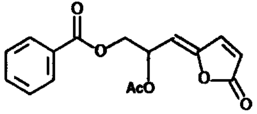
Tetrahedron **1990,** *46,* 5043

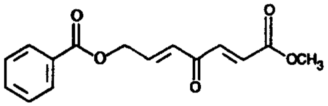
NEW BIOACTIVE HEPTENES FROM *MELODORUM FRUTICOSUM* (ANNONACEAE)

J. H. Jung[1] S. Pummangura[3], C. Chaichantipyuth[3], C. Patarapanich[3], P. E. Fanwick[2], Ching-jer Chang[1] and J. L. McLaughlin[1]
[1]Department of Medicinal Chemistry and Pharmacognosy, School of Pharmacy and Pharmacal Sciences, [2]Department of Chemistry, School of Science, Purdoe University, West Lafayette, Indiana 47907, U.S.A , [3]Department of Pharmaceutical Chemistry, Faculty of Pharmaceutical Sciences, Chulalonghkorn University, Bankok 10500, Thailand.

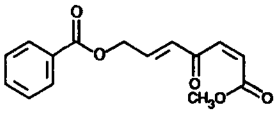
Three novel bioactive compounds were isolated from the title plant. They were cytotoxic on human tumor cell lines and were named acetylmelodorinol, melodienone, and isomelodienone.



acetylmelodorinol



melodienone



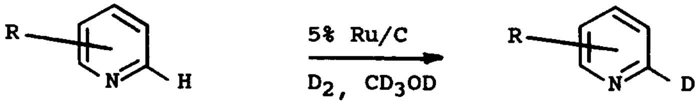
isomelodienone

Tetrahedron **1990,** *46,* 5055

DEUTERATION OF PYRIDINE DERIVATIVES: A VERY MILD PROCEDURE

George M. Rubottom and Eric J. Evain
Department of Chemistry, University of Idaho, Moscow, ID 83843 USA

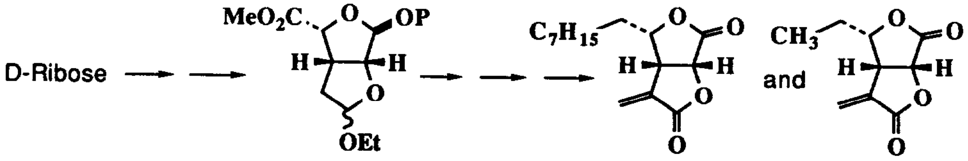
Ruthenium on carbon selectively catalyzes the hydrogen-deuterium exchange of pyridine derivatives at the ortho position. The reaction takes place at ambient temperature under mild conditions.



Tetrahedron **1990,** *46,* 5065

Total Synthesis of (-)-Isoavenaciolide and (-)-Ethisolide

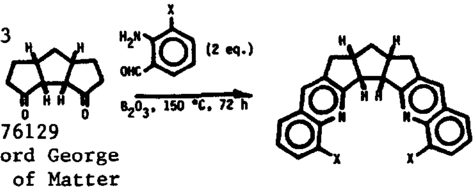
Andrew G. H. Wee, Department of Chemistry, University of Regina
Regina, Saskatchewan, S4S 0A2, Canada



Tetrahedron **1990,** *46,* 5077

UNUSUAL BEHAVIOR OF 3,4:9,10-BIS(2',3'-QUINOLINO)-TRICYCLO[6.3.0.0^{2,6}]UNDECANE UPON ATTEMPTED MONOPROTONATION WITH TRIFLIC ACID

Alan P. Marchand*and Pendri Annapurna
Chem. Dept., University of North Texas, Denton, TX 76203
Richard W. Taylor* and Don L. Simmons
Chem. Dept., University of Oklahoma, Norman, OK 73019
William H. Watson* and Ante Nagl
Chem. Dept., Texas Christian University, Ft. Worth, TX 76129
Judith L. Flippen-Anderson*, Richard Gilardi, and Clifford George
Naval Research Laboratory, Laboratory for the Structure of Matter
Code 6030, Washington, D.C. 20375-5000

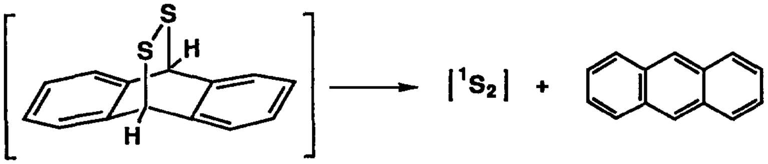


X = H or OMe

Tetrahedron **1990,** *46,* 5093

SELECTIVE SULFURIZATION OF OLEFINS BY 9,10-EPIDITHIO-9,10-DIHYDROANTHRACENE: INTERMEDIACY OF DIATOMIC SULFUR

Wataru Ando,* Hideki Sonobe, and Takeshi Akasaka
Department of Chemistry, University of Tsukuba, Tsukuba, Ibaraki 305, Japan

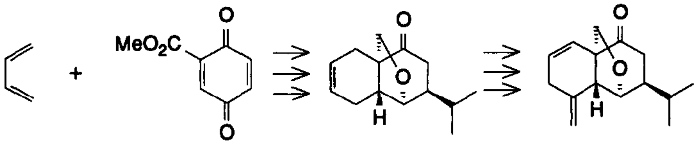


Tetrahedron **1990,** *46,* 5101

SYNTHESIS OF (±)-PA 22-VII, THE RACEMATE OF THE REARRANGEMENT PRODUCT OF PERSOONS'S PERIPLANONE-A

Kenji Mori* and Yasuhiro Igarashi
Department of Agricultural Chemistry, The University of Tokyo,
Yayoi 1-1-1, Bunkyo-ku, Tokyo 113, Japan

The structure of the stable rearrangement product of Persoons's periplanone-A was confirmed by the first synthesis of its racemate.



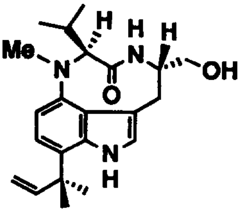
PA 22-VII

Tetrahedron **1990**, *46*, 5113

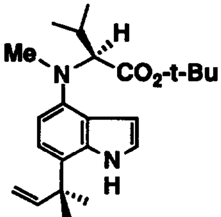
TOTAL SYNTHESIS OF INDOLE ALKALOID PENDOLMYCIN

Kazuaki Okabe, Hideaki Muratake, and Mitsutaka Natsume*
Research Foundation Itsuu Laboratory,2-28-10 Tamagawa, Setagaya-ku, Tokyo 158, Japan

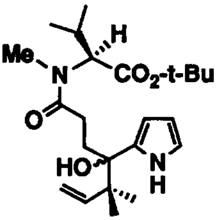
An indole alkaloid, pendolmycin (**1**), an inhibitor of EGF-induced phosphatidylinositol turnover, was synthesized from 1-tosylpyrrole in thirteen steps by way of the pyrrole derivative (**3**) and the indole derivative (**2**).



1



2

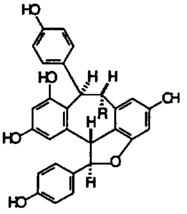


3

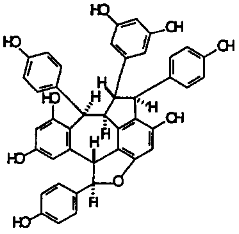
Tetrahedron **1990**, *46*, 5121

AMPELOPSINS A, B AND C, NEW OLIGOSTILBENES OF <u>AMPELOPSIS</u> <u>BREVIPEDUNCULATA</u> VAR. <u>HANCEI</u>

Yoshiteru Oshima, Yuji Ueno and Hiroshi Hikino
Pharmaceutical Institute, Tohoku University
Aoba-yama, Sendai, Japan
and
Ling-Ling Yang and Kun-Ying Yen
Taipei Medical College, Taipei, Taiwan,
Republic of China



Ampelopsin A R=OH
Ampelopsin B R=H



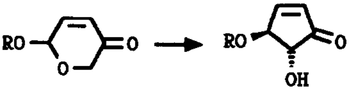
Ampelopsin C

Tetrahedron **1990**, *46*, 5127

A RING CONTRACTION OF 6-ALKOXY-2,3-DIHYDRO-6*H*-PYRAN-3-ONES TO POLYFUNCTIONALIZED CYCLOPENTENONES

Hartmuth C. Kolb and H. Martin R. Hoffmann*
Department of Organic Chemistry, University of Hannover, Schneiderberg 1B, 3000 Hannover, FRG

The rearrangement of 6-alkoxy-2,3-dihydro-6*H*-3-ones to *trans*-4-alkoxy-5-hydroxy-2-cyclopenten-1-ones has been optimized. The effect of buffer concentration ($PhCO_2H/KOAc$) on reaction rate and yield suggests specific acid catalysis. Substitution patterns and influence of the 6-alkoxy substituent have been investigated. Applications in natural product synthesis are described.

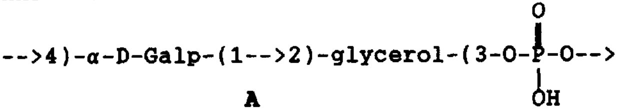


Tetrahedron **1990,** *46,* 5145

SYNTHESIS OF THE REPEATING UNIT OF THE CAPSULAR ANTIGEN OF *NEISSERIA MENINGITIDIS* SEROGROUP H

KARL-HEINZ METTEN and PETER WELZEL*
Fakultät für Chemie der Ruhr-Universität, Postfach 102148, D-4630 Bochum (FRG)

In the structure of the N.meningitidis capsular polysaccharide as represented by formula **A**, the configuration at C-2 of the glycerol unit is unknown. Both diasteroisomers of the repeating unit of **A** (isomeric at the glycerol 2-position) have been synthesized starting from 1,3(R):4,6(R)-bis-O-(4-methoxy-benzylidene)-D-mannitol.



$$\text{-->4)-}\alpha\text{-D-Galp-(1-->2)-glycerol-(3-O-}\overset{\text{O}}{\underset{\text{OH}}{\text{P}}}\text{-O-->}$$

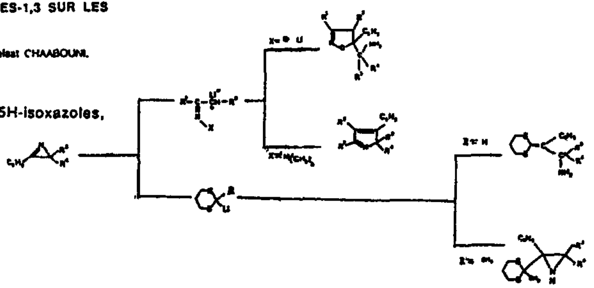
A

Tetrahedron **1990,** *46,* 5155

ACTION DE DERIVES LITHIES D'OXIMES, DE N,N-DIMETHYLHYDRAZONES ET DE DITHIANES-1,3 SUR LES 2H - AZIRINES

Ridha BEN CHEIKH, Nabiha BOUZOUITA, Habib GHABI et Rafaat CHAABOUNI.
Ecole Nationale d'ingénieurs de Tunis
B P 37 - le Belvédère 1002 Tunis - Tunisie

A synthesis of (amino -1'- alkyl)-5- 4H,5H-isoxazoles, 2H-pyrroles, primary allylic amines, and C - fonctionalized aziridines via 2H-azirines.



Tetrahedron **1990,** *46,* 5167

ALKYLATION OF POTASSIUM ACETATE IN "DRY MEDIA" THERMAL ACTIVATION IN COMMERCIAL MICROWAVE OVENS

Georges Bram, André Loupy, Mustapha Majdoub
I.C.M.O., Université Paris-Sud, Bât.420, 91405 Orsay (France)
Elvira Gutierrez and Eduardo Ruiz-Hitzky
Ciencia de Materiales, C.S.I.C., Madrid 28006 (Spain)

$$CH_3COOK + RX \xrightarrow[\text{Microwave}]{\text{Alumina}} CH_3COOR + KX \qquad R = nC_8H_{17},\ nC_{16}H_{33}$$

$$\text{1-2 min} \qquad \geq 92\% \qquad\qquad X = Br,\ Cl$$

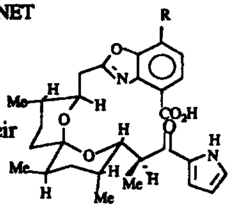
Tetrahedron **1990**, *46*, 5177

SEMI-SYNTHESIS OF A.23187 (CALCIMYCIN) ANALOGS WITH 5-N-AMINO SUBSTITUENTS. THEIR COMPLEXATION OF CALCIUM AND MAGNESIUM.

Fouzia SAMIH, Michelle PRUDHOMME*, Gérard DAUPHIN and Georges JEMINET

Université Blaise Pascal, Laboratoire de Chimie Organique Biologique,
URA 485 du CNRS, 63177 AUBIERE CEDEX FRANCE

The semi-synthesis of calcimycin analogs 1 ~ 4 are described together with their Ca^{2+} and Mg^{2+} complexing properties.



R

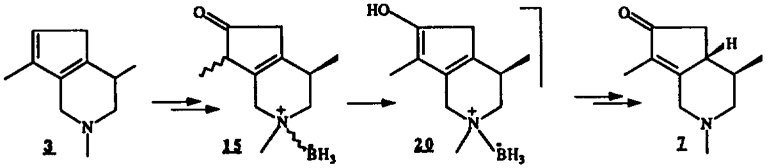
1 - NH_2
2 - $NHCH_3$
3 - $N(CH_3)_2$
4 - $NHCOCH_3$

Tetrahedron **1990**, *46*, 5187

SYNTHÈSE STÉRÉOSPÉCIFIQUE DE LA (±)Δ-7,7a 4aβH ISOTÉCOMANINE

J.L. Brayer[a], J.P. Alazard[b] et C. Thal[b]
[a] Centre de Recherche Roussel-Uclaf, 102, route de Noisy, 93230 Romainville, FRANCE
[b] Institut de Chimie des Substances Naturelles du C.N.R.S. 91198 Gif-sur-Yvette Cedex, FRANCE

A synthesis of the title compound 7 via a γ stereospecific protonation of the enol N-borane intermediates 20.



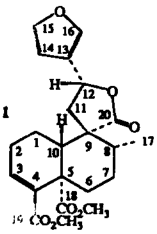
Tetrahedron **1990**, *46*, 5199

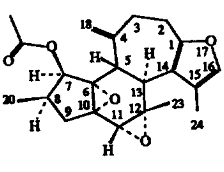
CROTOCORYLIFURAN AND CROTOHAUMANOXIDE, NEW DITERPENES FROM *CROTON HAUMANIANUS* J. Leonard.

Laurent Tchissambou#, Angèle Chiaroni##, Claude Riche## and Françoise Khuong-Huu##*.
CERVE, B.P.1249, Brazzaville, République Populaire du Congo.
##*CNRS, Institut de Chimie des Substances Naturelles, 91198 Gif-sur-Yvette, France

The structures of two new diterpenes from *Croton Haumanianus* have been determined by spectroscopic data for crotocorylifuran 1, a clerodane-type diterpene and by spectroscopic data and X-ray crystallographic analysis for crotohaumanoxide 2, a crotofolane-type diterpene.

1



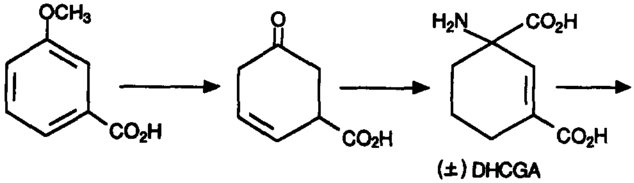


2

Tetrahedron **1990,** *46,* 5203

SYNTHESIS AND RESOLUTION OF DHCGA, A NEW CONFORMATIONALLY RIGID 3,4-DEHYDROGLUTAMIC ACID ANALOGUE

François Trigalo, Francine Acher and Robert Azerad *
Laboratoire de Chimie et Biochimie Pharmacologiques et Toxicologiques, URA 400 CNRS, Université R.Descartes, 45 rue des Saints-Pères, 75270- Paris cedex 06, France



Resolution by synthesis and separation of L-Leu-DHCGA diastereoisomers

(S)-DHCGA: $[\alpha]_D^{21}$= +29.7° (c 1.2, 4 N HCl)

(R)-DHCGA: $[\alpha]_D^{21}$= - 30.0° (c 1.2, 4 N HCl)

Tetrahedron **1990,** *46,* 5213

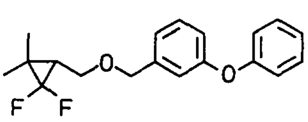
gem-DIFLUOROCYCLOPROPANES : AN IMPROVED METHOD FOR THEIR PREPARATION

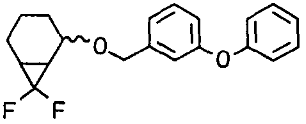
Yves BESSARD, Ulrich MÜLLER and Manfred SCHLOSSER*
Institut de Chimie organique, Université de Lausanne, Switzerland

Tetrahedron **1990,** *46,* 5222

GEMINAL DIFLUOROCYCLOPROPANES CARRYING OXYGEN-FUNCTIONAL SUBSTITUENTS

Manfred SCHLOSSER* and Yves BESSARD
Institut de Chimie organique, Université de Lausanne, Switzerland

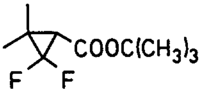


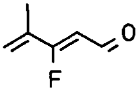


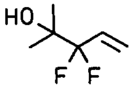
Tetrahedron **1990,** *46,* 5230

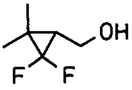
RING OPENING OF *gem*-DIHALOCYCLOPROPANES : NOVEL TYPES OF 1,4-ELIMINATION REACTIONS

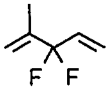
Yves BESSARD, Ludwig KUHLMANN and Manfred SCHLOSSER*
Institut de Chimie organique, Université de Lausanne, Switzerland











Tetrahedron **1990,** *46,* 5237

ELECTROCHEMICALLY INDUCED $S_{NR}1$ SUBSTITUTION IN ACETONITRILE. SYNTHESIS OF ARENES SUBSTITUTED BY PHENYLSENENO- AND PHENYLTELLURO GROUPS

Chantal Degrand, Laboratoire de Synthèse et d'Electrosynthèse Organométalliques associé au CNRS (URA 33), Faculté des Sciences, 6 bd Gabriel 21000 Dijon, France.

$$\mathrm{ArX + PhE^-} \xrightarrow[\mathrm{S_{NR}1}]{\text{+e(cathode)/MeCN or DMSO}} \mathrm{ArEPh + X^-}$$

53 - 74% (MeCN>DMSO)

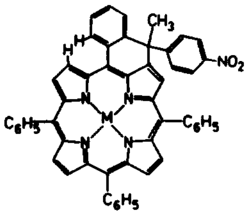
E = Se, Te
Ar = 4-Biphenyl, 9-anthryl, 2-fluorenyl

Tetrahedron **1990,** *46,* 5253

Unexpected Routes to Naphtoporphyrin Derivatives.

H.J. Callot, E. Schaeffer, R. Cromer, and F. Metz, Institut de Chimie, Université Louis Pasteur, F-67008 Strasbourg, France.

Rearrangement of α-styrylcobalt(III)porphyrins gives naphto(*a,t*)porphyrin derivatives. The acid-catalyzed cyclization of 2-formyl-tetraphenylporphyrin which gives the same naphtoporphyrin framework was also reinvestigated.

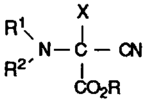


Tetrahedron **1990,** *46,* 5263

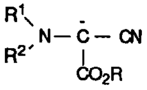
SYNTHESE DE STRUCTURES A CARBONE MULTIFONCTIONNALISE DERIVEES de CYANO-2 GLYCINATES N-PROTEGES

P. Hudhomme et G. Duguay*, Laboratoire de Synthèse Organique, URA CNRS n° 475
Faculté des Sciences et des Techniques, 2, rue de la Houssinière - F-44072 NANTES Cedex 03

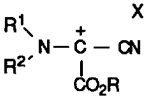
The title compounds 1 are easily obtained in good yields using anionic or cationic 2-cyano glycine equivalent strategy


$R^1R^2N-C(X)(CO_2R)-CN$

1


$R^1R^2N-\overset{-}{C}(CO_2R)-CN$

2


$R^1R^2N-\overset{+}{C}(CO_2R)-CN$

3

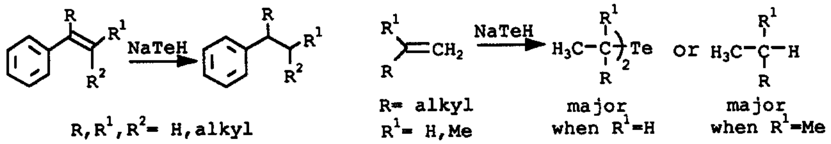
X = H, F, Cl, Br, Me, Allyl, Propargyl, OMe, OAc
R^1R^2N = BOCNH, OHCNH, Phth
R = Me, t.Bu

Tetrahedron **1990,** *46,* 5273

THE ACTION OF SODIUM HYDROGEN TELLURIDE ON OLEFINS

Derek H.R.Barton[a,b], Luis Bohé*[a] and Xavier Lusinchi[a].

a) Institut de Chimie des Substances Naturelles, C.N.R.S., 91198 Gif-sur-Yvette, France.
b) Department of Chemistry, Texas A&M University, College Station, Texas 77843, U.S.A.



These results are interpreted in terms of a radical pair mechanism involving hydrogen atom transfer from hydrogen telluride, HTe^- to the double bond.

Tetrahedron **1990,** *46,* 5285

SULPHONYL RADICAL ADDITION TO NON-CONJUGATED DIENES REGIO- AND STEREOSELECTIVE CYCLIZATIONS

Enzo De RIGGI, J.-M. SURZUR, Michèle Paula BERTRAND *Laboratoire de Chimie Organique B - Associé au CNRS -*
A. ARCHAVLIS *Ecole Supérieure de Chimie de Marseille,* R. FAURE, *Laboratoire de Chimie Organique Physique - Associé au CNRS*
- Faculté des Sciences Saint Jérôme, Av. Normandie Niemen - 13397 Marseille Cedex 13 - France.

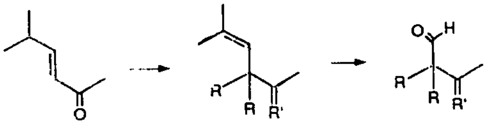
Free-radical addition of sulphonyl bromide to 1,6-dienes (malonic esters) leads under regio- and stereoselective cyclization to functionalized sulphones. The structures of the reaction products are established by 2D NMR spectroscopy.

Tetrahedron **1990**, *46*, 5295

SYNTHESE D'ACETOACETALDEHYDES MONO- ET DI-SUBSTITUES PAR DES CHAINES FONCTIONNALISEES

Dominique Cartier et Jean Lévy
Laboratoire de Transformations et Synthèse de Substances Naturelles
UA/CNRS - Faculté de Pharmacie, 51, rue Cognacq-Jay, 51096 Reims, FRANCE

These synthons, which were used in the synthesis of indole alkaloids, were prepared through alkylation-deconjugation of 5-methyl-3-hexen-2-one and further ozonolysis, after eventual protection.



R = H or functionalized chain, R' = O or $O(CH_2)_2O$

Tetrahedron **1990**, *46*, 5305

SYNTHESIS OF HIGH SPECIFIC ACTIVITY $[^3H_2$-1,2]-7-DEHYDROCHOLESTEROL. CONVERSION TO ECDYSONE IN FOLLICLE CELLS OF *LOCUSTA* (INSECTS)

DOLLE Frédéric[1], KAPPLER Christine[2], HETRU Charles[2], ROUSSEAU Bernard[3], COPPO Michèle[3], LUU Bang[1]*, HOFFMANN Jules A.[2].

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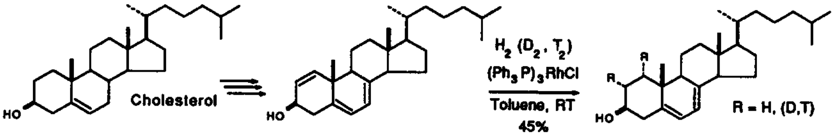
7-Dehydrocholesterol have been synthesized with high specific activity (2 TBq/mmol). *In vitro* incubations of this molecule with a 1,000g supernatant of a follicle cell homogenate yielded ecdysone in high rate.



Tetrahedron **1990**, *46*, 5317

ADDITION OF 1-ACETOXY- AND 1-TRIMETHYLSILYLOXY-BUTA-1,3-DIENES WITH α-OXO ESTERS; ENE AND DIELS-ALDER REACTIONS.

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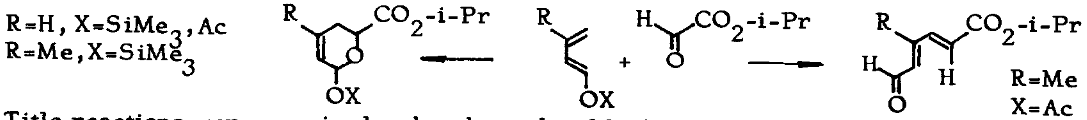

Title reactions were examined under thermal and high-pressure conditions.

Tetrahedron **1990,** *46,* 5325

KINETICS OF THE ALKALINE HYDROLYSIS OF SEVERAL N-BENZYLOXYCARBONYLDIPEPTIDE METHYL AND ETHYL ESTERS

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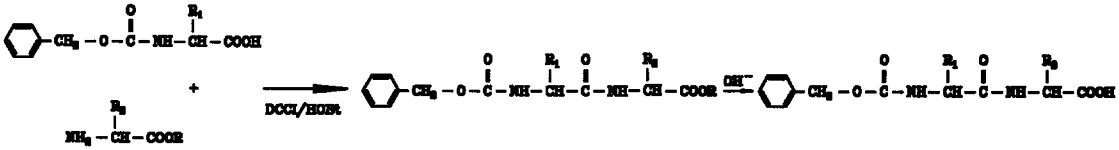
Delft University of Technology, Laboratories of Organic Chemistry and of Physical Chemistry,
Julianalaan 136, 2628 BL Delft, The Netherlands

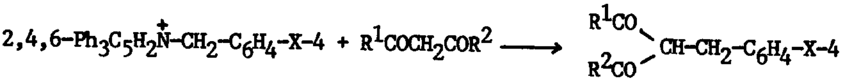


Tetrahedron **1990,** *46,* 5333

C-ALKYLATION OF β-DIKETONES WITH BENZYLPYRIDINIUM SALTS. EVIDENCE FOR CHAIN RADICAL MECHANISMS

J. Marquet[a], M. Moreno-Mañas[a,*], P. Pacheco[a], M. Prat[a], A.R. Katritzky[b,*], B. Brycki[b]
[a]Dep. of Chemistry. Univ. Autònoma de Barcelona. Bellaterra. 08193-Barcelona. Spain.
[b]Dep. of Chemistry. Univ. of Florida. Gainesville, Fl 32611. USA.

Evidence is presented for chain radicaloid mechanisms resulting from ET to the pyridinium moiety (X=H, R^1=R^2=Me) and to the aryl group of the benzyl moiety (X=NO_2).



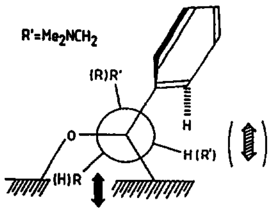
$$2,4,6\text{-}Ph_3C_5H_2\overset{+}{N}\text{-}CH_2\text{-}C_6H_4\text{-}X\text{-}4 + R^1COCH_2COR^2 \longrightarrow \begin{matrix}R^1CO\\R^2CO\end{matrix}\!\!>CH\text{-}CH_2\text{-}C_6H_4\text{-}X\text{-}4$$

Tetrahedron **1990,** *46,* 5347

TRANSFORMATION OF COMPOUNDS CONTAINING C-N BONDS ON HETEROGENEOUS CATALYSTS-7. THE STEREOCHEMISTRY OF DEHYDROGENATION OF 2-ALKYL-3-DIMETHYLAMINO-1-PHENYLPROPAN-1-OLS

G. Sirokmán, F. Lukács, Á. Molnár and M. Bartók*
Dept. of Organic Chemistry, József A. Univ., Szeged, Hungary

A mechanism involving a sterically hindered transition state was found in the copper-catalysed dehydrogenation of the title compounds by using a linear free energy relationship with Charton's steric constants.

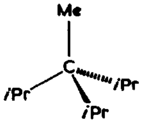


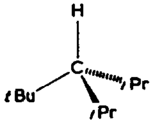
Tetrahedron **1990, *46*, 5353**

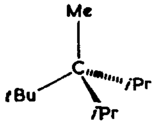
CONFORMATIONS AND ROTATION OF ISOPROPYL GROUPS ATTACHED TO THE SAME SATURATED CARBON CENTRE. A DYNAMIC NMR AND MOLECULAR MECHANICS STUDY OF 1,1,1-tris-ISOPROPYLETHANE, DI-ISOPROPYL-tert-BUTYLMETHANE, AND 1,1-DI-ISOPROPYL-tert-BUTYLETHANE

J.E.Anderson and B.R.Bettels, Chemistry Department, University College, Gower Street, London, WC1E 6BT, United Kingdom.

There are reported preferred conformations and barriers to conformational interconversion in the title compounds.



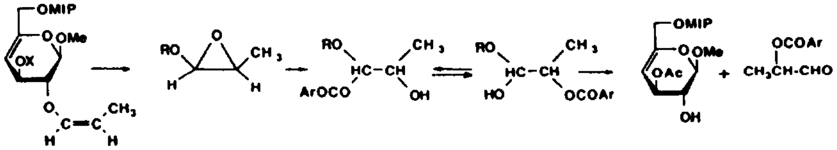




Tetrahedron **1990, *46*, 5365**

META-CHLOROPERBENZOIC ACID AS A SELECTIVE REAGENT FOR THE REMOVAL OF O-PROPENYL GROUPS. ITS USE IN THE SYNTHESIS OF SOME D-GALACTOPYRANOSIDE AND 4-DEOXY-L-*THREO*-4-HEXENOPYRANOSIDE DERIVATIVES.

P.L.Barili, G.Berti*, D.Bertozzi, G.Catelani°, F.Colonna, T.Corsetti, F.D'Andrea
Dipartimento di Chimica Bioorganica, Università di Pisa, Pisa, Italy
°Dipartimento di Scienze Farmaceutiche, Università di Ferrara, Ferrara, Italy



Use of MCPBA for the selective removal of O-propenyl groups is also exemplified by the syntheses of methyl 2-O-acetyl-3,4,6-tri-O-methyl-α- and ß-D-galactopyranoside and of benzyl 6-O-allyl-3,4-O-isopropylidene-ß-D-galactopyranoside.

Tetrahedron **1990, *46*, 5377**

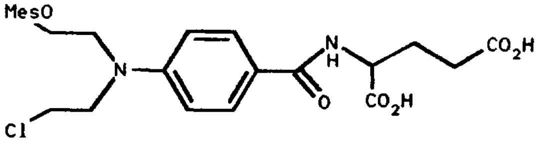
SYNTHESIS OF AN N-MUSTARD PRODRUG

John Mann and Margret Haase-Held.
Chemistry Department, Reading University, Whiteknights, Reading, RG6 2AD, UK.

Caroline J. Springer and Kenneth D. Bagshawe.
Cancer Research Campaign Laboratory, Charing Cross Hospital, London, W6 8RF,UK.

The novel N-mustard illustrated has been synthesized in six steps from p-nitrobenzoyl chloride.

It is designed for activation by tumour localising antibody-carboxypeptidase conjugates.

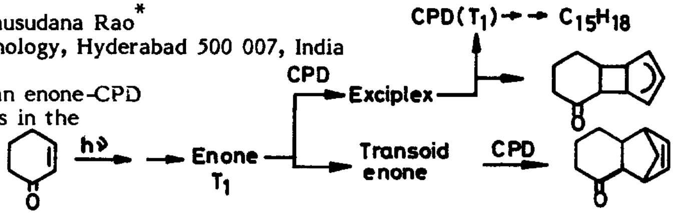


Tetrahedron **1990**, *46*, 5383

EFFECT OF MICELLAR MEDIUM ON PHOTOANNELATION Vs ENERGY TRANSFER IN THE SYSTEM EXCITED CYCLOHEX-2-EN-1-ONE-CYCLOPENTADIENE

M. Suresh Kumar & Jampani Madhusudana Rao*
Indian Institute of Chemical Technology, Hyderabad 500 007, India

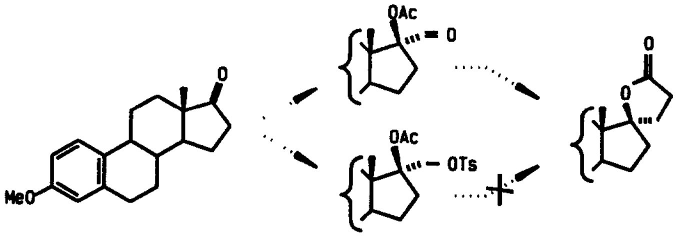
Summary : A transoid enone and an enone-CPD exciplex are proposed as transients in the photochemical and photophysical processes in the system excited cyclohexenone-CPD



Tetrahedron **1990**, *46*, 5389

INTRAMOLECULAR CONDENSATION OF STEROIDAL 17α-FORMYL 17β-ACETATES: MODEL STUDIES ON 19-NORSTEROIDS, AND A ROUTE T0 3-METHOXY-19-NOR-17α-PREGNA-1,3,5(10)-TRIENE-21,17-CARBOLACTONE

James R Bull* and Lynne M Steer
Department of Chemistry
University of Cape Town
Rondebosch 7700
South Africa



Tetrahedron **1990**, *46*, 5401

INTRAMOLECULAR CONDENSATION OF STEROIDAL 17α-FORMYL 17β-ACETATES: SYNTHESIS OF 14-FUNCTIONALISED 17- SPIROLACTONES

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University of Cape Town
Rondebosch 7700
South Africa
and
Jan L M Dillen
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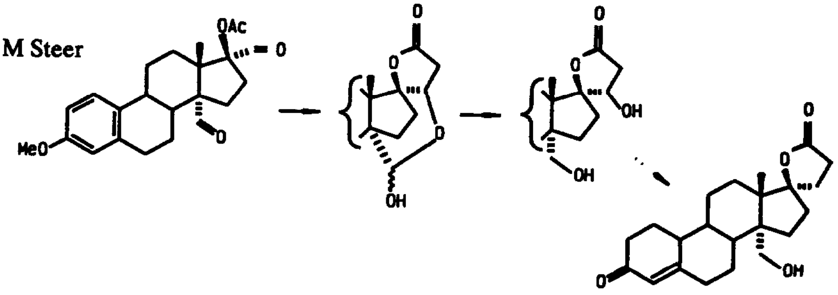
University of Pretoria
Pretoria 0002
South Africa



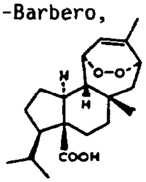
Tetrahedron **1990**, *46*, 5413

MULINIC AND ISOMULINIC ACIDS, REARRANGED DITERPENES WITH A NEW CARBON SKELETON FROM *MULINUM CRASSIFOLIUM*

Luis A. Loyola, Glauco Morales, Benjamín Rodríguez, Jesús Jiménez-Barbero,
María C. de la Torre, Aurea Perales and María R. Torres

Departamento de Química, Universidad de Antofagasta, Chile;
Institutos de Química Orgánica and 'Rocasolano', CSIC, Madrid, Spain

Two diterpenoids (compounds 1 and 2) possessing a new carbon skeleton have been isolated from the above plant.



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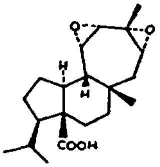

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