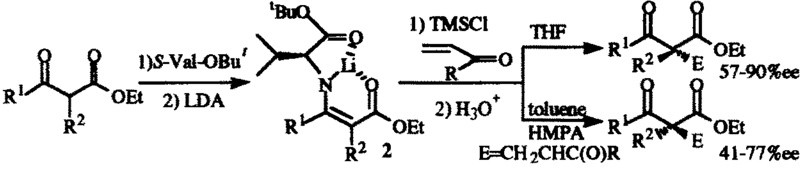
GRAPHICAL ABSTRACTS

Tetrahedron, **1994**, *50*, 13081

STEREOSELECTIVE REACTIONS. XXIV. CHLOROTRIMETHYLSILANE PROMOTED ASYMMETRIC MICHAEL REACTION OF CHIRAL LITHIOENAMINES DERIVED FROM α-ALKYL β-KETO ESTERS

Kaori Ando, Wonjun Seo, Kiyoshi Tomioka, and Kenji Koga*
Faculty of Pharmaceutical Sciences, University of Tokyo, Hongo, Bunkyo-ku, Tokyo 113, Japan



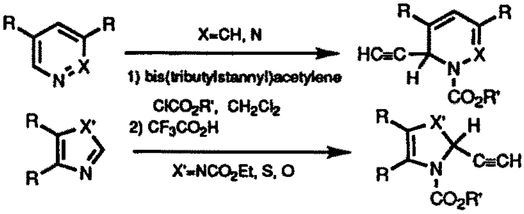
Complementary asymmetric Michael reaction of the chiral lithioenamines 2 was realized by changing the solvent system under the promotion of chlorotrimethylsilane.

Tetrahedron, **1994**, *50*, 13089

A New Entry to the Ethynylation of Azaaromatics Using Bis(tributylstannyl)acetylene in the Presence of Alkyl Chloroformate

Takashi Itoh, Hiroshi Hasegawa, Kazuhiro Nagata, Mamiko Okada, and Akio Ohsawa*
School of Pharmaceutical Sciences, Showa University,
1-5-8 Hatanodai, Shinagawa-ku, Tokyo 142, Japan

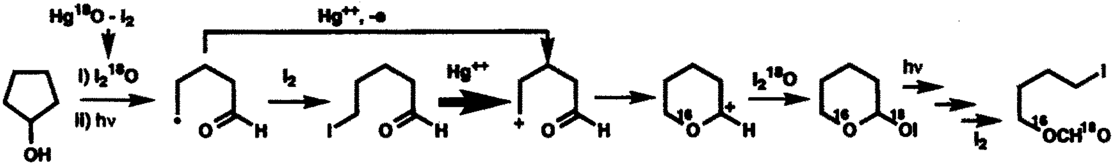
Various azaaromatics were reacted with bis(tributylstannyl)acetylene in the presence of alkyl chloroformate to give α-ethynyl adducts in good yields.



Tetrahedron, **1994**, *50*, 13101

Photoinduced Molecular Transformations. Part 154. On the Mechanism of the Formation of the 5-Iodopentyl Formate in the Photolysis of Cyclopentanol Hypoiodite in Solution in the Presence of Mercury(II) Oxide – Iodine.

Hiroshi Suginome* and Hisanori Senboku
Organic Synthesis Division, Faculty of Engineering, Hokkaido University, Sapporo 060, Japan

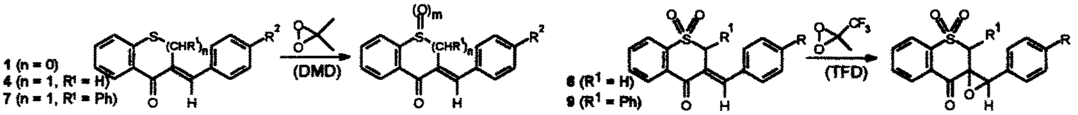


Tetrahedron, **1994**, *50*, 13113

Dioxirane Oxidation of (*Z*)-1-Thioaurones, (*E*)-3-Arylidene-1-thiochroman-4-ones and (*E*)-3-Arylidene-1-thioflavan-4-ones

W. Adam,[*,a] D. Golsch,[a] L. Hadjiarapoglou,[a] A. Lévai,[*,b] C. Nemes,[b] T. Patonay[b]
[a]Inst. of Org. Chem., Univ. of Würzburg, Am Hubland, D-97074 Würzburg, Germany.
[b]Departm. of Org. Chem., Lajos Kossuth University, H-4010 Debrecen, Hungary.

The oxidation of the title compounds 1, 4 and 7 with DMD afforded the corresponding sulfoxides and/or sulfones in good yields. The epoxidation of the sulfones 6 and 9 to the respective spiroepoxides required TFD as oxidant.

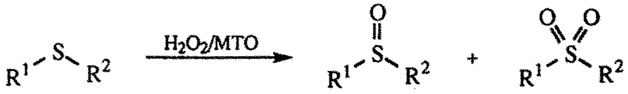


Tetrahedron, **1994**, *50*, 13121

CHEMOSELECTIVE METHYLTRIOXORHENIUM(VII)-CATALYZED SULFOXIDATIONS WITH HYDROGEN PEROXIDE.

W. Adam *, C. M. Mitchell, C. R. Saha-Möller, Universität Würzburg (FRG)

Methyltrioxorhenium(VII)-catalyzed oxidations of sulfides with hydrogen peroxide afforded sulfoxides in high chemoselectivity.

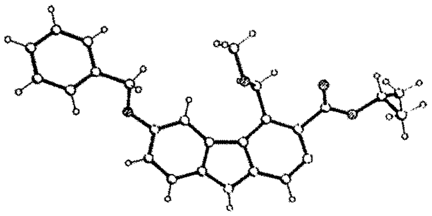


Tetrahedron, **1994**, *50*, 13125

DETECTION AND CHARACTERIZATION OF POLYMORPHIC MODIFICATIONS OF THE ANXIOLYTIC DRUG ABECARNIL

Martin Bock, Gisbert Depke, Ursula Egner, Anke Müller-Fahrnow*
and Gabriele Winter
Research Laboratories of Schering AG, 13342 Berlin, Germany.

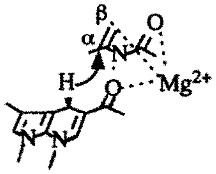
Several physicochemical methods including X-ray crystallography are applied to differentiate between the three solid state forms of the anxiolytic β-carboline compound ABECARNIL.



Tetrahedron, **1994**, *50*, 13135

REDUCTION OF NEW SUBSTRATES WITH A NADH MODEL. REDUCTION OF N-ACYLENAMINES : MECHANISM AND SCOPE.

C. Leroy, G. Dupas, J. Bourguignon* and G. Quéguiner. Laboratoire de Chimie Organique Fine et Hétérocyclique de l'IRCOF, URA 1429 CNRS, INSA, BP 08, 76131 Mont Saint Aignan Cédex, France.



Successful reduction of the title substrates with a NADH model is strongly dependent of the role played by electronic and geometrical factors in the formation of a bidendate structure involving Cβ and the acyl group.

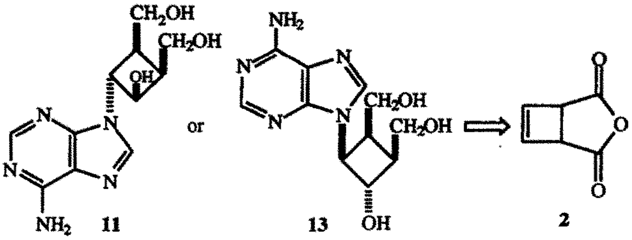
Tetrahedron, **1994**, *50*, 13145

Novel Cyclobutane Carbocyclic Nucleosides

Laurence Mévellec, François Huet*

Laboratoire de Synthèse Organique - URA CNRS 482
Faculté des Sciences, Université du Maine, BP 535
F-72017 Le Mans (France)

Synthesis of nucleoside analogues **11** and **13** is described with compound **2** as the starting material



Tetrahedron, **1994**, *50*, 13155

THE EFFECT OF THE METHOXY GROUP ON THE GEOMETRY OF THE BENZENE RING SUPPORTED BY CRYSTAL STRUCTURE STUDIES AND *AB INITIO CALCULATIONS*. CRYSTAL AND MOLECULAR STRUCTURE OF 4-(4-METHOXYPHENYL)-2,6-DIPHENYL-PYRIDINE AND 1-METHYL-4-(4-METHOXYPHENYL)-2,6-DIPHENYLPYRIDINIUM PERCHLORATE.

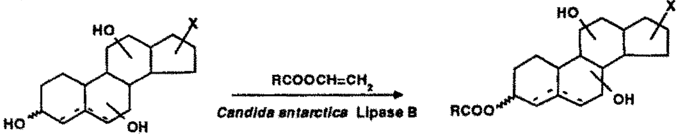
a. Tadeusz Marek Krygowski[a*], Romana Anulewicz[a], Adam Jarmula[a], Tomasz Bąk[b], Danuta Rasala[b], Sean Howard[c]
a. Department of Chemistry, University of Warsaw, 02-093 Warsaw, b. Institute of Chemistry, Pedagogical University, 25-020 Kielce, Poland, c. Department of Chemistry, University of Wales, College of Cardiff, Cardiff CF1 3TB, U.K.

The methoxy group in anisole increases the φ_1 angle by about 8^{o} in comparison to φ_2 and induces a greater contribution of canonical structure B_1 than B_2.

Tetrahedron, **1994**, *50*, 13165

REGIOSELECTIVE ESTERIFICATION OF POLYHYDROXYLATED STEROIDS BY *CANDIDA ANTARCTICA* LIPASE B

Anna Bertinotti, Giacomo Carrea, Gianluca Ottolina and Sergio Riva*
Istituto di Chimica degli Ormoni, C.N.R.Via Mario Bianco 920131, Milano ITALY

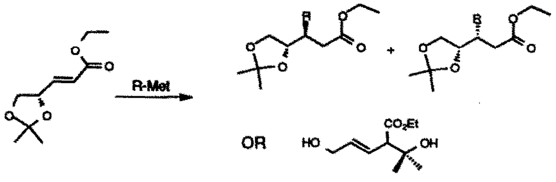


Tetrahedron, **1994**, *50*, 13173

STEREOSELECTIVITY IN THE 1,4-ADDITION REACTION OF ORGANOCOPPER REAGENTS TO ETHYL 3-[(*S*)-2,2-DIMETHYL-1,3-DIOXOLAN-4-YL] PROPENOATE

Karolina Nilsson and Christina Ullenius*
Department of Organic Chemistry, Chalmers University of Technology; S-412 96 Göteborg, Sweden

A model based on copper-alkene π-complex formation with intramolecular chelation of the γ-oxygen to lithium of a copper-lithium cluster can be used to rationalize the observed *anti* selectivity.



Tetrahedron, **1994**, *50*, 13181

Synthesis of Some Conjugated Caradienes from 3-Carene by the Wittig Reaction and Their Reactivity in the Diels-Alder Reaction

Marja Lajunen, University of Oulu, Department of Chemistry, Linnanmaa, P.O. Box 400, SF-90570 Oulu, Finland

The applicability of the Wittig reaction for the preparation of conjugated *cis*-caradienes starting from **20** was studied.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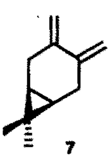
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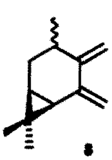
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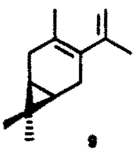
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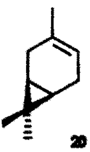
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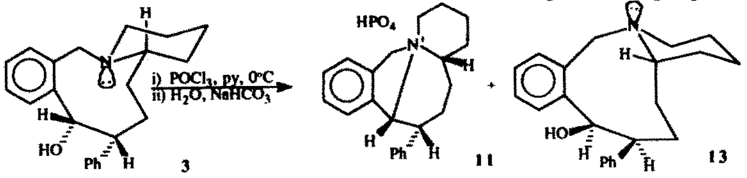
Tetrahedron, **1994**, *50*, 13199

The Synthesis and Stereochemistry of Some New Medium-Ring Nitrogen-containing Alcohols and Related Compounds

Craig J. Roxburgh
Department of Chemistry, University of Portsmouth, Portsmouth, Hampshire, PO1 2DT

A reduction, elimination, oxidation and transannular reaction of medium-sized nitrogen-containing rings are described.

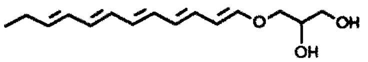


Tetrahedron, **1994**, *50*, 13207

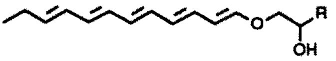
ACID-CATALYZED SOLVOLYSIS OF POLYENOL ETHERS. III. EFFECT OF THE ALKOXY MOIETY.

S.A.M. Nieuwenhuis, L.B.J. Vertegaal, M.C. de Zoete and A. van der Gen. Gorlaeus laboratories, Leiden Institute of Chemistry, Leiden University P.O. Box 9502, 2300 RA Leiden, The Netherlands.

The dependence of the solvolysis of polyenol ethers on the nature of the alkoxy moiety has been studied. A new mechanism was established, which is believed to be involved in the strong mutagenic activity displayed by many polyenol ethers, including the natural mutagen fecapentaene-12.



Fecapentaene-12

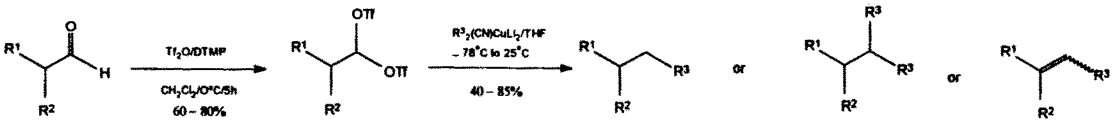


R=H, CH_3, Ph, 4-MeO-Ph

Tetrahedron, **1994**, *50*, 13231

GEMINAL DIALKYLATION, ALKYLATIVE REDUCTION AND OLEFINATION OF ALDEHYDES. REACTION OF *GEM*-BISTRIFLATES WITH HIGHER ORDER DIALKYLCYANOCUPRATES.

A. García Martínez,* J. Osío Barcina, B. Ruiz Díez, L. R. Subramanian
Departamento de Química Orgánica, Facultad de Ciencias Químicas, Universidad Complutense, E-28040 Madrid, Spain

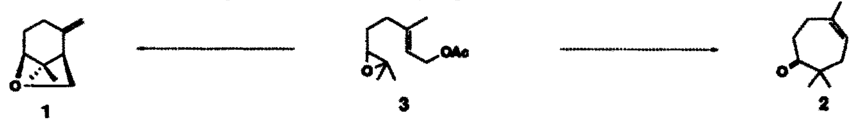


Tetrahedron, **1994**, *50*, 13239

SYNTHESIS OF (±)-KARAHANA ETHER AND KARAHANAENONE BY SELECTIVE CYCLIZATION OF 6,7-EPOXYGERANYL ACETATE

Alejandro F. Barrero,* Enrique J. Alvarez-Manzaneda and P. Linares Palomino,
Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Granada, 18071 Granada (Spain)

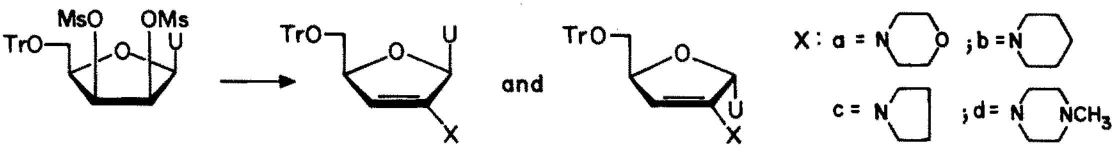
(±)-Karahana ether (1) and karahanaenone (2) have been synthesized from 6,7-epoxygeranyl acetate (3), being a Lewis-acid-catalyzed electrophilic cyclization the key step.



Tetrahedron, **1994**, *50*, 13251

REACTIONS OF 2',3'-DI-O-MESYL-*LYXO*-URIDINE WITH SECONDARY AMINES: FIRST REPORT ON THE ONE-POT CONVERSION OF MESYLATED NUCLEOSIDES TO ENAMINONUCLEOSIDES AND THE CRYSTAL STRUCTURE OF α-ENAMINE.

K. Sakthivel, C. G. Suresh and T. Pathak* National Chemical Laboratory, Pune 411008, India.

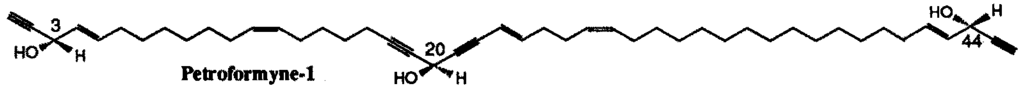


Tetrahedron, **1994**, *50*, 13261

ABSOLUTE STEREOCHEMISTRY OF PETROFORMYNES, HIGH MOLECULAR POLYACETYLENES FROM THE MARINE SPONGE *PETROSIA FICIFORMIS*

Yuewei Guo, Margherita Gavagnin, Enrico Trivellone and Guido Cimino

Istituto per la Chimica di Molecole di Interesse Biologico-CNR, Via Toiano, 6-80072 Arco Felice, Napoli, Italy.



Petroformyne-1

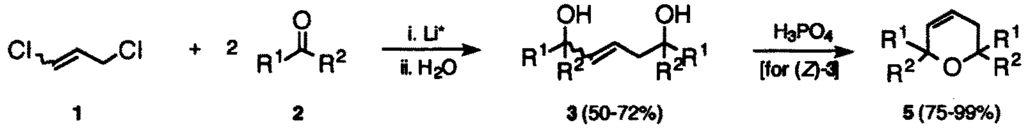
The *S* absolute stereochemistry at all the chiral centers of petroformynes 1-5, -A, and -B was established by applying advanced Mosher method.

Tetrahedron, **1994**, *50*, 13269

1,3-DICHLOROPROPENE AS A SOURCE OF THE 1,3-DIANION DERIVED FROM PROPENE: SYNTHESIS OF UNSATURATED 1,5-DIOLS AND DIHYDROPYRANS

A. Guijarro and M. Yus*

Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Alicante, Apdo. 99, 03080 Alicante, Spain



[Li*=Li powder, DTBB cat. (5%); R^1,R^2=H, Me, Et, Bu^t; R^1-R^2=$(CH_2)_4$, $(CH_2)_5$]

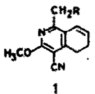
Tetrahedron, **1994**, *50*, 13277

POTASSAMIDE INDUCED *IN SITU* BENZYLATION OF 5,6-DIHYDROISOQUINOLINES: STRUCTURE OF NOVEL PRODUCTS

Tirumalai R.Kasturi* and Subramaniam Arumugam

Department of Organic Chemistry, Indian Institute of Science, Bangalore-560 012, INDIA.

Interesting *in situ* benzylation products **8a-b, 9a-b, 10a-b, 11a-b & 11'a-b** of 5,6-Dihydroisoquinolines **1a-b** were characterised by spectral data.



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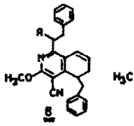

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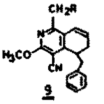

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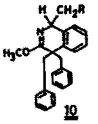

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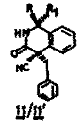

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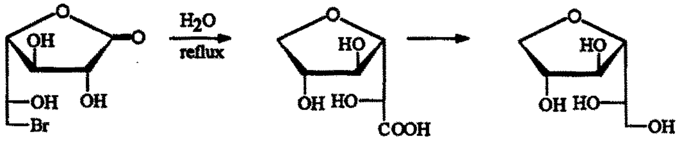
Tetrahedron, **1994**, *50*, 13285

ENANTIOMERICALLY PURE, HIGHLY FUNCTIONALIZED TETRAHYDROFURANS FROM SIMPLE CARBOHYDRATE PRECURSORS.

Inge Lundt*, Holger Frank, Department of Organic Chemistry, The Technical University of Denmark, Building 201, DK-2800 Lyngby, Denmark. - When 6-bromo-6-deoxy-hexonolactones are heated in water, hydroxylated tetrahydrofurans are formed readily. The reactions of 6-bromo-6-deoxy-hexonolactones with D-*galacto*, D-*altro*, D-*ido* and D-*manno* configuration are presented.



Tetrahedron, **1994**, *50*, 13299

SYNTHESIS OF 2-ACETAMIDO-1,2,4-TRIDEOXY-1,4-IMINO-D-GALACTITOL AND -D-GLUCITOL FOR EVALUATION AS GLYCOSIDASE INHIBITORS

Paul D. Croucher, Richard H. Furneaux and Gregory P. Lynch.*
Industrial Research Limited, PO Box 31-310, Lower Hutt, New Zealand.