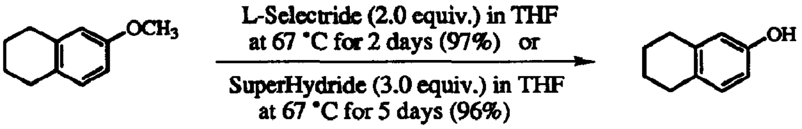
GRAPHICAL ABSTRACTS

Hydride-promoted Demethylation of Methyl Phenyl Ethers.

Tetrahedron Letters, **1994**, *35*, 8727

G. Majetich, Y. Zhang and Karen Wheless
The Department of Chemistry, *The University of Georgia*, Athens, Georgia 30602.

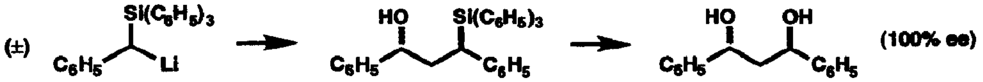
Solutions of L-Selectride or SuperHydride in refluxing THF efficiently deprotect methyl phenyl ethers. L-Selectride is the more effective reagent, while electron-poor arenes work best. Unlike other hydride sources, these reagents permit ether cleavage without the reduction of aryl halides.



Enantioselective Synthesis of γ-Hydroxysilanes, 1,3-Diols and Cyclopropanes by Reaction of a Chiral Epoxide with a Racemic α-Silyl Organolithium Reagent

Tetrahedron Letters, **1994**, *35*, 8731

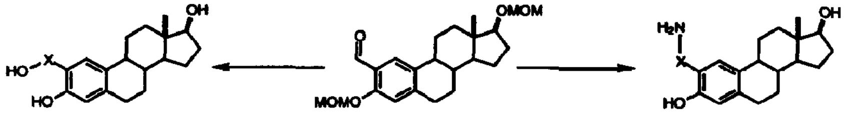
E. J. Corey* and Zhuoliang Chen
Department of Chemistry, Harvard University, Cambridge, Massachusetts 02138



SYNTHESIS OF 2-SUBSTITUTED HYDROXYALKYL AND AMINOALKYL ESTRADIOLS.

Tetrahedron Letters, **1994**, *35*, 8735

Carl J. Lovely and Robert W.Brueggemeier, College of Pharmacy, The Ohio State University. 500 West 12th Avenue, Columbus, Ohio, 43210, USA



1 10 2

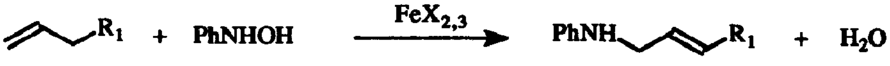
Elaboration of **10** leads to **1** and **2** ($X=CH_2$). Further tranformations of **10** yield higher homologs of **1** and **2** ($X=CH_2CH_2$ and $X=CH_2CH_2CH_2$).

REGIOSELECTIVE ALLYLIC AMINATION CATALYZED BY IRON SALTS

Tetrahedron Letters, **1994**, *35*, 8739

Radhey S. Srivastava and Kenneth M. Nicholas*, Department of Chemistry and Biochemistry, University of Oklahoma, Norman, OK 73019, USA

Olefins undergo regioselective allylic amination (with C=C migration) by phenylhydroxylamine in the presence of Fe(II) and Fe(III) salts. Free nitrosobenzene is not an intermediate in the amination process.

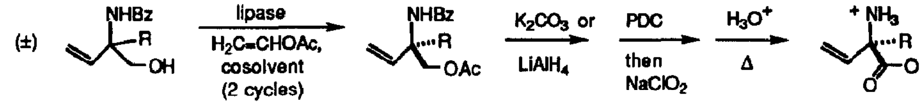


Tetrahedron Letters, **1994**, *35*, 8743

ENANTIOMERICALLY ENRICHED α-VINYL AMINO ACIDS VIA LIPASE-MEDIATED "REVERSE TRANSESTERIFICATION."

David B. Berkowitz,* James A. Pumphrey and Quanrong Shen
Department of Chemistry, University of Nebraska, Lincoln, NE 68588

Protected, racemic α-vinyl amino acids are reduced to the corresponding alcohols. These are enzymatically acylated, then chemically deacylated, oxidized and hydrolyzed to produce enantiomerically enriched L-α-vinyl amino acids (86-98% ee for R = Bn, Me).

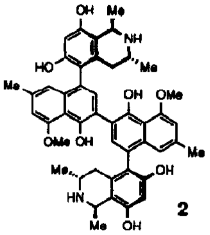


Tetrahedron Letters, **1994**, *35*, 8747

TOTAL SYNTHESIS OF MICHELLAMINES A-C: IMPORTANT ANTI-HIV AGENTS

Thomas R. Hoye,* Minzhang Chen, Liang Mi, and Owen P. Priest
Department of Chemistry, University of Minnesota, Minneapolis, Minnesota 55455

Michellamines A, B (**2**), and C have been prepared by total synthesis in 7 and 16 linear steps from known and commercial materials, respectively. Key steps include i) palladium(0)-mediated biaryl coupling, ii) silver oxide promoted oxidative 1-naphthol coupling to an atropisomeric mixture of cross-ring quinones (indigoids), and iii) simultaneous per-debenzylation/reductive bleaching to the central 2,2'-binaphthol.



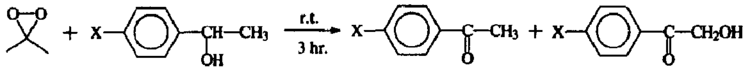
2

Tetrahedron Letters, **1994**, *35*, 8751

OXIDATION OF α-METHYLBENZYL ALCOHOLS BY DIMETHYLDIOXIRANE

F. Kovač and A.L. Baumstark*
Department of Chemistry, Laboratory for BCS, Georgia State University, Atlanta, GA 30303 USA

Dimethyldioxirane converts *p*-substituted α-methylbenzyl alcohols to the corresponding acetophenones in excellent yield with α-hydroxyacetophenones as the minor products; the oxidation shows a ρ of -1.57, PKIE of 3.55, KIE of 1.09 for OD and activation parameters with a large, negative $\Delta S^{\ddagger}$ term.



1 excess

2a X=OMe; **b** X=Me; **c** X=H; **d** X=F; **e** X=Cl; **f** X=Br; **g** X=CN

3a-g 97 %

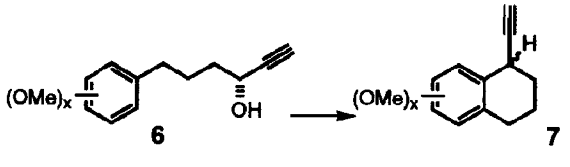
4a-g 2-3 %

Tetrahedron Letters, **1994**, *35*, 8755

THE ENANTIOSPECIFIC NICHOLAS REACTION

Alexander V Muehldorf*, Angel Guzman-Perez, and Arthur F. Kluge
Syntex Discovery Research
Mailstop R6-201, 3401 Hillview Ave., Palo Alto CA 94304

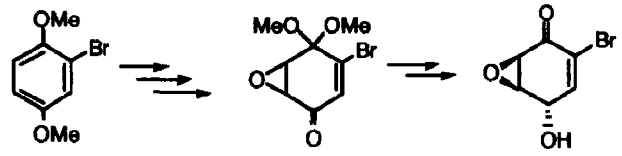
The enantiospecific Nicholas reaction, i.e. cobalt-promoted Friedel-Crafts reaction leading from chiral reactant to chiral product, was demonstrated for the first time.



Tetrahedron Letters, **1994**, *35*, 8759

SYNTHESIS OF BROMOXONE

Elisabeth C. L. Gautier,[a] Norman J. Lewis,[b] Alexander McKillop,[a]* Richard J. K. Taylor[a]*
[a]School of Chemical Sciences, University of East Anglia, Norwich, NR4 7TJ, UK.
[b]SmithKline Beecham Pharmaceuticals, Leigh, Tonbridge, Kent, TN11 9AN, UK.



(1)

Bromoxone (1) is prepared in 5 steps (15% overall yield).

Tetrahedron Letters, **1994**, *35*, 8761

INDIRECT ELECTROCHEMICAL CARBONYLATION OF AROMATIC AMINES WITH A PALLADIUM CATALYST.

Frederick W. Hartstock*, Deborah G. Herrington and Launa B. McMahon, Department of Chemistry, Wilfrid Laurier University, Waterloo, Ontario, Canada, N2L 3C5.

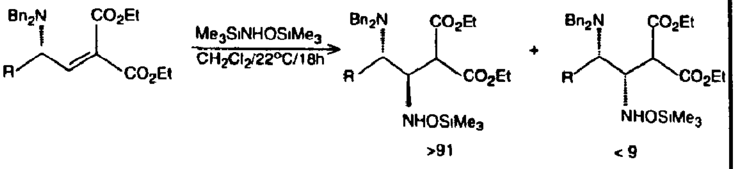
Carbonylation of primary aromatic amines with the aid of palladium(II) acetate and anodic reoxidation of the catalyst afforded excellent yields of carbamate.

$$\mathrm{PhNH_2 + MeOH + CO} \xrightarrow[\substack{\mathrm{NaOAc\ \ 50^{o}C,\ 1\ atm} \\ \mathrm{0.35V\ \ vs\ \ SCE}}]{\mathrm{Pd(OAc)_2,\ Cu(OAc)_2}} \mathrm{PhNHCOOMe}$$

Tetrahedron Letters, **1994**, *35*, 8765

STEREOSELECTIVE SYNTHESIS OF β-AMINO HYDROXYLAMINES

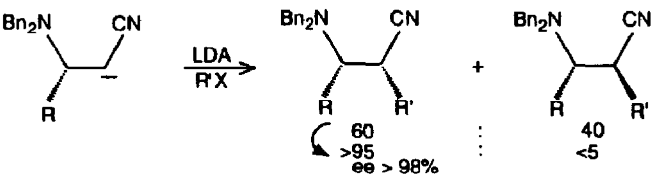
Manfred T. Reetz*[a)], Dirk Röhrig[b)],
Klaus Harms[b)] and Gernot Frenking[b)]
[a)]Max-Planck-Institut für Kohlenforschung,
Kaiser-Wilhelm-Platz 1,
45470 Mülheim/Ruhr, Germany
[b)]Universität Marburg, Fachbereich Chemie,
Hans-Meerwein-Strasse,
35043 Marburg, Germany



Tetrahedron Letters, **1994**, *35*, 8769

STEREOSELECTIVE SYNTHESIS OF β-AMINO NITRILES AND 1,3-DIAMINES

Manfred T. Reetz*[a)], Frank Kayser[b)] and
Klaus Harms[b)]
[a)]Max-Planck-Institut für Kohlenforschung,
Kaiser-Wilhelm-Platz 1,
45470 Mülheim/Ruhr, Germany
[b)]Universität Marburg, Fachbereich Chemie,
Hans-Meerwein-Strasse,
35043 Marburg, Germany

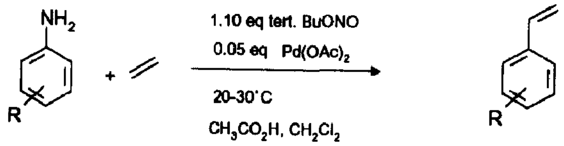


Tetrahedron Letters, **1994**, *35*, 8773

Tandem Diazotization Heck Reactions: A General Synthesis of Substituted Styrenes from Anilines

Matthias Beller*, Hartmut Fischer and Klaus Kühlein, Central Research, Hoechst AG, 65926 Frankfurt

Substituted styrenes were obtained highly selective via tandem diazotization Heck reaction of anilines in the presence of palladium catalysts.

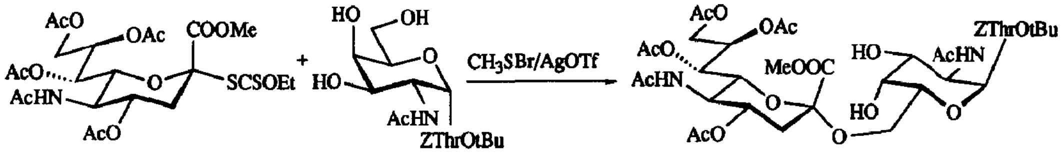


Tetrahedron Letters, **1994**, *35*, 8777

SYNTHESIS OF SIALYL-Tn ANTIGEN. REGIOSELECTIVE SIALYLATION OF A GALACTOSAMINE THREONINE CONJUGATE UNBLOCKED IN THE CARBOHYDRATE PORTION.

Beate Liebe and Horst Kunz*, Institut für Organische Chemie, Universität Mainz, J.-J.-Becherweg 18-20, D-55099 Mainz, Germany

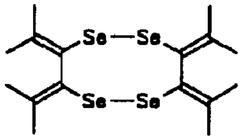
The sialyl-Tn antigen is readily available using the sialyl xanthate as donor and methylsulfenyl triflate as activator.

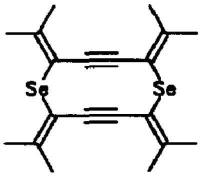


Tetrahedron Letters, **1994**, *35*, 8779

Syntheses and Properties of Eight- and Ten- Membered Selenaradialenes

Rolf Gleiter*[a], Harald Röckel[a] and Bernhard Nuber[b]
Organisch[a]- und Anorganisch[b]-Chemisches Institut der Universität Heidelberg
Im Neuenheimer Feld 270, D 69120 Heidelberg

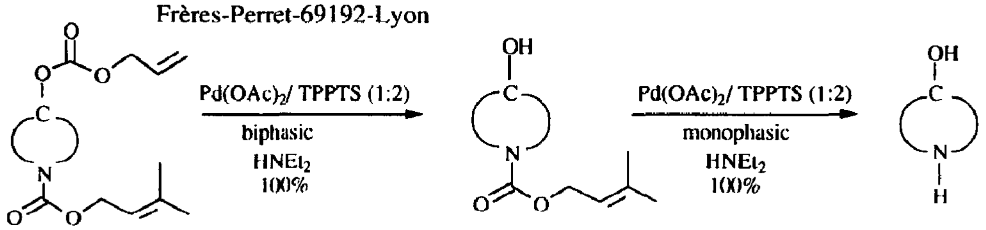




Tetrahedron Letters, **1994**, *35*, 8783

Selective Deprotective Method using Palladium-Water Soluble Catalysts

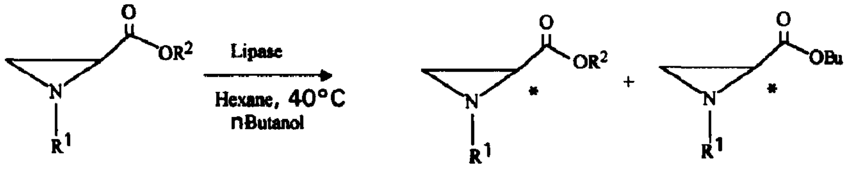
Sandrine Lemaire-Audoire, Monique Savignac
Errol Blart, Guy Pourcelot and Jean-Pierre Genêt Laboratoire de Synthèse Organique, E.N.S.C.P.
11 rue P.&M.Curie, 75231 Paris CEDEX 05, FRANCE;Jean-Marie Bernard; Rhône-Poulenc- 85, rue des Frères-Perret-69192-Lyon



PREPARATION OF OPTICALLY ACTIVE AZIRIDINE CARBOXYLATES BY LIPASE-CATALYZED ALCOHOLYSIS

Tetrahedron Letters, **1994**, *35*, 8787

Monique Martres,[1] Gérard Gil*[1] and Alain Méou[2]
1 Bioconversion- LASCO- associé au CNRS, case 532, Faculté des Sciences et Techniques de St Jérôme, 13397 Marseille Cedex 20, France
2 Laboratoire de Synthèse Organique Sélective- associé au CNRS, Faculté des Sciences de Luminy, case 901, F-13288, Marseille Cedex 9, France



Lipase-catalyzed alcoholysis gives the two enantiomers of aziridine carboxylates in good yield and medium to high e.e.

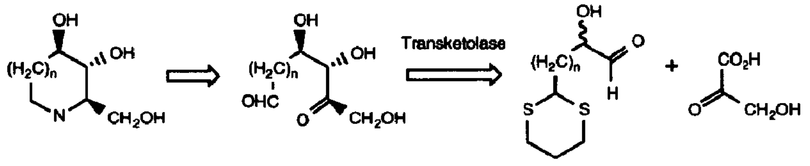
CHEMO-ENZYMATIC SYNTHESIS OF PRECURSORS OF FAGOMINE AND 1,4-DIDEOXY-1,4-IMINO-D-ARABINITOL

Tetrahedron Letters, **1994**, *35*, 8791

L. Hecquet, M. Lemaire, J. Bolte and C. Demuynck*

Laboratoire de Chimie Organique Biologique Associé au C.N.R.S., Université Blaise Pascal, 63177 Aubière, France.

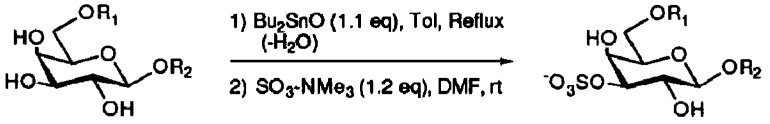
The enantioselectivity of transketolase allowed us to prepare optically pure precursors from racemic α-hydroxyaldehydes



REGIOSELECTIVE SULFATION OF GALACTOSE DERIVATIVES THROUGH THE STANNYLENE PROCEDURE. NEW SYNTHESIS OF THE 3'-O-SULFATED LEWIS^a TRISACCHARIDE.

Tetrahedron Letters, **1994**, *35*, 8795

André Lubineau* and Rémy Lemoine, Institut de Chimie Moléculaire d'Orsay, Laboratoire de Chimie Organique Multifonctionnelle, Université Paris-Sud, Bât. 420, F-91405 Orsay Cedex (France).



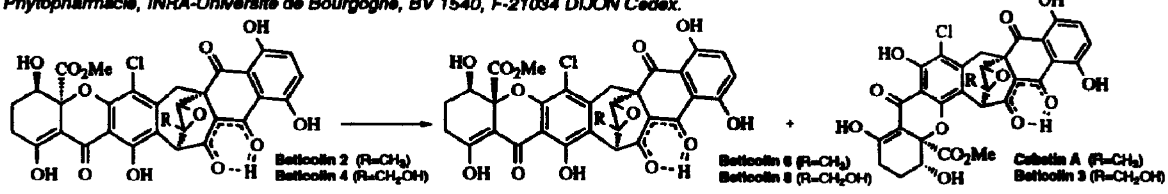
R_1 = H or TBDMS preferably
R_2 = MBn or protected sugars

One regioisomer only,
80-94% yields

THE YELLOW TOXINS PRODUCED BY CERCOSPORA BETICOLA. Part VIII‡ : CHEMICAL EQUILIBRIUM BETWEEN BETICOLINS ; STRUCTURES OF MINOR COMPOUNDS : BETICOLIN 6 AND BETICOLIN 8.

Tetrahedron Letters, **1994**, *35*, 8797

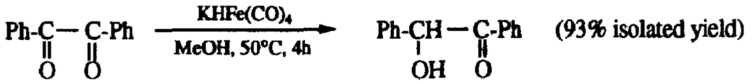
Ducrot P.-H.*[a], Lallemand J.-Y.[b], Milat M.-L.[c], Blein J.-P[c].
a)Unité de Phytopharmacie et des Médiateurs Chimiques, I.N.R.A. Route de Saint-Cyr F-78026 Versailles Cedex .b)Laboratoire de Synthèse Organique associé au C.N.R.S. Ecole Polytechnique F-91128 PALAISEAU Cedex . c)Unité associée Phytopharmacie, INRA-Université de Bourgogne, BV 1540, F-21034 DIJON Cedex.



POTASSIUM TETRACARBONYLHYDRIDOFERRATE: A REAGENT FOR THE SELECTIVE REDUCTION OF CARBONYL GROUPS

Tetrahedron Letters, **1994**, *35*, 8801

Jean-Jacques Brunet*, Rémi Chauvin, Fadjai Kindela and Denis Neibecker
Laboratoire de Chimie de Coordination du CNRS, 205, route de Narbonne, 31077 Toulouse (France)



$$\mathrm{Ph}\text{-}\underset{\underset{\mathrm{O}}{\|}}{\mathrm{C}}-\underset{\underset{\mathrm{O}}{\|}}{\mathrm{C}}\text{-Ph} \xrightarrow[\mathrm{MeOH,\ 50^\circ C,\ 4h}]{\mathrm{KHFe(CO)_4}} \mathrm{Ph}\text{-}\underset{\underset{\mathrm{OH}}{|}}{\mathrm{CH}}-\underset{\underset{\mathrm{O}}{\|}}{\mathrm{C}}\text{-Ph}$$

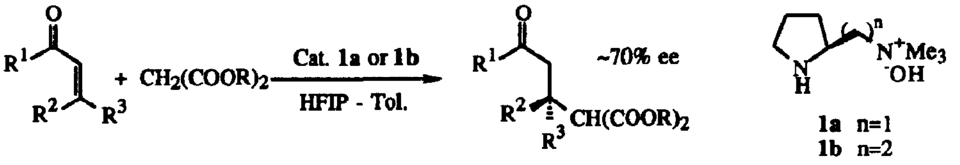
(93% isolated yield)

Methyl benzoylformate, N-methylisatine and methyl pyruvate are also selectively reduced to the corresponding α–hydroxycarbonyl compounds.

An Enantioselective Michael Addition Of Soft Nucleophiles To Prochiral Enone Catalyzed By (2-Pyrrolidyl)alkyl Ammonium Hydroxide

Tetrahedron Letters, **1994**, *35*, 8805

Akihiro Kawara† and Takeo Taguchi,* Tokyo College of Pharmacy, 1432-1 Horinouchi, Hachioji, Tokyo 192-03, Japan
† Process Development Laboratories, Sankyo Co., Ltd. 2-58 Hiromachi 1-chome, Shinagawa-ku, Tokyo 140, Japan



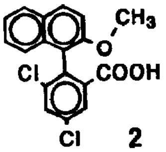
PRELACINAN-7-OL, A NOVEL SESQUITERPENE FROM *Rudbeckia laciniata*

Tetrahedron Letters, **1994**, *35*, 8809

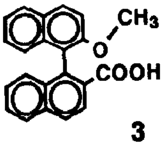
Yukiharu Fukushi, Chie Yajima and Junya Mizutani, Department of Applied Bioscience, Faculty of Agriculture, Hokkaido University, Kita-ku, Sapporo 060, Japan

Prelacinan-7-ol (**1**) was isolated from the roots of *Rudbeckia laciniata*. The absolute configuration was established by derivatizing to axially chiral MNCB (**2**) and MBNC (**3**) esters.

1



2



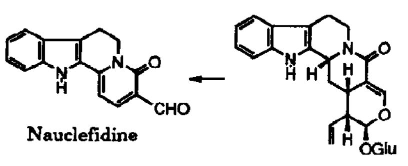
3

On the Indole Alkaloid, Nauclefidine; Structure Revision, Synthesis, and a Biomimetic Transformation from the Vincoside Lactam.

Tetrahedron Letters, **1994**, *35*, 8813

Hiromitsu Takayama,[a] Rieko Yamamoto,[a] Mika Kurihara,[a] Mariko Kitajima,[a] Norio Aimi,[a] Lin Mao,[b] and Shin-ichiro Sakai[a]*
Faculty of Pharmaceutical Sciences, Chiba University,[a] 1-33, Yayoi-cho, Inage-ku, Chiba 263, Japan, and Institute of Materia Medica, Chinese Academy of Medical Sciences,[b] 1 Xian Nong Tan Street, Beijing, People Republic of China.

The structure of a *Nauclea* alkaloid, nauclefidine, was revised by synthetic studies and biomimetic transformaton of the vincoside lactam based on the biogenetic proposal.

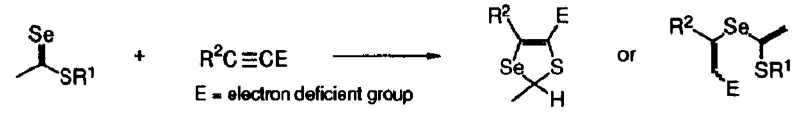


Tetrahedron Letters, **1994**, *35*, 8817

REACTION OF SELENOTHIOIC ACID S-ALKYL ESTERS WITH ELECTRON DEFICIENT ALKYNES: SELECTIVE SYNTHESIS OF CYCLIC SELENIDES AND ACYCLIC DIVINYL SELENIDES.

Toshiaki Murai,* Hiroya Takada, Takahiro Kanda, and Shinzi Kato,* Department of Chemistry, Faculty of Engineering,
Gifu University, Yanagido, Gifu 501-11, Japan

Reactions of selenothioic acid *S*-alkyl esters with electron deficient alkynes lead to cyclic selenides or acyclic divinyl selenides.

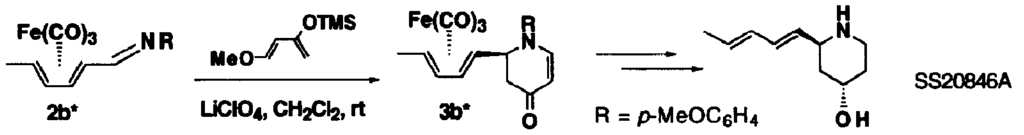


Tetrahedron Letters, **1994**, *35*, 8821

DIASTEREOSELECTIVE [4 + 2] TYPE CYCLOADDITION OF 1-AZATRIENE IRON-TRICARBONYL COMPLEX: ASYMMETRIC SYNTHESIS OF A PIPERIDINE ALKALOID.

Yoshiji Takemoto, Shigeo Ueda, Jun Takeuchi, Takahisa Nakamoto, and Chuzo Iwata*, Faculty of Pharmaceutical Sciences, Osaka University, 1-6 Yamada-Oka, Suita, Osaka 565, Japan

A $LiClO_4$ catalyzed cycloaddition reaction of **2b*** with Danishefsky's diene gives diastereomerically pure dehydropiperidinone **3b*** (>95% d.e.), which can be converted into a piperidine alkaloid, SS20846A.

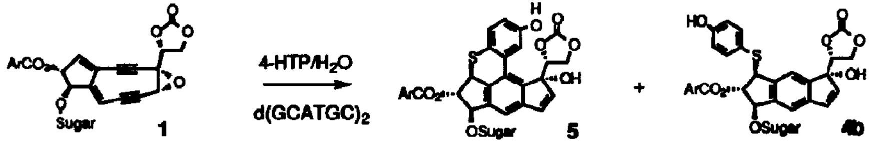


Tetrahedron Letters, **1994**, *35*, 8825

ACTIVATION OF NEOCARZINOSTATIN-CHROMOPHORE BY 4-HYDROXYTHIOPHENOL: INTRAMOLECULAR RADICAL TRAPPING OF BIRADICAL INTERMEDIATE

Hiroshi Sugiyama*, Tsuyoshi Fujiwara, and Isao Saito*
Department of Synthetic Chemistry and Biological Chemistry, Faculty of Engineering, Kyoto University, Kyoto 606-01, Japan

NCS chromophore (**1**) reacted with 4-hydroxythiophenol to provide novel cyclization product **5** together with nomal cyclization product **4b** under DNA-cleaving conditions.

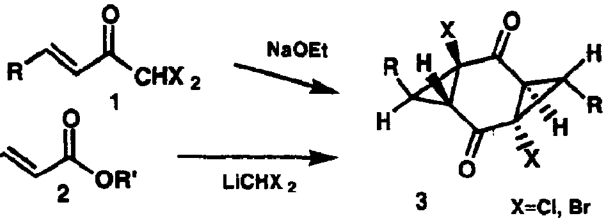


Tetrahedron Letters, **1994**, *35*, 8829

A Novel Synthesis of Tricyclo[5.1.0.0^{3,5}]octane-2,6-dione Derivatives via Double Michael Addition-Induced Cyclopropanation Reactions

Sadao Tsuboi,* Takashige Ono, Katsushi Kunito, Mikio Kageyama, Takashi Sakai, and Masanori Utaka

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

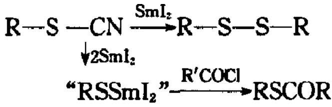


Tetrahedron Letters, **1994**, *35*, 8833

REDUCTIVE CLEAVAGE OF C—S BOND BY SAMARIUM DIIODIDE; A NOVEL METHOD FOR THE SYNTHESIS OF DISULFIDES AND THIOLESTERS

Xueshun Jia, Yongmin Zhang* and Xunjun Zhou, Department of Chemistry, Hangzhou University, Hangzhou, Zhejiang, 310028, China

Disulfides were obtained by the reaction of thiocyanates with equivalent SmI_2. Samarium thiolates were generated by the reaction of an equivalent of thiocyanates with two equivalents of SmI_2, and then reacted smoothly with acyl chlorides to give thiolesters.



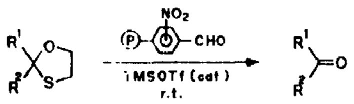
$$\begin{tikzcd} R{-}S{-}CN \arrow[r, "SmI_2"] \arrow[d, "2SmI_2"] & R{-}S{-}S{-}R \\ \text{“}RSSmI_2\text{”} \arrow[r, "R'COCl"] & RSCOR' \end{tikzcd}$$

Tetrahedron Letters, **1994**, *35*, 8835

Polymer Supported Nitrobenzaldehyde : Efficient, Highly Selective Catalytic, Deprotection of Oxathioacetals[+]

T. Ravindranathan*, Subhash P. Chavan* and Moreshwar M. Awachat
Division of Organic Chemistry : Technology
National Chemical Laboratory, Pune 411 008, India.

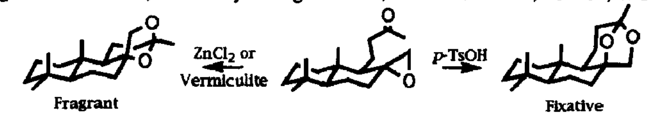
Oxathioacetals are smoothly deprotected to carbonyl compounds by polymer supported nitrobenzaldehyde at room temperature.



Tetrahedron Letters, **1994**, *35*, 8839

NOVEL DIASTEREOSELECTIVE ROUTES FOR THE SYNTHESIS OF THE AMBERGRIS KETALS

Maria do Céu Costa,[a] Regina Tavares,[a] William B. Motherwell*[b] and Maria João Marcelo Curto*[a]
(a) Inst. Nac. de Engenharia e Tec. Industrial (INETI), Dep. de Tec. das Indústrias Químicas, Estrada das Palmeiras, 2745 Queluz, Portugal; (b) Christopher Ingold Laboratories, University College London, 20 Gordon Street, London, WC1H 0AJ, UK.



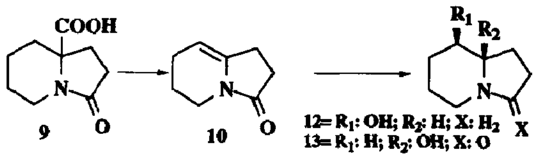
Stereospecific formation of either the fragrant or fixative diastereoisomer of the Ambraketals is possible by selection of the appropriate catalyst for the δ,ε-epoxyketone rearrangement.

Tetrahedron Letters, **1994**, *35*, 8843

AMINO ACIDS AS PRECURSORS TO INDOLIZIDINE ALKALOIDS. DPPA-PROMOTED DECARBONYLATION OF A BICYCLIC AMINO ACID: AN EASY ENTRY TO HYDROXYLATED INDOLIZIDINES.

María J. Martín-López and Francisco Bermejo-González*. Departamento de Química Orgánica, Universidad de Salamanca. Pza de la Merced. 37008 Salamanca, Spain.

The DPPA-promoted decarbonylation of carboxyamide **9** led to the enamide **10** (75%). This easily accessible intermediate allowed us access to 8,8a-*trans*-8-hydroxy-indolizidine **12** and to the carbinolamide **13** (45%). Allylic oxidation of **10** with CrO_3-3,5-dimethylpirazole led to 1,2,5,6-tetrahydro-3,7-indolizindione **14**.

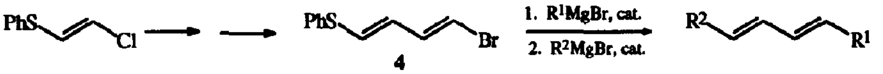


Tetrahedron Letters, **1994**, *35*, 8847

A General Approach to Conjugated (*E,E*)-Dienes through Sequential Coupling Reactions

Francesco Babudri, Vito Fiandanese, Luigia Mazzone, and Francesco Naso*
Centro CNR di Studio sulle Metodologie Innovative di Sintesi Organiche, Dipartimento di Chimica, Università di Bari, Bari, Italy

Conjugated (*E,E*) dienes can be easily synthesized through sequential coupling reactions on the easily accessible bifunctional dienyl compound **4**.

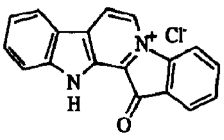


Tetrahedron Letters, **1994**, *35*, 8851

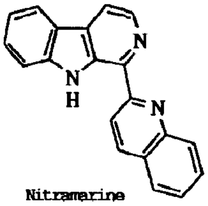
IMINOPHOSPHORANE-MEDIATED SYNTHESES OF THE FASCAPLYSIN ALKALOID OF MARINE ORIGIN AND NITRAMARINE.

Pedro Molina*, Pilar M. Fresneda, Sagrario García-Zafra, Pedro Almendros
Departamento de Química Orgánica, Universidad de Murcia
Campus de Espinardo, 30071, Murcia, Spain

New and efficient syntheses of the alkaloids fascaplysin and nitramarine are described. In both syntheses the key step, formation of the β-carboline ring, involve a tandem azaWittig/electrocyclic ring closure process.



Fascaplysin

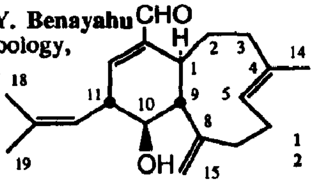


Nitramarine

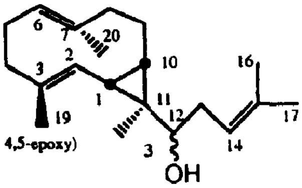
Tetrahedron Letters, **1994**, *35*, 8855

XENIAFARAUNOL A AND B AND FARAUNATIN; THREE NEW CYTOTOXIC DITERPENES FROM THE SOFT CORAL *XENIA FARAUNENSIS*

Y. Kashman*, M. Saltoun, A. Rudi and Y. Benayahu
School of Chemistry and Department of Zoology,
Tel-Aviv University, Ramat-Aviv, ISRAEL



1
2 (4,5-epoxy)

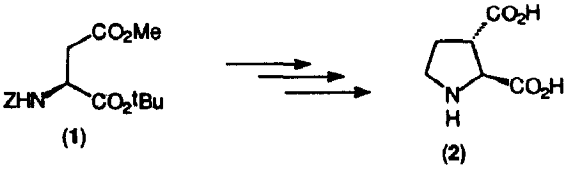


3

Tetrahedron Letters, **1994**, *35*, 8859

ASYMMETRIC SYNTHESIS OF (2S,3S)-3-CARBOXY-PROLINE

Ron Cotton[b] Andrew N.C. Johnstone[a], and Michael North[a]*
a) Department of Chemistry, University of Wales, Bangor, Gwynedd, LL57 2UW
b) Department of Chemistry, Zeneca PLC, Mereside, Alderley Edge, Macclesfield, SK10 4TG

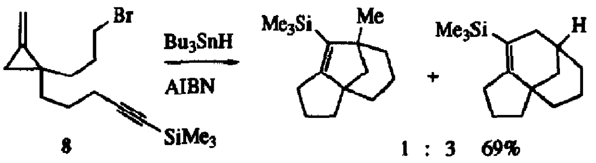


Tetrahedron Letters, **1994**, *35*, 8863

CASCADE RADICAL REACTIONS OF METHYLENECYCLOPROPANE DERIVATIVES

Marco Santagostino and Jeremy D Kilburn*
Department of Chemistry, University of Southampton,
Southampton, SO17 1BJ, UK

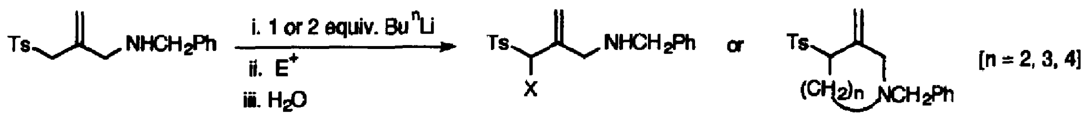
Radicals derived from disubstituted methylenecyclopropane derivatives, such as 8, gave tricyclic products *via* a sequence of radical cyclisations and fragmentation.



Tetrahedron Letters, **1994**, *35*, 8867

MONO AND DILITHIATION OF BENZYL[2-(TOSYLMETHYL)-2-PROPENYL]AMINE: NEW γ-AMINATED ALLYL SULFONE ANIONS

Diego A. Alonso and Carmen Nájera
Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, 03080 Alicante, Spain

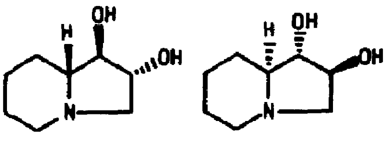


Tetrahedron Letters, **1994**, *35*, 8871

STEREOSELECTIVE SYNTHESIS OF (+)- AND (-)-LENTIGINOSINE

M K Gurjar*, Lakshmi Ghosh, M Syamala, V Jayasree
Indian Institute of Chemical Technology,
Hyderabad 500 007, India

Synthesis of (1R,2R,8aR) and (1S,2S,8aS)-lentiginosine based on Sharpless asymmetric dihydroxylation from (R)- and (S)-pipecolinic acids respectively.



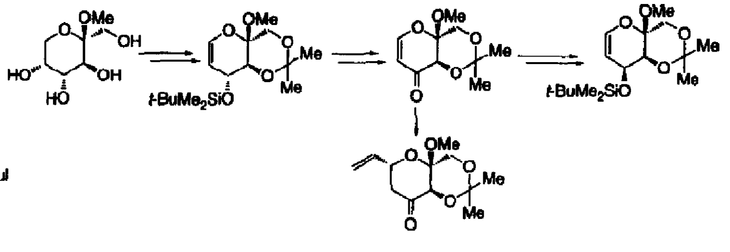
Tetrahedron Letters, **1994**, *35*, 8873

NOVEL PYRANOID GLYCALS DERIVED FROM D-FRUCTOSE

Karl J. Hale* and Soraya Manaviazar

The Christopher Ingold Laboratories,
Department of Chemistry,
University College London,
20 Gordon Street,
London WC1H 0AJ, UK.

Methodology for the construction of several useful pyranoid 5,6-glycal building blocks is described. Some of their chemistry is also discussed.

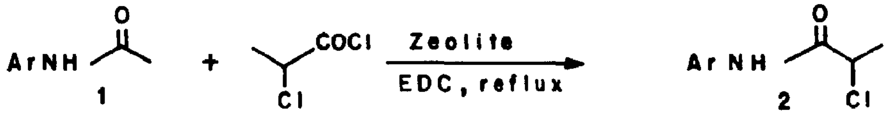


Tetrahedron Letters, **1994**, *35*, 8877

CATALYTIC TRANS N-ACYLATION OF ANILIDES WITH α-CHLOROPROPIONYL CHLORIDE OVER ZEOLITES

H.R. Sonawane,* A.V. Pol, P.P. Moghe, A. Sudalai and S.S. Biswas, National Chemical Laboratory, Pune 411 008, India

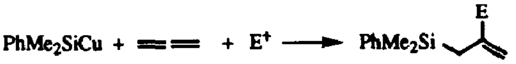
A mild and effective method of zeolite catalysed trans N-acylation of anilides in liquid phase is described.



Tetrahedron Letters, **1994**, *35*, 8881

NEW FINDINGS ON THE REGIOCHEMISTRY OF THE SILYLCUPRATION OF ALLENE

F. J. Blanco, P. Cuadrado, A. M. González, F. J. Pulido* and I. Fleming
Departamento de Química Orgánica, Universidad de Valladolid, 47011-Valladolid, Spain, and University Chemical Laboratory, Lensfield Road, Cambridge, CB2 1EW



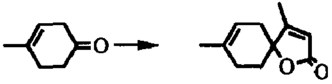
Allene reacts with phenyldimethylsilylcopper, with the opposite regioselectivity to that shown by the corresponding silylcuprate reagent, to give allylsilanes rather than vinylsilanes.

Tetrahedron Letters, **1994**, *35*, 8883

TRANSITION METAL PROMOTED ACETYLENE ISOMERISATION REACTIONS IN ORGANIC SYNTHESIS:- APPLICATION TO THE SYNTHESIS OF (+/-)-ANDIROLACTONE.

P. Quayle*[a], E. L. M. Ward[a], and P. Taylor[b]. [a]Department of Chemistry. The Victoria University of Manchester. Machester M13 9PL. U.K.; [b]ICI Paints Division. Slough. UK.

A chromium promoted acetylene-vinylidene rearrangement has been utilised in the synthesis of (+/-) - andirolactone.

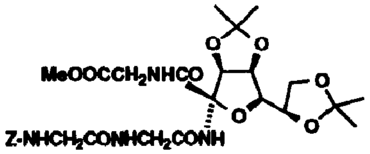


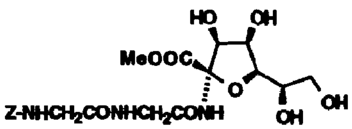
Tetrahedron Letters, **1994**, *35*, 8885

TRI- AND TETRA-PEPTIDES INCORPORATING AN α-AMINO ACID AT THE ANOMERIC POSITION OF MANNOFURANOSE

J. C. Estevez, R. J. Estevez, H. Ardron, M. R. Wormald, D. Brown and G. W. J. Fleet*
Dyson Perrins Laboratory, South Parks Road, Oxford OX1 3QY UK; Glycobiology Institute, Biochemistry Department, Oxford University, South Parks Road, Oxford OX1 3QU Pfizer Central Research, Sandwich, Kent CT13 9NJ, UK

The first examples of peptides containing an α-amino acid residue in which the α-carbon is also the anomeric position of a carbohydrate are described.



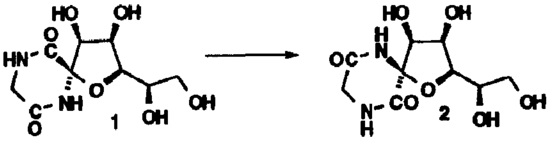


Tetrahedron Letters, **1994**, *35*, 8889

SPIROCYCLIC PEPTIDES AT THE ANOMERIC POSITION OF MANNOFURANOSE

J. C. Estevez, H. Ardron, M. R. Wormald, D. Brown and G. W. J. Fleet*
Dyson Perrins Laboratory, Oxford Centre for Molecular Sciences, South Parks Road, Oxford OX1 3QY UK; Glycobiology Institute, Biochemistry Department, Oxford University, South Parks Road, Oxford OX1 3QU; Pfizer Central Research, Sandwich, Kent CT13 9NJ, UK

Unprotected spirodiketopiperazines such as 1 and 2 are configurationally stable to treatment with aqueous trifluoroacetic acid; treatment of 1 with potassium *tert*-butoxide in dimethylformamide at 100°C causes isomerisation to the more stable 2 in 90% yield.

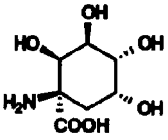


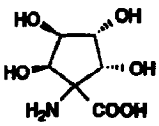
Tetrahedron Letters, **1994**, *35*, 8891

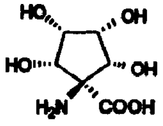
Polyhydroxylated Cyclohexane and Cyclopentane α-Amino Acids from Cyclisations of an Azidolactone

A. J. Fairbanks, A. Hui, B. M. Skead, P. M. de Q. Lilley, R. B. Lamont[c] R. Storer, J. Saunders,[c] D. J. Watkin[b] and G. W. J. Fleet
Dyson Perrins Laboratory, Oxford Centre for Molecular Sciences, South Parks Road, Oxford OX1 3QY, UK; Chemical Crystallography Laboratory, Oxford University, 9 Parks Road, Oxford OX1 3PD, UK; Glaxo Research & Development, Greenford Road, Greenford, Middlesex UB6 0HE, UK

A short synthesis of highly functionalised α-amino acids is reported starting from an azido lactone







Tetrahedron Letters, **1994**, *35*, 8895

Aldol Equilibrations of Unprotected Trihydroxybicyclic Lactones: Enantiomeric Tetrahydroxy-α-Aminocyclopentane Carboxylic Acids from Epimeric Bicyclic Lactones

Andrew Hui, A. J. Fairbanks, R. J. Nash, P. M. de Q. Lilley, R. Storer, D. J. Watkin and G. W. J. Fleet
Dyson Perrins Laboratory, Oxford University, South Parks Road, Oxford OX1 3QY UK; AFRC Institute of Grassland & Environmental Research, Plas Gogerddan, Aberystwyth, Dyfed SY23 3EB; Chemical Crystallography Laboratory, 9 Parks Road, Oxford OX1 3PD UK; Glaxo Research & Development, Greenford Road, Greenford, Middlesex UB6 0HE, UK

Enantiomeric aminoacids 1 and 2 may be formed by routes involving unusual aldol equilibration of their bicyclic precursors