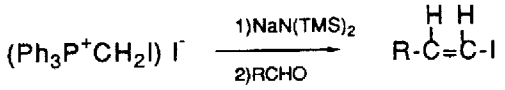
GRAPHICAL ABSTRACTS

Tetrahedron Lett. 30, 2173 (1989)

SYNTHESIS OF Z-1-IODOALKENES

Gilbert Stork* and Kang Zhao
Department of Chemistry, Columbia University, New York, New York 10027

A successful preparation of iodomethyltriphenylphosphorane is described. The Wittig reaction of this phosphorane provides a simple 1-carbon homologation of an aldehyde to a Z-vinyl iodide.

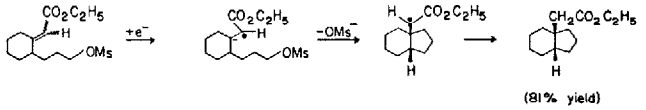


Tetrahedron Lett. 30, 2175 (1989)

INSIGHTS INTO THE ELECTROCHEMICAL REDUCTIVE CYCLIZATION OF α,β-UNSATURATED CARBONYL DERIVATIVES.

Paul G. Gassman* and Changjin Lee
Department of Chemistry, University of Minnesota, Minneapolis, Minnesota 55455 USA

A series of acyclic and cyclic α,β-unsaturated esters bearing tethered mesylate groups have been cathodically reduced to give synthetically useful yields of monocyclic and bicyclic esters via attack of the β-carbon of the α,β-unsaturated ester on the carbon bearing the mesylate moiety.

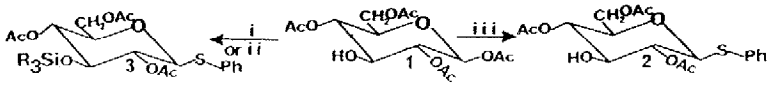


Tetrahedron Lett. 30, 2179 (1989)

FACILE SYNTHESIS OF SILYLATED THIOGLYCOSIDES

Sudhir Nambiar, John F. Daeuble, K. Grant Taylor,* and
Ronald J. Doyle[a], Department of Chemistry and Department of Microbiology/Immunology[a]
University of Louisville, Louisville, KY 40292

The one pot conversion of **1** into **3** is described. The method is applicable to galactopyranosyl-, 2-deoxyglucopyranosyl-, and ribofuranosyl systems, as well.

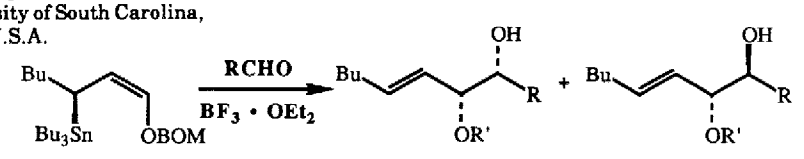


Tetrahedron Lett. 30, 2183 (1989)

SYNTHESIS OF NONRACEMIC γ-ALKOXY ALLYLSTANNANES BY STEREOSPECIFIC ANTI [1,3]-STANNYL MIGRATION

James A. Marshall and Wei Yi Gung
Department of Chemistry, University of South Carolina, Columbia, South Carolina 29208 U.S.A.

The γ-alkoxy allylstannane 5b undergoes a stereoselective addition (syn:anti ~90:10) to various aldehydes (R = *n*-C_6H_{13}, BuC≡C, (*E*)-BuCH=CH, C_6H_{11}, Ph) affording the 1,2-diol derivatives 8, 9 and 10 of high ee.



5b (>95% ee)

8 R' = BOM
9 R' = H

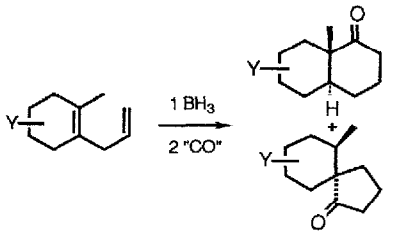
10

Tetrahedron Lett.30,2187(1989)

BORON ANNULATION IN ORGANIC SYNTHESIS. 4. SILICON EFFECTS WITH TETRASUBSTITUTED OLEFINS

James A. AKERS and Thomas A. BRYSON
Department of Chemistry
University of South Carolina, Columbia, SC 29208

Selectivity for hydroboration and boron decalone annulation employing tetrasubstituted olefins is strongly influenced by allylic silicon.

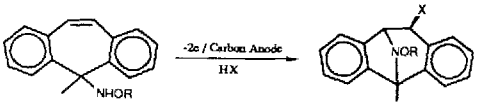


Tetrahedron Lett.30,2191(1989)

CYCLIZATION OF ELECTROCHEMICALLY GENERATED NITROGEN RADICALS. A NOVEL SYNTHESIS OF 11-SUBSTITUTED DIBENZO[a,d]CYCLOHEPTENIMINES

Sandor Karady,* Edward G. Corley, Newton L. Abramson and Leonard M. Weinstock*
Merck Sharp and Dohme Research Laboratories P.O. Box 2000 Rahway, New Jersey 07065

A convenient synthesis of 11-substituted dibenzo[a,d]cycloheptenimines proceeding via annelation of electrochemically generated nitrogen radicals is described.

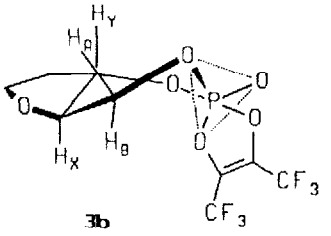


Tetrahedron Lett.30,2195(1989)

PENTACOVALENT PHOSPHORUS-CONTAINING MODEL OF A P(V) CYCLIC NUCLEOTIDE INTERMEDIATE. NON-CHAIR CONFORMATION OF THE PHOSPHORUS-CONTAINING RING.

Jaehoon H. Yu and Wesley G. Bentrude*
Department of Chemistry, University of Utah
Salt Lake City, Utah 84112

Phosphorane **3**, a model for cyclic nucleotide-enzyme or cyclic nucleotide-substrate adducts, was shown by ^{1}H NMR to be in a non-chair conformation, **3b**.

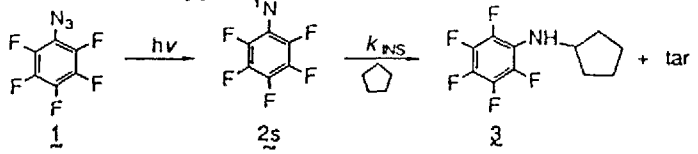


3b

Tetrahedron Lett.30,2199(1989)

Polyfluorinated Aryl Azides as Photoaffinity Labelling Reagents; The Room Temperature CH Insertion Reactions of Singlet Pentafluorophenyl Nitrene with Alkanes

Mary Jennifer T. Young and Matthew S. Platz
Department of Chemistry, The Ohio State University, Columbus, OH 43210

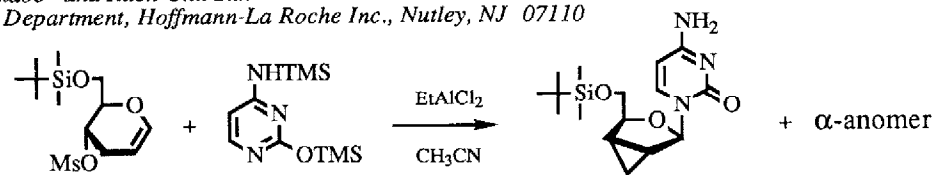


1 2s 3

Tetrahedron Lett.30,2203(1989)

A CYCLOPROPANO ANALOG OF 2',3'-DIDEOXYCYTIDINE: STEREOSELECTIVE FORMATION OF A [3,1,0] BICYCLIC SYSTEM *via* HOMOLOGOUS FERRIER REACTION

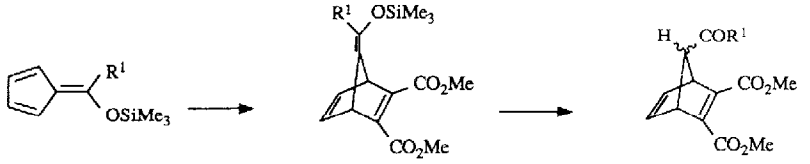
Masami Okabe and Ruen-Chu Sun*
Chemistry Department, Hoffmann-La Roche Inc., Nutley, NJ 07110



Tetrahedron Lett.30,2207(1989)

CYCLOADDITIONS OF 6-SILYLOXYFULVENES : ACCESS TO 7-NORBORN-5-ENYL AND 7-NORBORNA-2,5-DIENYL ALDEHYDES AND KETONES

Gaspard NZABAMWITA, Bate KOLANI, Bernard JOUSSEAUME*
Laboratoire de Chimie Organique et Organométallique, Associé au CNRS, Université de Bordeaux I, 351, cours de la Libération, F 33405 - TALENCE(FRANCE)



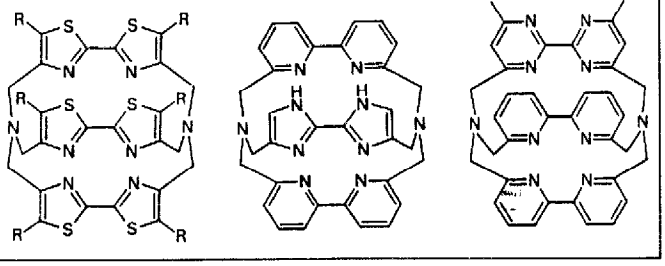
Diels Alder adducts of 6-silyloxy-6-alkyl-fulvenes afforded, after hydrolysis, 7-norborn-5-enyl and 7-norborno-2,5-dienyl aldehydes and ketones in good yields.

Tetrahedron Lett.30,2209(1989)

SYNTHESIS OF MACROBICYCLIC CRYPTATES INCORPORATING BITHIAZOLE, BISIMIDAZOLE AND BIPYRIMIDINE BINDING SUBUNITS.

J.-M. LEHN et J.-B. REGNOUF DE VAINS
Institut Le Bel, Université Louis Pasteur, 4, rue Blaise Pascal, F-67000 STRASBOURG

The synthesis and some properties of novel macrobicyclic cryptands incorporating bis-heterocyclic subunits are described.

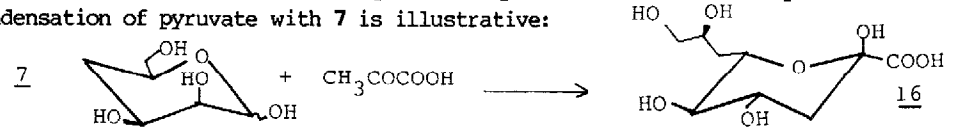


Tetrahedron Lett.30,2217(1989)

SCOPE AND LIMITATIONS OF THE ALDOL CONDENSATION CATALYZED BY IMMOBILIZED ACYLNEURAMINATE PYRUVATE LYASE.

C.Augé,B.Bouxom,B.Cavayé and C.Gautheron, Institut de Chimie Moléculaire d'Orsay U.R.A. C.N.R.S. D.0462, 91405 Orsay Cedex, France.

New acceptor substrates have been used in the aldol condensation catalyzed by immobilized acylneuraminate pyruvate lyase : hexoses and pentoses. The condensation of pyruvate with **7** is illustrative:

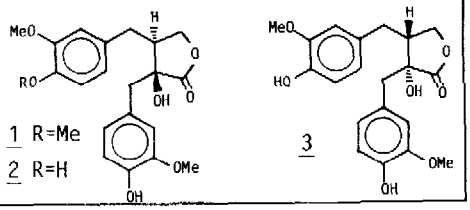


TOTAL SYNTHESES OF (-)-TRACHELOGENIN, (-)-NORTRACHELOGENIN AND (+)-WIKSTROMOL

Tetrahedron Lett. 30, 2221 (1989)

Kenza KHAMLACH, Robert DHAL and Eric BROWN
UA CNRS n°482, Faculté des Sciences, Route de Laval, BP 535, 72017 Le Mans Cedex, France

The lignans (-)-trachelogenin 1, (-)-nortrachelogenin 2 and (+)-wikstromol 3 were obtained by α-hydroxylation (using O_2/LHDS) of the corresponding α,β-dibenzyl-γ-butyrolactones of synthetic origin.

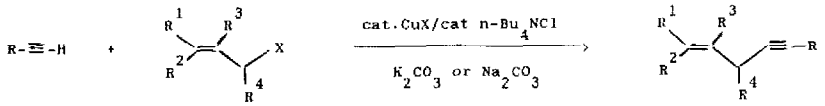


COPPER(I) AND PHASE TRANSFER CATALYSED ALLYLIC SUBSTITUTION BY TERMINAL ALKYNES

Tetrahedron Lett. 30, 2225 (1989)

Tuyêt JEFFERY
ER 12 du CNRS, Laboratoire de Chimie de l'Ecole Normale Supérieure, 24 Rue Lhomond - 75231 Paris Cédex 05 - France

The allylic substitution of (un)substituted allyl halides by alk-1-ynes can proceed smoothly at or near room temperature in the presence of a catalytic amount of copper(I) salt under solid-liquid phase tranfer conditions.

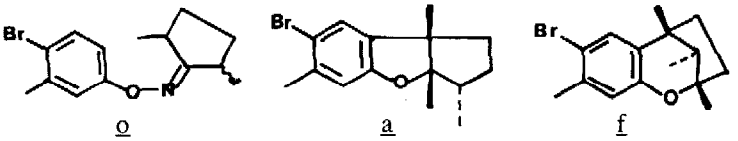


THE SHERADSKY REARRANGEMENT OF α,α'-DISUBSTITUTED CYCLOPENTANONE ARYLOXIMES : A SYNTHESIS OF THE SESQUITERPENES (±)-APLYSIN AND (±)-FILIFORMIN

Tetrahedron Lett. 30, 2229 (1989)

Jean-Yves Laronze*, Rachida El Boukili, Dominique Cartier, Jacqueline Laronze and Jean Lévy
UA/CNRS - Faculté de Pharmacie ; 51 rue Cognacq-Jay, F51100 Reims.

(±)-Aplysin a and (±)-filiformin f were obtained in 2 steps from the rearrangement product of oxime o.



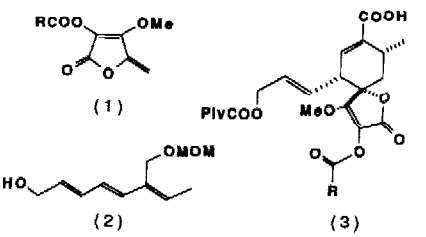
o a f

METHYL α-ACYLOXY-γ-METHYLENE-β-TETRONATE. PREPARATION AND USE AS A BUILDING BLOCK FOR THE SYNTHESIS OF THE SPIROTETRONIC ACID STRUCTURE OF CHLOROTHRICOLIDE

Tetrahedron Lett. 30, 2233 (1989)

Kaoru Okumura, Kousuke Okazaki, Kei Takeda, and Eiichi Yoshii*
Faculty of Pharmaceutical Sciences, Toyama Medical and Pharmaceutical University, Toyama 930-01, Japan

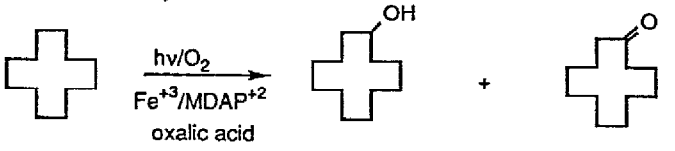
Synthesis of the upper fragment 3 of chlorothricolide via Diels-Alder reaction of the title compound and triene 2 is reported.



Tetrahedron Lett.30,2237(1989)

A NOVEL PHOTOOXIDATION OF HYDROCARBONS SENSITIZED BY 2,7-DIAZAPYRENIUM DICATION IN THE PRESENCE OF IRON CATALYST

Isao Saito,* Masami Takayama and Teruo Matsuura
Department of Synthetic Chemistry, Faculty of Engineering, Kyoto University, Kyoto 606, Japan

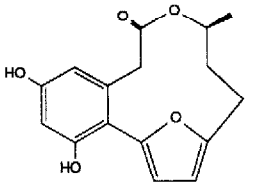


Tetrahedron Lett.30,2241(1989)

NOVEL CURVULARIN-TYPE METABOLITES OF A HYBRIDE STRAIN ME 0005 DERIVED FROM TWO DIFFERENT ONES PENICILLIUM CITREO-VIRIDE B. IFO 6200 AND 4692

Shen Lai, Yoshikazu Shizuri, Shosoke Yamamura, Kazuaki Kawai, and Hideyuki Furukawa
Department of Chemistry, Faculty of Science and Technology, Keio University, Hiyoshi, Yokohama, Japan

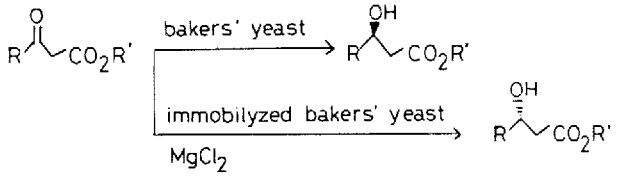
Five new curvularins represented by citreofuran were produced by a hybrid strain ME 0005.



Tetrahedron Lett.30,2245(1989)

A NEW METHOD FOR STEREOCHEMICAL CONTROL OF MICROBIAL REDUCTION. REDUCTION OF β-KETO ESTERS WITH BAKERS' YEAST IMMOBILIZED BY MAGNESIUM ALGINATE

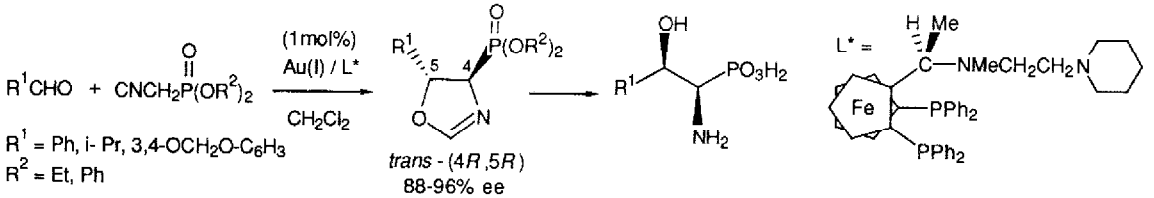
K. Nakamura, Y. Kawai, S. Oka, and A. Ohno
Departement of Chemistry, Shiga University of Medical Science, Seta, Ohtsu, 520-21 Japan and Institute for Chemical Research, Kyoto University, Uji, Kyoto 611 Japan



Tetrahedron Lett.30,2247(1989)

ASYMMETRIC SYNTHESIS OF (1-AMINOALKYL)PHOSPHONIC ACIDS VIA ASYMMETRIC ALDOL REACTION OF (ISOCYANOMETHYL)PHOSPHONATES CATALYZED BY A CHIRAL FERROCENYLPHOSPHINE-GOLD(I) COMPLEX

Masaya Sawamura, Yoshihiko Ito,* and Tamio Hayashi,* *Department of Synthetic Chemistry, Kyoto University, Kyoto 606, Japan*

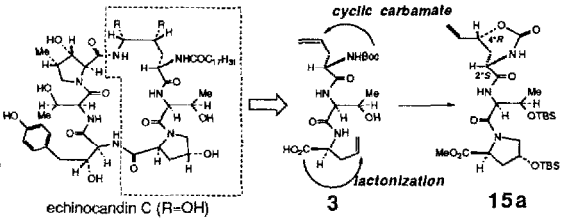


Tetrahedron Lett. 30, 2251 (1989)

STEREOSELECTIVE HYDROXYLATION OF A PEPTIDE SIDE CHAIN. THE SYNTHESIS OF THE ECHINOCANDIN RIGHT-HALF EQUIVALENT

M. Sakaitani and Y. Ohfune*
Suntory Institute for Bioorganic Research
Shimamoto-cho, Mishima-gun, Osaka618, Japan

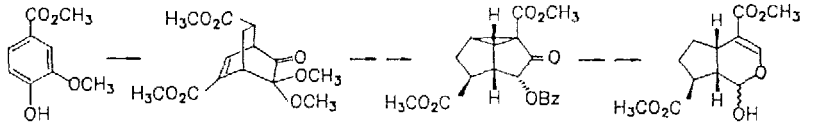
Highly stereoselective conversion of the tripeptide **3** into **15a**, equivalent to the echinocandin right-half tripeptide, was accomplished using halolactonization from the N-terminal of **3** and S_N2' cyclic carbamate formation from the N-terminal of **3**.



Tetrahedron Lett. 30, 2255 (1989)

SYNTHETIC APPLICATIONS OF MASKED O-BENZOQUINONES. A NOVEL TOTAL SYNTHESIS OF (±)FORSYTHIDE AGLUCONE DIMETHYL ESTER

Chun-Chen Liao* and Ching-Peng Wei, Department of Chemistry, National Tsing Hua University, Hsinchu, Taiwan 30043, Republic of China

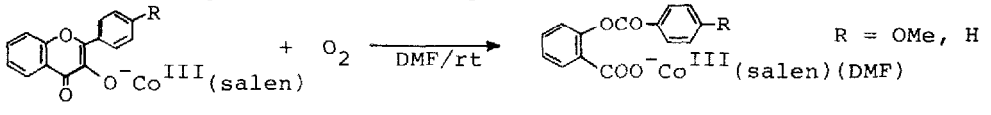


Tetrahedron Lett. 30, 2257 (1989)

SUBSTRATE ANION COBALT(III) COMPLEX INTERMEDIATE IN MODEL QUERCETINASE REACTION USING COBALT SCHIFF BASE COMPLEX

Akira Nishinaga,* Naoki Numada, and Kazushige Maruyama
Osaka Institute of Technology, Ohmiya 5, Asahi-ku, Osaka 535, Japan

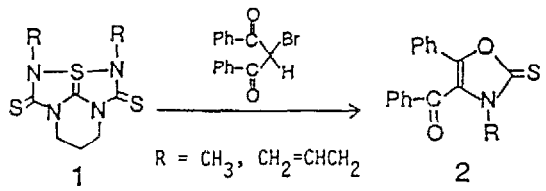
Flavonolatocobalt(III)(salen) are synthesized. They undergo dioxygenolysis in DMF by nonradical process to give depsidocobalt(III)(salen)(DMF).



Tetrahedron Lett. 30, 2259 (1989)

SYNTHESIS OF N-SUBSTITUTED OXAZOLINE-2-THIONE DERIVATIVES: REACTION OF TETRAAZAPENTALENE DERIVATIVES WITH α-HALOKETONES

Noboru Matsumura,* Masaaki Tomura, Osamu Mori, Yoshikazu Takamura, and Shigeo Yoneda
Department of Applied Chemistry, College of Engineering, University of Osaka Prefecture, Sakai, Osaka 591, Japan



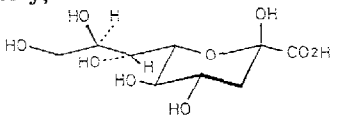
Tetrahedron Lett.30,2263(1989)

IMPROVED SYNTHESES OF TWO 3-DEOXYALD-2-ULOSONIC ACIDS(KDN,KDO) BY CONDENSATION OF OXALACETIC ACID WITH ALDOSES FOLLOWED BY Ni^{2+}CATALAYZED DECARBOXYLATION

Ryuichi Shirai and Haruo Ogura*

School of Pharmaceutical Sciences, Kitasato University, Shirokane, Minato-ku, Tokyo 108, Japan

Condensation of oxalacetic acid with D-mannose and D-arabinose followed by Ni^{2+}catalyzed decarboxylation gave 3-deoxy-D-*glycero*-D-*galacto*-2-nonulosonic acid(KDN,**1**) and 3-deoxy-D-*manno*-2-octulosonic acid(KDO, **2**) respectively in high chemical yield and high diastereoselectivity.



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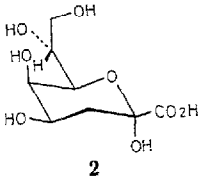
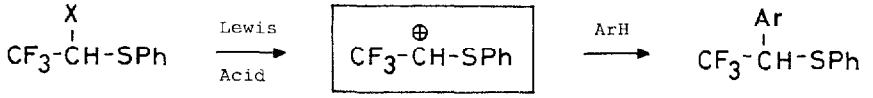


2

Tetrahedron Lett.30,2265(1989)

GENERATION AND REACTION OF 2,2,2-TRIFLUORO-1-PHENYLSULFENYLETHYL CARBOCATION

Kenji Uneyama* and Makoto Momota
Department of Applied Chemistry, Faculty of Engineering,
Okayama University, Okayama 700, Japan

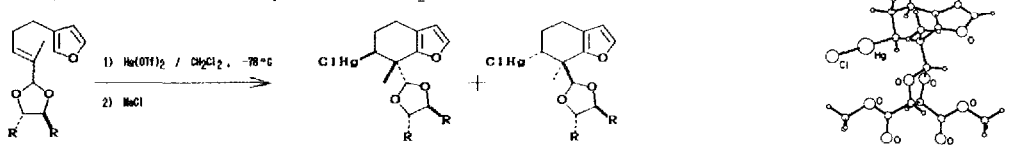


Tetrahedron Lett.30,2267(1989)

CHIRAL INDUCTION IN A BIOMIMETIC OLEFIN CYCLIZATION

Hideyuki Takenaka, Tomohiro Sato, † and Mugio Nishizawa*
Faculty of Pharmaceutical Sciences, Tokushima Bunri University, Yamashiro-Cho, Tokushima 770, †Shionogi Research Institute, Shionogi & Co. Ltd., Fukushimaku, Osaka 553, Japan

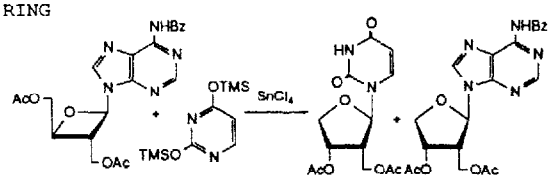
Chiral acetals originated from *L*-tartaric acid induce *R* configuration into neighboring carbons during mercury triflate induced cyclization of perillene derivatives in maximum 76% de.



Tetrahedron Lett.30,2269(1989)

A FACILE SYNTHESIS OF 2-DEOXY-2-HYDROXYMETHYL-β-D-ERYTHROFURANOSYL NUCLEOSIDES FROM 9-(2-DEOXY-2-HYDROXYMETHYL-β-D-ERYTHROOXETANOSYL)ADENINE BY A NOVEL RING EXPANSION ACCOMPANYING TRANSGLYCOSIDATION

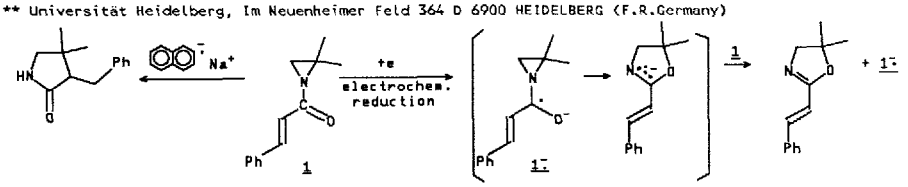
K. Kato,[1] T. Minami,[1] T. Takita,[1] S. Nishiyama,[2] S. Yamamura,[2] and H. Naganawa,[3] [1]Nippon Kayaku Co. Ltd.. [2]Keio University. [3]Institute of Microbial Chemistry.



Tetrahedron Lett. 30, 2271 (1989)

REDUCTIVE RING OPENING OF N-ACYLAZIRIDINES :
DIFFERENT OUTCOMES OF CHEMICAL AND ELECTROCHEMICAL REACTIONS

D. Archier-Jay*, N. Besbes*, A. Laurent*#, E. Laurent, H. Stamm**# and R. Tardivel*
* Université de Lyon I, 43 Bd du 11 Novembre 1918 69622 VILLEURBANNE Cedex (France)
** Universität Heidelberg, Im Neuenheimer Feld 364 D 6900 HEIDELBERG (F.R.Germany)



Tetrahedron Lett. 30, 2273 (1989)

A REVERSIBLE DOUBLE SMILES REARRANGEMENT
THROUGH INTERMEDIATE FORMATION OF TWO TAUTOMERIC MEISENHEIMER SPIRO-COMPLEXES

V.N.Knyazev, V.N.Drozd
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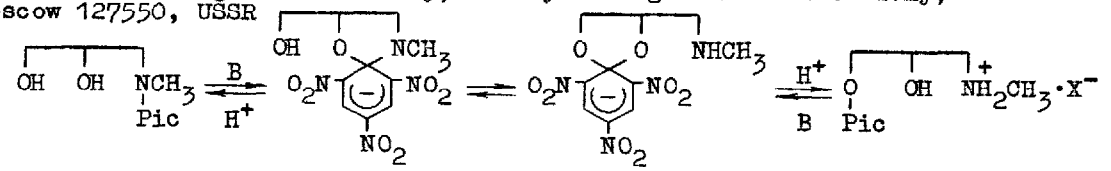

Tetrahedron Lett. 30, 2277 (1989)

PHOTOCATALYTIC EFFECTS OF Fe(III) COMPOUNDS
ON THE HYDROXYLATION OF BENZOIC ACID BY
HYDROGEN PEROXIDE INITIATED BY 589 nm
RADIATION AND SENSITIZED BY METHYLENE BLUE

Stanislav Luňák,* Petr Sedlák, Jiřina Brodilová, and Pavel Lederer
Institute of Inorganic Chemistry, Czechoslovak Academy of Sciences,
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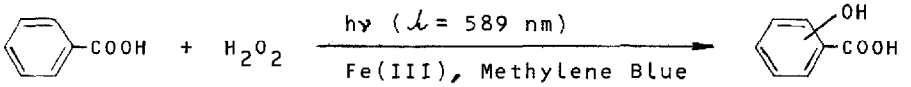
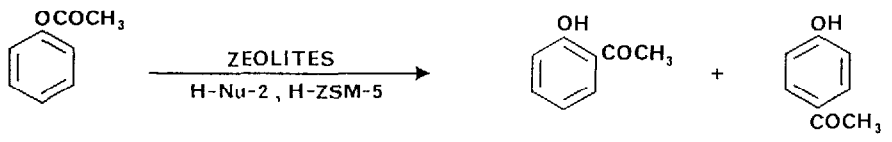


Tetrahedron Lett. 30, 2281 (1989)

PARA-SELECTIVE FRIES REARRANGEMENT OF PHENYL ACETATE
IN THE PRESENCE OF ZEOLITE MOLECULAR SIEVES

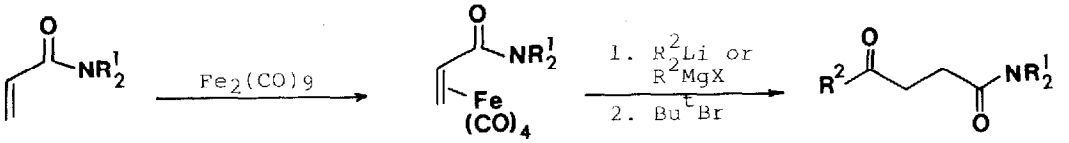
Colin S. Cundy, Raymond Higgins, Sarah A.M. Kibby, Barrie M.Lowe, and R.Michael Paton*.
Department of Chemistry, University of Edinburgh, West Mains Road, Edinburgh EH9 3JJ, Scotland.



Tetrahedron Lett.30,2285(1989)

SYNTHESIS OF β-KETOAMIDES VIA NUCLEOPHILIC ATTACK ON IRON TETRACARBONYL COMPLEXES OF A,B-UNSATURATED AMIDES

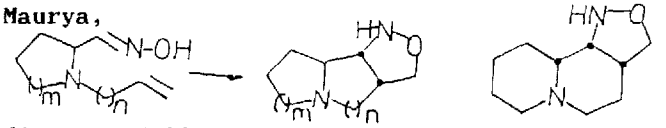
Annie Pouilhès and Susan E. Thomas,* Department of Chemistry, University of Warwick, Coventry CV4 7AL, England



Tetrahedron Lett.30,2289(1989)

A ROUTE TO PYRROLIZIDINES, INDOLIZIDINES AND QUINOLIZIDINES VIA INTRAMOLECULAR OXIME OLEFIN CYCLOADDITIONS.[a]

Alfred Hassner*, Rakesh Maurya,
Department of Chemistry,
Bar-Ilan University,
Ramat-Gan, Israel

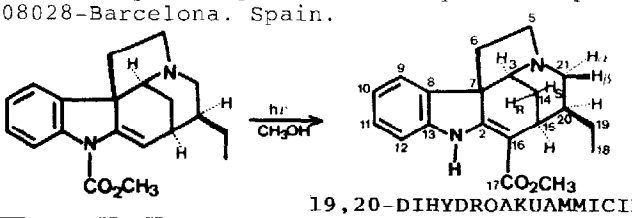


Functionalized pyrrolizidines, indolizidines or quinolizidines, with stereospecific introduction of three stereo centers are prepared by a thermal cycloaddition involving aldoxime and alkene functions.

Tetrahedron Lett.30,2293(1989)

TOTAL SYNTHESIS AND NMR DATA OF THE STRYCHNOS ALKALOID 19,20-DIHYDROAKUAMMICINE

Mercedes Amat, Ana Linares, and Joan Bosch
Laboratory of Organic Chemistry. Faculty of Pharmacy. University of Barcelona. 08028-Barcelona. Spain.



19,20-DIHYDROAKUAMMICINE

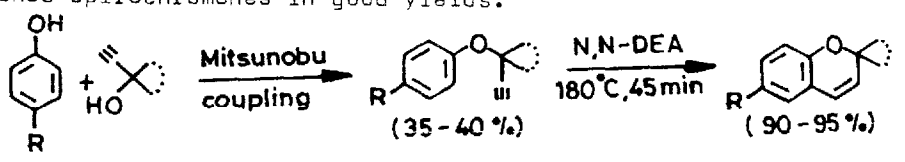
DETAILED ^{1}H- AND ^{13}C-NMR DATA ARE REPORTED FOR THE FIRST TIME

Tetrahedron Lett.30,2297(1989)

A NOVEL SYNTHESIS OF SPIROCHROMENES

Rajaram Sankara Subramanian and Kalpattu Kuppusamy Balasubramanian
Department of Chemistry, Indian Institute of Technology,
Madras 600 036. India.

The Claisen rearrangement of cyclic tertiary ethynyl aryl ethers furnishes spirochromenes in good yields.



Tetrahedron Lett.30,2301(1989)

SYNTHESIS OF (±)-NITRAMINE, (±)-ISONITRAMINE AND (±)-SIBIRINE VIA DIELS-ALDER REACTIONS

M.J. Wanner and G.J. Koomen*, Organic Chemistry Laboratory, University of Amsterdam, Nieuwe Achtergracht 129, 1018 WS Amsterdam, The Netherlands

Diels-Alder reactions with methylene-glutarimides are used to construct the spiro-framework of the title alkaloids.