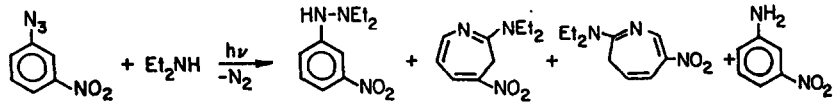
GRAPHICAL ABSTRACTS

Tet.Lett.,27,29,3325 (1986)

PHOTOLYSIS OF 3-NITROPHENYL AZIDE: TRAPPING THE REACTIVE INTERMEDIATES

Tsuei-Yun Liang and Gary B. Schuster*
Department of Chemistry, University of Illinois; Urbana, IL 61801-3731

Irradiation of 3-nitrophenyl azide gives four trappable intermediates; the singlet nitrene, two isomeric dehydroazepiness, and the triplet nitrene.

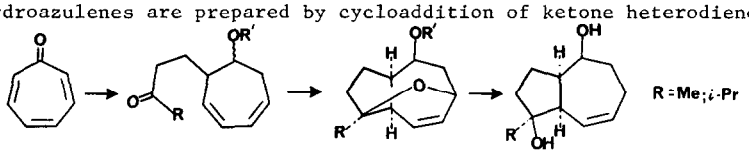


Tet.Lett.,27,29,3329 (1986)

INTRAMOLECULAR LEWIS ACID CATALYZED HETEROCYCLOADDITION REACTIONS. CYCLIZATION OF KETONE HETERODIENOPHILES IN THE DIHYDROTROPONE SERIES.

James H. Rigby*, JoAnn Zbur Wilson and Chrisantha Senanayake, Department of Chemistry, Wayne State University, Detroit, MI 48202 USA

Substituted Hydroazulenes are prepared by cycloaddition of ketone heterodienophiles.



Tet.Lett.,27,29,3333 (1986)

A NOVEL APPROACH TO DEACYLATION OF CEPH-3-EM ESTERS

Shahriar Mobashery and Michael Johnston
Departments of Chemistry and of Biochemistry and Molecular Biology
The University of Chicago, Chicago, Illinois 60637, USA.

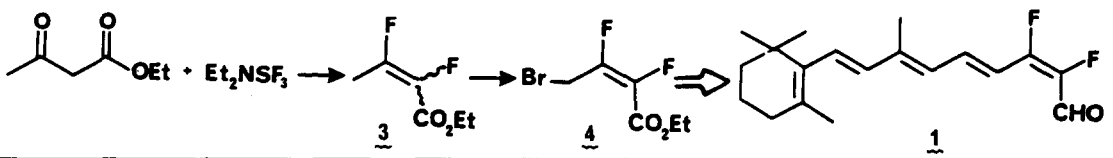
A cephalosporin deacylation via a cephem C-10 iodide is described.

Tet.Lett.,27,29,3337 (1986)

THE PREPARATION OF VICINAL DIFLUOROOLEFINIC CARBONYL COMPOUNDS AND THEIR APPLICATION TO THE SYNTHESIS OF DIFLUORORETINAL ANALOGS

A. E. Asato and R. S. H. Liu, Department of Chemistry, 2545 The Mall
University of Hawaii, Honolulu, Hawaii 96822

The synthesis of (13Z)-13,14-difluoro-20-retinal, 1 from key intermediate 3.

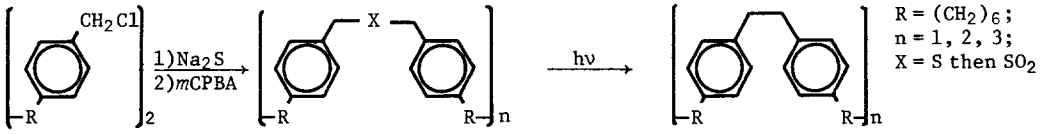


Tet.Lett.,27,29,3341 (1986)

A CONVENIENT SYNTHESIS OF MACROCYCLIC PARACYCLOPHANES

Jared A. Butcher, Jr.* and Aloke K. Dutta
Clippinger Laboratories, Ohio University, Athens, OH 45701

[2.n]-paracyclophanes are made from 1,n-*bis*-[4-chloromethylphenyl]-alkanes.

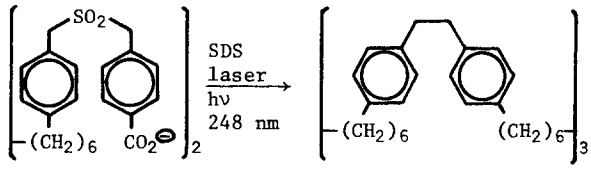


Tet.Lett.,27,29,3343 (1986)

MACROCYCLIC RING FORMATION IN MICELLES

Aloke K. Dutta and Jared A. Butcher, Jr.*
Clippinger Laboratories, Ohio University, Athens, OH 45701

The influence SDS micelles exert on the course of the chemical reaction initiated by excimer laser photolysis of long-chain *bis*-dibenzylsulfone detergent molecules is evaluated. In the presence of SDS [2.12]$_3$-paracyclophane forms; in the absence of SDS it does not.

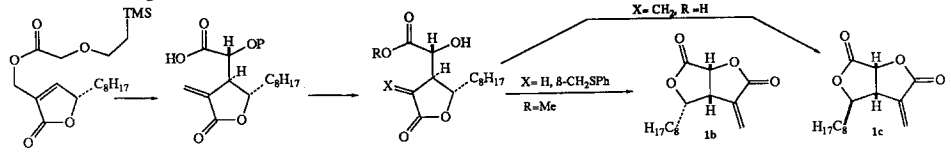


Tet.Lett.,27,29,3345 (1986)

TOTAL SYNTHESIS OF (±)-ISOAVENACIOLIDE AND (±)-AVENACIOLIDE

Steven D. Burke,* Gregory J. Pacofsky, and Anthony D. Piscopio
Department of Chemistry, University of South Carolina, Columbia, SC 29208 USA

Stereocontrolled syntheses of (±)-isoavenaciolide (**1b**) and (±)-avenaciolide (**1c**) via the ester enolate Claisen rearrangement and complementary bislactonization reactions from a common intermediate.

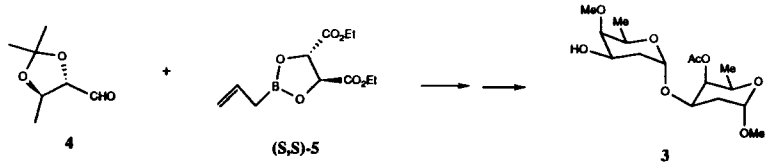


Tet.Lett.,27.29,3349 (1986)

TOTAL SYNTHESIS OF THE AB DISACCHARIDE UNIT OF OLIVOMYCIN A

William R. Roush* and Julie A. Straub,
Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA 02139

A 10 step highly diastereoselective total synthesis of disaccharide 3 is described. The sugar units were assembled by a sequence initiated by the reaction of aldehyde 4 and chiral reagent 5.

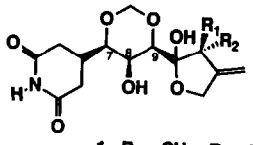


4 (S,S)-5 3

Tet.Lett.,27,29,3353 (1986)

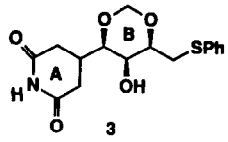
STUDIES ON THE TOTAL SYNTHESIS OF SESBANIMIDE: A HIGHLY DIASTEREOSELECTIVE SYNTHESIS OF THE AB RING SYSTEM

William R. Roush[1]* and Michael R. Michaelides
Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA 02139



1, $R_1 = CH_3$, $R_2 = H$

2, $R_1 = H$, $R_2 = CH_3$



3

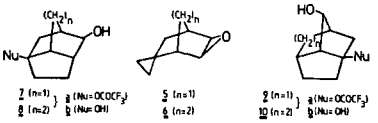
A highly diastereoselective total synthesis of 3, corresponding to the AB ring system of sesbanimide A (1) and B (2), is described.

Tet.Lett.,27,29,3361 (1986)

TRANSANNULAR RING EXPANSION OF THE SPIROCYCLOPROPANE MOIETY IN THE ACID CATALYZED REARRANGEMENT OF OXIRANES DERIVED FROM NORBORNENE AND BICYCLO[2.2.2]OCTENE.

Waldemar Adam* and Elisabeth Crämer
Institut für Organische Chemie der Universität, D-8700 Würzburg, West Germany

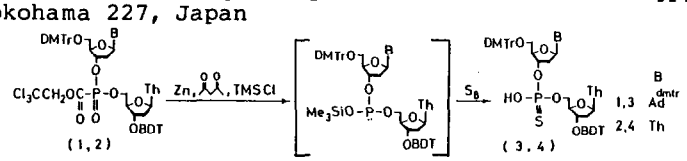
Acid-catalyzed rearrangement of epoxy norbornane 5 and epoxy bicyclo[2.2.2]octane 6 to brendanes 7,9 and homobrendanes 8,10.



Tet.Lett.,27,29,3365 (1986)

Acylphosphonates. 6. Reaction Mechanism of Zn/Me_3SiCl Mediated Conversion of 2,2,2-Trichloroethoxycarbonylphosphonates to Silyl Phosphites

Mitsuo Fujii, Kouji Ozaki, Akiko Kume, Mitsuo Sekine, and Tsujiaki Hata*
Department of Life Chemistry, Tokyo Institute of Technology, Nagatsuta, Midoriku, Yokohama 227, Japan

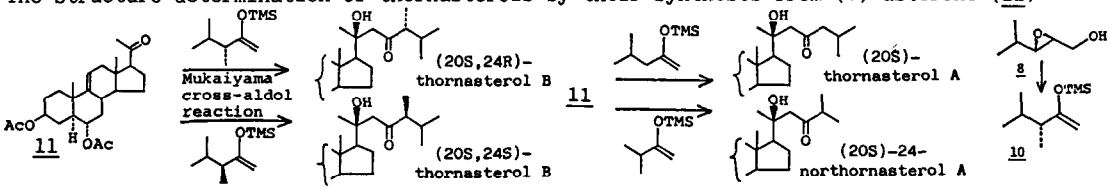


Tet.Lett.,27,,29,3369 (1986)

STRUCTURES OF THORNASTEROL A AND B

Masanori Honda and Tetsuya Komori*
Faculty of pharmaceutical Sciences, Kyushu University, Fukuoka 812, Japan

The structure determination of thornasterols by their syntheses from (+)-asterone (11)



Tet.Lett.,27,29,3373 (1986)

ELECTROCHEMICAL OXIDATION OF ORGANOSILICON COMPOUNDS I. OXIDATIVE CLEAVAGE OF CARBON-SILICON BOND IN ALLYLSILANES AND BENZYLSILANES

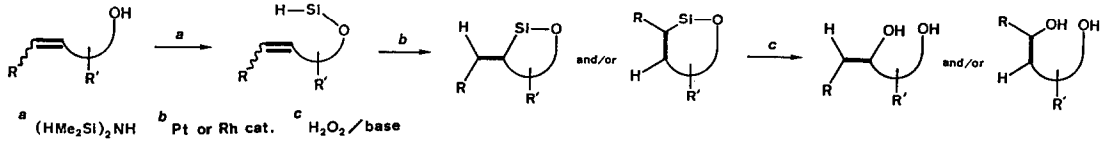
Jun-ichi Yoshida,* Toshiki Murata, and Sachihiko Isoe
Faculty of Science, Osaka City University, Osaka 558, JAPAN

Electrochemical oxidation of allylsilanes and benzylsilanes resulted in cleavage of C-Si bond and introduction of an oxygen nucleophile into the organic group.

Tet.Lett.,27,29,3377 (1986)

SILAFUNCTIONAL COMPOUNDS IN ORGANIC SYNTHESIS. 30.
INTRAMOLECULAR HYDROSILATION OF ALKENYL ALCOHOLS:
A NEW APPROACH TO THE REGIOSELECTIVE SYNTHESIS OF 1,2- AND 1,3-DIOLS

Kohei Tamao,* Tetsu Tanaka, Takashi Nakajima, Ritsuo Sumiya, Hitoshi Arai, and Yoshihiko Ito*
Department of Synthetic Chemistry, Kyoto University, Yoshida, Kyoto 606, Japan

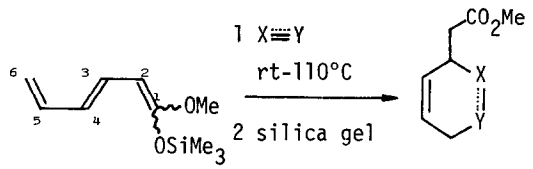


Tet.Lett.,27,29,3381 (1986)

SITE SELECTIVE CYCLOADDITION REACTION OF 1-METHOXY-1-TRIMETHYLSILOXY-1,3,5-HEXATRIENE WITH DIENOPHILES

Masatomi Ohno, Kohki Mori, and Shoji Eguchi*
Institute of Applied Organic Chemistry,
Faculty of Engineering, Nagoya University,
Furo-cho, Chikusa, Nagoya, 464, Japan

The title triene underwent [4+2] cycloaddition reaction with electron-deficient dienophiles (X≡Y) at C-3—C-6 rather than at C-1—C-4 due to steric effect to give the ortho-directed products.

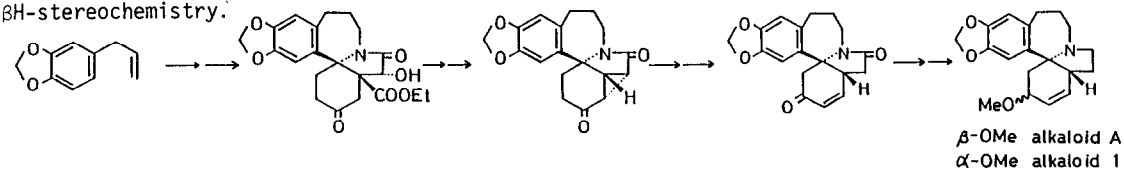


Tet.Lett.,27,29,3385 (1986)

TOTAL SYNTHESIS OF THE HOMOERYTHRINAN ALKALOIDS, 6βH,7-DIHYDROSCHELHAMMERIDINE (ALKALOID A) AND 6βH,7-DIHYDRO-3-EPI-SCHELHAMMERIDINE (ALKALOID 1): REVISION OF THE PROPOSED STEREOCHEMISTRY

Yoshisuke Tsuda* and Masami Murata
Faculty of Pharmaceutical Sciences, Kanazawa University, 13-1, Takaramachi, Kanazawa 920, Japan

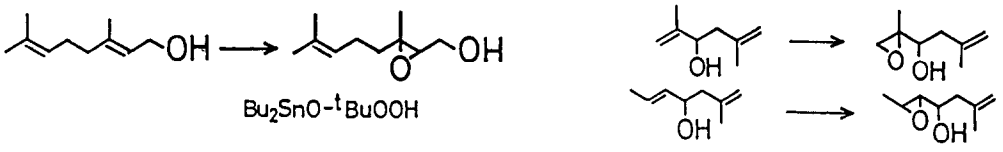
Total synthesis of the homoerythrinan alkaloids, alkaloid A and alkaloid 1 established their 6βH-stereochemistry.



Tet.Lett.,27,29,3387 (1986)

SELECTIVE EPOXIDATION OF ALLYLIC ALCOHOLS WITH DIBUTYLTIN OXYPEROXIDE

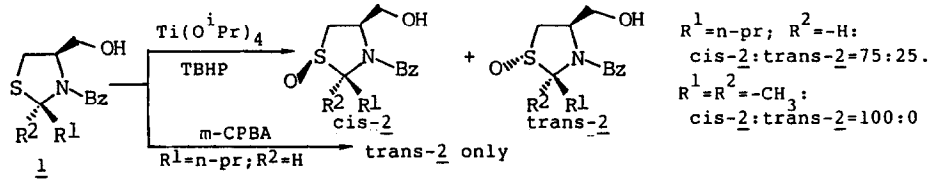
Shigekazu Kanemoto, Tsuyoshi Nonaka, Koichiro Oshima*, Kiitiro Utimoto, and Hitosi Nozaki
Department of Industrial Chemistry, Kyoto University, Kyoto 606 JAPAN



Tet.Lett.,27,29,3391 (1986)

ASYMMETRIC INDUCTION TO SULFUR ATOM: STEREOCONTROLLED S-OXIDATION OF THIAZOLIDINES

Wataru Ando*, and Liren Huang
Department of Chemistry, The University of Tsukuba, Sakura, Ibaraki 305, Japan

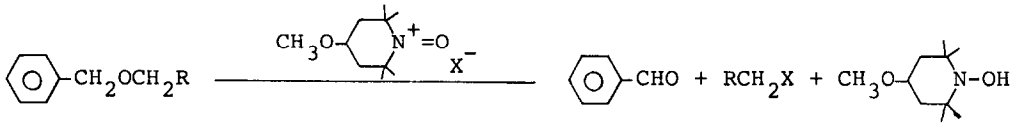


Tet.Lett.,27,29,3395 (1986)

Oxidative Cleavage of Benzyl Ethers by Use of Oxoaminium Salt

Takeo Miyazawa and Takeshi Endo
Research Laboratory of Resources Utilization, Tokyo Institute of Technology, Nagatsuta, Midori-ku, Yokohama 227, Japan

Oxidative cleavage of benzyl ethers with oxoaminium salt

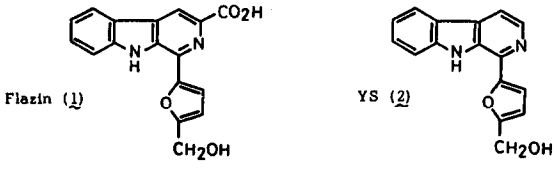


Tet.Lett.,27,29,3399 (1986)

STRUCTURES OF FLAZIN AND YS, HIGHLY FLUORESCENT COMPOUNDS ISOLATED FROM JAPANESE SOY SAUCE.

Shin-ichi Nakatsuka,* Bai-nian Feng, Toshio Goto and Kiyoshi Kihara†
Faculty of Agriculture and †Engineering, Nagoya University, Chikusa, Nagoya 464, Japan

The structures of flazin and YS were determined to be β-carboline derivatives, **1** and **2.**

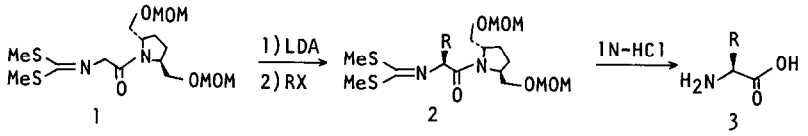


Tet.Lett.,27,29,3403 (1986)

ASYMMETRIC SYNTHESIS OF α-AMINO ACIDS

Satoru IKEGAMI, Takashi HAYAMA, Tsutomu KATSUKI, and Masaru YAMAGUCHI
Departoment of Chemistry , Kyushu University 33, Hakozaki, Higashi-ku, Fukuoka 812,Japan

Asymmetric Alkylation of (2S,5S)-Amide (1)



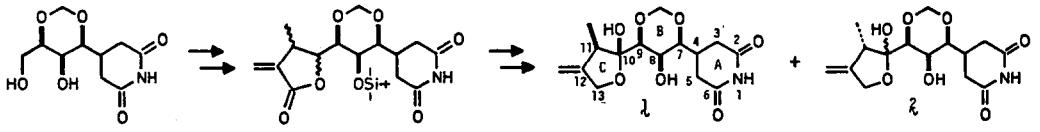
1 2 3

Tet.Lett.,27,29,3407 (1986)

TOTAL SYNTHESES OF NATURAL (+)-SESBANIMIDE A AND (-)-SESBANIMIDE B

Fuyuhiko Matsuda and Shiro Terashima*
Sagami Chemical Research Center, Nishi-Ohnuma, Sagamihara, Kanagawa 229, Japan

The title compounds (1 and 2) were synthesized by the following synthetic scheme.



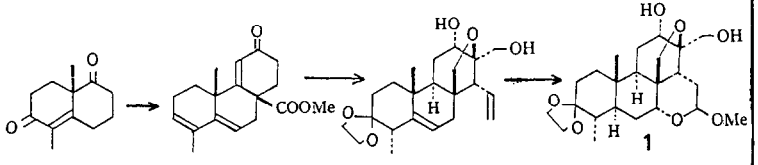
1 2

Tet.Lett.,27,29,3411 (1986)

SYNTHESIS OF BRUCEANTIN SKELETON

Tatsushi Murae*, Makoto Sasaki, Toshiyuki Konosu,
Hisaaki Matsuo, and Takeyoshi Takahashi*
Department of Chemistry, Faculty of Science, The University of Tokyo,
Bunkyo-ku, Tokyo 113, Japan

Synthesis of bruceantin skeleton (1) via tri- and tetracyclic compounds.



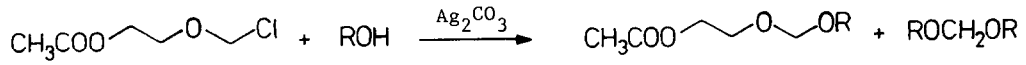
1

Tet.Lett.,27,29,3417 (1986)

NOVEL REACTIVITY OF 2-(CHLOROMETHOXY)ETHYL ACETATE

David J. Aitken, Lilias Rees, Colin J. Suckling, and Hamish C.S. Wood,
Department of Pure and Applied Chemistry, University of Strathclyde,
295, Cathedral Street, Glasgow G1 1XL, Scotland

2-(Chloromethoxy)ethyl acetate reacts with alcohols in the presence of silver carbonate to produce 2-(alkoxymethoxy)ethyl acetates and bis(alkoxy)methanes.



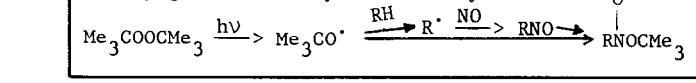
Tet.Lett.,27,29,3421 (1986)

SPIN TRAPPING REACTIONS WITH NITRIC OXIDES III. ALKOXYALKYL NITROXIDES AND NEW NITROGEN CENTERED RADICALS

Antal Rockenbauer*, Miklós Győr and Ferenc Tüdős†

Central Research Institute for Chemistry, H-1525 Budapest, P.O.Box 17, Hungary
†also: Eötvös Loránd University, Department of Chemical Technology, H-1088 Budapest, Múzeum krt.6-8, Hungary

Nitroxides and aminyl radicals formed by reactions of NO, N_2O, NO_2, N_2O_3, N_2O_4 and photochemically generated alkyl and alkoxy radicals



Tet.Lett.,27,29, 3425 (1986)

SPIN TRAPPING REACTIONS WITH NITRIC OXIDES IV. REACTIONS WITH OLEFINS

Antal Rockenbauer*, Miklós Győr and Ferenc Tüdős†

Central Research Institute for Chemistry, H-1525 Budapest, P.O.Box 17, Hungary
†also: Eötvös Loránd University, Department of Chemical Technology, H-1088 Budapest,

Consecutive reactions of NO_2 and NO with olefins yield nitroxide diastereomers