

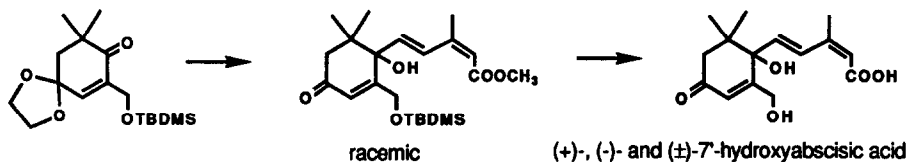
*Tetrahedron*, 1991, 47, 3259

**SYNTHESIS OF (+)-, (-)- and (±)-7'-HYDROXYABSCISIC ACID**

Lloyd A. K. Nelson<sup>a</sup>, Angela C. Shaw<sup>b</sup> and Suzanne R. Abrams<sup>ab</sup>

<sup>a</sup>Mobil Research and Development Corp., Mobil Technical Center, P.O. Box 1028, Princeton, N.J. 08540, U.S.A.

<sup>b</sup>Plant Biotechnology Institute, National Research Council of Canada, Saskatoon, SK Canada S7N 0W9



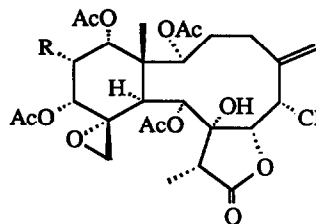
*Tetrahedron*, 1991, 47, 3271

**NEW CHLORINATED DITERPENES FROM THE GORGONIAN  
*JUNCEELLA GEMMACEA***

Hai-yin He and D. John Faulkner

Scripps Institution of Oceanography, UCSD, La Jolla, CA 92093-0212

The gorgonian *Junceella gemmacea* from Pohnpei, Micronesia, yielded six novel diterpenes of the briarane class. The structures and relative configurations of gemmacolides A - F were elucidated by interpretation of spectral data. The structures of gemmacolides A - C (R = OAc, R = isovalerate, R = H) are illustrated.

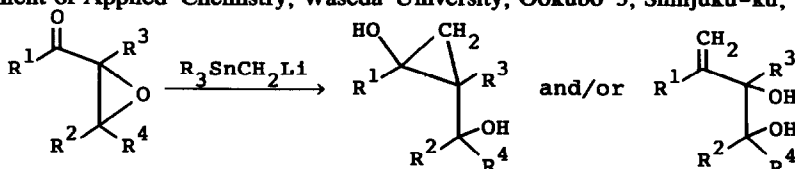


*Tetrahedron*, 1991, 47, 3281

**THE REACTION OF TRIALKYLSTANNYLMETHYL-LITHIUM WITH  $\alpha,\beta$ -EPOXY KETONES AND  $\alpha$ -CHLORO KETONES**

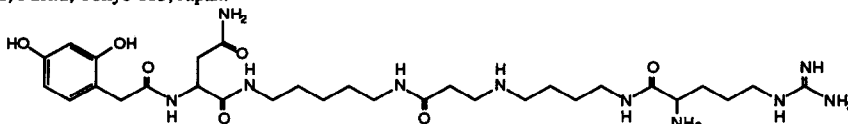
Tadashi Sato<sup>\*</sup>, Toshihiro Kikuchi, Hiroshi Tsujita, Atsushi Kaetsu, Norio Sootome, Ken-ichiro Nishida, Kazutaka Tachibana and Eigoro Murayama

Department of Applied Chemistry, Waseda University, Ookubo 3, Shinjuku-ku, Tokyo 169.



TOTAL SYNTHESIS OF NSTX-3, SPIDER TOXIN OF *NEPHILA MACULATA*

Tadashi Teshima, Takahiro Matsumoto, Tateaki Wakamiya, Tetsuo Shiba<sup>†</sup>, Yoshio Aramaki<sup>††</sup>, Terumi Nakajima<sup>††</sup>, and Nobufumi Kawai<sup>†††</sup>. Department of Chemistry, Faculty of Science, Osaka University, Toyonaka, Osaka 560, Japan. <sup>†</sup> Peptide Institute, Protein Research Foundation, Minoh, Osaka 562, Japan. <sup>††</sup> Department of Analytical Chemistry, Faculty of Pharmaceutical Science, The University of Tokyo, Bunkyo-ku, Tokyo 113, Japan. <sup>†††</sup> Department of Neurobiology, Tokyo Metropolitan Institute for Neurosciences, Fuchu, Tokyo 183, Japan.

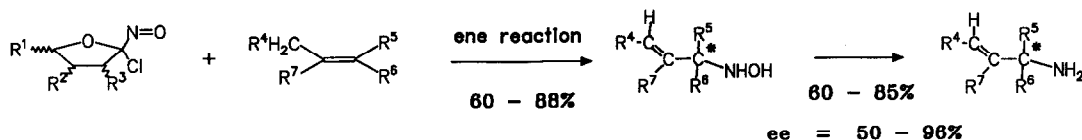


Structure of NSTX-3

## ASYMMETRIC SYNTHESIS OF PRIMARY AMINES FROM ALKENES AND CHIRAL CHLORONITROSO SUGAR DERIVATIVES

H. Braun, H. Felber, G. Kreße, A. Ritter, F.P. Schmidtchen\*, A. Schneider

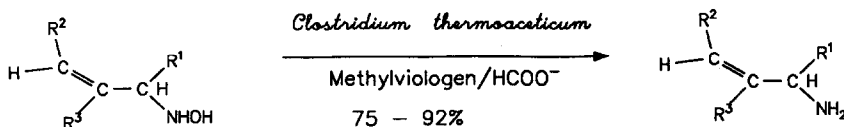
Organisch-Chemisches Institut, Tech. Universität München, Lichtenbergstr. 4, D-8046 Garching, FRG



## MICROBIAL REDUCTION OF N-ALLYLHYDROXYLAMINES TO N-ALLYLAMINES USING CLOSTRIDIA

H. Braun, F.P. Schmidtchen\*, A. Schneider, H. Simon\*

Organisch-Chemisches Institut, Tech. Universität München, Lichtenbergstr. 4, D-8046 Garching, FRG

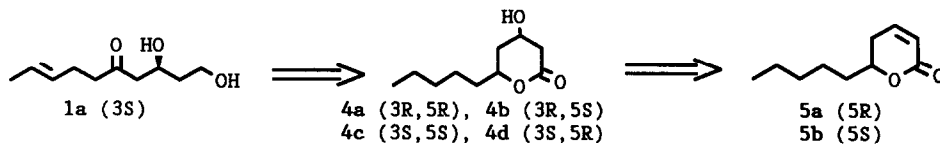


SECONDARY METABOLITES BY CHEMICAL SCREENING-13: ENANTIOSELECTIVE SYNTHESIS OF  $\delta$ -LACTONES FROM STREPTENOL A, A CHIRAL BUILDING BLOCK FROM STREPTOMYCES

Y. Romeyke, M. Keller, H. Kluge, S. Grabley and P. Hammann

Hochst AG, Postfach 800320, D-6230 Frankfurt a. M., FRG

The enantioselective synthesis of all four stereoisomers of the secondary metabolite 3-hydroxy-5-decanolide **4** and both enantiomers of massoialactone **5** is described, starting with one chiral building block, streptenol A **1a**, a metabolite from *Streptomyces* sp.

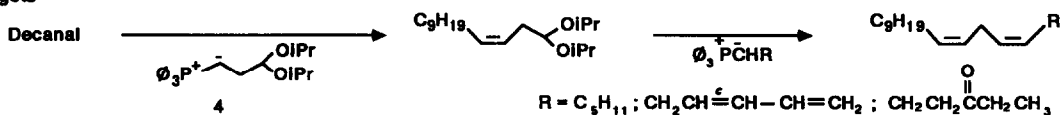


C3-HOMOLOGATION. SYNTHESIS OF C19-SKIPPED POLYENIC PHEROMONES.

Jacques Viala\*, Pascal Munier and Maurice Santelli

Laboratoire de Synthèse Organique, URA au CNRS n° 1411. Faculté des Sciences de Saint Jérôme. 13397, Marseille-Cedex 13, Fr.

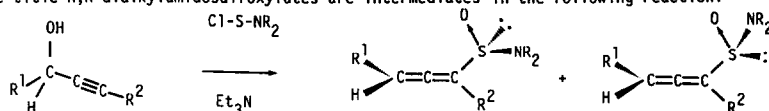
Total synthesis of three sex pheromone components including an all-*cis* diene or triene unit. *Cis*-Wittig reactions, by using C3 homologating agent **4** and convenient phosphonium salts, allowed us to built up all-*cis* skipped polyenic skeleton of the targets



STEREOCHEMICAL COURSE OF THE [2,3]-SIGMATROPIC REARRANGEMENT OF SUBSTITUTED PROPARGYL N,N-DIALKYLAMIDOSULFOXYLATES. X-RAY MOLECULAR STRUCTURE OF  $[\text{S}^*, (\text{S})\text{R}^*]$ -4-[(1,4,4-TRIMETHYL-1,2-PENTADIENYL)SULFINYL]-MORPHOLINE.

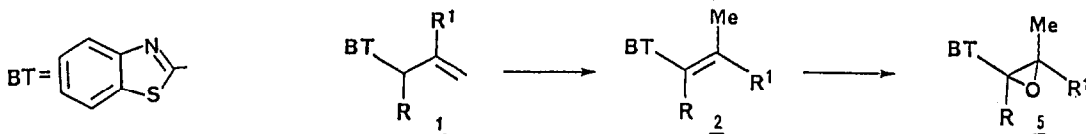
Jean-Bernard Baudin<sup>a</sup>, Itka Bkouche-Waksman<sup>b</sup>, Sylvestre A. Julia<sup>a</sup>, Claudine Pascard<sup>b</sup> and Yuan Wang<sup>a</sup>. a) Laboratoire de Chimie, UPR 402 CNRS, Ecole Normale Supérieure, 24 rue Lhomond, 75231 Paris Cedex 05, France. b) Laboratoire de Cristallographie, Institut de Chimie des Substances Naturelles du CNRS, 91190 Gif sur Yvette, France.

The title N,N-dialkylamidosulfoxylates are intermediates in the following reaction:

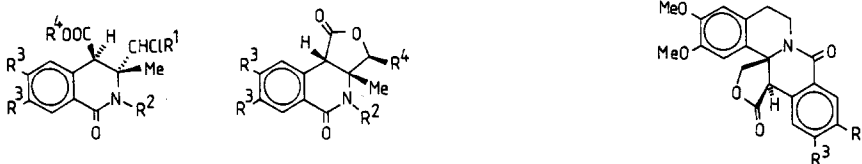


## STERESELECTIVE SYNTHESIS OF VINYLBENZOTHAZOLES AND THEIR EPOXIDES.

S. Florio,<sup>\*</sup> G. Ingrosso, L. Ronzini and E. Epifani  
 Laboratorio di Chimica Organica, Dip. Biologia, Univ., Lecce, ITALY  
 2-Allylbenzothiazoles 1 are isomerized to vinyl BT's 2 which are stereospecifically converted into epoxides 3.



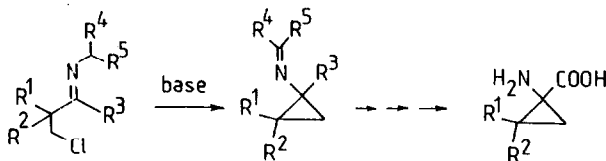
Reactions of  $\alpha$ -chloroimines with homophthalic anhydrides. Synthesis and molecular structure of 3,3a-dihydrofuro[3,4-c]isoquinoline-1,5(4H,9bH)-diones, furo[3',4':9,9a]-8,9,16,16a-tetrahydro-1H,3H,11H-dibenzo[a,g]quinolizine 1,11-diones and related compounds  
 A. Georgieva, E. Stanoeva, S. Spassov, J. Macicek, O. Angelova, M. Haimova, N. De Kimpe

SYNTHESIS OF 2,2-DIALKYLCYCLOPROPYLAMINES FROM  $\beta$ -CHLOROIMINES AND APPLICATION TOWARDS THE SYNTHESIS OF 1-AMINO-2,2-DIALKYLCYCLOPROPANECARBOXYLIC ACIDS.

Norbert DE KIMPE, Paul SULMON and Marc BOEYKENS

Laboratory of Organic Chemistry, Faculty of Agricultural Sciences, State University of Gent, Gent, Belgium

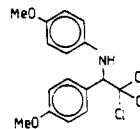
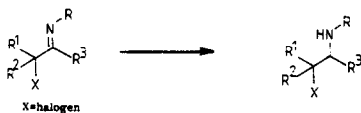
Base-induced 1,5-dehydrochlorination of  $\beta$ -chloroimines affords N-cyclopropylimines, which were hydrolyzed into cyclopropylamines. This transformation was used for the synthesis of ACC-analogues.



A CONVENIENT METHOD FOR THE SYNTHESIS OF  $\beta$ -CHLOROAMINES BY ELECTROPHILIC REDUCTION OF  $\alpha$ -CHLOROIMINES.

N. De Kimpe and C. Stevens

Laboratory of Organic Chemistry, Faculty of Agricultural Sciences, State University of Gent, Coupure Links 653, B-9000 Gent (Belgium)



Solution Structure of Branched  $U3'p5'A3'p5'G$

and its comparison with  $A3'p5'U$  by 500 MHz NMR spectroscopy

C. Glemarec, M. Jaseja, A. Sandström, L. Koole, P. Aback and J. Chattopadhyaya\*

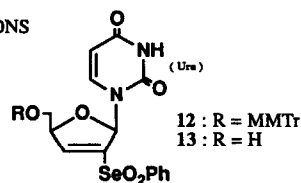
Department of Bioorganic Chemistry, Box 581, Biomedical Center, University of Uppsala, S-751 23 Uppsala, Sweden

*Temperature-dependent variation of populations of  $\gamma^+$ ,  $\beta^+$  and  $\epsilon$  rotamers for branched tetramer, along with NOE studies, have clearly shown that its solution structure is dictated by stacking along the  $U3' \rightarrow 5'A3' \rightarrow 5'C$  axis, while the  $A2' \rightarrow 5'G$  part was free of any significant constraint.*

SYNTHESIS OF NEW 2',3'-MODIFIED URIDINE DERIVATIVES FROM 2',3'-ENE-2'-PHENYLSELENONYL URIDINE BY MICHAEL ADDITION REACTIONS

W. Tong, Z. Xi, C. Gioeli, & J. Chattopadhyaya\*  
Department of Bioorganic Chemistry, Box 581, Biomedical Center, University of Uppsala, S-751 23 Uppsala, Sweden

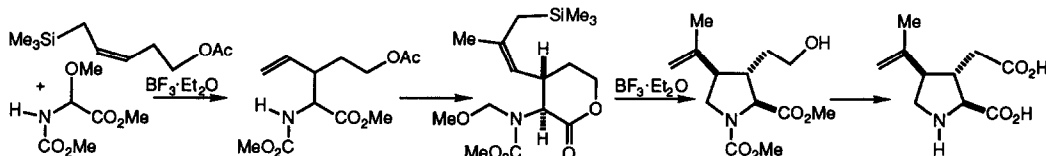
*Several new 2',3'-substituted uridine derivatives have been prepared through Michael addition reactions of sulfur, nitrogen, oxygen and carbon nucleophiles to 2',3'-ene-2'-phenylselenonyl uridine 12 or 13.*



### TOTAL SYNTHESIS OF (±)- $\alpha$ -ALLOKAINIC ACID VIA TWO ALLYLSILANE *N*-ACYLIMINIUM ION REACTIONS

Hendrik H. Mooiweer, Henk Hiemstra,\* and W. Nico Speckamp\*

Department of Organic Chemistry, University of Amsterdam, Nieuwe Achtergracht 129, 1018 WS Amsterdam, The Netherlands

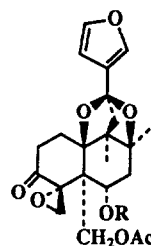


### TWO NEO-CLERODANE DITERPENOIDS CONTAINING AN UNUSUAL 2,6-DIOXABICYCLO[2.2.1]HEPTANE STRUCTURAL MOIETY

M.C. de la Torre, M. Bruno, F. Piozzi, G. Savona, A.A. Omar, A. Perales and B. Rodríguez

Institutos de Química Orgánica and "Rocasolano", CSIC, Madrid, Spain; Dipartimento di Chimica Organica dell'Università, Palermo, Italy; College of Pharmacy, Alexandria University, Egypt

Compounds 1 and 2 have been isolated from *Teucrium oliverianum* (Labiatae) and their structures established by spectroscopic means, including an X-ray analysis of 1.



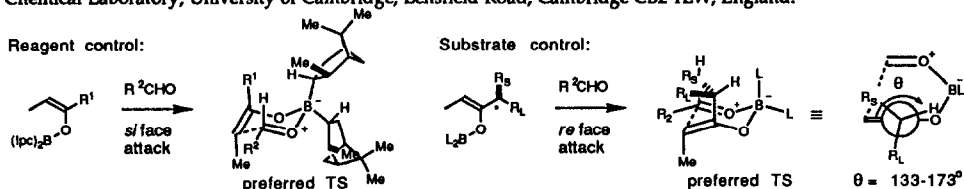
1 R = Ac  
2 R = H

### ORIGINS OF STEREOSELECTIVITY IN CHIRAL BORON ENOLATE ALDOL REACTIONS: A COMPUTATIONAL STUDY USING TRANSITION STATE MODELLING.

Anna Bernardi,<sup>a</sup> Anna M. Capelli,<sup>a</sup> Angiolina Comotti,<sup>a</sup> Cesare Gennari,<sup>a</sup> Mark Gardner,<sup>b</sup> Jonathan M. Goodman,<sup>b</sup> and Ian Paterson<sup>\*b</sup>

<sup>a</sup> Dipartimento di Chimica Organica e Industriale, Università di Milano, via Venezian 21, 20133 Milano, Italy

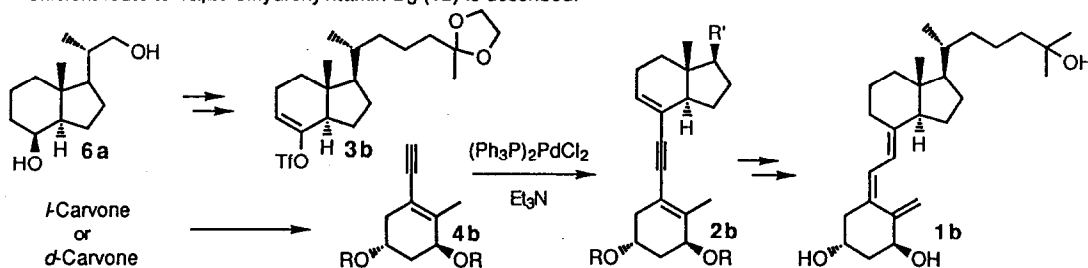
<sup>b</sup> University Chemical Laboratory, University of Cambridge, Lensfield Road, Cambridge CB2 1EW, England.



PALLADIUM-CATALYSED COUPLING OF VINYL TRIFLATES WITH ENYNES  
AND ITS APPLICATION TO THE SYNTHESIS OF 1 $\alpha$ ,25-DIHYDROXYVITAMIN D<sub>3</sub>

José L. Mascareñas, Luis A. Sarandeses, Luis Castedo, and Antonio Mouriño\*; Departamento de Química Orgánica, Facultad de Química y Sección de Alcaloides del CSIC; 15706 Santiago de Compostela; Spain

An efficient route to 1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> (1b) is described.



CYCLOAROMATIZATION OF  $\alpha$ -OXOKETENE DITHIOACETALS  
AND  $\beta$ -OXODITHIOACETALS WITH BENZYL-, 1-(NAPHTHYL-  
METHYL) AND 2-(NAPHTHYLMETHYL)MAGNESIUM HALIDES:  
SYNTHESIS OF CONDENSED POLYNUCLEAR AROMATIC HYDROCARBONS

Ch. Srinivasa Rao, Maliakel P. Balu, Hiriyakkanavar Ila\* and  
Hiriyakkanavar Junjappa. Department of Chemistry, North-Eastern Hill  
University, Shillong - 793003, Meghalaya, India.

