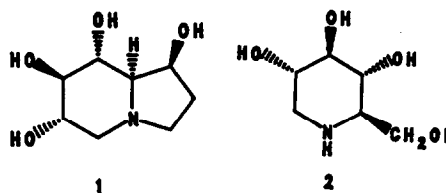


Tetrahedron Lett. 1990, 31, 3093

ENZYME-CATALYZED ACYLATION OF CASTANOSPERMINE AND (+)-1-DEOXYNOJIRIMYCIN

Deborah L. Delinck and Alexey L. Margolin*
Merrell Dow Research Institute, Indianapolis Center
9550 N. Zionsville Rd., Indianapolis, IN 46268

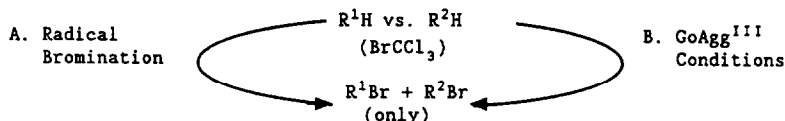
Several esters of the alkaloids castanospermine (1) and (+)-1-deoxynojirimycin (2) have been synthesized via subtilisin-catalyzed regioselective acylation in pyridine



Tetrahedron Lett. 1990, 31, 3097

COMPARISON OF GIF-TYPE REACTIVITY TOWARDS ALKANES WITH STANDARD RADICAL REACTION SELECTIVITY. GIF OXIDATION OF *n*-BUTANE AND PROPANE

Derek H.R. Barton*, Eva Csuhai, Dario Doller, Nubar Ozbalik and Nathalie Senglet
Department of Chemistry, Texas A&M University, College Station, TX 77843



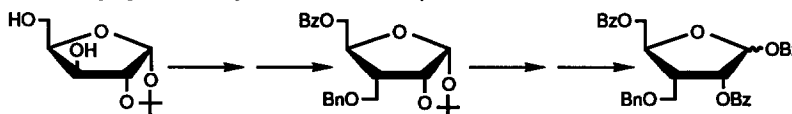
For A and B the relative reactivities for a range of hydrocarbons are completely different. Oxidation of *n*-butane and propane under GoAgg^{III} conditions gave 2-butanone and acetone respectively.

Tetrahedron Lett. 1990, 31, 3101

A NEW AND NOVEL APPROACH TOWARDS THE SYNTHESIS OF 3'-DEOXY-3'-HYDROXYMETHYL RIBOFURANOSIDES

Jeffrey S. Pudlo and Leroy B. Townsend*
Department of Chemistry, College of Literature, Science, and Arts; Department of Medicinal Chemistry, College of Pharmacy
University of Michigan, Ann Arbor, Michigan, 48109

Synthesis of a novel sugar provides a key intermediate for the synthesis of 3'-branched nucleosides.

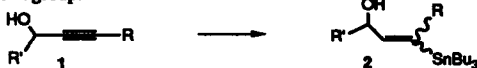


Tetrahedron Lett. 1990, 31, 3105

A ROUTE TO THE PREPARATION OF γ -HYDROXYVINYLSTANNANES

Mark Lautens* and Alexandre H. Huboux
Department of Chemistry, University of Toronto, Toronto, Ontario Canada M5S 1A1

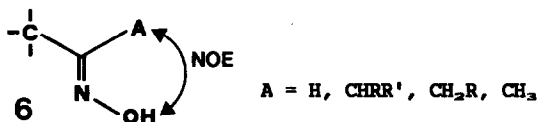
A series of propargyl alcohols, 1, (R = alkyl, aryl, silyl and stannyl) were hydrometallated using Cp₂TiCl₂ and isobutylmagnesium chloride. The resulting Grignard reagents were trapped with Bu₃SnCl giving γ -hydroxyvinylstannanes 2 in good yield (50-75%). The overall stereochemistry of addition of the tin-hydrogen atoms was a function of the R group.



Tetrahedron Lett. 1990, 31, 3109

CONVENIENT AND RAPID DETERMINATION OF THE CONFIGURATION OF ALDOXIMES AND KETOXIMES BY MEANS OF NOE DIFFERENCE SPECTROSCOPY

Gottfried Heinisch and Wolfgang Holzer*
Institute of Pharmaceutical Chemistry, University of Vienna
Währingerstraße 10, A-1090 Vienna, Austria



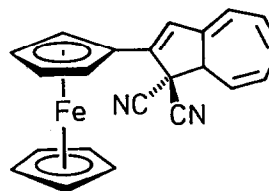
Homonuclear NOE difference spectroscopy is shown to be a versatile tool for the elucidation of the stereochemistry in oximes of type 6.

Tetrahedron Lett. 1990, 31, 3113

OXIDATION STATE DEPENDENT LIGHT SENSITIVITY OF A FERROCENE/DIHYDROAZULENE-CONJUGATE

Jörg Daub*, Sebastian Gierisch und Josef Salbeck
Institut für Organische Chemie der Universität Regensburg
Universitätsstr. 31, D-8400 Regensburg (Germany-W)

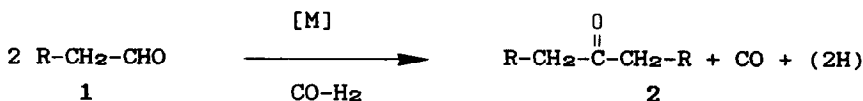
The synthesis of a dihydroazulene-ferrocene-conjugate is described and its properties investigated by electrochemical methods and under irradiation conditions.



Tetrahedron Lett. 1990, 31, 3117

SYNTHESIS OF SYMMETRICAL KETONES FROM ALDEHYDES CATALYSED BY DICOBALTOCTACARBONYL

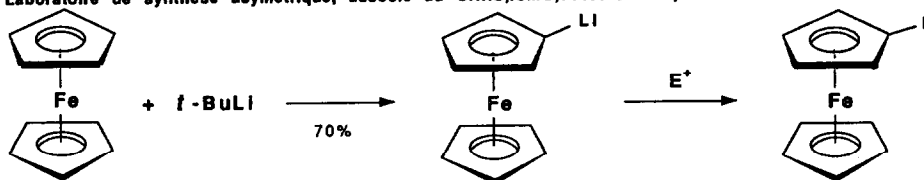
M. Fontaine, A.F. Noels*, A. Demonceau and A.J. Hubert
University of Liège, Sart Tilman (B.6), B-4000 Liège (Belgium)



Tetrahedron Lett. 1990, 31, 3121

A CONVENIENT METHOD FOR THE PREPARATION OF MONOLITHIOFERROCENE

F. REBIÈRE, O. SAMUEL, H.B. KAGAN*
Laboratoire de synthèse asymétrique, associé au CNRS, ICMO, 91405-ORSAY, FRANCE

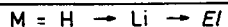
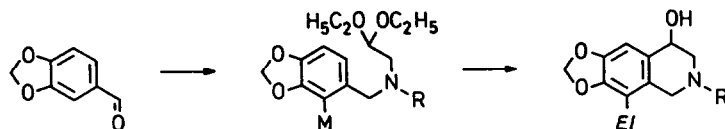


**AN EASY AND VERSATILE ACCESS TO
8-SUBSTITUTED ISOQUINOLINES**

Tetrahedron Lett. 1990, 31, 3125

Gyula Simig and Manfred Schlosser *

Institut de Chimie organique, Université de Lausanne, Switzerland

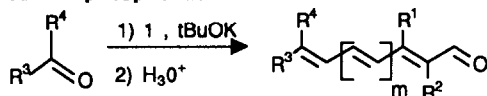


L. Duhamel, J. Guillemont, Y. Le Gallic, G. Plé, J. M. Poirier,
Y. Ramondenc and P. Chabardes.

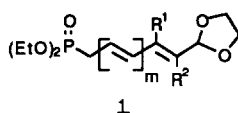
Tetrahedron Lett. 1990, 31, 3129

**Polyethylenic aldehydes by direct polyvinyl-
olation of carbonyl compounds using functio-
nalized phosphonates**

Carbonyl compounds are converted into
polyethylenic aldehydes in a one pot reaction with the
anions of phosphonates **1** followed by a mild acidic
hydrolysis



	1a	1b	1c	1d	1e
m	0	0	0	1	1
R ¹	H	CH ₃	H	H	CH ₃
R ²	H	H	CH ₃	H	H

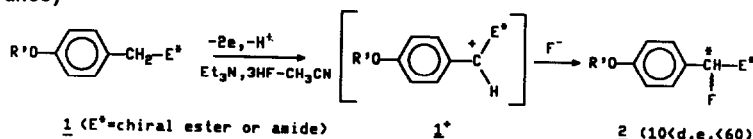


**DIASTERESELECTIVE FLUORINATION AT
BENZYLIC POSITION BY ANODIC OXIDATION**

Tetrahedron Lett. 1990, 31, 3137

L. KABORE, S. CHEBLI, R. FAURE, E. LAURENT and B. MARQUET
UCB-Lyon I, Lab. Chimie Orga. 3, URA CNRS 467
et Lab. Chimie Anal. 2, 43, Bd du 11 Novembre 1918
69622 VILLEURBANNE Cedex (France)

Asymmetric fluorination of
chiral benzylic derivatives
1 is obtained by anodic
oxidation in Et₃N, 3HF/CH₃CN.

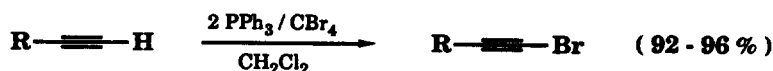


**CONVENIENT PREPARATION OF 1-BROMO-1-ALKYNES
FROM PRIMARY ALKYNES AND PPh₃ / CBr₄**

Tetrahedron Lett. 1990, 31, 3141

A. WAGNER, M.P. HEITZ, C. MIOSKOWSKI*

Université Louis Pasteur, Laboratoire de Chimie Bio-organique associé au CNRS
Faculté de Pharmacie, 74 route du Rhin F-67401 STRASBOURG



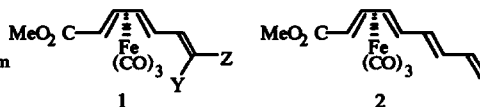
**DIELS-ALDER REACTIONS ON LINEAR POLYENES,
SELECTIVELY PROTECTED AS THEIR TRICARBONYL-IRON
COMPLEXES.**

Tetrahedron Lett. 1990, 31, 3145

a) Thierry Benvegna, Jacques Martelli *, René Gré
b) Loïc Toupet

a) Laboratoire de Chimie Organique Biologique, E.N.S.C.R., Av. du Gal Leclerc, 35700 Rennes, France.
b) Département de Physique Cristalline, Université de Rennes I, Av. du Gal Leclerc, 35042 Rennes-Cedex, France.

The first examples of Diels-Alder reactions using dienophiles or a diene bearing butadiene-tricarbonyliron moieties are described. These highly stereo-selective reactions are useful for the synthesis of polycyclic derivatives via tandem cycloadditions.



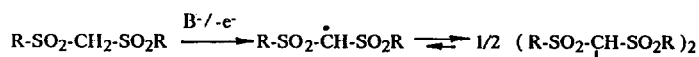
Tetrahedron Lett. 1990, 31, 3149

THE REVERSIBLE ANODIC COUPLING OF ANIONS OF POLYSULPHONES IN BASIC MEDIA

Georges Le Guillanton and Jacques Simonet*

Laboratoire d'Electrochimie, Unité de Recherche Associée au CNRS N°439, UCO, 3 Place A. Leroy, BP 808, 49005 ANGERS CEDEX (France).

Dimerization of anions of polysulphones may lead symmetrical dimers. The stability of those dimers is relative: they give, upon heating, free radicals corresponding to the homolytic scission of the central C - C bond.



Tetrahedron Lett. 1990, 31, 3151

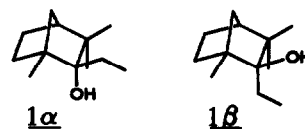
**SYNTHESIS OF EARTHY-MOULDY SMELLING COMPOUNDS - II
ETHYL α - AND β - FENCHOLS**

P. Gosselin^a, D. Joulain^b, P. Laurin^a, F. Rouessac^a

^a Laboratoire de Synthèse Organique, CNRS U.A. 482, Faculté des Sciences, BP535, F-72017 Le Mans, France.

^b Robertet S.A., BP 100, F-08333 Grasse, France.

Several stereoselective routes to both ethyl α - and β -fenchols 1 α and 1 β are discussed. Direct addition of ethyllithium to fenchone was the best route to 1 α whereas obtention of 1 β was achieved by the highly stereoselective retroethynylation of a mixture of ethynyl α - and β -fenchols 4 α and 4 β .

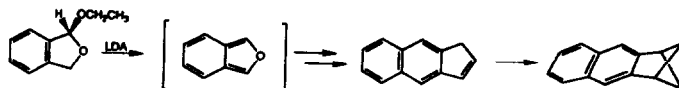


Tetrahedron Lett. 1990, 31, 3155

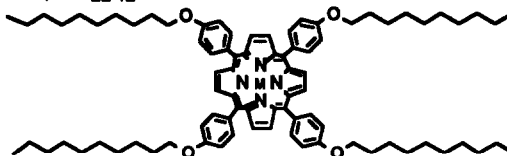
BENZ[F]INDENE AND ITS KATZ REACTION

Ulrich Burger*, Pierre-Jean Thorel, and Jean Pierre Schaller, Département de Chimie Organique, Université de Genève, CH-1211 Genève 4, Switzerland.

A novel and very short synthesis of the useful title hydrocarbon is presented and applied to the preparation of a valence isomer of anthracene.



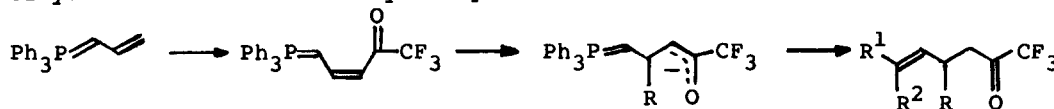
Novel Liquid Crystals Consisting of Tetraphenylporphyrin Derivatives
 Shin-ichi Kugimiya* and Motoko Tokemura
 University of Tokushima, Josanjima, Tokushima City, 770 Japan
 M = H₂: T_{C-CL1} = 45.3°C, T_{CL1-CL2} = 88.6°C, T_{CL2-IL} = 144.5°C



A NOVEL SYNTHESIS OF TRANS- γ,δ -UNSATURATED TRIFLUOROMETHYL KETONES

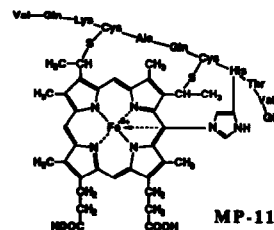
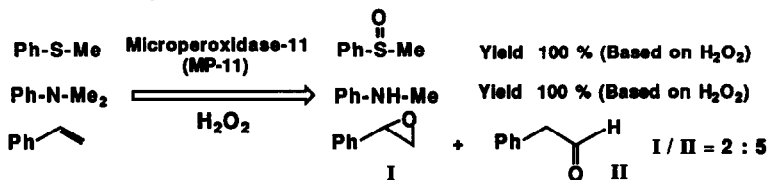
Yanchang Shen*, Tielin Wang
 Shanghai Institute of Organic Chemistry, Academia Sinica
 345 Lingling Lu, Shanghai 200032, China

A synthesis of γ,δ -unsaturated trifluoromethyl ketones via the reaction of ylide-anion with carbonyl compounds.



SULFIDE OXIDATION, N-DEMETHYLATION, AND OLEFIN OXIDATION BY HEME-UNDECAPEPTIDE, MICROPEROXIDASE-11, IN THE PRESENCE OF HYDROGEN PEROXIDE

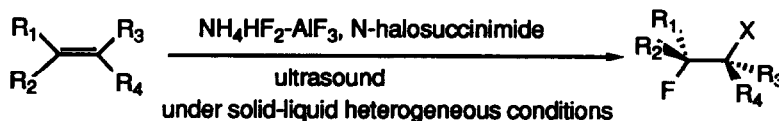
Tadahiko Meshino, Shigeo Nakamura, and Masaaki Hirobe
 Faculty of Pharmaceutical Sciences, University of Tokyo



The Combination of Ammonium Hydrogen Fluoride and Aluminium Fluoride: An Efficient Solid Fluoride Source for Halofluorination of Alkenes

Junko Ichihara, Kotaro Funabiki, and Terukiyo Hanafusa

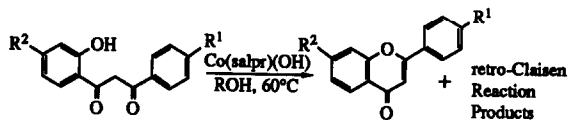
The Institute of Scientific and Industrial Research, Osaka University, Mihogaoka, Ibaraki, Osaka 567, Japan



COBALT SCHIFF BASE COMPLEX PROMOTED RETRO-CLAISEN REACTION OF 1-(2-HYDROXYPHENYL)-3-PHENYL-1,3-PROPANEDIONS AND FLAVONE FORMATION

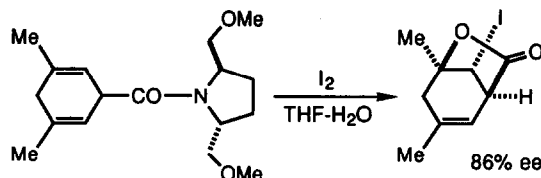
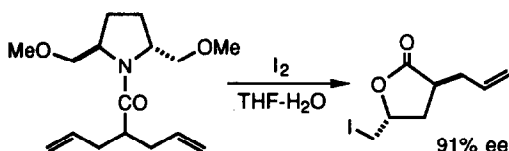
A. NISHINAGA,* K. MARUYAMA, H. ANDO, R. SATO, and T. MASHINO
Osaka Institute of Technology Ohmiya 5, Asahi-ku, Osaka 535, Japan
A. INADA* and T. NAKANISHI, Faculty of Pharmaceutical Sciences, Setsunan University, Hirakata, Osaka 573-01

Co(salpr)(OH) promotes the conversion of 1-(2-hydroxyphenyl)-3-phenyl-1,3-propanediones in alcohols to flavones and retro-Claisen reaction products.



ENANTIOSELECTIVE IODOLACTONIZATION THROUGH DIASTEREOTOPIC GROUP DIFFERENTIATION

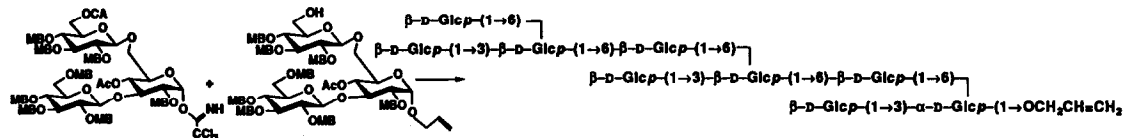
Kaoru Fuji,* Manabu Node, Yoshimitsu Naniwa, and Takeo Kawabata
Institute for Chemical Research, Kyoto University
Uji, Kyoto 611, Japan



STEREOCONTROLLED SYNTHESIS OF PHYTOALEXIN ELICITOR-ACTIVE β-D-GLUCOHEXAOSIDE AND β-D-GLUCONONAOSIDE

Namgi Hong, and Tomoya Ogawa
RIKEN (The Institute of Physical and Chemical Research), Wako-shi, Saitama, 351-01 Japan

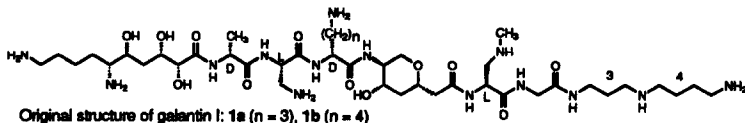
Unambiguous synthetic routes for both β-D-glucohexaoside and β-D-glucononaoside were developed in a stereocontrolled manner.



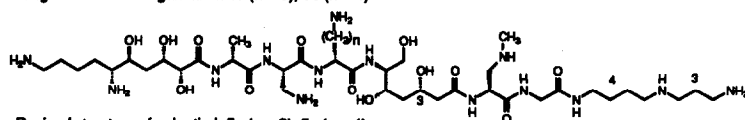
TOTAL SYNTHESIS OF GALANTIN I. REVISION OF THE ORIGINAL STRUCTURE

Naomi Sakai and Yasufumi Ohfune*
Suntory Institute for Bioorganic Research
Shimamoto-cho, Osaka 618, Japan

The proposed structure of galantin I, a mixture of homologs (1a/1b=9/1) was revised to be 5a and 5c, respectively, by synthetic and spectroscopic studies.



Original structure of galantin I: 1a (n = 3), 1b (n = 4)

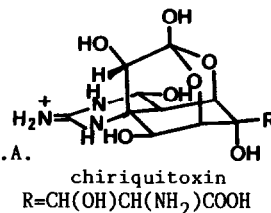


Revised structure of galantin I: 5a (n = 3), 5c (n = 4)

THE STRUCTURE OF CHIRIQUITOXIN FROM THE COSTA RICAN FROG *ATELOPUS CHIRIQUIENSIS*

Mari Yotsu,^a Takeshi Yasumoto,^{a*} Yong Hae Kim,^b Hideo Naoki,^c C. Y. Kao^d

^a Faculty of Agriculture, Tohoku University, Tsutsumidori-Amamiya, Aoba-ku, Sendai 981, Japan; ^b Department of Chemistry, Korea Advanced Institute of Science and Technology, Seoul 131-650, Korea; ^c Suntory Institute for Biorganic Research, Wakayamadai, Shimamotocho, Osaka 618, Japan; ^d Department of Pharmacology, State University of New York, Brooklyn, New York, 11203-2098, U.S.A. The structure of chiriquitoxin, a tetrodotoxin analog isolated from the Costa Rican frog *Atelopus chiriquiensis*, was elucidated.

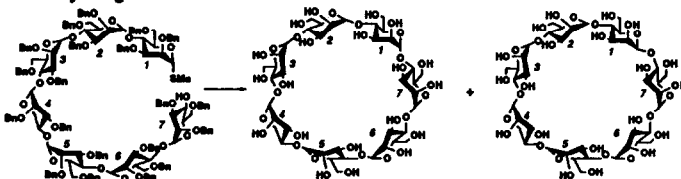


STERESELECTIVITY OF CYCLOGLYCOSYLATION IN MANNOOLIGOSE SERIES DEPENDS ON CARBOHYDRATE CHAIN LENGTH: SYNTHESIS OF MANNO ISOMERS OF β- AND γ-CYCLODEXTRINS

Masato Mori, Yukishige Ito, Jun Uzawa, and Tomoya Ogawa

RIKEN (The Institute of Physical and Chemical Research), Wako-shi, Saitama, 351-01 Japan

The α-(1→4) linked mannoheptaosyl and mannooctosyl methyl thioglycosides gave the expected cycloglycosylation products in high yield but with low stereoselectivity.



SYNTHETIC STUDIES ON MANZAMINE A II;¹

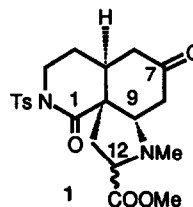
A NOVEL DIELS-ALDER APPROACH TO THE PYRROLO[2,3-j]ISOQUINOLINE SKELETON

Yasuhiro Torisawa,^a Masako Nakagawa,^{a*} Hitoe Arai,^a Ziping Lai,^a and Tohru Hino^{a*}

Tadashi Nakata^b and Takeshi Oishi^b

Faculty of Pharmaceutical Sciences, Chiba University,^a 1-33, Yayoi-cho, Chiba-shi 260, Japan
The Institute of Physical and Chemical Research (RIKEN),^b Wako-shi, Saitama 351-01, Japan

The central ring system 1 of manzamine A has been synthesized.



CUBIC REACTION COORDINATE DIAGRAM IN THE NUCLEOPHILIC SUBSTITUTION PROCESS

Igor V. Trushkov, Viktor V. Zhdarkin, Anatoly S. Koz'min, and Nikolai S. Zefirov*
Department of Chemistry, Moscow State University, Moscow 119899, U.S.S.R.

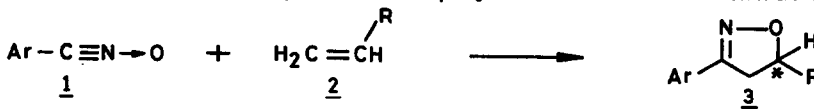
A three-dimensional diagram obtained from the More O'Ferrall plot by the addition of one more perpendicular coordinate reflecting the biradicaloid character of the transition state is proposed for analysis of S_N reactions.

BAKER'S YEAST CATALYZED ASYMMETRIC CYCLOADDITION OF NITRILEOXIDES TO C=C BOND: IMPROVED CHIRAL RECOGNITION BY USING β -CYCLODEXTRIN

K.Rama Rao*, N.Bhanumathi and P.B.Sattur

Organic Chemistry-I, Indian Institute of Chemical Technology, Hyderabad-500 007, India

Baker's Yeast catalyzes asymmetric cycloaddition. β -cyclodextrin enhances chiral recognition

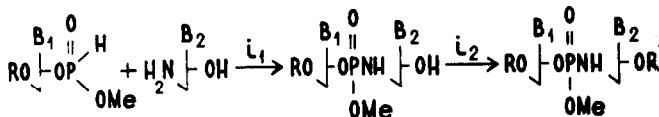


A NEW METHOD OF SYNTHESIS OLIGODEOXYRIBO-NUCLEOTIDES CONTAINING INTERNUCLEOTIDE PHOSPHORAMIDATE BONDS

S.M.Gryaznov and N.I.Sokolova

Institute of Biotechnology, Nauchny proezd, Moscow 117246

A.N.Belozersky Laboratory of Molecular Biology and Bioorganic Chemistry, Moscow State University, Moscow 119899, USSR



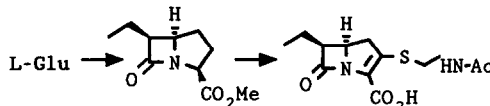
NEW STRATEGY FOR THE SYNTHESIS OF CARBAPENEMS.

TOTAL SYNTHESIS OF 6-*epi* PS-5 AND PS-5.

Ari M.P. Koskinen* and Mehran Ghiaci, Department of Chemistry

University of Surrey, Guildford, Surrey GU2 5XH, U.K.

A new strategy for the synthesis of carbapenem antibiotics has been developed. This consists of first assembling the pyrrolidine ring, and closing the β -lactam ring. The strategy is exemplified by asymmetric syntheses of 6-*epi* PS-5 and PS-5.



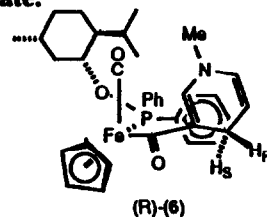
Chiral Organometallic NADH mimics: Preparation

of homochiral (R)-(-)-[(η^5 -C₅H₅)Fe(CO)(PPh₂(O-(*l*)-menthyl))]-1-methyl-1,4-dihydronicotinoyl and asymmetric reduction of ethyl benzoylformate.

Stephen G. Davies,* Renato T. Skerlj and Mark Whittaker

Dyson Perrins Laboratory, South Parks Road, Oxford, OX1 3QY, U.K.

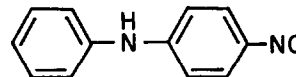
The homochiral complex (R)-(-)-(6) reduces ethyl benzoylformate to (R)-(-)-ethyl mandelate in 52% enantiomeric excess.



**A NOVEL REACTION OF ACETANILIDE WITH NITROBENZENE
IN DMSO - AN UNUSUAL SOLVENT ASSISTED REGIOSELECTIVE
AROMATIC NUCLEOPHILIC SUBSTITUTION**

N.R. Ayyangar*, S.N. Naik and K.V. Srinivasan
National Chemical Laboratory, Pune 411 008, India

The reaction of acetanilide with nitrobenzene in the presence of a base in DMSO yielded *p*-nitrosodiphenylamine as the major product.



**RADICAL ANIONS OF NITROSOIMIDAZOLES:
PUTATIVE INTERMEDIATES IN THE MECHANISM
OF ACTION OF NITROIMIDAZOLE ANTIBIOTICS**

Martyn C.R. Symons,^a W. Russell Bowman,^b and Peter F. Taylor^b

^aDepartment of Chemistry, The University of Leicester, Leicester LE1 7RH

^bDepartment of Chemistry, University of Technology, Loughborough, Leics. LE11 3TU

The radical anions of 1-methyl-4-phenyl-5-nitrosoimidazole and 5-phenyl-4-nitrosoimidazole have been detected using e.s.r. spectroscopy and are proposed as putative intermediates in the oxidation of thiols to disulphides by the nitrosoimidazoles.

