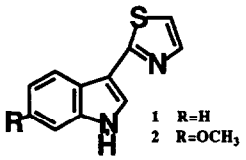
Tetrahedron, **1991**, *47*, 3909

THE CAMALEXINS: NEW PHYTOALEXINS PRODUCED IN THE LEAVES OF *CAMELINA SATIVA* (CRUCIFERAE).

Lois M. Browne[1*], Kenneth L. Conn[2], William A. Ayer[1] and Jalpa P. Tewari[2],
Departments of Chemistry[1] and Plant Science[2], University of Alberta, Edmonton, Alberta, Canada T6G 2E1



1 R=H
2 R=OCH_3

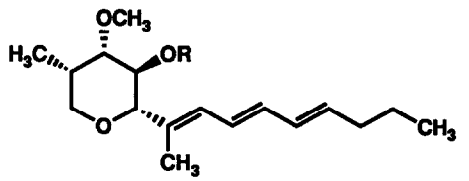
Two new thiazoyl substituted indole phytoalexins, camalexin (1) and methoxycamalexin (2), were isolated from Camelina sativa leaves following elicitation by the fungus Alternaria brassicae.

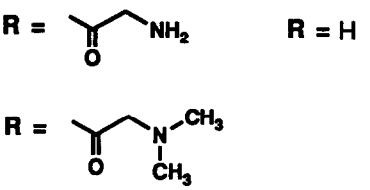
Tetrahedron, **1991**, *47*, 3915

STRUCTURE ELUCIDATION OF RESTRICTICIN, A NOVEL ANTIFUNGAL AGENT FROM *PENICILLIUM RESTRICTUM*

Otto D. Hensens*, Carol F. Wichmann, Jerrold M. Liesch, Frank L. VanMiddlesworth, Kenneth E. Wilson and Robert E. Schwartz
Department of Natural Products Chemistry, Merck Sharp & Dohme Research Laboratories, P. O. Box 2000, Rahway, N. J. 07065-0900, U. S. A.

The structures and absolute stereochemistry of a new class of antifungal agents were determined on the basis of spectroscopic evidence.



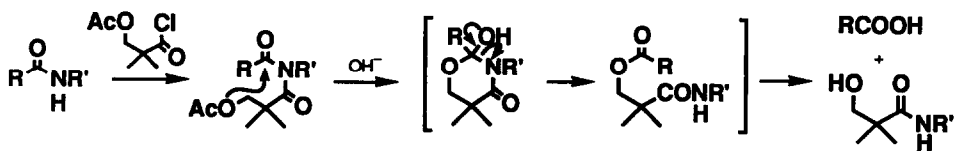


Tetrahedron, **1991**, *47*, 3925

AN EFFICIENT METHOD FOR HYDROLYSIS OF *N*-MONOSUBUSTITUTED AMIDES UTILIZATION OF INTRAMOLECULAR N–O ACYL MIGRATION IN HYDROXYPIVALIMIDES

Tetsuto Tsunoda*, Osamu Sasaki, Osamu Takeuchi, and Shô Itô
Department of Chemistry, Tohoku University, Sendai 980, and
Faculty of Pharmaceutical Sciences, Tokushima Bunri University Tokushima, 770 Japan

An efficient and versatile method for the hydrolysis of *N*-monosubstituted carboxamides has been developed.

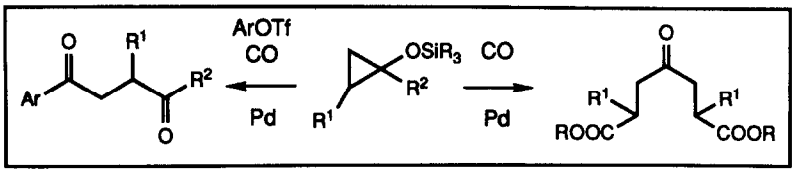


Tetrahedron, **1991**, *47*, 3935

SYNTHESIS OF 1,4-DICARBONYL COMPOUNDS AND 4-KETO PIMELATES BY PALLADIUM-CATALYZED CARBONYLATION OF SILOXYCYCLOPROPANES

Satoshi Aoki and Eiichi Nakamura*

Department of Chemistry, Tokyo Institute of Technology Meguro, Tokyo 152 Japan

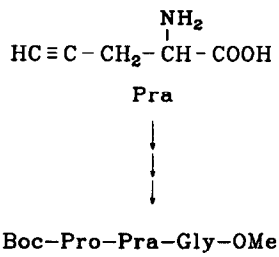


Tetrahedron, **1991**, *47*, 3947

SYNTHESIS, PROPERTIES AND CRYSTAL STRUCTURE OF THE TRIPEPTIDE BOC-L-PROLYL-L-PROPARGYL-GLYCYL-GLYCINE METHYL ESTER

Hans Willisch, Wolfgang Hiller, Bahram Hemmasi, Ernst Bayer.*
Institute of Organic Chemistry, University of Tübingen, Auf der Morgenstelle 18, D-7400 Tübingen, F.R. Germany

Propargylglycine (Pra), as a powerful inhibitor of microbial growth, was built into a protected tripeptide with the sequence Pro-Pra-Gly. The peptide was employed to study its effects on the activity of prolyl 4-hydroxylase and the collagen biosynthesis. The Boc-protected tripeptide methyl ester was identified by mass spectrometry and NMR spectroscopy and its crystal structure was established by X-ray diffraction analysis.

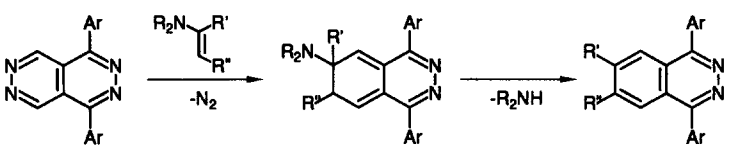


Tetrahedron, **1991**, *47*, 3959

INVERSE-ELECTRON-DEMAND DIELS-ALDER REACTIONS OF CONDENSED PYRIDAZINES, PART 1. SYNTHESIS OF PHTHALAZINE DERIVATIVES FROM PYRIDAZINO[4,5-*d*]PYRIDAZINES.

Norbert Haider
Institute of Pharmaceutical Chemistry, University of Vienna, Währinger Straße 10, A-1090 Vienna, Austria

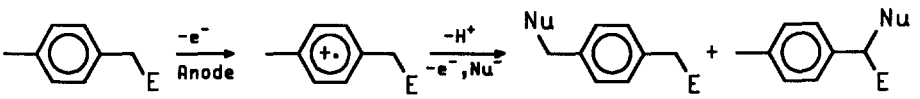
1,4-Diarylpyridazino[4,5-*d*]pyridazines were found to undergo [4+2] cycloaddition reactions with a variety of electron-rich dienophiles like enamines and ketene acetals to afford phthalazine derivatives.



Tetrahedron, **1991**, *47*, 3969

ETUDE DE LA REGIOSELECTIVITE EN FLUORATION ANODIQUE DE DERIVES BENZYLIQUES

E. Laurent, B. Marquet et R. Tardivel
UCB-Lyon I, Lab. de Chimie Organique 3, URA CNRS 467
43, Bd du 11 Novembre 1918 69622 VILLEURBANNE Cedex (France)

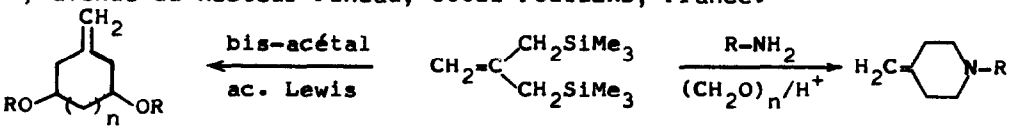


E=CN, $CO_2C_2H_5$, $SO_3C_2H_5$; Nu^-=F^-et(ou)CH_3CN

Tetrahedron, **1991**, *47*, 3981

Le 2-trimethylsilylméthyl allyltriméthylsilane, précurseur de carbocycles et hétérocycles à groupe méthylénique.

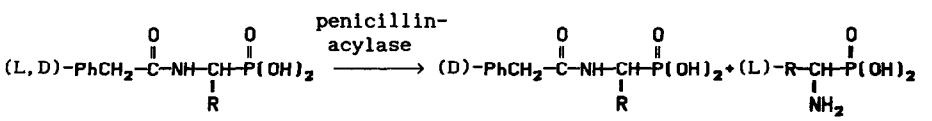
B. GUYOT, J. PORNET et L. MIGINIAC,
Laboratoire de Synthèse Organique, UA 574 CNRS, Université de Poitiers, 40, avenue du Recteur Pineau, 86022 POITIERS, France.



Tetrahedron, **1991**, *47*, 3989

PREPARATION OF OPTICALLY ACTIVE 1-AMINOALKYL-PHOSPHONIC ACIDS BY STEREOSELECTIVE ENZYMATIC HYDROLYSIS OF RACEMIC N-ACYLATED 1-AMINOALKYLPHOSPHONIC ACIDS

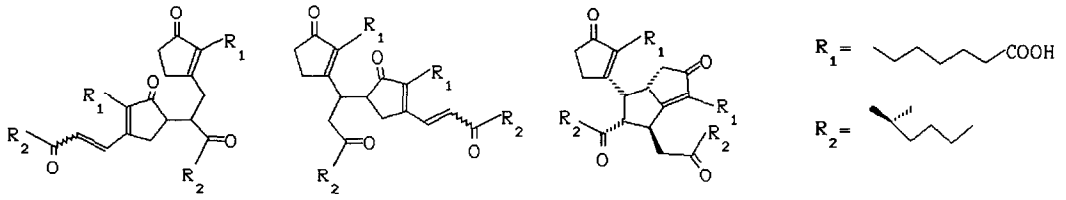
V. A. Solodenko,[a] T. N. Kasheva,[a] V. P. Kukhar,[a] E. V. Kozlova,[b] D. A. Mironenko[b] and V. K. Švedas[b,*]
[a]Institute of Bioorganic Chemistry of the Ukrainian Academy of Sciences, (USSR),
[b]A. N. Belozersky Laboratory, Moscow State University, (USSR)



Tetrahedron, **1991**, *47*, 3999

THE SYNTHESIS OF 16,16-DIMETHYL-15-KETO-PGB$_1$ OLIGOMERS. THE CHEMICAL STRUCTURES OF DIMERS.

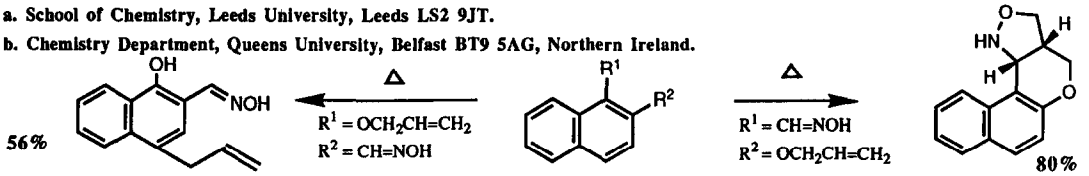
I.Martin*, J.Anvelt, T.Pehk[1], Ü.Lille
Department of Prostanoid Chemistry, Institute of Chemistry, Akadeemia tee 15, Tallinn 200108, Estonia. [1]Department of Physics, Institute of Chemical Physics and Biophysics, Lenini pst. 10, Tallinn 200001, Estonia



Tetrahedron, **1991**, *47*, 4007

X=Y-ZH Systems as Potential 1,3- Dipoles. Part 31. Generation of Nitrones from Oximes. Background and Scope of the Tandem 1,2- Prototropy-Intramolecular Cycloaddition Sequence.

Ronald Grigg[a], Frances Heaney[b], Jasothara Markandu[a], Sivagnanasundram Surendrakumar[a], and William J. Warnock[a].
a. School of Chemistry, Leeds University, Leeds LS2 9JT.
b. Chemistry Department, Queens University, Belfast BT9 5AG, Northern Ireland.



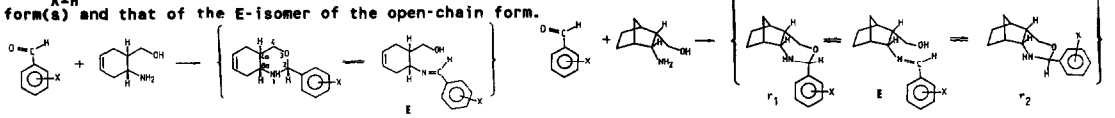
Tetrahedron, **1991**, *47*, 4031

RING-CHAIN TAUTOMERISM AND THREE- TO FOUR-COMPONENT EQUILIBRIA IN FUSED-RING TETRAHYDRO-1,3-OXAZINES

Kalevi Pihlaja,*,+ Aija Parkkinen,+ Ferenc Fülöp,+,f Jorma Mattinen,+ and Gábor Bernáth[f]

+Department of Chemistry, University of Turku, SF-20500 Turku, Finland, and [f]Institute of Pharmaceutical Chemistry, Albert Szent-Györgyi Medical University, H-6701 Szeged, POB 121, Hungary

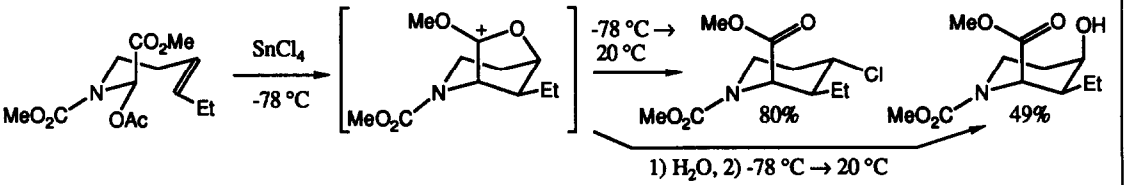
The condensation of cis- and trans-2-hydroxymethyl-4-cyclohexenyl-1-amine and 2,3-diexo- and 2,3-diendo-3-hydroxymethylbicyclo[2.2.1]heptylamine with aromatic aldehydes led to ring-chain tautomeric equilibria between epimeric tetrahydro-1,3-oxazines and open-chain Schiff bases. For each system studied a simple equation, log K_X = 0.76σ^+ + log $K_{X=H}$, derived for 1,3-oxazines prevailed when K was taken equal to the ratio of the amount of the epimeric ring form(s) and that of the E-isomer of the open-chain form.



Tetrahedron, **1991**, *47*, 4039

TIN TETRACHLORIDE INDUCED π-CYCLIZATIONS OF GLYCINE CATION EQUIVALENTS TO SUBSTITUTED PIPECOLIC ACID DERIVATIVES

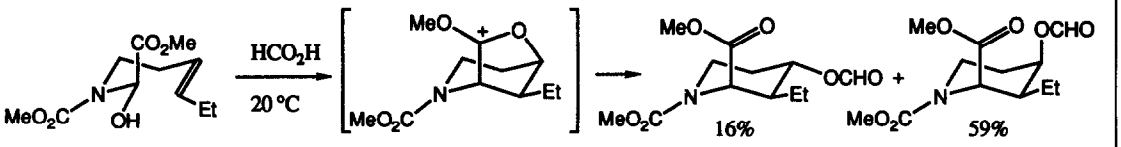
Peter M. Esch, Ilona M. Boska, Henk Hiemstra*, Richard F. de Boer, and W. Nico Speckamp*
Department of Organic Chemistry, University of Amsterdam, Nieuwe Achtergracht 129, 1018 WS Amsterdam, The Netherlands



Tetrahedron, **1991**, *47*, 4063

FORMIC ACID INDUCED π-CYCLIZATIONS OF GLYCINE CATION EQUIVALENTS TO SUBSTITUTED PIPECOLIC ACID DERIVATIVES

Peter M. Esch, Richard F. de Boer, Henk Hiemstra*, Ilona M. Boska, and W. Nico Speckamp*
Department of Organic Chemistry, University of Amsterdam, Nieuwe Achtergracht 129, 1018 WS Amsterdam, The Netherlands

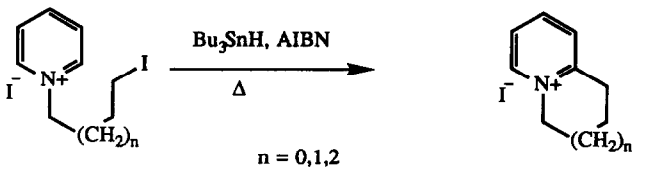


Tetrahedron, **1991**, *47*, 4077

INTRAMOLECULAR FREE-RADICAL SUBSTITUTION OF PYRIDINIUM RINGS.

John A. Murphy* and Michael S. Sherburn, Department of Chemistry, University of Nottingham, Nottingham NG7 2RD.

Intramolecular free radical substitution of pyridinium salts has been accomplished giving good yields of [6,5]-, [6,6]- and [6,7]- bicyclic compounds.

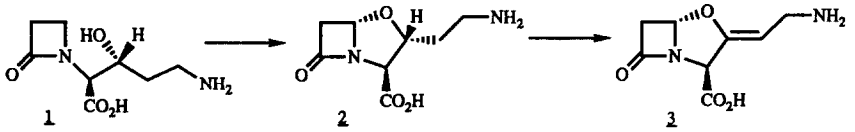


Tetrahedron, **1991**, *47*, 4089

ISOLATION OF DIHYDROCLAVAMINIC ACID AN INTERMEDIATE IN THE BIOSYNTHESIS OF CLAVULANIC ACID

Jack E. Baldwin, Robert M Adlington, Justin S. Bryans, Alain O Bringhen, Janice B Coates, Nicholas P. Crouch, Matthew D Lloyd, and Christopher J. Schofield. The Dyson Perrins Laboratory and the Oxford Centre for Molecular Sciences, South Parks Road, Oxford, OX1 3QY. U K, Stephen W Elson*, Keith H Baggaley, Robert Cassels, and Neville Nicholson, SmithKline Beecham Pharmaceuticals, Brockham Park, Betchworth, Surrey RH3 7AJ, U.K.*

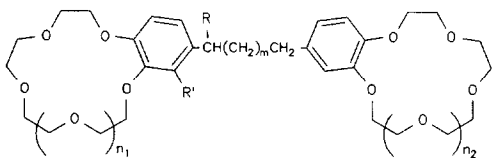
A primary isotope effect was used in an *in vitro* study to allow the isolation of an intermedeiate (2), between proclavaminic acid (1) and clavaminic acid (3) in clavulanic acid biosynthesis.



Tetrahedron, **1991**, *47*, 4101

BIS(BENZOCROWN ETHER)S WITH POLYMETHYLENE BRIDGES AND THEIR APPLICATION IN ION-SELECTIVE ELECTRODES

Elżbieta Luboch*, Andrzej Cygan and Jan F. Biernat
Faculty of Chemistry, Technical University of Gdańsk
80-952 Gdańsk, Poland

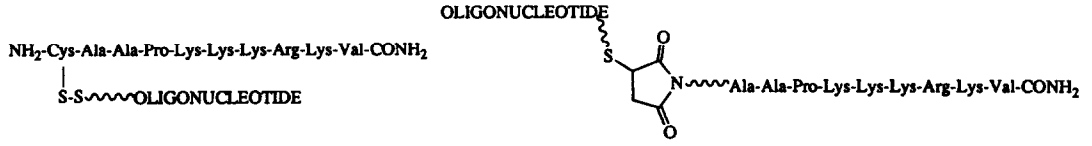


Synthetic procedures based on the condensation of benzocrown ether derivatives leading to bis(benzocrown ether)s with polymethylene bridges have been elaborated. Methods for introducing lipophilic substituents into these compounds also have been described. The reported compounds have been tested in ion-selective electrodes.

Tetrahedron, **1991**, *47*, 4113

SYNTHESIS OF DEFINED PEPTIDE-OLIGONUCLEOTIDE HYBRIDS CONTAINING A NUCLEAR TRANSPORT SIGNAL SEQUENCE.

Ramon Eritja*, Anna Pons, Mónica Escarceller, Ernest Giralt$, and Fernando Albericio$.Department of Molecular Genetics. CID-CSIC. Jordi Girona 18-26., 08034 Barcelona. Spain. $Department of Organic Chemistry. University of Barcelona. 08028 Barcelona, Spain.



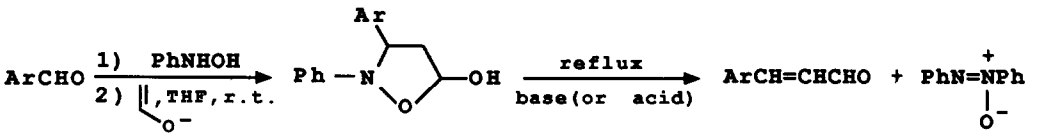
Tetrahedron, **1991**, *47*, 4121

AN EFFICIENT C_2-HOMOLOGATION OF AROMATIC ALDEHYDES VIA 5-HYDROXYISOXAZOLIDINE

L. Di Nunno [a,b] and A. Scilimati [b]

[a] Centro CNR di Studio sulle Metodologie Innovative di Sintesi Organiche, Dipartimento di Chimica, Università, Trav. 200 Re David 4, 70126 Bari-Italy.

[b] Dipartimento Farmaco-Chimico, Università, Trav. 200 Re David 4, 70126 Bari-Italy.

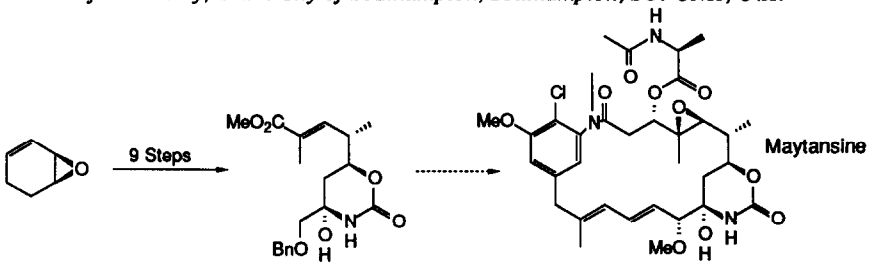


Tetrahedron, **1991**, *47*, 4133

A SHORT AND EFFICIENT SYNTHESIS OF THE C-3 TO C-10 PORTION OF THE MAYTANSINOIDS

David M. Hodgson,[†] Philip J. Parsons,[†*] and Peter A. Stones

Department of Chemistry, University of Southampton, Southampton, SO9 5NH, U.K.

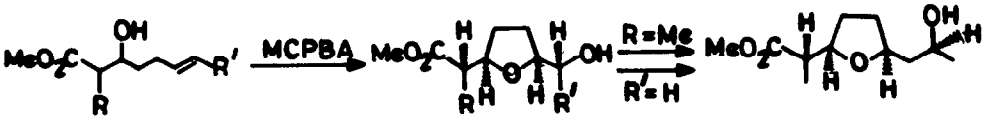


Tetrahedron, **1991**, *47*, 4143

METACHLOROPEROXYBENZOIC ACID PROMOTED STEREOSELECTIVE SYNTHESIS OF 2,5-DISUBSTITUTED TETRAHYDROFURANS FROM α OR γ -ALLYL-β -HYDROXY ESTERS : A FORMAL SYNTHESIS OF (±) METHYL NONACTATE

Javed Iqbal*, Anu Pandey and Bhanu P.S. Chauhan

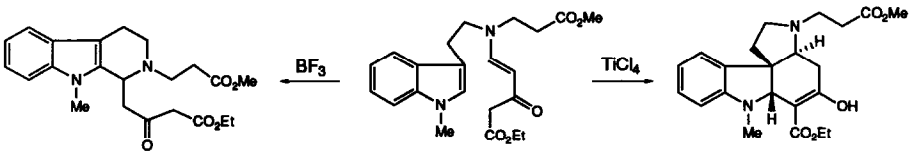
Department of Chemistry, Indian Institute of Technology, Kanpur 208016, India



Tetrahedron, **1991**, *47*, 4155

MODELS OF FOLATE COFACTORS - 22.
LEWIS ACID CATALYZED CYCLIZATION OF CARBON-FRAGMENT TRANSFER PRODUCTS OF FOLATE COFACTOR MODELS. SYNTHESIS OF ENANTIOMERICALLY PURE TETRACYCLIC (ABCE) RING SYSTEM OF ASPIDOSPERMA ALKALOIDS.

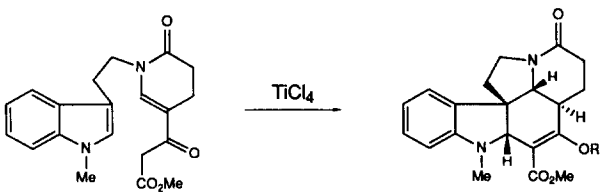
R.H. Huizenga and U.K. Pandit, University of Amsterdam (The Netherlands)



Tetrahedron, **1991**, *47*, 4165

MODELS OF FOLATE COFACTORS - 23.
A SYNTHETIC STRATEGY TO THE ASPIDOSPERMA SKELETON. SYNTHESIS OF THE 21-EPIMER OF 20-DEETHYL-3,17-DIOXO-16-ETHOXYCARBONYL-1-METHYLASPIDOSPERMIDINE.

R.H. Huizenga, J. van Wiltenburg, H. Bieräugel and U.K. Pandit, University of Amsterdam (The Netherlands)

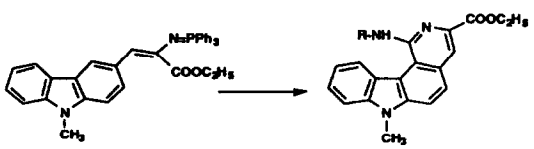


Tetrahedron, **1991**, *47*, 4175

Iminophosphorane-Mediated Synthesis of Fused Carbazoles. A Facile One-Pot Preparation of 7H-Pyrido[4,3-c]carbazole and 10H-Pyrido[4,3-c]carbazole Derivatives.

P. Molina, P. M. Fresneda, and P. Almendros.
Departamento de Química Orgánica, Facultad de Ciencias.
Universidad de Murcia, Murcia, Spain

Aza-Wittig reaction of iminophosphorane 1 with isocyanates to lead to 7H-Pyrido[4,3-c]carbazole 2.



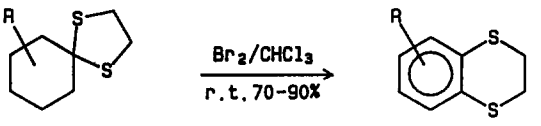
1 2

Tetrahedron, **1991**, *47*, 4187

REACTIVITY OF ETHANEDIYL S,S-ACETALS - 3. RING AROMATIZATION IN CYCLOHEXANONE DERIVATIVES: A NOVELTY SYNTHESIS OF 1,4-BENZODITHIANS

ROMUALDO CAPUTO, CARLA FERRERI, GIOVANNI PALUMBO*, FRANCESCO RUSSO
Dipartimento di Chimica Organica e Biologica dell'Università
Via Mezzocannone, 16 I-80134 Napoli (Italy)

A ready and reliable synthesis of 1,4-benzodithians with substituents on the benzenoid ring is reported for the first time.

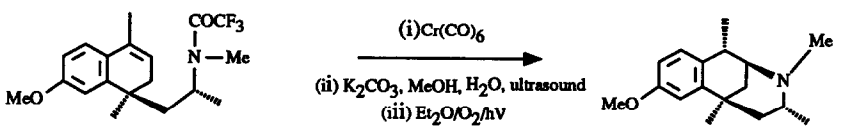


Tetrahedron, **1991**, *47*, 4195

A CHIRAL SYNTHESIS OF A 6,7-BENZOMORPHAN

Malcolm Sainsbury*, Mary F.Mahon, and Colin S.Williams,
School of Chemistry, University of Bath, Claverton Down, Bath BA27AY, U.K. Alan Naylor and David I.C.Scopes, Medicinal Chemistry Department, Glaxo Group Research Ltd., Ware, Herts. SG12ODJ

The synthesis of (-)-(S),2(S),4(R),6(R)-1,2,3,4,5,6,-hexahydro-2,6-methano-8-methoxy-1,3, 4,6- tetramethyl-3-benzazocine is achieved through the chromium hexacarbonyl mediated cyclisation of 1(S),1′(R)-1,2-dihydro-7-methoxy-1,4-dimethyl-1-(N-methyl-N-trifluoroacetamido-1′-methylethan-2′-yl)naphthalene



Tetrahedron, **1991**, *47*, 4211

ON THE REACTION OF TRISUBSTITUTED OLEFINES WITH PHENYLSELENENYL CHLORIDE IN METHANOL.

P. Ceccherelli,* M. Curini, M.C. Marcotullio, O. Rosati; Istituto di Chimica Organica, Facoltà di Farmacia, Università di Perugia, Italy.

The interaction of cholesterol and *p*-menthene with excess phenylselenenyl chloride in methanol produced the corresponding *trans* chloromethoxy and dimethoxy-derivatives. The mechanism of these transformations has been investigated.