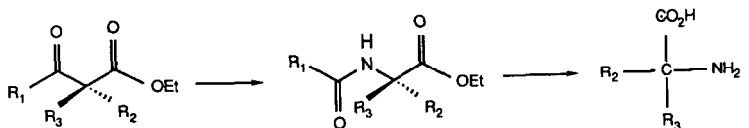


GRAPHICAL ABSTRACTS

Tetrahedron Lett. 29,403(1988)

ASYMMETRIC SYNTHESIS OF α -ALKYLATED α -AMINO ACIDS VIA
SCHMIDT REARRANGEMENT OF α,α -BISALKYLATED β -KETO ESTERS

Gunda I. Georg*, Xiangming Guan, and Joydeep Kant
Department of Medicinal Chemistry, University of Kansas, Lawrence, KS 66045-2500 U.S.A.



Tetrahedron Lett. 29,407(1988)

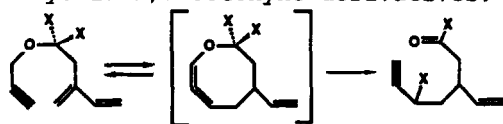
INTRAMOLECULAR ENE REACTION OF 1,7-OCTENYNES:

THERMAL GENERATION OF 1,2-CYCLOOCTADIENE

K.J. Shea,* L.D. Burke and W.P. England

Department of Chemistry, University of California, Irvine, California 92717

1,2-Cyclooctadienes are generated thermally by an intramolecular ene cyclization of acyclic 1,7-octenyne derivatives.

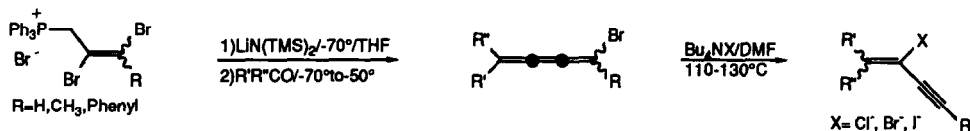


Tetrahedron Lett. 29,411(1988)

BROMO[3]CUMULENES AS PRECURSORS TO HALOENYNES

Carl B. Ziegler, Jr., Amerian Cyanamid Company, Medical Research Division, Lederle Laboratories, Pearl River, New York 10965

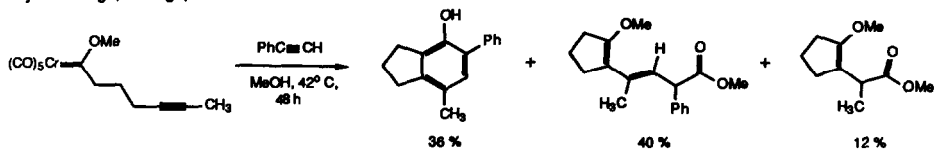
A regioselective S_N2' synthesis of haloenynes starting from bromo[3]cumulenes is reported.



Tetrahedron Lett. 29,415(1988)

THE *IN SITU* GENERATION OF NON-STABILIZED CARBENE COMPLEXES VIA INTRA-
MOLECULAR ACETYLENE INSERTION: A NEW TWO-ALKYNE ANNULATION AND A
NEW PREPARATION OF γ -KETO ESTERS

W. D. Wulff* and Y. C. Xu
Department of Chemistry, Searle Chemistry Laboratory
The University of Chicago, Chicago, Illinois 60637



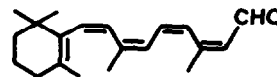
Tetrahedron Lett., 29, 419 (1988)

ALL-*CIS*-RETINAL and 7-*CIS*,9-*CIS*,11-*CIS*-RETINAL

Achla Trehan and R. S. H. Liu*

Department of Chemistry, 2545 The Mall, University of Hawaii, Honolulu, Hawaii 96822

A modified C₁₅ + C₅ route led to the previously unknown and highly hindered all-*cis*-retinal as well as an improved synthesis of 7-*cis*,9-*cis*,11-*cis*-retinal. The distorted nature of the chromophore in all-*cis*-retinal is revealed in its much blue-shifted uv absorption spectrum ($\lambda_{\max} = 287\text{nm}$) and its ready isomerization to 7-*cis*,9-*cis*,13-*cis*-retinal.



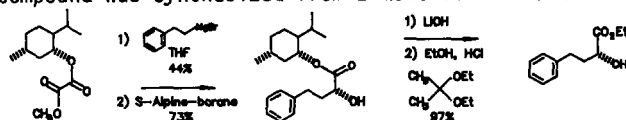
Tetrahedron Lett., 29, 423 (1988)

AN EFFICIENT SYNTHESIS OF ETHYL (R)-2-HYDROXY-4-PHENYL-BUTYRATE: A USEFUL INTERMEDIATE IN THE SYNTHESIS OF CONVERTING ENZYME INHIBITORS

Gary A. Flynn* and Douglas W. Beight

Merrell Dow Research Institute, Cincinnati, Ohio 45215

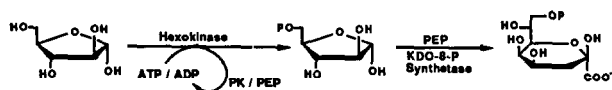
The title compound was synthesized from L-menthol in 24% overall yield.



Tetrahedron Lett., 29, 427 (1988)

SYNTHESIS OF 3-DEOXY-D-MANNO-2-OCTULOSONATE-8-PHOSPHATE (KDO-8-P) FROM D-ARABINOSE: GENERATION OF D-ARABINOSE-5-PHOSPHATE USING HEXOKINASE

Mark D. Bednarski, Debbie C. Crans, Robert DiCosimo, Ethan S. Simon, Phillip D. Stein and George M. Whitesides*
Department of Chemistry, Harvard University, Cambridge, MA 02138 USA
Marilyn J. Schneider
Department of Chemistry, Wellesley College, Wellesley, MA 02181 USA



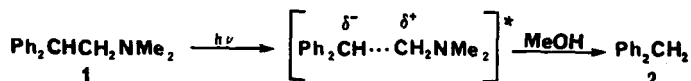
Tetrahedron Lett., 29, 431 (1988)

PHOTOSOLVOLYSIS OF A CARBON-CARBON BOND.

THE PHOTOLYSIS OF N,N-DIMETHYL-2,2-DIPHENYLETHYLAMINE IN METHANOL.

Daniel D.M. Wayner* and Lise Gravelle, Division of Chemistry
National Research Council of Canada, Ottawa, Ontario, Canada K1A 0R6

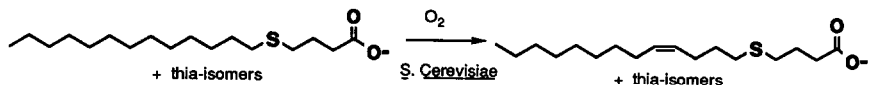
The title compound (1) is photolyzed in methanol to give good yields (ca. 50%) of diphenylmethane (2) indicating that the C-C bond undergoes a formal heterolytic cleavage.



USE OF SULFUR AS AN OXIDANT DETECTOR

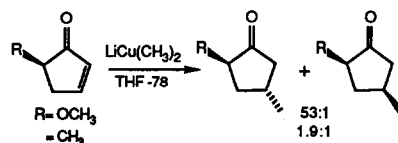
Peter H. Buist* , H. Garry Dallmann, Robert R. Rymerson, Peter M. Seigel and Paul Skala
The Ottawa-Carleton Institute for Research and Graduate Studies, Carleton University,
Ottawa, Ontario, Canada K1S 5B6

The oxidation of a number of thiastearates has been examined as a function of sulfur position using the yeast *S. cerevisiae*.

CUPRATE ADDITIONS TO 5-METHOXYCYCLOPENTENONES:
A NOVEL STEREOELECTRONIC EFFECT

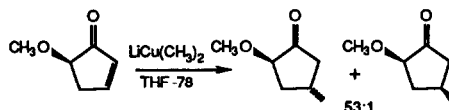
Amos B. Smith III*, Norma K. Dunlap and Gary A. Sulikowski
Department of Chemistry, The Laboratory for Research on the Structure
of Matter and The Monell Chemical Senses Center, University of Pennsylvania,
Philadelphia, PA. 19104 USA

Cuprate additions to 5-methoxy-2-cyclopentenone proceed with moderate to extremely high diastereofacial selectivity, depending upon the specific cuprate. Comparisons with related 5-substituted cyclopentenones suggest a novel stereoelectronic effect.

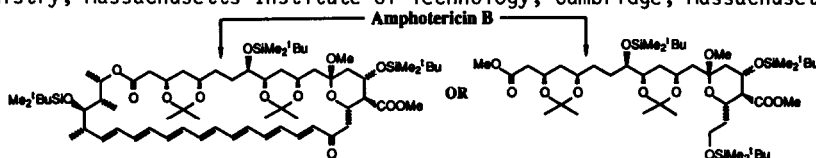
THEORETICAL EVALUATION OF STEREOELECTRONIC DIATEREOFACIAL
SELECTIVITY IN THE CONJUGATE ADDITION OF CUPRATES TO
5-SUBSTITUTED CYCLOPENTENONES

Amos B. Smith III* and Peter K. Trumper*
Department of Chemistry, The Laboratory for Research on the Structure of
Matter and The Monell Chemical Senses Center, University of Pennsylvania,
Philadelphia, PA. 19104 USA. Department of Chemistry, Bowdoin College,
Brunswick, ME. 04011 USA

The 53:1 preference for conjugate addition of Me₂CuLi anti to the methoxy
of 5-methoxycyclopentenone has been evaluated with semi-empirical molecular
orbital methods.

DEGRADATION OF AMPHOTERICIN B: CLEAVAGE OF THE
GLYCOSIDIC LINKAGE WITH ALUMINUM AMALGAM [Al(Hg)] OR
DICHLORODICYANOQUINONE (DDQ)

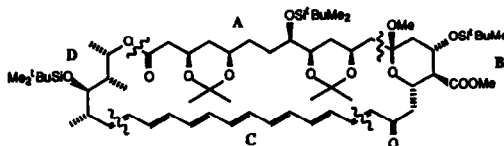
Robert M. Kennedy, Atsushi Abiko and Satoru Masamune*
Department of Chemistry, Massachusetts Institute of Technology, Cambridge, Massachusetts
02139 U.S.A.



A SYNTHESIS OF 19-DEHYDROAMPHOTERONOLIDE B.

Robert M. Kennedy, Atsushi Abiko, Toshiro Takemasa, Hiroshi Okumoto, and Satoru Masamune*
 Department of Chemistry, Massachusetts Institute of Technology, Cambridge, Massachusetts
 02139 U.S.A.

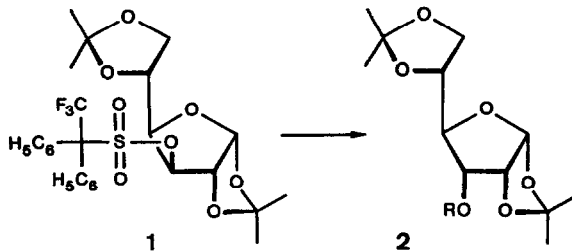
A Total Synthesis of 19-dehydroamphoterionolide
 from the synthetic fragments A, B, and CD is
 described.

APPLICATION OF STERICALLY CROWDED
 ALKYL SULFONATES: S_N2 -SUBSTITUTION
 IN THE DIACETONE GLUCOSE SYSTEM

Thomas Netscher

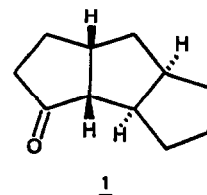
Chemisches Laboratorium der Universität
 D - 7800 Freiburg i. Br., West Germany

Unusual nucleophilic C-substitution
 yielding allofuranose deriva-
 tives **2** was attained starting from
 the novel sulfonate **1**.

INTRAMOLECULAR [2+2] CYCLOADDITIONS OF VINYLKETENES TO OLEFINS-II.
 THE SYNTHESIS OF A LINEAR ANNELATED TRIQUINANE DERIVATIVE.

Alain De Mesmaeker, Siem J. Veenstra, Beat Ernst*
 Central Research Laboratories, Ciba-Geigy Ltd., CH-4002 Basel, Switzerland.

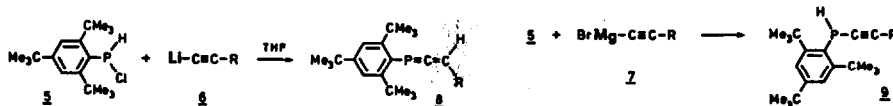
A short and stereoselective synthesis of the triquinane derivative **1**
 is described.



3H-PHOSPHALEN - ALKINYL-1-H-PHOSPHAN - TAUTOMERE

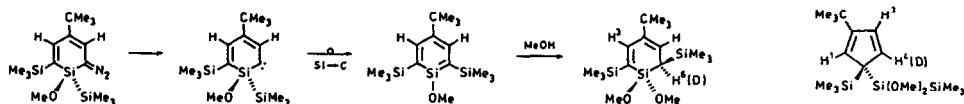
G. Märkl*, S. Reitingner

Institut für Organische Chemie der Universität Regensburg
 Universitätsstraße 31, D-8400 Regensburg, BRD



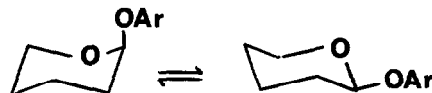
PHOTOCHEMISCHE UND THERMISCHE ZERSETZUNG VON DIAZO-2-TRIMETHYLSILYL-2-SILA-3,5-CYCLOHEXADIENEN SILABENZOLE UND SILAFULVENE ALS ZWISCHENSTUFEN

G. Märkl und W. Schlosser; Institut für Organische Chemie der Universität Regensburg, Universitätsstr. 31, D-8400 Regensburg, BRD - W.S. Sheldrick; Fachbereich Chemie der Universität Kaiserslautern, Erwin-Schrodinger-Straße, D-6750 Kaiserslautern, BRD

THE EFFECT OF PARA-SUBSTITUENTS ON THE CONFORMATIONAL BEHAVIOUR OF 2-ARYLOXYTETRAHYDROPYRANS

Michael J. Cook*, Trevor J. Howe and Alison Woodhouse
School of Chemical Sciences, University of East Anglia, Norwich NR4 7TJ, England

In chloroform solution, the anomeric interactions in the 2-aryloxytetrahydropyran system are sensitive to electron withdrawing groups at the para position. This sensitivity is suppressed in the less polar solvent cyclohexane.

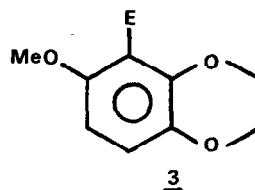


Lithiation of 6-Methoxy 1,4-Benzodioxan:

Functionalization at the 5-Position

G. GUILLAUMET, M. HRETANI, G. COUDERT

A highly efficient synthesis of 3 is reported from 6-methoxy 1,4-benzodioxan 1. (E = D, Me, Me₃Si, Me₂COH, Ph₂COH, (CH₂)₅COH, CHO, CH₃(CH₂)₆CHOH, PhCOH).

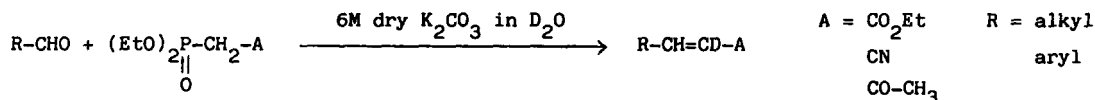


The Wittig-Horner reaction in heterogeneous media-X : synthesis of α -Deuterated functional olefins using potassium carbonate-Deuterium Oxide.

Pascale SEGUINEAU and Jean VILLIERAS

Laboratoire de Synthèse Organique Sélective et Matériaux -
Faculté des Sciences - NANTES - France.

α -Labelled functional olefins are prepared in high yields by the Wittig-Horner reaction in the presence of a 6M K₂CO₃-D₂O at room temperature.

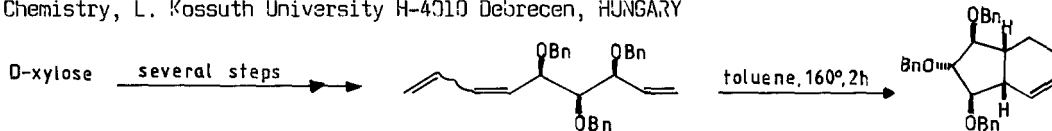


Tetrahedron Lett. 29, 481 (1988)

COMPLETE STEREORELECTIVITY IN THE INTRAMOLECULAR DIELS-ALDER REACTION OF A TRIENE DERIVATIVE FROM D-XYLOSE

Pál Herczegh, Martina Zsóly, László Szilágyi[†] and Rezső Bognár*

Research Group of Antibiotics, Hungarian Academy of Sciences and [†]Department of Organic Chemistry, L. Kossuth University H-4010 Debrecen, HUNGARY



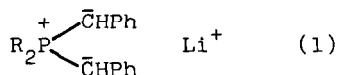
Tetrahedron Lett. 29, 485 (1988)

THE STEREOCHEMISTRY OF WITTIG REACTIONS OF YLIDE-ANIONS DERIVED FROM SEMI-STABILIZED PHOSPHONIUM YLIDES.

Eugene G. McKenna and Brian J. Walker*

Department of Chemistry, The Queen's University of Belfast, Belfast, BT9 5AG N. Ireland.

Reactions of benzylic ylide-anions (1) with benzaldehyde give excellent yields of stilbenes usually with increased E-stereoselectivity compared to the reactions of the analogous ylides.



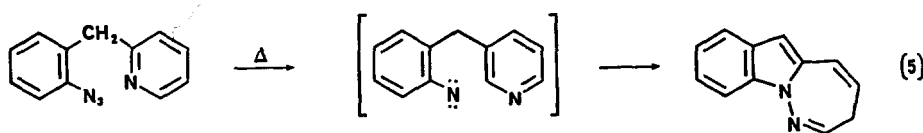
Tetrahedron Lett. 29, 489 (1988)

EXPANSION OF A PYRIDINE RING BY A NITRENE

Gurnos Jones* and David C. York

Department of Chemistry, University of Keele, Keele, Staffordshire, ST5 5BG, U.K.

The pyridine ring in compound (1) has been enlarged by the derived nitrene to give diazepinoindole (5).



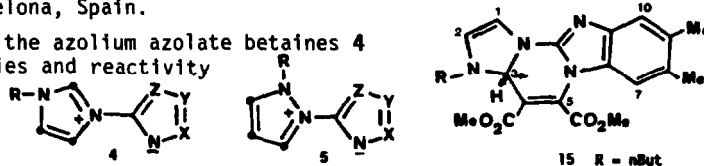
Tetrahedron Lett. 29, 491 (1988)

MESOMERIC BETAINES OF AZOLIUM AZOLATE: Synthesis and Properties

Ermitas Alcalde^{*a}, Immaculada Dinarés^a and Jordi Frigola^b.

(a) Laboratorio de Química Orgánica, Fac. Farmacia, 08028-Barcelona. (b) Dpto. de Química Médica, Laboratorios Dr. Esteve, 08026-Barcelona, Spain.

We describe a facile entry into the azolium azolate betaines 4 and 5, their spectroscopic properties and reactivity towards electrophiles (MeI) and dipolarophiles (DMAD).

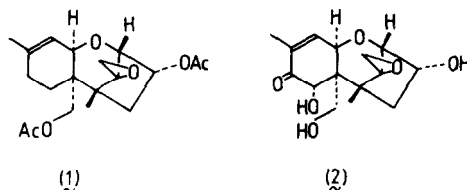


Tetrahedron Lett. 29, 493 (1988)

PARTIAL SYNTHESIS OF THE TRICHOECENE MYCOTOXINS, CALONECTRIN AND DEOXYNIVALENOL

Ernest W. Colvin* and Stuart Cameron,
Department of Chemistry, University of Glasgow,
Glasgow G12 8QQ, U.K.

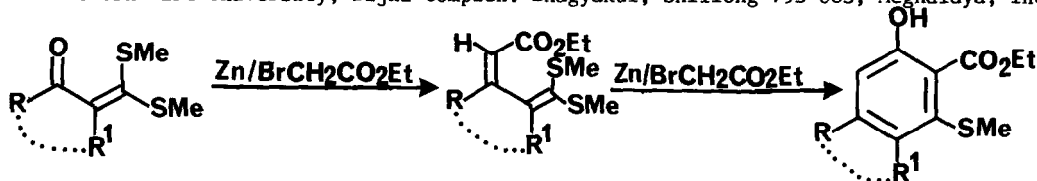
Partial synthesis of calonectrin (1) and deoxynivalenol (2) from a readily available trichothecene precursor are reported.



Tetrahedron Lett. 29, 497 (1988)

NOVEL CYCLOAROMATIZATION IN REFORMATSKY REACTION ON α -OXOKETENE DITHIOACETALS: A REGIOSELECTIVE SYNTHESIS OF SUBSTITUTED ETHYL 2-HYDROXY-6-METHYLTHIOBENZOATES

Apurba Datta, Hiriyakkanavar Ila* and Hiriyakkanavar Junjappa*, Department of Chemistry, North-Eastern Hill University, Bijni Complex, Bhagyakul, Shillong 793 003, Meghalaya, India



Tetrahedron Lett. 29, 501 (1988)

CYCLOAROMATIZATION OF α -OXOKETENE DITHIOACETALS WITH 3-METHYL-5-LITHIOMETHYLISOXAZOLE: A NEW GENERAL APPROACH FOR SYNTHESIS OF SUBSTITUTED AND ANNELATED 1,2-BENZISOXAZOLES

Maliakel P. Balu, Dinah Pooranchand, Hiriyakkanavar Ila* and Hiriyakkanavar Junjappa*, Department of Chemistry, North-Eastern Hill University, Shillong 793 003, Meghalaya, India

