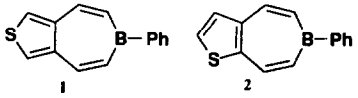
GRAPHICAL ABSTRACTS

Thienoborepins: Conjugation Characteristics in Boron Heterocycles

Tetrahedron, **1994**, *50*, 6495

Yoshikazu Sugihara,*[a] Ryuta Miyatake,[a] Toshiyasu Yagi,[a] Ichiro Murata,[a] Mamoru Jinguji,[b] Tomoo Nakazawa,[b] and Akira Imamura[c]

Department of Chemistry, Faculty of Science, Osaka University, Toyonaka Osaka 560, Japan,[a] Department of Chemistry, Medical University of Yamanashi, Tamaho, Nakakoma, Yamanashi 408-38, Japan[b], Department of Chemistry, Faculty of Science, Hiroshima University, Kagamiyama, Higashi-Hiroshima 724, Japan.[c]



1 2

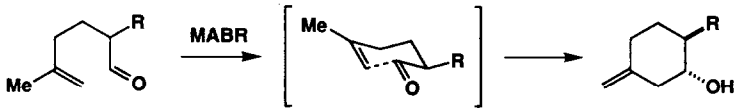
Protonolysis, complex-formation with amines, ab initio molecular orbital calculations, redox potentials, and spectroscopic features of 1-phenylthieno-[3,4-*d*]borepin (**1**) and 1-phenylthieno[2,3-*d*]borepin (**2**) were examined.

Tetrahedron, **1994**, *50*, 6505

Unprecedented Stereochemical Control in the Intramolecular Ene-Reactions of δ,ε-Unsaturated Aldehydes Using Exceptionally Bulky Organoaluminum Reagents: Elucidation of the Transition State

Takashi Ooi, Keiji Maruoka, and Hisashi Yamamoto*

School of Engineering, Nagoya University Chikusa, Nagoya 464-01, Japan

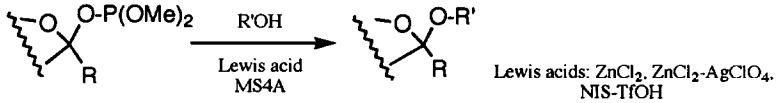


Tetrahedron, **1994**, *50*, 6523

GLYCOSYLATION USING GLYCOSYL PHOSPHITE AS A GLYCOSYL DONOR

Yutaka Watanabe,* Chikara Nakamoto, Takashi Yamamoto, and Shoichiro Ozaki

Department of Applied Chemistry, Faculty of Engineering, Ehime University, Matsuyama 790, Japan



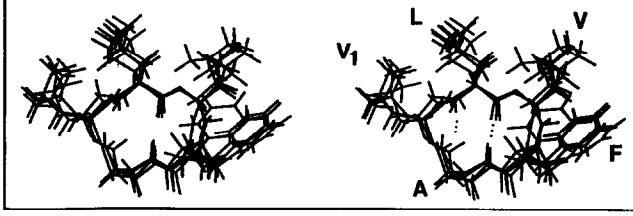
Tetrahedron, **1994**, *50*, 6537

Conformational Analysis of a New Cyclic Depsipeptide Calcium Blocker, Leualacin, by NMR Spectroscopy

Keiko Yoda, Hideyuki Haruyama*, Harumitu Kuwano, Kiyosi Hamano [a], Kazuhiko Tanzawa [b]

Analytical and Metabolic Research Laboratories, [a] Biomedical Research Laboratories,

[b] Biological Research Laboratories, Sankyo Co., Ltd., 1-2-58 Hiromachi, Shinagawa-ku, Tokyo 140, Japan



Stereoplots of leualacin in $CDCl_3$.
(RMSD=0.59 Å)
-------: Hydrogen bonds,
L: L-leucine,
F: L-N-methylphenylalanine,
A: β-alanine,
V and V1: S- and R-leucic acids.

Tetrahedron, **1994**, *50*, 6549

THE INTRODUCTION OF NITRILE GROUPS INTO HETEROCYCLES AND CONVERSION OF CARBOXYLIC GROUPS INTO THEIR CORRESPONDING NITRILES WITH CHLOROSULFONYLISOCYANATE AND TRIETHYLAMINE

H. Vorbrüggen and K. Krolikiewicz
Research Laboratories, Schering AG, D-13342 Berlin, Germany

Nucleophilic unsaturated systems as well as carboxylic acids react acc. to R. Graf with chlorosulfonylisocyanate to N-chlorosulfonylamides, which are readily converted by triethylamine in high overall yields into the corresponding nitriles.

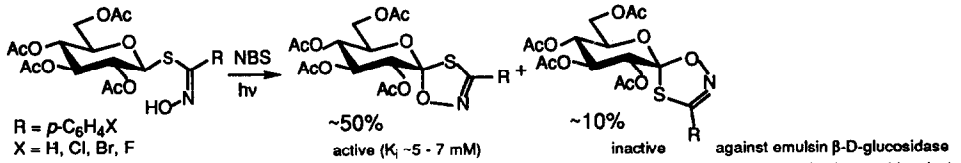
Tetrahedron, **1994**, *50*, 6559

Synthesis, Structure and Enzymatic Evaluation of New Spiro Oxathiazole Sugar Derivatives

J.-P. Praly[a], R. Faure[b], B. Joseph[c], L. Kiss[d] and P. Rollin[c]

a, b - Université Lyon I, 69622-Villeurbanne, France; c - Université d'Orléans, 45067- Orléans, France

d - Lajos Kossuth University of Debrecen, POB 55, H-4010 - Debrecen, Hungary



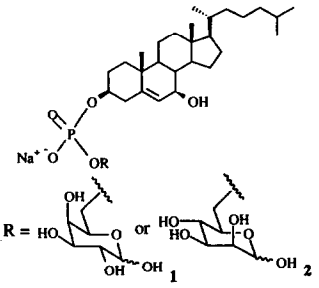
Tetrahedron, **1994**, *50*, 6569

Synthesis of Phosphoric Acid Diesters of 7β-hydroxycholesterol and of Carbohydrates.

X. Pannecoucke, G. Schmitt and B. Luu*.

Laboratoire de Chimie Organique des Substances Naturelles, URA CNRS, Centre de Neurochimie, 5 rue Blaise Pascal, 67084 Strasbourg, France.

The sodium salt of 3β(7β-hydroxycholesterol) 6(carbohydrate) monophosphate (**1** or **2**) has been synthesized using both the phosphoramidite and the hydrogen phosphonate methods.

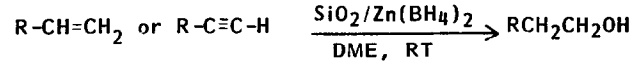


Tetrahedron, **1994**, *50*, 6579

SILICA GEL SUPPORTED ZINC BOROHYDRIDE. A NOVEL REAGENT FOR HYDRATION OF UNACTIVATED ALKENES AND ALKYNES

Brindaban C. Ranu, Arunkanti Sarkar, Manika Saha and Rupak Chakraborty
Department of Organic Chemistry, Indian Association for the Cultivation of Science, Jadavpur, Calcutta - 700 032, India.

Regioselective hydration of unactivated alkenes and alkynes has been achieved by the action of zinc borohydride on the corresponding alkene or alkyne on silica gel support.

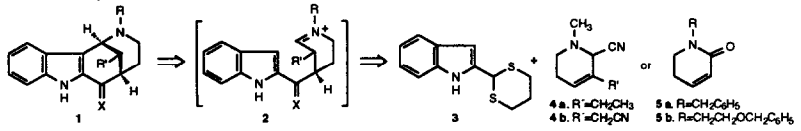


Tetrahedron, **1994**, *50*, 6585

SYNTHETIC APPLICATIONS OF 2-(1,3-DITHIAN-2-YL)INDOLES. IV. NEW SYNTHESIS OF THE TETRACYCLIC ABED RING SYSTEM OF *STRYCHNOS* ALKALOIDS

Anna Diez,[a] Josep Castells,[a] Pilar Forns,[a] Mario Rubiralta,[a]* David S. Grierson,[b] Henri-Philippe Husson,[b] Xavier Solans,[c] and Mercè Font-Bardía[c]

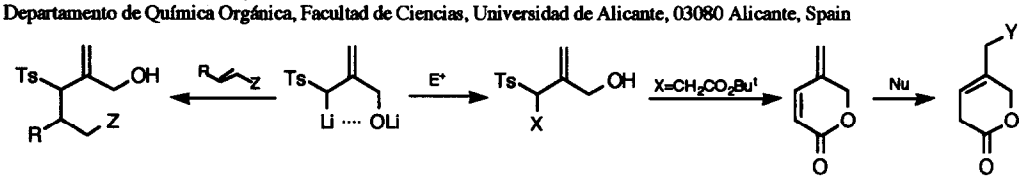
a. Laboratory of Organic Chemistry, Faculty of Pharmacy, University of Barcelona, 08028 Barcelona, Spain. b. Institut de Chimie des Substances Naturelles du CNRS, F-91198 Gif-sur-Yvette, France. c. Departament de Cristal.lografia, Mineralogia i Dipòsits Minerals, Universitat de Barcelona, 08028 Barcelona, Spain



Tetrahedron, **1994**, *50*, 6603

TOSYLATED LITHIUM 2-(LITHIOMETHYL)-2-PROPEN-1-OLATE: A γ-ALKOXIDE ALLYL SULFONE ANION IN ORGANIC SYNTHESIS

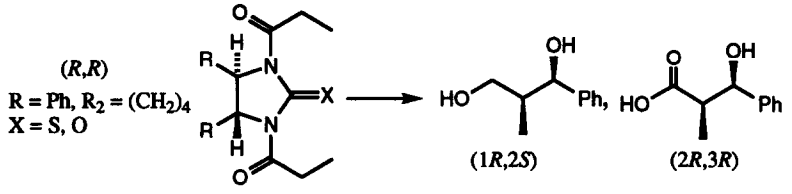
Diego A. Alonso, Carmen Nájera and José M. Sansano
Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, 03080 Alicante, Spain



Tetrahedron, **1994**, *50*, 6621

BIFUNCTIONAL CHIRAL AUXILIARIES 7: ALDOL REACTIONS OF ENOLATES DERIVED FROM 1,3-DIACYLIMIDAZOLIDINE-2-THIONES AND 1,3-DIACYLIMIDAZOLIDINE-2-ONES

S.G. Davies*, A.J. Edwards, G.B. Evans and A.A. Mortlock,
The Dyson Perrins Laboratory, University of Oxford, South Parks Road, Oxford, OX1 3QY, UK.

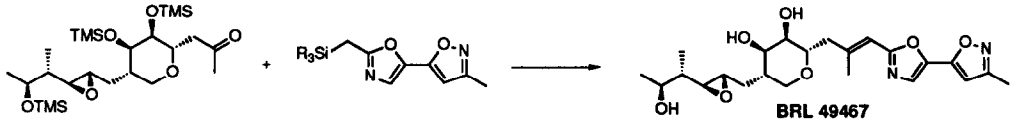


Tetrahedron, **1994**, *50*, 6643

STEREOSELECTIVITY IN THE PETERSON REACTION - APPLICATION TO THE SYNTHESIS OF BRL 49467.

David Bell, Eleanor A. Crowe, Nicholas J. Dixon, Graham R. Geen*, Inderjit S. Mann and Mark R. Shipton
SmithKline Beecham Pharmaceuticals, Coldharbour Road, The Pinnacles, Harlow, Essex, CM19 5AD, U.K.

The *E*:*Z* selectivity in the introduction of the tri-substituted double bond in BRL 49467 could be controlled by the choice of conditions used in a Peterson reaction.

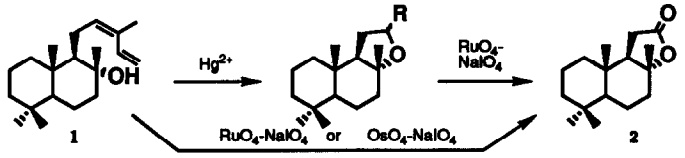


Tetrahedron, **1994**, *50*, 6653

SYNTHESIS OF *nor*-AMBREINOLIDE FROM (+)-*cis*-ABIENOL

Alejandro F. Barrero,* Juan F. Sánchez, Enrique J. Alvarez-Manzaneda, Joaquín Altarejos, Manuel Muñoz and Ali Haïdour
Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Granada, 18071 Granada (Spain)

nor-Ambreinolide (2) has been prepared from *cis*-abienol (1) through induced cyclization with $Hg(OAc)_2$ and oxidative treatment of the resulting crude, or by direct reaction with RuO_4-$NaIO_4$ or OsO_4-$NaIO_4$.

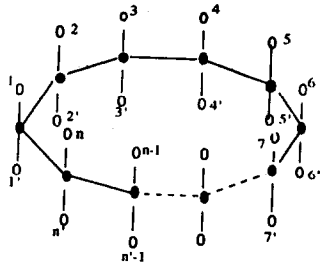


Tetrahedron, **1994**, *50*, 6663

ON THE ENUMERATION OF CHIRAL AND ACHIRAL SKELETONS OF POSITION ISOMERS OF HOMOSUBSTITUTED MONOCYCLIC CYCLOALKANES WITH A RING SIZE n (odd or even).

R. M. NEMBA*, F. NGOUHOUO, Laboratory of Physical chemistry, Faculty of Science,University of Yaounde I, PO. Box 812 Yaounde, Cameroun.

Stereograph of a monocyclic cycloalkane whose cycle index is taken as a basis for applying Polya's theorem to the enumeration of chiral and achiral skeletons of position isomers of $C_nH_{2n-k}X_k$ systems.

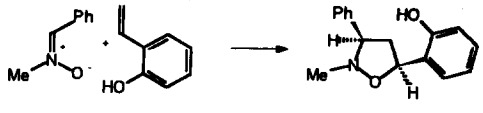


Tetrahedron, **1994**, *50*, 6671

STEREOSELECTIVE CONTROL IN 1,3-DIPOLAR CYCLOADDITION OF NITRONES TO SUBSTITUDED STYRENES

Ugo Chiacchio,[b] Franco Casuscelli,[a] Antonino Corsaro,[b] Antonio Rescifina,[b] Giovanni Romeo,[a] * and Nicola Uccella[c]
[a]Dipartimento Farmaco-chimico, Università, 98168 Messina, Italy
[b]Dipartimento di Scienze Chimiche, Università, 95125 Catania,Italy
[c]Dipartimento di Chimica, Università, 87036 Arcavacata di Rende, Italy

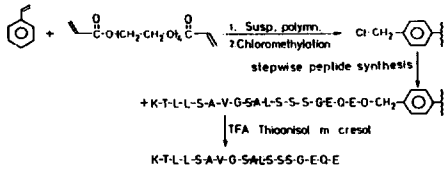
The stereochemistry of 1,3-dipolar cycloaddition of *C*-methyl-*N*-phenylnitrone with substituted styrenes has been investigated. The presence of an hydroxyl function at the ortho position in the dipolarophile completely controls the stereochemical course of the reaction with the exclusive formation of *cis* cycloadduct.



Tetrahedron, **1994**, *50*, 6681

GEL-PHASE PEPTIDE SYNTHESIS ON A NEW HIGH-CAPACITY TETRAETHYLENEGLYCOL DIACRYLATE-CROSSLINKED POLY-STYRENE SUPPORT:SYNTHESIS OF PARDAXIN 16-33

M. Renil, R. Nagaraj, V.N. Rajasekharan Pillai*
School of Chemical Science,
Mahatma Gandhi University,
Kottayam 686 560, India.

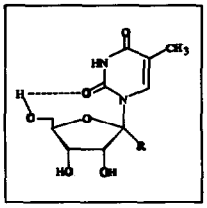


INTRAMOLECULAR HYDROGEN BONDING IN PRIMARY HYDROXYL OF THYMINE 1-(1-DEOXY-ß-D-PSICOFURANOSYL) NUCLEOSIDE

Tetrahedron, **1994**, *50*, 6689

X. Martin[a], M. Moreno[a], J. M. Lluch[a*] and A. Grouiller[b]. a)Departament de Química, Universitat Autònoma de Barcelona. 08193 Bellaterra (Barcelona), Spain. b) Laboratoire de Chimie Organique II, Université Lyon I, ESCIL, 43, Boulevard du 11 Novembre 1918, 69622 Villeurbane, France.

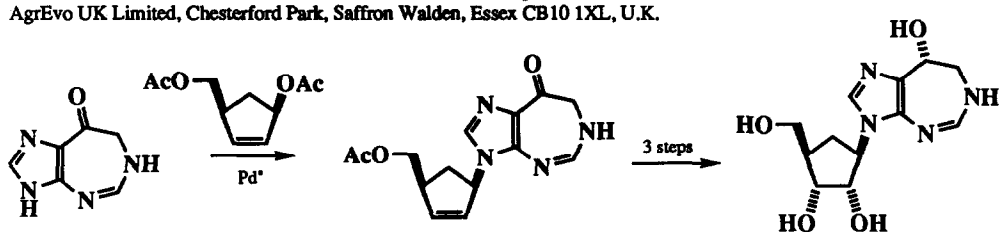
By using the semiempirical AM1 method, it is concluded that a clear intramolecular hydrogen bond exists in 1-(1-Deoxy-ß-D-Psicofuranosyl) Thymine.



TOTAL SYNTHESIS OF CARBOCYCLIC ANALOGUES OF COFORMYCIN

Tetrahedron, **1994**, *50*, 6695

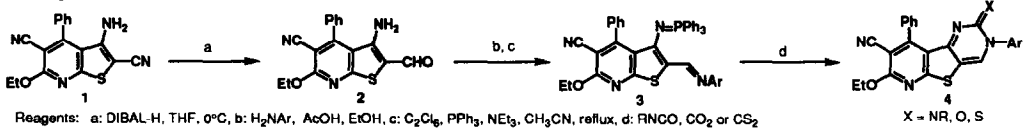
E. A. Saville-Stones, R. M. Turner, S. D. Lindell,* N. S. Jennings, J. C. Head and D. S. Carver, AgrEvo UK Limited, Chesterford Park, Saffron Walden, Essex CB10 1XL, U.K.



AN EFFICIENT IMINOPHOSPHORANE-MEDIATED SYNTHESIS FOR PYRIDO[3',2':4,5]THIENO[3,2-d]PYRIMIDINE DERIVATIVES

Tetrahedron, **1994**, *50*, 6705

Carlos Peinador, María J. Moreira and José M[a]. Quintela*
Departamento de Química Fundamental e Industrial, Facultad de Ciencias, Universidad de La Coruña, Campus de A Zapateira, E-15071, La Coruña, Spain.

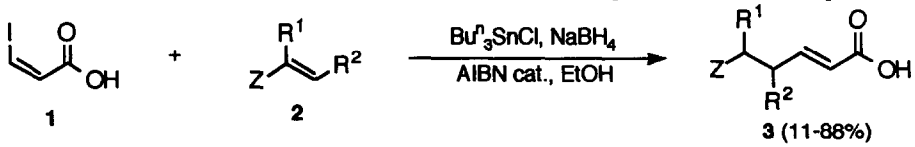


Pyridothienopyrimidines bearing various substituents at position 2 of the pyrimidine ring are reported. The aza Wittig-type reaction of iminophosphoranes 3 with isocyanates, carbon dioxide and carbon disulfide leads to 2,3-dihydropyrido[3',2':4,5]thieno[3,2-d]pyrimidines 4.

ß-ACYLVINYL INTERMOLECULAR RADICAL ADDITIONS TO DOUBLE BONDS: STEREOSELECTIVE SYNTHESIS OF FUNCTIONALISED (*E*)-α,ß-UNSATURATED CARBOXYLIC ACIDS

Tetrahedron, **1994**, *50*, 6715

F. Foubelo, F. Lloret and M. Yus*
Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, Apdo. 99, 03080 Alicante, Spain



(R^1= or ≠R^2=H, Me, Cl; Z=CO_2Me, CN, $CONMe_2$, Cl, $CO_2CH_2CH{=}CH_2$)