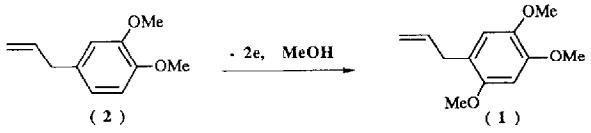
GRAPHICAL ABSTRACTS

Tetrahedron Lett.30,4037(1989)

ELECTROSYNTHESIS OF γ-ASARONE

R.R. Vargas, V.L. Pardini and H. Viertler*
Instituto de Quimica, Universidade de Sao Paulo, CP 20780 - 01498 Sao Paulo, Brasil.

γ-Asarone is synthesised in high yield, and conveniently, by anodic methoxylation of methyl eugenol, at constant current.

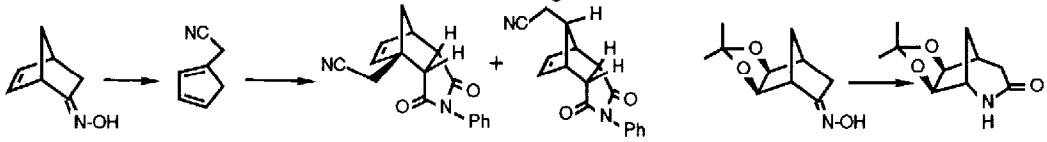


Tetrahedron Lett.30,4041(1989)

BECKMANN FRAGMENTATION VERSUS BECKMANN REARRANGEMENT IN DEHYDRONORCAMPHOR DERIVATIVES

Daniel G. VerHaeghe, Gregory S. Weber and Paul A. Pappalardo*
Department of Chemistry, Oakland University, Rochester, Michigan 48309-4401 USA

Dehydronorcamphor oxime underwent Beckmann fragmentation to cyanomethylcyclopentadiene
Protected diol derivative underwent normal Beckmann Rearrangement.

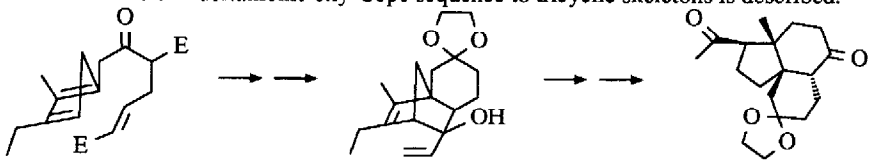


Tetrahedron Lett.30,4045(1989)

AN INTRAMOLECULAR CYCLOADDITION-SIGMATROPIC REARRANGEMENT APPROACH TO (±) GASCARDIC ACID

Gervais Bérubé and Alex G. Fallis*
The Ottawa-Carleton Chemistry Institute, Dept. of Chemistry, Univ. of Ottawa, , Ont., Canada, K1N 6N5

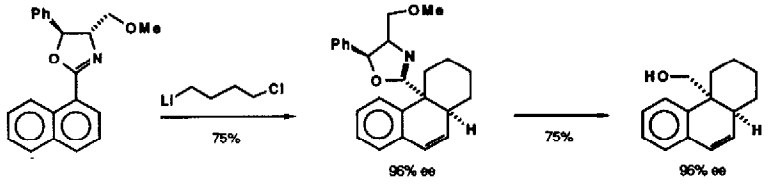
A general intramolecular Diels-Alder:anionic oxy-Cope sequence to tricyclic skeletons is described.



Tetrahedron Lett.30,4049(1989)

INTRAMOLECULAR ASYMMETRIC TANDEM ADDITIONS TO CHIRAL NAPHTHYL OXAZOLINES

A. I. Meyers* and Giulia Licini
Department of Chemistry, Colorado State University, Fort Collins, CO 80523 USA

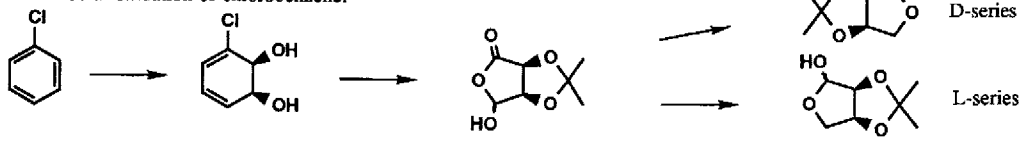


Tetrahedron Lett. 30, 4053 (1989)

AN ENANTIODIVERGENT APPROACH TO D- AND L-ERYTHROSE VIA MICROBIAL OXIDATION OF CHLOROBENZENE

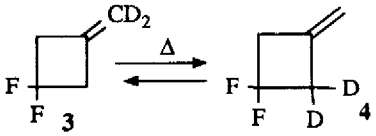
Tomas Hudlicky*, Hector Luna, John D. Price, Fan Rulin
Department of Chemistry, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061

D- and L-Erythrose derivatives have been synthesized from intermediates derived from the microbial oxidation of chlorobenzene.



Tetrahedron Lett. 30, 4055 (1989)

THE DEGENERATE THERMAL REARRANGEMENT OF 3,3-DIFLUORO-METHYLENECYCLOBUTANE. THE EFFECT OF GEM-DIFLUORO SUBSTITUENTS ON CYCLOBUTANE BOND STRENGTH. William R. Dolbier, Jr. and Laura Cooke; Department of Chemistry, University of Florida; Gainesville, Florida 32611.



$\text{Log } A = 14.1 \pm 0.2$

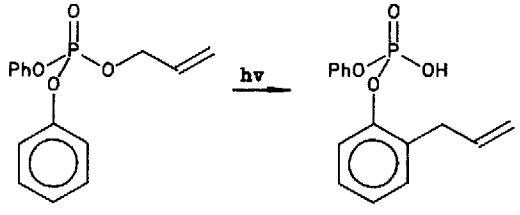
$E_a = 55.0 \pm 0.7$ kcal/mole

Tetrahedron Lett. 30, 4059 (1989)

PHOTOREARRANGEMENT OF ALLYL DIPHENYL PHOSPHATE VIA POSSIBLE TYPE-II REACTION AND PHOSPHORANYL 1,3-BIRADICALS

David R. Anderson* and Claudia N. Eley
Department of Chemistry, University of Colorado
Colorado Springs, Colorado 80907

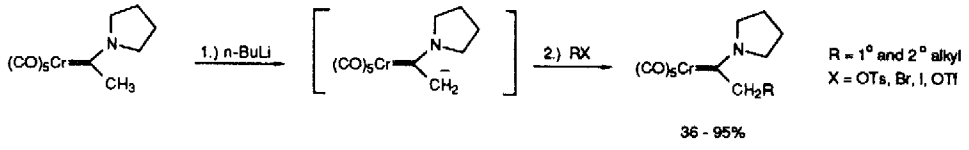
A Norrish type-II reaction is proposed for the photorearrangement of allyl diphenyl phosphate to *ortho*-allylphenyl phenyl phosphate.



Tetrahedron Lett. 30, 4061 (1989)

ALKYLATIONS OF "ENOLATES" GENERATED FROM AMINO CARBENE COMPLEXES OF CHROMIUM

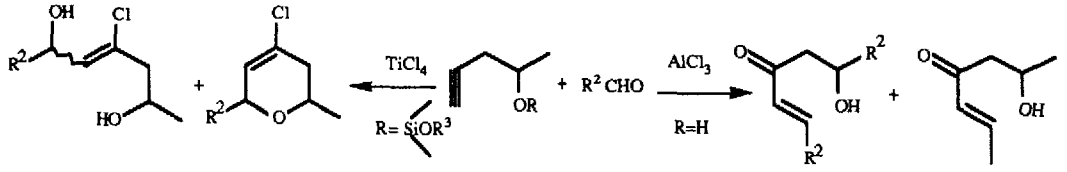
William D. Wulff,* Benjamin A. Anderson and Lyle D. Isaacs
Department of Chemistry, Searle Chemistry Laboratory
The University of Chicago, Chicago, Illinois 60637



Tetrahedron Lett.30,4065(1989)

ELECTROPHILIC CONDENSATION OF HOMOPROPARGYL ALCOHOLS AND THEIR SILYL ETHERS WITH CARBONYL COMPOUNDS

T. H. Chan* and P. Arya
Department of Chemistry, McGill University, Montreal, P.Q. Canada H3A 2K6

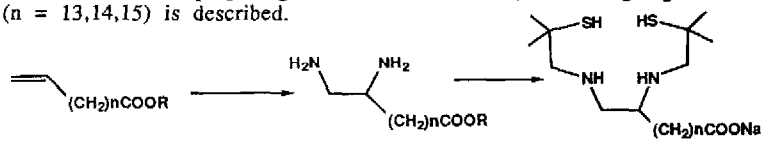


Tetrahedron Lett.30,4069(1989)

A NEW SYNTHESIS OF BIS-AMINOETHANETHIOL (BAT) CHELATING AGENTS CONTAINING A GAMMA CARBOXYLATE

Robert H. Mach, Hank F. Kung,* P. Jungwiwattanaporn and Y.-Z. Guo
Department of Radiology, University of Pennsylvania, Philadelphia, PA 19104

A new method for preparing bis(aminoethanethiol) chelating agents containing a long chain fatty acid (n = 13,14,15) is described.

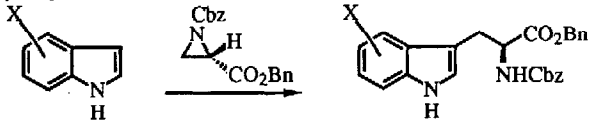


Tetrahedron Lett.30,4073(1989)

CONSTRUCTION OF OPTICALLY PURE TRYPTOPHANS FROM SERINE DERIVED AZIRIDINE-2-CARBOXYLATES

Kazuo Sato and Alan P. Kozikowski*
Department of Chemistry and Behavioral Neuroscience, University of Pittsburgh, Chevron Science Center, Pittsburgh, PA 15260

The preparation of optically pure tryptophans from indoles and (2*R*)- or (2*S*)-aziridinecarboxylates has been explored (equation 1).



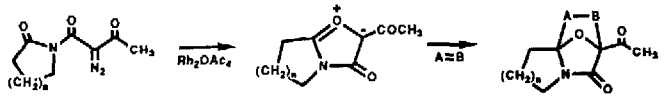
(Equation 1)

Tetrahedron Lett.30,4077(1989)

SYNTHESIS OF AZA SUBSTITUTED POLYCYCLES VIA RHODIUM (II) CARBOXYLATE INDUCED CYCLIZATION OF DIAZOIMIDES

Albert Padwa, Donald L. Hertzog and Richard L. Chinn*
Department of Chemistry, Emory University, Atlanta, GA 30322 USA

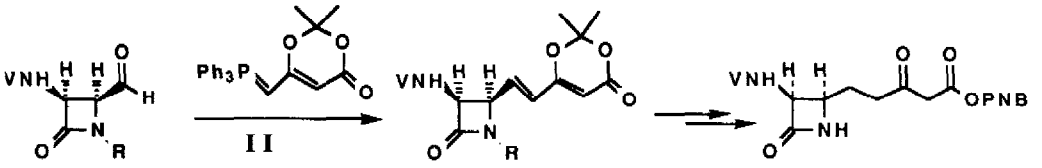
Treatment of several substituted diazoimide derivatives with rhodium (II) carboxylates results in nitrogen-containing cyclic carbonyl formation followed by 1,3-dipolar cycloaddition.



Tetrahedron Lett. 30, 4081 (1989)

A MILD FOUR-CARBON HOMOLOGATION OF 4-FORMYL AZETIDINONES

Christina Bodurow* and Michael A. Carr, Lilly Research Laboratories, Eli Lilly and Co., Indianapolis, IN 46285



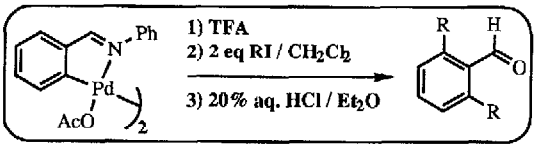
V=phenoxyacetyl PNB=p-nitrobenzyl

Tetrahedron Lett. 30, 4085 (1989)

PALLADIUM MEDIATED 2,6-DIALKYLATION OF N-BENZILIDINE IMINES: PREPARATON OF 2,6-DIALKYLBENZALDEHYDES

J. Stuart McCallum, John R. Gasdaska, and Lanny S. Liebeskind*
Department of Chemistry, Emory University, Atlanta, Georgia 30322 *and*
Samuel J. Tremont,* Monsanto Company, Q3B, Q315, 800 N. Lindbergh Rd,
St. Louis, Missouri 63167

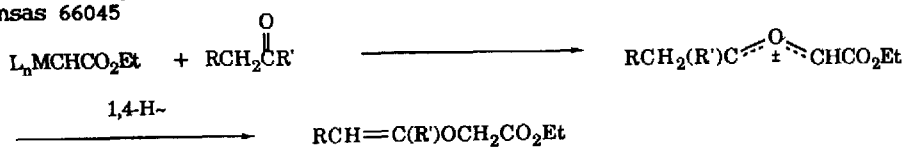
Treatment of di-μ-trifluoroacetatobis[o-(N-phenylbenzimidoyl)]dipalladium with two equivalents of primary alkyl iodides and subsequent hydrolysis of the intermediate imine provides an efficient route to 2,6-disubstituted benzaldehydes.



Tetrahedron Lett. 30, 4089 (1989)

REGIO- AND DIASTEREOSELECTIVITY OF ENOL ETHER FORMATION BY 1,4-SIGMATROPIC SHIFTS OF HYDROGEN IN CARBONYL YLIDES

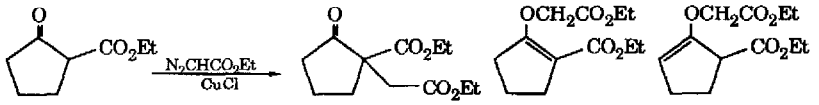
Andrew C. Lottes, John A. Landgrebe* and Kristin Larsen
Department of Chemistry, University of Kansas
Lawrence, Kansas 66045



Tetrahedron Lett. 30, 4093 (1989)

CATALYST DEPENDENT MECHANISTIC PATHS IN THE REACTIONS OF ETHYL DIAZOACETATE WITH β-KETO ESTERS.

Andrew C. Lottes, John A. Landgrebe*, and Kristin Larsen
Department of Chemistry, University of Kansas
Lawrence, Kansas 66045

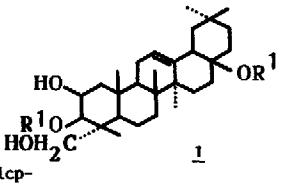


Tetrahedron Lett. 30, 4097 (1989)

THE FIRST STRUCTURALLY CONFIRMED SAPONIN FROM SOLIDAGO GIGANTEA: STRUCTURE ELUCIDATION BY MODERN NMR TECHNIQUES

G. Reznicek and J. Jurenitsch, Inst. of Pharmacognosy, Univ. of Vienna, A-1090 Vienna, Währinger Str. 25, Austria
G. Michl and E. Haslinger, Lab. of Org. Chemistry I, Univ. of Bayreuth, D-8580 Bayreuth, Universitätsstr. 30, FRG

Combined chemical and sophisticated spectroscopic methods (mainly NMR) led to the structure of the bisdesmosidic giganteasaponin 4 (1).



1

R^1: β-D-Apio-D-f-(1-3)-β-D-Glcp-(1-3)-β-D-Glcp-

β-D-Xylp-(1-3)┐ α-L-Rhp-(1-3)┐

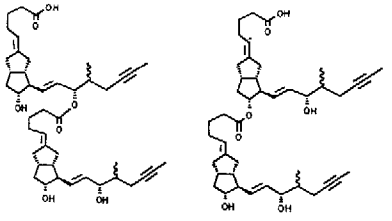
R^2: β-D-Galp-(1-2)-α-L-Rhp-(1-3)-β-D-Xylp-(1-4)-α-L-Rhp-(1-2)-β-D-6-Deoglcp-

Tetrahedron Lett. 30, 4101 (1989)

SYNTHESIS OF DIMERIC CARBACYCLIN STRUCTURES: ILOPROST-11-ILOPROST-ESTER AND ILOPROST-15-ILOPROST-ESTER

Jürgen Westermann*, Michael Harre and Helmut Dahl

Chemical and Microbiological Development and Production Schering AG Berlin-Bergkamen, D-1000 Berlin 65, FRG

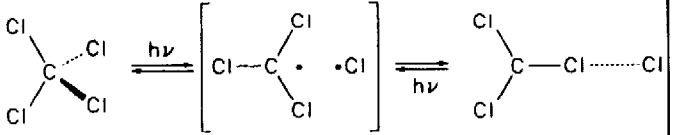


Tetrahedron Lett. 30, 4105 (1989)

PHOTOISOMERISIERUNG VON TETRACHLORMETHAN IN EINER ARGON-MATRIX

Günther Maier und Hans Peter Reisenauer
Institut für Organische Chemie
der Justus-Liebig-Universität
Heinrich-Buff-Ring 58, D-6300 Gießen
Jiani Hu, B. Andes Hess, Jr. und
Lawrence J. Schaad
Department of Chemistry
Vanderbilt University
Nashville, Tennessee 37235, USA

Irradiation of tetrachloromethane (3) in argon at 12 K leads to an iso-tetrachloromethane with structure 5.

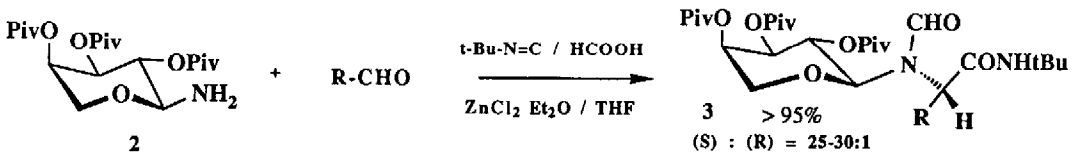


3 4 5

Tetrahedron Lett. 30, 4109 (1989)

Carbohydrates as Chiral Templates: Diastereoselective Ugi Synthesis of (S)-Amino Acids Using O-Acylated D-Arabinopyrano-sylamine as the Auxiliary

Horst Kunz *, Waldemar Pfrengle and Wilfried Sager, Institut für Organische Chemie der Universität Mainz, Becher-Weg 18-20, D-6500 Mainz 1, Federal Republic of Germany



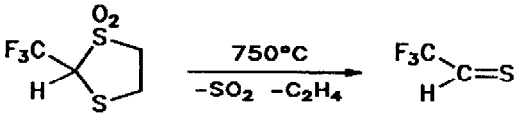
Tetrahedron Lett.30,4111(1989)

TRIFLUOROTHIOACETALDEHYDE

Bernhard Schuler and Wolfgang Sundermeyer*

Anorganisch-Chemisches Institut der Universität, Im Neuenheimer Feld 270, D-6900 Heidelberg 1

ABSTRACT: The extremely reactive trifluorothioacetaldehyde, CF_3CHS, was synthesized and its existence was proved by spectroscopic methods and Diels-Alder reactions.



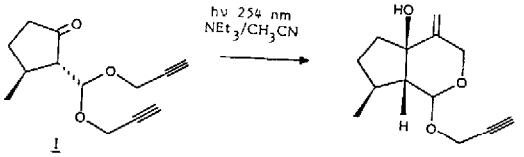
Tetrahedron Lett.30,4113(1989)

A SHORT ACCESS TO IRIDOID PRECURSORS

J. COSSY

Laboratoire de Photochimie, Associé au CNRS, U.F.R. Sciences de Reims, B.P. 347, 51062 Reims, France.

A photoreductive radical cyclization of compound 1 led to the formation of precursors of iridoids oxygenated on C-5.

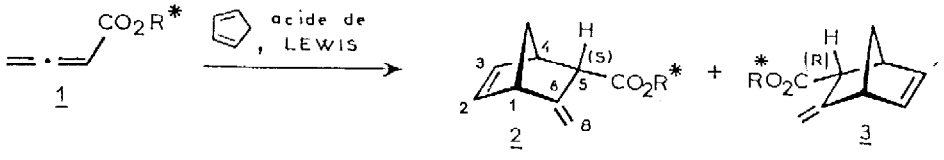


Tetrahedron Lett.30,4117(1989)

SUR UNE METHODE RAPIDE DE DETERMINATION DE LA PURETE DIASTEREOISOMERIQUE DES ADDUITS CYCLOPENTADIENE-ESTERS ALLENIQUES CHIRAUX

M. BERTRAND et J.P. ZAHRA. L.A.S.C.O. C.N.R.S. U.R.A. 109 - 13397 MARSEILLE CEDEX 13 France.

Determination of the diastereoisomeric excess of the adducts of chiral allenic esters with cyclopentadiene is proposed.

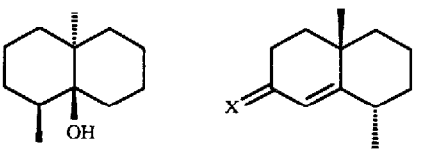


Tetrahedron Lett.30,4121(1989)

Asymmetric Michael-type Alkylation of Chiral Imines. Enantioselective Syntheses of Geosmin and Two Other Related Natural Terpenes, as well as Unnatural Geosmin.

Gilbert REVIAL, Laboratoire de Chimie Organique, ESPCI, 10 rue Vauquelin, 75231 Paris Cedex 05, France.

Natural (−)-geosmin **11** (as well as its unnatural enantiomer), (+)-octalone **14** (from *Vetiveria zizanioides*), and (+)-octalin **15** (from *Bazzania fauriana* and *B. angustifolia*) have been prepared in high chemical and enantiomeric yields.



(−)-**11**

(+)-**14** X = O
(+)-**15** X = H_2

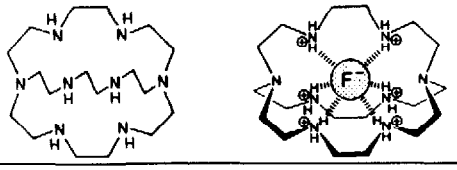
ANION RECEPTOR MOLECULES : SYNTHESIS OF AN OCTAAZA CRYPTAND AND STRUCTURE OF ITS FLUORIDE CRYPTATE

Tetrahedron Lett. 30, 4125 (1989)

Bernard Dietrich[a], Jean-Marie Lehn[a], Jean Guilhem[b] and Claudine Pascard[b]

[a] *URA CNRS N°422, Institut Le Bel, Université Louis Pasteur, 4, rue Blaise Pascal, 67000 Strasbourg*
[b] *Institut de Chimie des Substances Naturelles du CNRS, 91198 Gif-sur-Yvette Cédex, France.*

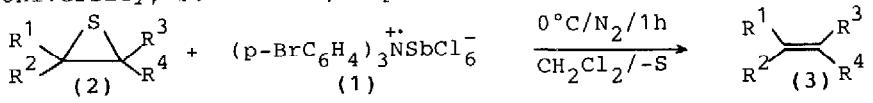
The synthesis of a macrobicyclic octaaza-cryptand and the crystal structure of its F^- cryptate are reported.



AMINIUM RADICAL SALT CATALYZED DESULPHURIZATION OF THIIRANES: AN EFFICIENT PREPARATION OF ARYLSUBSTITUTED OLEFINS

Tetrahedron Lett. 30, 4129 (1989)

Masaki Kamata,* Kazuyuki Murayama, and Tsutomu Miyashi†
Department of Chemistry, Faculty of Education, Niigata University, Ikarashi, Niigata 950-21, Japan †Department of Chemistry, Faculty of Science, Tohoku University, Sendai 980, Japan

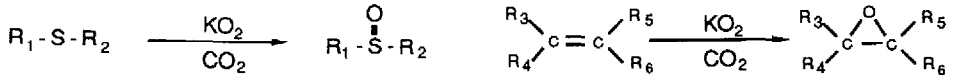


THE REACTIVITY OF SUPEROXIDE: A POTENT OXIDANT GENERATED IN SITU FROM SUPEROXIDE AND CO_2

Tetrahedron Lett. 30, 4133 (1989)

Hiroshi Yamamoto, Tadahiko Mashino, Tetsuo Nagano and Masaaki Hirobe*
Faculty of Pharmaceutical Sciences, University of Tokyo, Hongo, Bunkyo-ku, Tokyo 113, Japan

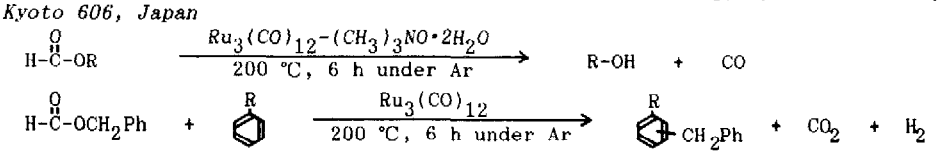
The reaction of CO_2 with superoxide cooxidized sulfides and olefins to the corresponding sulfoxides and epoxides, respectively, in dimethylformamide.



Ruthenium Complex Catalyzed Benzylation of Arenes with Benzyl Formate; Decarbonylation and Decarboxylation of Alkyl Formates

Tetrahedron Lett. 30, 4137 (1989)

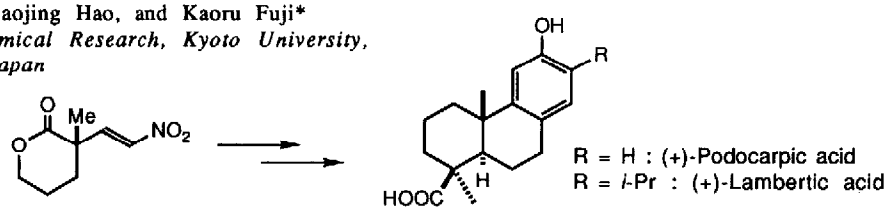
Teruyuki Kondo, Supawan Tantayanon, Yasushi Tsuji and Yoshihisa Watanabe*
Department of Hydrocarbon Chemistry, Faculty of Engineering, Kyoto University, Sakyo-ku, Kyoto 606, Japan



Tetrahedron Lett.30,4141(1989)

GENERAL ENTRY TO THE SYNTHESIS OF OPTICALLY ACTIVE DITERPENOIDS OF C-20β SERIES

Manabu Node, Xiaojing Hao, and Kaoru Fuji*
Institute for Chemical Research, Kyoto University, Uji, Kyoto 611, Japan

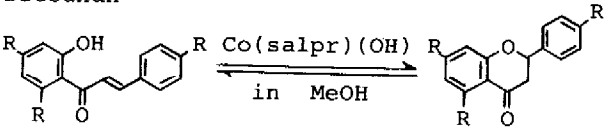


Tetrahedron Lett.30,4145(1989)

CONVERSION OF 2'-HYDROXYCHALCONES TO FLAVANONES CATALYZED BY COBALT SCHIFF BASE COMPLEX

Kazushige Maruyama, Kimihiro Tamanaka, and Akira Nishinaga*
Osaka Institute of Technology, Ohmiya 5, Asahi-ku, Osaka 535, Japan
Akira Inada* and Tsutomu Nakanishi
Faculty of Pharmaceutical Sciences, Setsunan University, Hirakata, Osaka 573-01

Reversible interconversion between 2'-hydroxychalcones and flavanones is promoted by Co(salpr)(OH), which acts as a base.



R = H, OMe, CH_2OMe

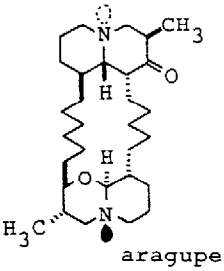
Tetrahedron Lett.30,4149(1989)

ARAGUPETROSINE A, A NEW VASODILATIVE MACROCYCLIC QUINOLIZIDINE ALKALOID FROM AN OKINAWAN MARINE SPONGE XESTOSPONGIA SP.

Motomasa Kobayashi, Kazuyoshi Kawazoe, and Isao Kitagawa*

Faculty of Pharmaceutical Sciences, Osaka University 1-6, Yamada-oka, Suita, Osaka 565, Japan

The absolute stereostructure of aragupetrosine A has been determined.



aragupetrosine A

Tetrahedron Lett.30,4153(1989)

HIGHLY NUCLEOPHILIC TRIBUTYLTIN AZIDE IN OXIRANE RING CLEAVAGE LEADING TO 1,2-AZIDO ALCOHOL

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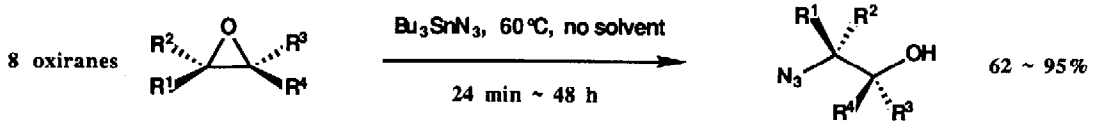

Tetrahedron Lett.30,4157(1989)

[2,3]-WITTIG REARRANGEMENT ON CARBOHYDRATE TEMPLATE. NOVEL APPROACH TO CHIRAL SYNTHESIS OF 3-ALKYLMALIC ACIDS

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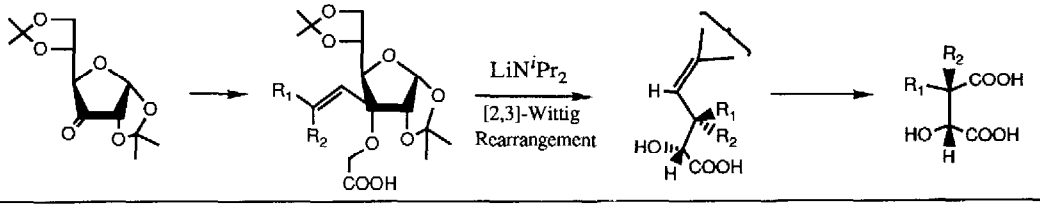

Tetrahedron Lett.30,4161(1989)

ELECTROREDUCTIVE "BARBIER TYPE" ALLYLATION OF IMINES WITH A COMBINATION OF A Pb(0)/Pb(II) REDOX MEDIATOR AND SACRIFICIAL ANODE (Al)

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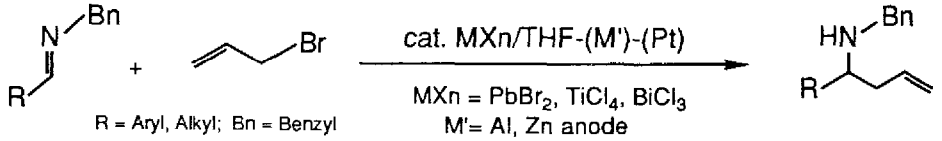

Tetrahedron Lett.30,4165(1989)

1,5-DIHYDRO-3*H*-2,4-BENZODIOXEPINE AS A NOVEL CARBONYL PROTECTING GROUP

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A novel and facile protective group for carbonyl compounds as 1,5-dihydro-3*H*-2,4-benzodioxepine, which can be cleaved smoothly in a nonacidic manner by catalytic hydrogenolysis, has been demonstrated.