnBr_2, 1.1 eq \\
NiBr_2Bipy; 0.1 eq
\end{array}$$
(1)

UNUSUAL HIGH ENANTIOSELECTIVITY BY A NEW HPLC CHIRAL STATIONARY PHASE

Tetrahedron Letters, 1997, 38, 1943

Myung Ho Hyun* and Chung Sik Min, Department of Chemistry, Pusan National University, Pusan 609-735, Korea

A new chiral stationary phase (CSP 1) prepared from (R)-phydroxyphenylglycine has been found to show unusually high enantioselectivity for the enantiomers of N-(3,5dinitrobenzoyl)-a-amino amides.

PALLADIUM-CATALYZED COUPLING AND CARBONYLATIVE COUPLING OF SILYLOXY COMPOUNDS WITH HYPERVALENT IODONIUM SALTS

Tetrahedron Letters, 1997, 38, 1947

Suk-Ku Kang,* Tokutaro Yamaguchi, Pil-Su Ho, Won-Yeob Kim, and Seok-Keun Yoon Department of Chemistry, Sung Kyun Kwan University, Natural Science Campus, Suwon 440-746, Korea

 $Pd(OAc)_2(2 \text{ mol } \%), Ph_2I^+ BF_4^- \text{ in DME/H}_2O(4:1)$ and slow addition of siloxy compound in DME via a syringe pump over 60 min, 30 °C Pd(OAc)₂(2 mol %), siloxy compound in DME, 30 °C 15 min then addition of Ph₂I⁺ BF₄ in DME/H₂O (4:1)

Tetrahedron Letters, 1997, 38, 1951

ASYMMETRIC CARBONYL ADDITION REACTIONS TO BENZYLOXYALDEHYDES BY BINAPHTHOL-TITANIUM CATALYST: ANTI- VS SYN-DIASTEREOFACIAL

PREFERENCE IN ANOMALOUS NONCHELATION COMPLEXATION

Koichi Mikami,* Satoru Matsukawa, Eiji, Sawa,

Akinori Harada† and Nobuaki Koga†
Department of Chemical Technology, Tokyo Institute of Technology, Meguro-ku, Tokyo 152, Japan
†Department of Chemistry, College of General Education, Nagoya University, Chikusa-ku, Nagoya 464, Japan

A MILD AND EFFICIENT METHOD FOR CONVERTING ALCOHOLS AND TETRAHYDROPYRANYL ETHERS TO BROMIDES WITH INVERSION OF CONFIGURATION

Akira Tanaka**and Takayuki Oritanib

Division of Environmental Bioremediation, Graduate School of Agriculture and Department of Applied Biological Chemistry, Faculty of Agriculture, Tohoku University, 1-1 Tsutsumidori-amamiyamachi, Aoba-ku, Sendai 981, Japan Bromotriphenylphosphonium salt 2 converted alcohols and tetrahydropyranyl ethers to the corresponding bromides in high yields.

$$ROR' + PPh_3-Br O Br$$

$$(R'=H \text{ or } THP) 2$$

$$ROR' + PPh_3 - Br O Br$$

FORMATION OF CYCLOPROPYL CARBINOLS THROUGH A HIGHLY DIASTEREOSELECTIVE HYDROZIRCONATION OF VINYLOXIRANE DERIVATIVES.

Susumu Harada, Noboru Kowase, Takeo Taguchi* and Yuji Hanzawa* School of Pharmacy, Tokyo University of Pharmacy and Life Science, 1432-1 Horinouchi, Hachioji, Tokyo 192-03, Japan

Formation of cyclopropyl carbinol derivatives by the diastereoselective hydrozirconation of vinyloxirane derivatives were described.

Tetrahedron Letters, 1997, 38, 1961

Tetrahedron Letters, 1997, 38, 1965

Tetrahedron Letters, 1997, 38, 1957

A HIGHLY EFFICIENT SYNTHESIS OF THE ANTIVIRAL AGENT

(+)-CYCLARADINE INVOLVING THE REGIOSELECTIVE CLEAV-AGE OF EPOXIDE BY NEIGHBORING PARTICIPATION. Nobuya Katagiri,* Yumiko Matsuhashi, Hideaki Kokufuda, Masahiro Takebayashi, Chikara Kaneko, Pharmaceutical Institute, Tohoku University, Aobayama, Aoba-ku, Sendai 980-77, Japan

(+)-Cyclaradine, carbocyclic arabinofuranosyladenine having anti-HSVactivity, has been synthesized from 2azabicyclo[2.2.1]hept-5-en-3-one in only seven steps.

NOVEL EPOXYEREMOPHILANOLIDES, EREMOPETASITENINS A1, A2, B1, AND B2, FROM PETASITES JAPONICUS

Motoo Tori,* Makiko Kawahara, and Masakazu Sono

Faculty of Pharmaceutical Sciences, Tokushima Bunri University, Yamashiro cho, Tokushima, 770, Japan

$$R_1O$$
 O
 O
 O
 O

eremopetasitenin A1 (1) R1=H, R2=Ang. eremopetasitenin A2 (2) R1=Z-3-methylthiopropenoyl, R2=Me

eremopetasitenin B1 (3) R1=H, R2=Ang. eremopetasitenin B2 (4) R1=Z-3-methylthiopropenoyl, R2=Ang.

SYNTHESIS OF TAXANE A/B RING BY INTRAMOLECULAR NITRILE OXIDE CYCLIZATION REACTION

Yoshimasa Hirai and Hiroto Nagaoka*

Meiji College of Pharmacy, Yato-cho, Tanashi, Tokyo 188, Japan

The reaction of nitro olefin 9 with p-chlorophenyl isocyanate and triethyl amine produced tricyclic compound 10.

A VARIETY OF LIPID-COATED GLYCOSIDE HYDROLASES AS EFFECTIVE GLYCOSYL TRANSFER CATALYSTS IN HOMOGENEOUS

ORGANIC SOLVENTS. Toshiaki Mori and Yoshio Okahata*

Department of Biomolecular Engineering, Tokyo Institute of Technology, 4259 Nagatsuda, Midori-ku, Yokohama 226 Japan

Man-α-, Man-β-, GlcNAc-β-, Glc-β-, and Gal-β-

SCAPAUNDULINS A AND B, TWO NOVEL DIMERIC LABDANE DITERPENOIDS, AND RELATED COMPOUNDS FROM THE JAPANESE LIVERWORT SCAPANIA UNDULATA (L.) DUM.

Tatsuhiko Yoshida, Masao Toyota and Yoshinori Asakawa* Faculty of Pharmaceutical Sciences, Tokushima Bunri University, Yamashiro-cho, Tokushima 770, Japan

Two novel dimeric labdane diterpenoids, scapaundulins A (1) and B (2), together with three new labdane diterpenoids have been isolated from the ether extract of the Japanese liverwort *Scapania undulata* (L.) Dum.

Tetrahedron Letters, 1997, 38, 1975

Tetrahedron Letters, 1997, 38, 1971

SYNTHESIS OF $[R-(R^*,S^*)]$ - and $[S-(R^*,R^*)]$ - β -hydroxy-3- $(\beta$ -d-ribofuranosyl)wybutines, the most probable alternatives for the hypermodified nucleoside

OF RAT LIVER PHENYLALANINE TRANSFER RIBONUCLEIC ACID. Taisuke Itaya,* Tae Kanai, and Takehiko Iida, Faculty of Pharmaceutical Sciences, Kanazawa University, Takara-machi, Kanazawa 920, Japan

The first synthesis of the title compounds has been accomplished through the Wittig reaction as the key step.

Tetrahedron Letters, 1997, 38, 1979

Tetrahedron Letters, 1997, 38, 1987

SYNTHESIS OF 1,8-NAPHTHYLENE-BRIDGED 59n-CYCLOPHANES BY EFFICIENT INTRAMOLECULAR [2 + 2] PHOTOCYCLOADDITION

Yosuke Nakamura, Miho Matsumoto, Yoshitou Hayashida, and Jun Nishimura* Department of Chemistry, Gunma University, Tenjin-cho, Kiryu, Gunma 376, Japan

Novel 1.8-naphthylene-bridged para- and metacyclophanes were efficiently synthesized as a single isomer by the intramolecular [2+2] photocycloaddition of 1.8-bis(p- and m-vinylphenyl)naphthalenes, respectively.

LIPASE-CATALYZED EFFICIENT KINETIC RESOLUTION OF 3-HYDROXY-3-(PENTAFLUOROPHENYL)PROPIONITRILE

Takashi Sakai*, Tetsuo Takayama, Takafumi Ohkawa, Tadashi Ema and Masanori Utaka*

Department of Applied Chemistry, Faculty of Engineering, Okayama University, Tsushima 700, Japan

Lipase-Catalyzed Transesterification

F OH CN Lipase Vinyl Acetate
$$i$$
-Pr₂O, 30 °C F F F F F $E > 1057$ $E > 1057$ $E > 1057$

AXIAL CHIRALITY INDUCTION IN FLEXIBLE BIPHENOLS BY HYDROGEN BONDING AND STERIC INTERACTIONS

Tadashi Mizutani, Hideki Takagi, Osamu Hara, Takuya Horiguchi, and Hisanobu Ogoshi Department of Synthetic Chemistry and Biological Chemistry, Graduate School of Engineering, Kyoto University, Sakyo-ku, Kyoto 606-01 Japan

Chiral induction in biphenols was studied as a model for intermolecular information transmission. Upon complexation with chiral trans-1,2-cyclohexanediamines, axial chirality was induced in biphenols. The bulky diamine $(R = CH_2CH_2Bu')$ induced an opposite chirality to that induced by the less bulky diamine $(R = CH_3, H)$.

Tetrahedron Letters, 1997, 38, 1991

Tetrahedron Letters, 1997, 38, 1995

RADICAL INDUCED ALLYLATIONS OF FUNCTIONALIZED α -HALOALKYLPHENYL SULFONES.

A. Giardinà, R.Giovannini and M.Petrini*

Dipartimento di Scienze Chimiche dell'Università. Via S.Agostino, 1 I-62032 Camerino, Italy.

$$PhSO_2$$
 + $SnBu_3$ $AlBN$ $PhSO_2$ $PhSO_2$

X = Cl, Br

Tetrahedron Letters, 1997, 38, 2003

Tetrahedron Letters, 1997, 38, 2005

A New Water-Soluble Calix[4]arene Ditopic Receptor Rigidified by Microsolvation: Acid-Base and Inclusion Properties. Giuseppe Arena**, Alessandro Casnati*, Leonardo Mirone*, Domenico Sciotto* and Rocco Ungaro*.a. Dipartimento di Scienze Chimiche, Universita' di Catana, 95125 Catania, Italy; b. Dipartimento di Chimica Organica e Industriale, Universita' di Parma, Viale delle Scienze, I -43100, Parma, Italy.

Hydrogen bonding at the lower rim of a calix[4]arene ditopic receptor has a remarkable influence on its acid-base and inclusion properties.

A SHORT, VINYL RADICAL CYCLISATION APPROACH TO (±)-2-PUPUKEANONE

A. Srikrishna, D. Vijaykumar and G.V.R. Sharma

Department of Organic Chemistry, Indian Institute of Science, Bangalore 560 012, India

A BIOGENETICALLY PATTERNED FIRST TOTAL SYNTHESIS OF (±)-6-EPIJUNICEDRANOL (OR JUNICEDRAN-11-OL)

A. Srikrishna and P. Praveen Kumar

Department of Organic Chemistry, Indian Institute of Science, Bangalore 560 012, India.

9-FLUORENEMETHYL H-PHOSPHONOTHIOATE, A VERSATILE REAGENT FOR THE PREPARATION OF NUCLEOSIDE H-PHOSPHONOTHIOATE, NUCLEOSIDE PHOSPHOROTHIOATE, AND NUCLEOSIDE PHOSPHORODITHIOATE MONOESTERS

J. Jankowska, J. Cieślak, and A. Kraszewski*
Institute of Bioorganic Chemistry, Polish Academy of Sciences,
Noskowskiego 12/14, 61-704 Poznan, Poland

J. Stawiński*
Department of Organic Chemistry, Arrhenius Laboratory,
Stockholm University, S-106 91 Stockholm, Sweden.

Tetrahedron Letters, 1997, 38, 2007

SOLID-PHASE SYNTHESIS OF SMALL MOLECULE LIBRARIES USING DOUBLE COMBINATORIAL CHEMISTRY. John Nielsen* and

Flemming R. Jensen, Department of Organic Chemistry, Building 201, The Technical University of Denmark, DK-2800 Lyngby, Denmark.

The first synthesis of a combinatorial library using double combinatorial chemistry is presented and exemplified by the synthesis of a [6+3]-member library of Mitsunobu-alkylated tyrosine dimers.

Library 1 Linker +

Library 2

Library 1

Library 2

[60]FULLERENE-BASED ELECTRON **ACCEPTORS** TETRACYANO-p-QUINODIMETHANE (TCNQ) AND DICYANO-p-OUINONEDIIMINE (DCNOI) DERIVATIVES. B. M. Illescas, N. Martin, * C. Seoane. *

Dpto. de Química Orgánica, Facultad de Química, Univ. Complutense, 28040 Madrid, Spain.

Tetrahedron Letters, 1997, 38, 2015

Tetrahedron Letters, 1997, 38, 2019

Synthesis of a Scalemic β-Amino Disulfide from (S)-Phenylglycine and (R)-Styrene Oxide and Use as a Catalyst in Enantioselective

Additions of Diethylzinc to Aldehydes David A. Fulton and Colin L. Gibson, Pure & Applied Chemistry, University of Strathclyde, 295 Cathedral Street, Glasgow, UK.

Two routes to the novel scalemic 6-amino disulfide 7 have been developed from (S)phenylglycine and (R)-styrene oxide. The Bamino disulfide 7 was used as a catalyst in the enantioselective addition of diethylzinc to aldehydes providing (R)-secondary alcohols in 39-80% ee.

(S)-Phenylglycine or (R)-Styrene oxide
$$N \longrightarrow N$$

Tetrahedron Letters, 1997, 38, 2023

THE DESIGN AND SYNTHESIS OF A CONFORMATIONALLY CONSTRAINED TRISACCHARIDE FOR PROBING CARBOHYDRATE-PROTEIN INTERACTIONS

N. Navarre, A. H. van Oijen, G. J. Boons*, School of Chemistry, The University of Birmingham, Edgbaston, Birmingham B15 2TT, UK

A novel cyclic trisaccharide has been designed and prepared which is conformationally constrained around its glycosidic linkages but can adopt a conformation required for binding with the lectin LOLI. This type of saccharide will be important to probe the importance of saccharide flexibility for carbohydrate-protein complex formation.

A STEREOSPECIFIC SYNTHESIS OF VICINAL AMINO ALCOHOLS BY AMINOLYSIS OF VINYLEPOXIDES

U. M. Lindström, R. Franckowiak, N. Pinault and P. Somfai*

Organic Chemistry 2, Center for Chemistry and Chemical Engineering
Lund Institute of Technology, Lund University, P. O. Box 124, S-221 00 Lund, Sweden

 $Several\ vinylepoxides\ have\ been\ prepared\ and\ subjected\ to\ a\ TsOH\cdot H_2O\text{-}catalyzed\ aminolysis\ reaction\ to\ afford,\ stereospecifically$ and with high regioselectivity, the corresponding amino alcohols in good yields.

$$R \xrightarrow{Q} \frac{R'NH_2}{TsOH'H_2O, \Delta} \xrightarrow{QH} \frac{QH}{NHR'}$$