GRAPHICAL ABSTRACTS

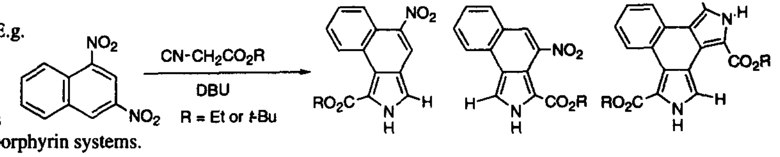
Tetrahedron Letters, **1997**, *38*, 2031

Synthesis of Novel Porphyrin Chromophores from Nitroarenes: Further Applications of the Barton-Zard Pyrrole Condensation.

Timothy D. Lash,* Chaminda Wijesinghe, Augustine T. Osuma and Jyoti R. Patel
Department of Chemistry, Illinois State University, Normal, Illinois 61790-4160, U.S.A.

Dinitronaphthalenes and related nitroaromatic compounds condense with isocyanoacetates in the presence of DBU to give *c*-annelated pyrroles in good yields. These polycyclic systems are valuable precursors to conjugated porphyrin systems.

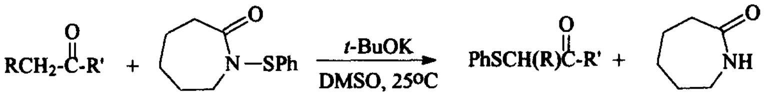
E.g.



Tetrahedron Letters, **1997**, *38*, 2035

A NOVEL REACTION OF N-PHENYLTHIOCAPROLACTAM: THE α–SULFENYLATION OF KETONES UNDER MILD CONDITIONS.

Gabriela Foray, Alicia B. Peñéñory* and Roberto A. Rossi*. Depto. Química Orgánica, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, A.P. 4, C.C.61, 5000 Córdoba, ARGENTINA.



1 2 3 4

80-97%

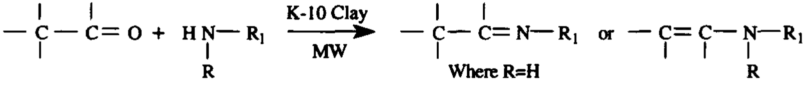
1 = Aliphatic, aromatic and cyclic ketones

Tetrahedron Letters, **1997**, *38*, 2039

CLAY CATALYZED SYNTHESIS OF IMINES AND ENAMINES UNDER SOLVENT-FREE CONDITIONS USING MICROWAVE IRRADIATION

Rajender S. Varma,*[1,2] Rajender Dahiya[1] and Sudhir Kumar[2] [1] Department of Chemistry and Texas Regional Institute for Environmental Studies (TRIES), Sam Houston State University, Huntsville, Texas 77341-2117, and [2]Houston Advanced Research Center (HARC), 4800 Research Forest Drive, The Woodlands, Texas 77381, U.S.A.

The montmorillonite K 10 clay catalyzed reactions of primary and secondary amines with aldehydes and ketones, respectively, are expedited by microwave irradiation under solvent-free conditions to afford a facile preparation of imines and enamines.



$$-\overset{|}{\underset{|}{C}}-\overset{|}{C}=O + H\underset{\underset{R}{|}}{N}-R_1 \xrightarrow[\text{MW}]{\text{K-10 Clay}} -\overset{|}{\underset{|}{C}}-\overset{|}{C}=N-R_1 \text{ or } -\underset{|}{C}=\underset{|}{C}-\underset{\underset{R}{|}}{N}-R_1$$

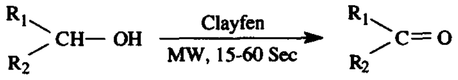
Where R=H

Tetrahedron Letters, **1997**, *38*, 2043

MICROWAVE-ASSISTED OXIDATION OF ALCOHOLS UNDER SOLVENT-FREE CONDITIONS USING CLAYFEN

Rajender S. Varma* and Rajender Dahiya
Department of Chemistry and Texas Institute for Environmental Studies (TRIES), Sam Houston State University, Huntsville, Texas 77341-2117, U.S.A.

Admixed with clay-supported iron(III) nitrate, alcohols are readily oxidized to the corresponding carbonyl compounds upon exposure to microwaves under solvent-free 'dry' conditions.



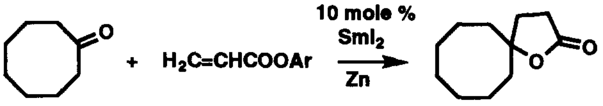
$$\begin{matrix}R_1\\R_2\end{matrix}\!\!>CH-OH \xrightarrow[\text{MW, 15-60 Sec}]{\text{Clayfen}} \begin{matrix}R_1\\R_2\end{matrix}\!\!>C=O$$

R_1 = alkyl, aryl ; R_2 = H, alkyl, aryl

Tetrahedron Letters, **1997**, *38*, 2045

Catalytic Reactions of Samarium(II) Iodide

E. J. Corey* and Guo Zhu Zheng
Department of Chemistry and Chemical Biology
Harvard University
Cambridge Massachusetts 02138

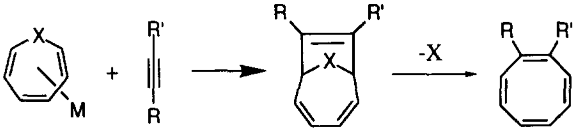


Tetrahedron Letters, **1997**, *38*, 2049

A CONVENIENT SYNTHESIS OF 1,2-DISUBSTITUTED CYCLOOCTATETRAENES

James H. Rigby* and Namal C. Warshakoon
Department of Chemistry, Wayne State University,
Detroit MI 48202-3489 USA

Substituted cyclooctatetraenes can be prepared in two steps employing a Cr-(O)-promoted [6π+2π] thiepin dioxide-alkyne cycloaddition followed by photo-activated sulfur dioxide extrusion.

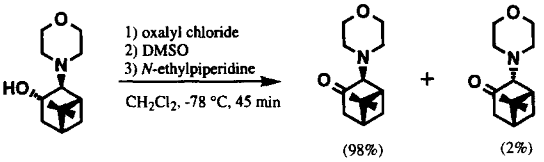


Tetrahedron Letters, **1997**, *38*, 2053

The Effect of Different Amine Bases in the Swern Oxidation of β-Amino Alcohols

William Chrisman and Bakthan Singaram*
Department of Chemistry
Thimann Laboratories of the University of California, Santa Cruz, California 95064

The effect of using amine bases of varied steric requirement in the Swern oxidation of tertiary β-amino alcohols was studied, and yields were optimized by the use of N-methylpyrrolidine, N-ethylpiperidine, or triethylamine, depending on the β-amino alcohol substrate.



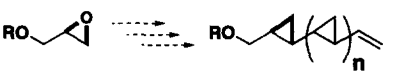
Tetrahedron Letters, **1997**, *38*, 2057

A Novel Approach to Oligocyclopropane Structural Units.

Richard E. Taylor,* Michael K. Ameriks, and Matthew J. LaMarche

Department of Chemistry and Biochemistry, University of Notre Dame
Notre Dame, IN 46556

A fundamentally novel approach to the synthesis of oligocyclopropane structural units based on the iterative formation and trapping of homo-allyl cationic intermediates has been accomplished. This new methodology provides practical access to the diastereomically related *trans*-syn-*trans* and *trans*-anti-*trans* bis-cyclopropanes and higher homologues.

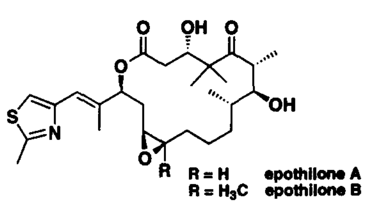


Tetrahedron Letters, **1997**, *38*, 2061

Towards the Synthesis of Epothilone A. Enantioselective Preparation of the Thiazole Sidechain and Macrocyclic Ring Closure.

Richard E. Taylor* and Jeffrey D. Haley
Department of Chemistry and Biochemistry, University of Notre Dame
Notre Dame, IN 46556

A synthetic approach to a new class of microtubule-stabilizing natural products is described which employs a macrocyclic olefination strategy to cyclize the 16-membered lactone ring. The C13-C19 thiazole subunit of epothilone A and B is prepared in high enantioselectivity using a catalytic asymmetric allylation reaction.

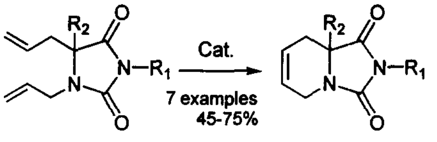


Tetrahedron Letters, **1997**, *38*, 2065

Ring-Closing Olefin Metathesis for the Synthesis of 1,8-Diazabicyclo[4.3.0]non-3-ene-7,9-diones

Alexey B. Dyatkin
Boehringer Ingelheim Pharmaceuticals Inc., 900 Ridgebury Road, P.O. Box 368, Ridgefield, CT 06877 USA

Convenient and efficient synthesis of 1,8-Diazabicyclo [4.3.0]non-3-ene-7,9-diones by RCM reaction from easily available starting materials.



Cat.=Bis(tricyclohexylphosphine)benzilidine ruthenium dichloride

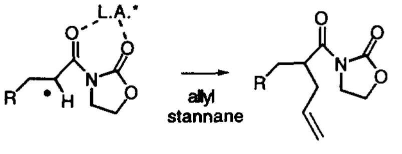
---

Tetrahedron Letters, **1997**, *38*, 2067

Substrate Steric Effects in Enantioselective Lewis Acid Promoted Free Radical Reactions

Jason Hongliu Wu, Guiru Zhang and Ned A. Porter*
Department of Chemistry, Duke University, Durham, NC 27708, USA

Generation of free radicals complexed to chiral Lewis acids by two routes and reaction of the complex with allylstannane indicates that steric effects of the radical substrate are important in determining enantioselectivity.

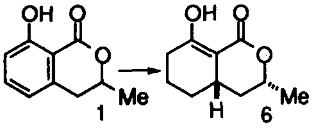


Tetrahedron Letters, **1997**, *38*, 2071

BIRCH REDUCTION OF 3,4-DIHYDRO-8-HYDROXY-3-METHYLISOCOUMARIN (MELLEIN). EXPEDITIOUS SYNTHESES OF (±)-RAMULOSIN AND A SPRUCE BUDWORM TOXIN.

Arthur G. Schultz* and Yu-Jang Li.
Department of Chemistry, Rensselaer Polytechnic Institute, Troy, NY 12180-3590

A three-step conversion of (±)-mellein (1) to (±)-ramulosin (6) in 41% yield is described.

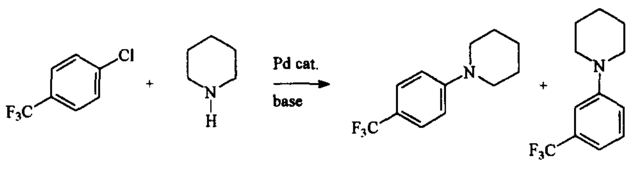


First Palladium-Catalyzed Aminations of Aryl Chlorides

Tetrahedron Letters, **1997**, *38*, 2073

Matthias Beller*, Thomas H. Riermeier, Claus-Peter Reisinger and Wolfgang A. Herrmann
Anorganisch-chemisches Institut der TU München, 85747 Garching, Germany

Efficient aminations of aryl chlorides with secondary amines in the presence of a palladacycle catalyst have been developed.

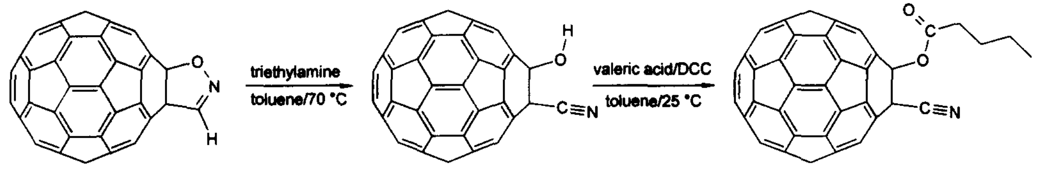


Ring Opening of the Heterocycle in [60]Fullereno[1,2-*d*]isoxazole

Tetrahedron Letters, **1997**, *38*, 2075

Hermann Irngartinger* and Anton Weber
Organisch-Chemisches Institut der Universität, Im Neuenheimer Feld 270, D-69120 Heidelberg, Germany.

The isomerically pure fullerol 1-cyano-2-hydroxy-dihydro[60]fullerene was synthesized by N-O bond cleavage of a fullerene-fused isoxazoline. A fulleryl ester of this alcohol could be obtained easily with valeric acid.

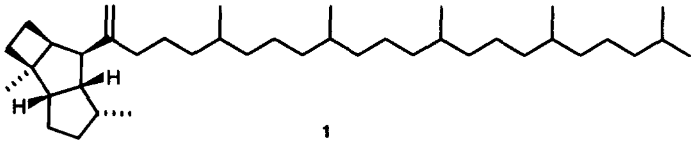


PODURAN, AN UNUSUAL TETRATERPENE FROM THE SPRINGTAIL *PODURA AQUATICA*.

Tetrahedron Letters, **1997**, *38*, 2077

Stefan Schulz*, Universität Hamburg, Institut für Organische Chemie, Martin-Luther-King-Platz 6, D-20146 Hamburg, Germany
Christoph Messer, Konrad Dettner, Universität Bayreuth, Institut für Tierökologie II, D-95440 Bayreuth, Germany

The new hydrocarbon tetraterpene poduran (1) was isolated from the springtail *Podura aquatica*. It possesses a rare tricyclic head region and a tail of five isoprene units.



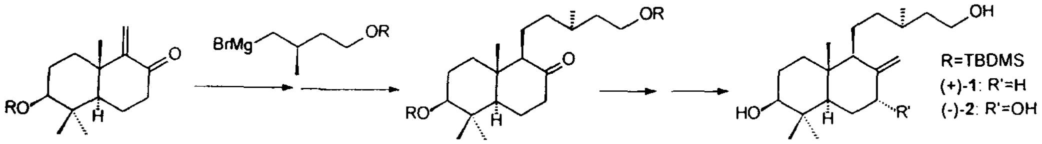
1

Enantioselective Total Synthesis of (+)-Labd-8(17)-ene-3β,15-diol and (-)-Labd-8(17)-ene-3β,7α,15-triol

Tetrahedron Letters, **1997**, *38*, 2081

Alexander Pemp and Karlheinz Seifert
Lehrstuhl für Organische Chemie I/2, NW II, Universität Bayreuth, D-95440 Bayreuth, Germany

The connection of the bicyclic skeleton and the side chain unit leads to the labdane diterpenes (+)-1 and (-)-2.

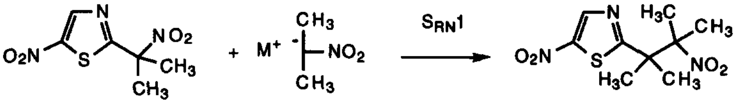


Tetrahedron Letters, **1997**, *38*, 2085

SYNTHESIS OF A CUMYL ANALOGUE IN NITROTHIAZOLE SERIES AND $S_{RN}1$ REACTION AT TERTIARY CARBON

Armand GELLIS, Patrice VANELLE*, José MALDONADO and Michel P. CROZET
Laboratoire de Chimie Organique, Faculté de Pharmacie, 27 Bd Jean Moulin, 13385 Marseille Cedex 05, France

A new alkylating agent, 2-(1-methyl-1-nitroethyl)-5-nitrothiazole, bearing a tertiary nitro nucleofuge, reacts with 2-nitropropane anion by $S_{RN}1$ mechanism leading to the C-alkylation product.

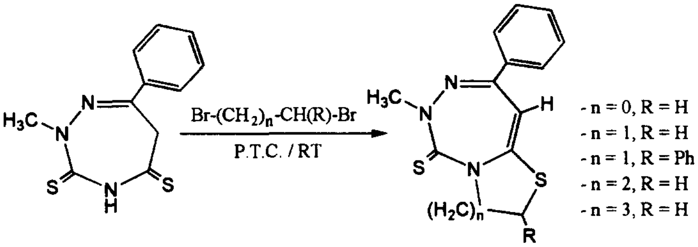


Tetrahedron Letters, **1997**, *38*, 2087

REGIOSELECTIVE SYNTHESIS OF NEW BIHETEROCYCLIC TRIAZEPINES

My. Y. AIT ITTO[1], A. HASNAOUI*[1], A. RIAHI[2] and J.-P.LAVERGNE[3].
[1]Laboratoire des Substances Naturelles et des Hétérocycles associé au CNCPRST, Département de Chimie, Faculté des Sciences-Semlalia, BP S15 Marrakech,Maroc; [2] Laboratoire de Photochimie, associé au CNRS BP. 1089 F-51687 Reims Cedex 2, France; [3]Laboratoire des Aminoacides et Peptides, associé au CNRS, Université Sciences et Techniques Montpellier II, France.

A one step regioselective synthesis of new series of biheterocyclic triazepines is reported

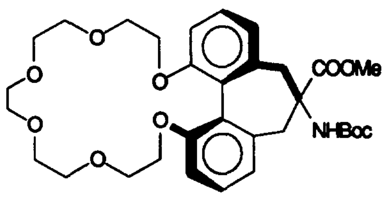


Tetrahedron Letters, **1997**, *38*, 2091

N-t-BOC 6-AMINO-1,11-(20-CROWN-6)-6,7-DIHYDRO-5H-DIBENZO[a,c] CYCLOHEPTENE-6-CARBOXYLIC ACID METHYL ESTER, THE FIRST PROTOTYPE OF A CROWN-CARRIER-AXIALLY DISSYMMETRIC-α,α-DISUBSTITUTED GLYCINE.

Jean-Paul Mazaleyrat,* Anne Gaucher, Yolaine Goubard, Jaroslav Šavrda and Michel Wakselman, SIRCOB, Bât. Lavoisier, Université de Versailles, 45 Avenue des Etats-Unis, 78000 Versailles, France.

The title compound: Boc-[20-C-6]-Bip-OMe, has been synthesized at the racemic state by phase transfer bis-alkylation of a glycine *tert*-butyl ester Schiff base with 2,2'-*bis*-(bromomethyl)-6,6'-dimethoxy-1,1'-diphenyl, followed by demethylation, esterification, N-protection and cyclisation with crown formation.

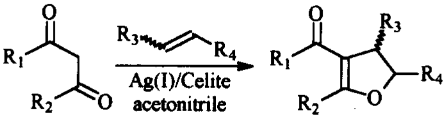


Tetrahedron Letters, **1997**, *38*, 2095

A FACILE SYNTHESIS OF DIHYDROFURANS UTILIZING SILVER(I)/CELITE PROMOTED OXIDATIVE CYCLOADDITION OF 1,3-DICARBONYL COMPOUNDS TO ALKENES

Yong Rok Lee*and Byung So Kim
Department of Industrial Chemistry, College of Engineering, Yeungnam University, Kyongsan 712-749, Korea

An efficient synthesis of dihydrofurans has been carried out starting from 1,3-dicarbonyl compounds.



Tetrahedron Letters, **1997**, *38*, 2099

Preparation of Nitriles from Primary Amides under Swern Oxidation Conditions

Noriyuki Nakajima* and Makoto Ubukata*
Biotechnology Research Center, Toyama Prefectural University, Kosugi, Toyama 939-03, Japan

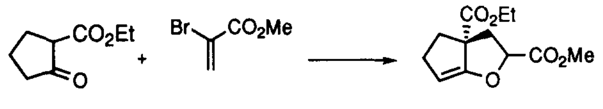
$$\mathbf{R{-}CONH_2} \xrightarrow[\mathrm{Et_3N}]{\mathrm{(COCl)_2\text{-}DMSO}} \mathbf{R{-}CN} \quad (75\text{-}96\ \%)$$

The reaction was completed within 15 min. at -78°C and desired products were obtained in high yields.

Tetrahedron Letters, **1997**, *38*, 2103

Tandem Nucleophilic Reaction of 1,3-Dicarbonyl Compounds to Methyl α-Bromoacrylate: [3+2]Heteroannulation Leading to Hydrofuran Derivatives

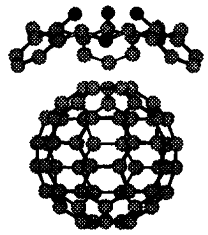
Hisahiro Hagiwara,[a]* Kouji Sato,[a] Toshio Suzuki[a] and Masayoshi Ando[b]
[a]Graduate School of Science and Technology, and [b]Faculty of Engineering, Niigata University, 2 no-cho, Niigata 950-21, Japan



Tetrahedron Letters, **1997**, *38*, 2107

SOLUTION COMPLEXES FORMED FROM C_{60} AND CALIXARENES. ON THE IMPORTANCE OF THE PREORGANIZED STRUCTURE FOR COOPERATIVE INTERACTIONS.

Atsushi Ikeda, Makoto Yoshimura, and Seiji Shinkai*
Department of Chemical Science & Technology, Faculty of Engineering, Kyushu University, Fukuoka 812, Japan

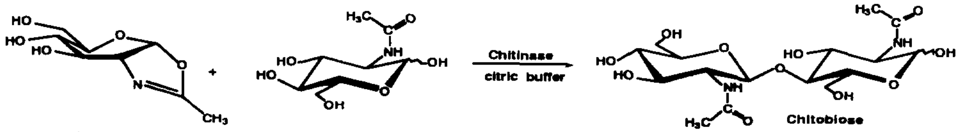


In order to find calix[n]arenes which can interact with C_{60} in solution we have screened 28 different calix[n]arenes by spectroscopic methods. We eventually discovered such three calix[n]arenes (1_5·Bu^t·H, 2_6·Bu^t·Bu^t·H·H, 3_3·Bu^t·H). They commonly possess a cone conformation and a benzene ring inclination suitable to C_{60} inclusion.

Tetrahedron Letters, **1997**, *38*, 2111

A NOVEL METHOD FOR SYNTHESIS OF CHITOBIOSE VIA ENZYMATIC GLYCOSYLATION USING A SUGAR OXAZOLINE AS GLYCOSYL DONOR

Shiro Kobayashi*, Toshitsugu Kiyosada and Shin-ichiro Shoda
Department of Materials Chemistry, Graduate School of Engineering, Tohoku University, Aoba, Sendai 980-77, Japan



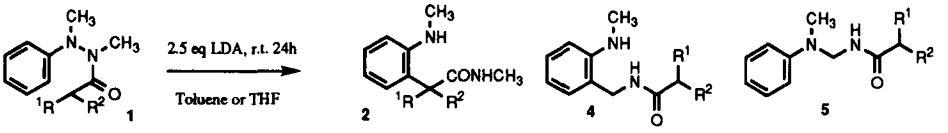
An enzymatic synthesis of *N,N'*-diacetylchitobiose was achieved by using a sugar oxazoline as novel glycosyl donor.

Tetrahedron Letters, **1997**, *38*, 2113

ANIONIC[3,3], [2,3] AND [1,2] REARRANGEMENTS OF ALIPHATIC AND AROMATIC ACYL HYDRAZINES WITH N-N BOND CLEAVAGE.

Yasuyuki Endo,* Takuya Uchida and Koichi Shudo,
Faculty of Pharmaceutical Sciences, University of Tokyo, 7-3-1, Hongo, Bunkyo-ku, Tokyo 113, Japan

Anionic [3,3] rearrangements of aromatic hydrazine acylate afforded *o*-aminophenylacetamide **2**. The [2,3] and [1,2] rearranged products (**4** and **5**) were major products in the case of bulky substituent on the reaction sites.

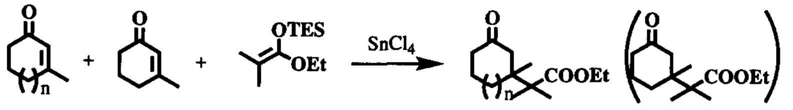


Tetrahedron Letters, **1997**, *38*, 2117

MUKAIYAMA-MICHAEL REACTION OF CYCLIC KETENE SILYL ACETALS AND ENONES. IMPORTANCE OF RING FLEXIBILITY IN ELECTRON TRANSFER PROCESS

Yukihiro Fujita,[a] Shunichi Fukuzumi,[b]* and Junzo Otera[a]*
[a]Department of Applied Chemistry, Okayama University of Science, Ridai-cho, Okayama 700, Japan
[b]Department of Applied Chemistry, Faculty of Enginnering, Osaka University, Suita, Osaka 565, Japan

Macrocyclic reaction components react more preferentially than the 6-membered analogs under electron transfer conditions.



Tetrahedron Letters, **1997**, *38*, 2121

SmI$_2$-PROMOTED CONJUGATE REDUCTION OF α,β-UNSATURATED ESTERS AND KETONES STUDIED IN COMPARISON WITH MUKAIYAMA-MICHAEL REACTION OF KETENE SILYL ACETAL

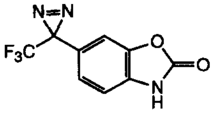
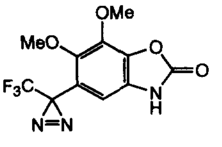
Yukihiro Fujita,[a] Shunichi Fukuzumi,[b]* and Junzo Otera[a]*
[a]Department of Applied Chemistry, Okayama University of Science, Ridai-cho, Okayama 700, Japan
[b]Department of Applied Chemistry, Faculty of Enginnering, Osaka University, Suita, Osaka 565, Japan

Macrocyclic reaction components react more preferentially than the 6-membered analogs in SmI$_2$-promoted conjugate reduction.

Tetrahedron Letters, **1997**, *38*, 2125

DESIGN OF PHOTOAFFINITY REAGENTS FOR LABELING THE AUXIN RECEPTOR IN MAIZE

Seiji Kosemura,* Hideyuki Emori, Shosuke Yamamura,*
Department of Chemistry, Faculty of Science and Technology, Keio University,
Hiyoshi, Yokohama 223, Japan
Toyoaki Anai, Kaori Tomita, and Koji Hasegawa
Institute of Applied Biochemistry, University of Tsukuba,
Tennodai 1-1-1, Tsukuba 305, Japan

Tetrahedron Letters, **1997**, *38*, 2129

A NEW FACILE METHOD FOR THE CHEMOSELECTIVE REDUCTIVE TRANSFORMATION OF AZIDES TO *N*-(*tert*-BUTOXYCARBONYL)AMINES

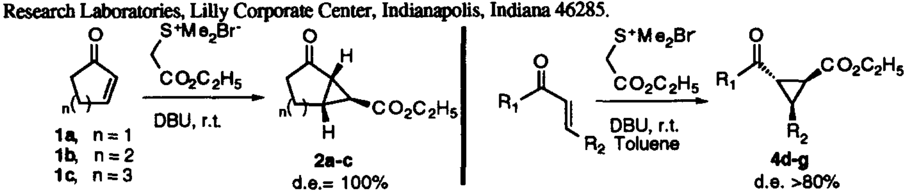
Hiyoshizo Kotsuki,* Takeshi Ohishi, and Tomohiro Araki
Department of Chemistry, Faculty of Science, Kochi University, Akebono-cho, Kochi 780, Japan

$$\mathrm{R{-}N_3} + \mathrm{Boc_2O\ (1.5\ equiv)} \xrightarrow[\substack{\text{20\% Degussa Pd(OH)}_2\text{/C} \\ \text{rt or 50 °C, EtOH}}]{\mathrm{Et_3SiH\ (1.5\ equiv)}} \underset{64\text{-}99\%}{\mathrm{R{-}NHBoc}}$$

Tetrahedron Letters, **1997**, *38*, 2133

STEREOSELECTIVE CYCLOPROPANATION OF ENONES WITH ETHYL DIMETHYLSULFONIUM ACETATE BROMIDE IN THE PRESENCE OF DBU

I. Collado,[a] C. Domínguez,[a] J. Ezquerra,[a] C. Pedregal*[a] and J. A. Monn*[b]
a. Centro de Investigación Lilly, S. A. Paraje de la Cruz s/n. 28130 Valdeolmos, Madrid, Spain.
b. Lilly Research Laboratories, Lilly Corporate Center, Indianapolis, Indiana 46285.

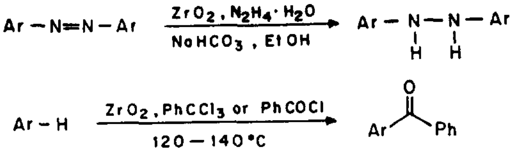


Tetrahedron Letters, **1997**, *38*, 2137

REGIOSPECIFIC ACYLATIONS OF AROMATICS AND SELECTIVE REDUCTIONS OF AZOBENZENES OVER HYDRATED ZIRCONIA

M.L. Patil, G.K. Jnaneshwara, D.P. Sabde, M.K. Dongare, A. Sudalai* and V.H. Deshpande*

National Chemical Laboratory, Pune - 411 008, INDIA.

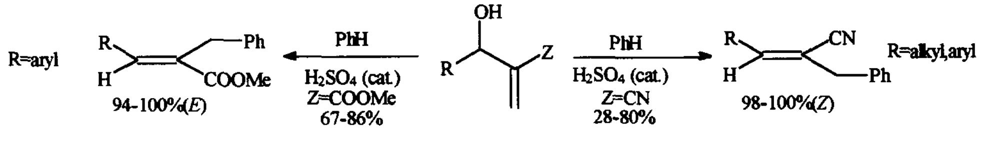


Tetrahedron Letters, **1997**, *38*, 2141

THE FRIEDEL-CRAFTS REACTION OF THE BAYLIS-HILLMAN ADDUCTS.

Deevi Basavaiah*, Marimganti Krishnamacharyulu, Rachakonda Suguna Hyma and Subramanian Pandiaraju, School of Chemistry, University of Hyderabad, Hyderabad-500 046, India

Simple stereoselective synthesis of [2Z]-2-benzylalk-2-enenitriles and [2E]-2-benzylalk-2-enoates *via* the conc.H_2SO_4 catalyzed Friedel-Crafts reaction of the Baylis-Hillman adducts with benzene.

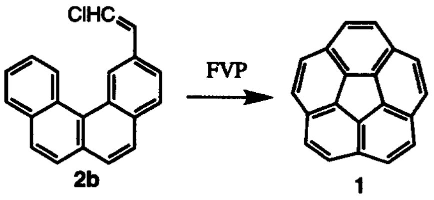


Tetrahedron Letters, **1997**, *38*, 2145

A NEW SYNTHESIS OF CORANNULENE

G. Mehta and G. Panda, School of Chemistry
University of Hyderabad, Hyderabad 500 046, India

Flash vacuum pyrolysis (FVP) of **2b** leads to the formation of corannulene **1**



Tetrahedron Letters, **1997**, *38*, 2149

COBALT ASSISTED CLEAVAGE OF S-S BONDS AND A BASE-FREE SYNTHESIS OF MERCAPTURIC ACIDS

Shantanu Chowdhury and Sujit Roy*, Metallo-Organic Laboratory, I & PC Division, Indian Institute of Chemical Technology, Hyderabad 500 007, India

$$\text{PhSSPh} + \text{RX} \xrightarrow[\text{Zn}]{\text{CoCl}_2\ (10\%)} \text{PhSR}\ \text{(9 examples)}$$

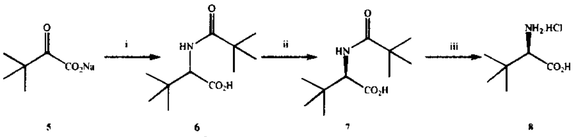
$$1/2\ [\text{AcNHCH(COOH)CH}_2\text{S-}]_2 + \text{RX} \xrightarrow[\text{Zn}]{\text{CoCl}_2\ (10\%)} \text{AcNHCH(COOH)CH}_2\text{SR}\quad \text{(7 examples)}$$

Tetrahedron Letters, **1997**, *38*, 2153

A NOVEL SYNTHESIS OF *TERT*-LEUCINE *VIA* A LEUCKART TYPE REACTION

Brian M. Adger, Ulrich C. Dyer, Ian C. Lennon, Peter D. Tiffin* and Simon E. Ward.
Chiroscience Ltd., Cambridge Science Park, Milton Road, Cambridge, CB4 4WE, UK.

An efficient synthesis of racemic *tert*-leucine from trimethylpyruvic acid using a Leuckart type reaction is described. A facile resolution of an intermediate with α-MBA allows entry into either (R)- or (S)-*tert*-leucine.



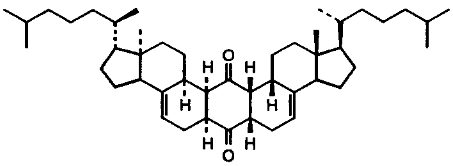
i) $HCO_2H/HCO_2NH_4/110°C$; ii) (S)-α-MBA; 2N HCl; iii) 6N HCl/Reflux

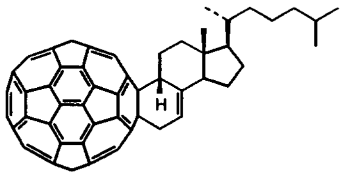
---

Tetrahedron Letters, **1997**, *38*, 2155

SYNTHESIS OF UNUSUAL CHOLESTANE ANALOGS BY DIELS-ALDER REACTION (A+CD ⟶ ABCD)

Francesco De Riccardis*, Irene Izzo, Consiglia Tedesco and Guido Sodano*
Dipartimento di Chimica, Università di Salerno, 84081 Baronissi, (SA) - Italy



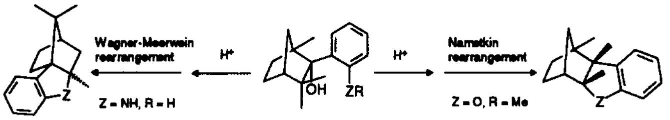


Tetrahedron Letters, **1997**, *38*, 2159

TANDEM WAGNER-MEERWEIN REARRANGEMENT-CARBOCATION TRAPPING IN THE FORMATION OF CHIRAL HETEROCYCLIC RING SYSTEMS

Scott M. Starling, Simone C. Vonwiller,* The School of Chemistry, The University of Sydney, NSW, 2006, Australia

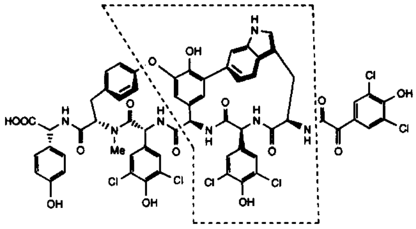
Ortho substituted aryl fenchyl alcohol derivatives undergo cationic rearrangement under acidic conditions to give chiral dihydroindoles and dihydrobenzofurans.



Tetrahedron Letters, **1997**, *38*, 2163

SYNTHESIS OF C-C BIARYL SEGMENT OF COMPLESTATIN AND CHLOROPEPTIN : APPROACH TO THE RIGHT HAND CEF-RING SYSTEM OF COMPLESTATIN

M. K. Gurjar* and N. K. Tripathy
Indian Institute of Chemical Technology, Hyderabad - 500 007, India

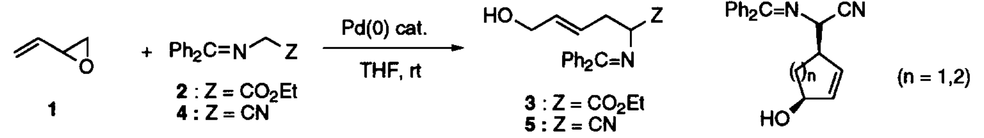


Complestatin

Tetrahedron Letters, **1997**, *38*, 2167

SYNTHESIS γ,δ-UNSATURATED δ-HYDROXY SUBSTITUTED α-AMINO ACIDS BY PALLADIUM-CATALYZED ALKYLATION OF MONOEPOXYDIENES

A. Mazón[a], C. Nájera[a], J. Ezquerra[b], and C. Pedregal[b]
[a] Departamento de Química Orgánica, Universidad de Alicante, Apdo. 99, 03080 Alicante, Spain. [b] Centro de Investigación Lilly S. A., Paraje de la Cruz s/n, 28130 Valdeolmos, Madrid, Spain.



1

2 : Z = CO_2Et
4 : Z = CN

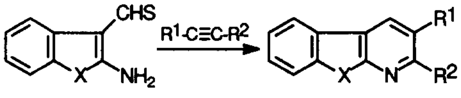
3 : Z = CO_2Et
5 : Z = CN

Tetrahedron Letters, **1997**, *38*, 2171

REACTION OF HETEROAROMATIC *o*-AMINOTHIOALDEHYDES WITH ALKYNES: A NOVEL ENTRY TO *b*-FUSED PYRIDINES.

Alessandro Degl'Innocenti,[a] *Maria Funicello,*[b] *Patrizia Scafato,*[b] *Piero Spagnolo** [ca] Dipartimento di Chimica Organica, via G.Capponi, 9, Firenze, [b] Dipartimento di Chimica, via N.Sauro 85, Potenza,[c] Dipartimento di Chimica Organica, v.le Risorgimento 4, Bologna, Italy.

Heterocyclic *o*-aminothioaldehydes smoothly react with mono- and disubstituted electron deficient alkynes to give *b*-fused pyridines.



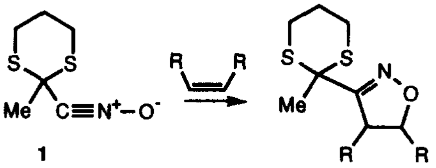
X = O, S, N-Et. R^1, R^2 = H, COOEt, Ts.

Tetrahedron Letters, **1997**, *38*, 2175

EXPLOITING THE 1,3-DITHIANE OF 2-OXOPROPANENITRILE OXIDE TO LIMIT COMPETING DIMERIZATION IN 1,3-DIPOLAR CYCLOADDITION REACTIONS

Stuart J. Barrow and Christopher J. Easton,* Research School of Chemistry, Australian National University, Canberra, ACT 0200, Australia
G. Paul Savage and Gregory W. Simpson, CSIRO Division of Chemicals and Polymers, Private Bag 10, Rosebank MDC, Clayton, VIC 3169, Australia

The 1,3-dithiane moiety reduces the rate of dimerization of the nitrile oxide 1, thereby acting as a steric auxiliary to promote the competing cycloaddition reactions.

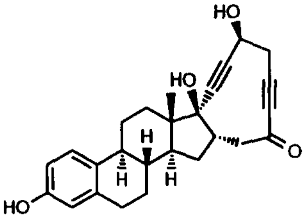


Tetrahedron Letters, **1997**, *38*, 2179

Estramicins: A Novel Cyclic Diyl Precursor Derived from Estradiol.

Christel Meert, Jing Wang, Pierre J. De Clercq*
University of Gent, Department of Organic Chemistry,
Krijgslaan 281 (S4), B-9000 Gent (Belgium).

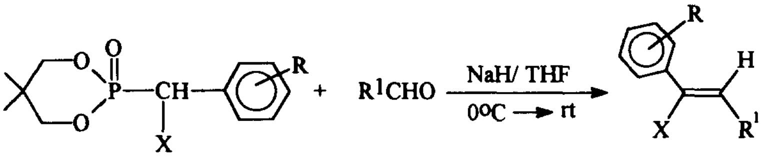
The shown estradiol derivative obtained via a stereocontrolled sequence from estrone was found to cycloaromatize via the Bergman process upon treatment with mesylchloride/triethylamine ($t_{1/2}$ = 20 min).



Tetrahedron Letters, **1997**, *38*, 2183

A CONVENIENT ROUTE TO ARYL SUBSTITUTED CHLORO AND BROMO OLEFINS

Sudha Kumaraswamy and K. C. Kumara Swamy*
School of Chemistry, University of Hyderabad, Hyderabad-500 046, India

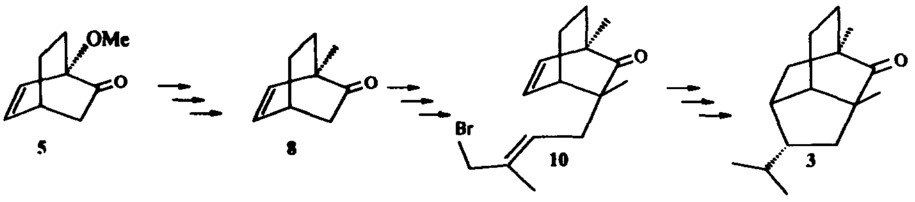


X = Cl, Br
(11 examples)

Tetrahedron Letters, **1997**, *38*, 2185

A NEW TOTAL SYNTHESIS OF 2-PUPUKEANONE

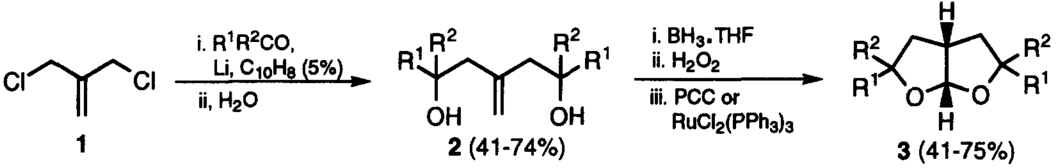
K. Kaliappan and G.S.R. Subba Rao*
Department of Organic Chemistry, Indian Institute of Science, Bangalore-560 012, INDIA.



Tetrahedron Letters, **1997**, *38*, 2187

SUBSTITUTED 1,7-DIOXABICYCLO[3.3.0.]OCTANES: NEW EASY ACCESS TO THE PERHYDROFUROFURAN CORE OF AFLATOXINS AND ANALOGUES

F. Alonso, E. Lorenzo and M. Yus*
Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, Apdo. 99, E-03080-Alicante, Spain



1 **2** (41-74%) **3** (41-75%)

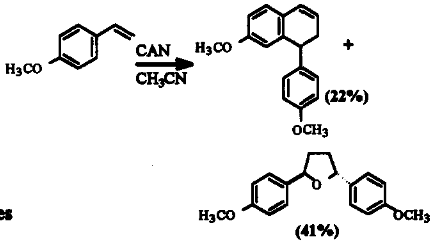
Tetrahedron Letters, **1997**, *38*, 2191

NOVEL CERIUM(IV) AMMONIUM NITRATE INDUCED DIMERIZATION OF METHOXYSTYRENES

Vijay Nair*[a], Jessy Mathew[a], Puthuparampil P. Kanakamma[a], Sreeletha B. Panicker[a], V. Sheeba[a], S. Zeena[a] and Guenter K. Eigendorf [b]

[a] Organic Chemistry Division, Regional Research laboratory (CSIR)
Trivandrum-19, India

[b] Department of Chemistry, University of British Columbia
Vancouver, Canada, V6 T 1Z1



The cerium(IV) ammonium nitrate mediated dimerization of methoxystyrenes in methanol and their cyclization in acetonitrile is described.