GRAPHICAL ABSTRACTS

AN EFFICIENT PROCEDURE FOR THE REGIOSELECTIVE MONOPROTECTION OF 1,2-DIOLS

Tetrahedron, **1992**, *48*, 8337

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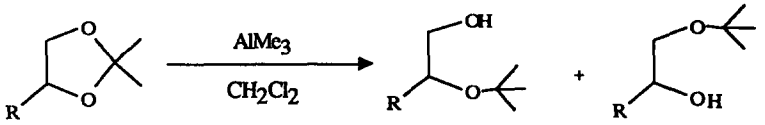
Department of Chemistry, Texas A&M University, College Station, Texas 77843

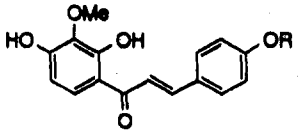


The reaction of isopropylidene ketals with trimethylaluminum gives hydroxy tert.-butyl ethers in good yield and high regioselectivity.

SYNTHESIS OF KUKULKANINS A AND B - METHOXY CHALCONES FROM *MIMOSA TENUFOLIA* L.

Tetrahedron, **1992**, *48*, 8347

Vegesna S. Raju, Gottumukkala V. Subbaraju
Maghar S. Manhas,* Zbigniew Kaluza and Ajay K. Bose
Department of Chemistry and Chemical Engineering
Stevens Institute of Technology, Hoboken, New Jersey 07030, U.S.A.



1 R=Me
2 R=H

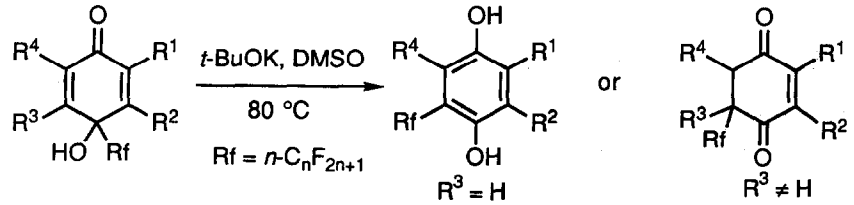
Synthesis of kukulkanins A (1) and B (2) has been achieved starting from pyrogallol.

PERFLUOROALKYL MIGRATION IN THE REARRANGEMENT OF 4-PERFLUOROALKYL-4-QUINOLS

Tetrahedron, **1992**, *48*, 8353

Hidemitsu Uno,* Ayumi Yayama, and Hitomi Suzuki*,†
Advanced Instrumentation Center for Chemical Analysis, Ehime University, Bunkyo-cho 2-5, Matsuyama 790, Japan
†Department of Chemistry, Faculty of Science, Kyoto University, Sakyo-ku, Kyoto 606, Japan

4-Perfluoroalkyl-4-quinols rearranged into perfluoroalkylhydroquinones or 5-perfluoroalkyl-2-cyclohexene-1,4-diones in moderate to good yields on treatment with *t*-BuOK in DMSO.

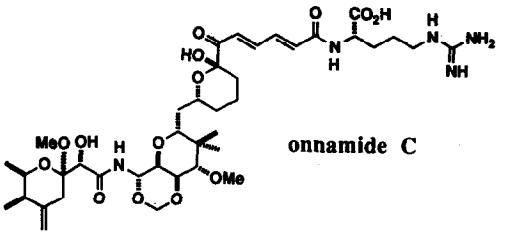


Tetrahedron, **1992**, *48*, 8369

Eight New Cytotoxic Metabolites Closely Related to Onnamide A from Two Marine Sponges of the Genus *Theonella*

Shigeki Matsunaga, Nobuhiro Fusetani,* and Youichi Nakao Laboratory of Marine Biochemistry, Faculty of Agriculture, The University of Tokyo, Bunkyo-ku, Tokyo 113, Japan

Eight new cytotoxic compounds of onnamide A class, including onnamide C shown right, were isolated from the marine sponge *Theonella* sp. collected off Hachijo Island. Their structures were determined by the interpretation of spectral data.

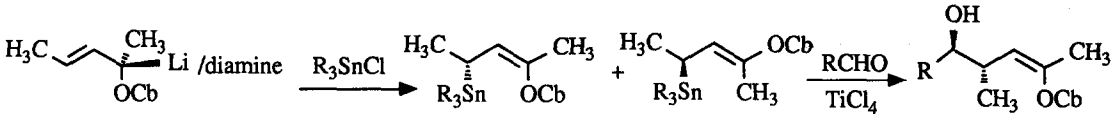


onnamide C

Tetrahedron, **1992**, *48*, 8377

Enantiomerically Enriched 1-(*N,N*-Diisopropylcarbamoyloxy)-1,3-dimethylallyllithium: Stereochemistry of the Stannylation,Titanation, and the Homoaldol Reaction

Oliver Zschage, Jan-Robert Schwark, Thomas Krämer, and Dieter Hoppe*, Institut für Organische Chemie der Universität Kiel,Olshausenstr. 40 - 60, W-2300 Kiel 1, Germany

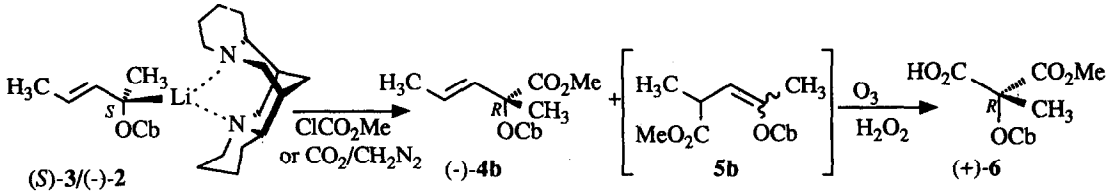


(*S*)-**3**/(-)-**2** (-)-**4** (*R,Z*) (+)-**5** (*S,E*) **14** (≈ 80 %*ee*)

Tetrahedron, **1992**, *48*, 8389

1-(*N,N*-Diisopropylcarbamoyloxy)-1,3-dimethylallyllithium• (-)-Sparteine: Stereochemistry of the Enantioselective Carboxylation and Methoxycarbonylation

Oliver Zschage, Dieter Hoppe*, Institut für Organische Chemie der Universität Kiel, Olshausenstr. 40 - 60, W-2300 Kiel 1, Germany



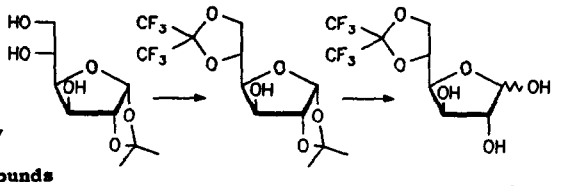
(*S*)-**3**/(-)-**2** (-)-**4b** **5b** (+)-**6**

Tetrahedron, **1992**, *48*, 8393

DIRECT KETALISATION OF *vic.*- DIOLS WITH HEXAFLUOROACETONE. CONVERSION OF D-GLUCOSE AND L-RHAMNOSE DERIVATIVES TO HEXAFLUOROACETONE KETALS

Miethchen, R.*, Rentsch, D.*, Stoll, N.+

University of Rostock, Department of Organic Chemistry* and Institute of Organic Catalysis Research+, Buchbinderstr. 5-9, D-2500 Rostock, Germany



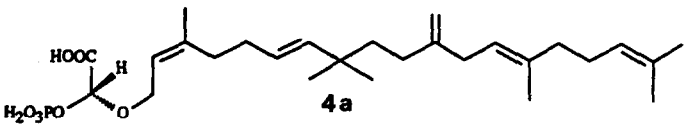
Hexafluoroacetone ketals of the title compounds were prepared in presence of dicyclohexylcarbodiimide. Mixed fluoro-substituted /non-fluoro-substituted ketals are cleaved by acids more easily at the non-fluorinated moiety.

Tetrahedron, **1992**, *48*, 8401

THE FIRST ENZYMATIC DEGRADATION PRODUCTS OF THE ANTIBIOTIC MOENOMYCIN A.

K.-H.Metten, K.Hobert, S.Marzian, U.E.Hackler, U.Heinz, P.Welzel,*
Fakultät für Chemie der Ruhr-Universität, Postfach 102148, D-4630 Bochum (Germany)
W.Aretz,* D.Böttger, U.Hedtmann, G.Seibert, A.Markus, M.Limbert,
Hoechst AG, SBU-Antiinfektiva, Postfach 800320, D-6230 Frankfurt 80 (Germany)
Y. van Heijenoort, J. van Heijenoort,
Biochimie Moléculaire et Cellulaire, Université Paris-Sud, Orsay (France)

Moenomycin A was enzymatically cleaved to yield **4a**, which could be further dephosphorylated. The configuration of the glycerate part of moenomycin A was confirmed and *ent*-**4a** was prepared. Both **4a** and *ent*-**4a** are antibiotically inactive.



4a

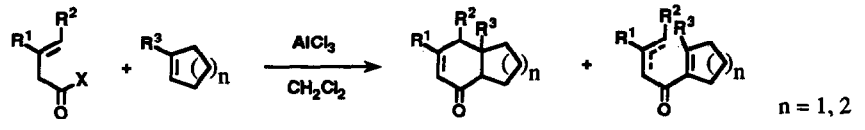
Tetrahedron, **1992**, *48*, 8419

Formation of 2-Cyclohexenones by Friedel-Crafts Acylation of Alkenes with β,γ-Ethylenic Acyl Halides.

Robert Faure, Agnès Pommier, Jean-Marc Pons, Michel Rajzmann and Maurice Santelli*

U.R.A. au CNRS n° 1411, Centre de St-Jérôme, Av. Esc. Normandie-Niemen, 13397 Marseille Cedex 13-France.

Friedel-Crafts acylation of alkenes with β,γ-alkenyl acyl halides leads to 2-cyclohexenones. Bicyclic and tricyclic enones are obtained.



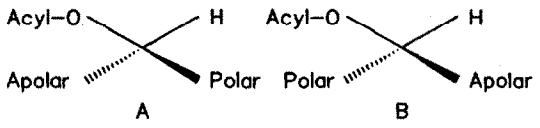
n = 1, 2

Tetrahedron, **1992**, *48*, 8431

A SUGGESTION TO THE PPL ACTIVE SITE MODEL DILEMMA

Zdeněk Vimmer, Institute of Organic Chemistry and Biochemistry ČAV, Flemingovo nám. 2, CS-166 10 Prague 6, Czechoslovakia

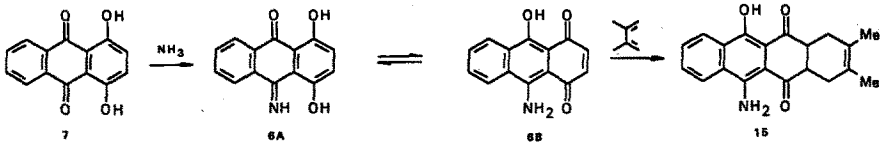
A PPL active site model with a new explanation of the nature of the substituents of the chiral centre predicted is discussed.



Tetrahedron, **1992**, *48*, 8437

POLYCYCLIC HYDROXYQUINONES. XXVII. TAUTOMERISM IN 1,4-DIHYDROXY-9,10-ANTHRAQUINONE MONOIMINES. CYCLOADDITION REACTIONS OF THEIR 1,4-ANTHRAQUINONOID TAUTOMERS.

Francisco Fariña, M. Teresa Molina, Pedro Noheda and M. Carmen Paredes*
Instituto de Química Orgánica General, CSIC, Juan de la Cierva, 3, 28006 Madrid, Spain



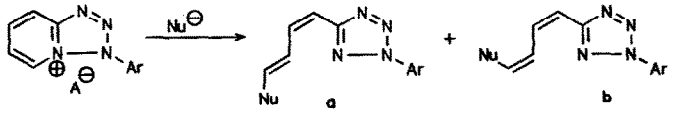
Quinizarin **7** and derivatives react with ammonia to give monoimines of type **6**. Quinone imine **6A** exists in equilibrium with the 1,4-anthraquinonoid tautomer **6B**, which can be captured in a Diels-Alder reaction to yield adducts such as **15** related to anthracyclinones.

Tetrahedron, **1992**, *48*, 8451

STEREOELECTRONIC CONTROL IN RING OPENING OF BRIDGE-HEAD NITROGEN CONTAINING FUSED AZOLIUM SALTS

András Messmer*, György Hajós, and Géza Timári
Central Research Institute for Chemistry, POB 17, H-1525, Budapest, Hungary

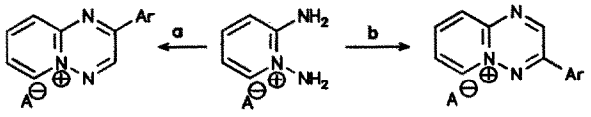
Dramatic change of **a : b** ratios controlled by stereoelectronic effect; with Nu = CN^-, **a:b** = 8 : 92; with Nu = morpholide anion, **a:b** = 100 : 0.



Tetrahedron, 1992, *48*, 8459

SELECTIVE RING CLOSURE TO SUBSTITUTED PYRIDO[1,2-b]-as-TRIAZINIUM SALT

György Hajós*, Zsuzsanna Riedl, Eszter Gács-Baitz and András Messmer
Central Research Institute for Chemistry, H-1525 Budapest POB 17

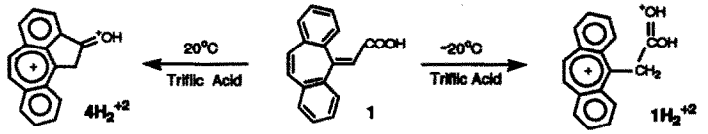


Reagent: arylglyoxal, a: acidic conditions; b: basic conditions

Tetrahedron, 1992, *48*, 8465

DIRECT OBSERVATION AND THERMAL TRANSFORMATIONS OF DICATIONS DERIVED FROM DIBENZOTROPYLIUM IONS

Gregorio Asensio,[a] Miguel A. Miranda,[b] Julia Pérez-Prieto,[a] M. Carmen Rams,[a] M. José Sabater[a]
[a]Universidad de Valencia, Departamento de Q. Orgánica, and [b]Universidad Politécnica, Departamento de Química, Spain.

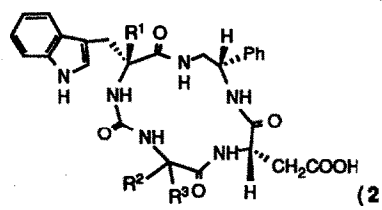


Tetrahedron, 1992, *48*, 8471

SYNTHESIS AND CCK-B BINDING AFFINITIES OF CYCLIC ANALOGUES OF THE POTENT AND SELECTIVE CCK-B RECEPTOR ANTAGONIST CI-988.

Eric Didier, David C. Horwell and Martyn C. Pritchard*
Parke Davis Neuroscience Research Centre, Addenbrookes Hospital Site, Hills Road, Cambridge, CB2 2QB .U.K

A series of 14-membered macrocyclic compounds (2) have been prepared as potential CCK-B ligands.
(2):R^1=H, Me
R^2,R^3= H, cyclohexyl.



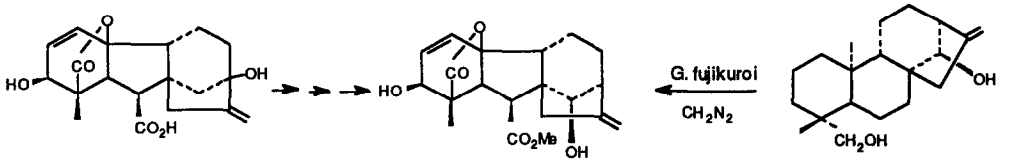
(2)

Tetrahedron, **1992**, *48*, 8491

THE CHEMICAL AND MICROBIOLOGICAL SYNTHESIS OF 14-HYDROXY-GIBBERELLINS

Braulio M. Fraga, Fernando García-Tellado, Pedro González, Melchor G. Hernández, and J.R. Hanson[a]
Instituto Productos Naturales y Agrobiología, CSIC, Dep. Química Orgánica, Univ. La Laguna, Tenerife, Spain
[a] School of Chemistry and Molecular Sciences, University of Sussex, Brighton, BN1 9QJ, U.K.

Gibberellic acid has been transformed by chemical methods into 14β-hydroxygibberellin A_7 methyl ester, and the corresponding acid was obtained by biotransformation of *ent*-14α,19-dihydroxy-kaur-16-ene with the fungus *Gibberella fujikuroi*.

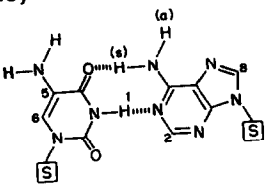


Tetrahedron, **1992**, *48*, 8505

EFFECT OF C5-AMINO SUBSTITUENT ON 2'-DEOXYURIDINE BASE PAIRING WITH 2'-DEOXY-ADENOSINE: INVESTIGATION BY ^1H AND ^{13}C NMR SPECTROSCOPY

Dinesh A. Barawkar, R. Krishna Kumar and K.N. Ganesh*
Bio-Organic Chemistry Unit, Division of Organic Chemistry(Synthesis)
National Chemical Laboratory, Pune-411 008, INDIA.

Base pairing properties of 5-NH_2-2'-deoxyuridine with 2'-deoxyadenosine is studied by using ^1H and ^{13}C NMR spectroscopy.

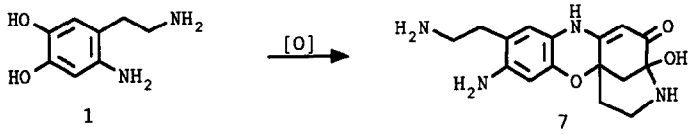


Tetrahedron, **1992**, *48*, 8515

A NEW OXIDATION PATHWAY OF THE NEUROTOXIN 6-AMINODOPAMINE. ISOLATION AND CHARACTERISATION OF A DIMER WITH A TETRAHYDRO[3,4a]IMINOETHANOPHENOXAZINE RING SYSTEM.

A. Napolitano, M. d'Ischia, C. Costantini and G. Prota
Department of Organic and Biological Chemistry,
University of Naples, Via Mezzocannone 16, I-80134 Naples, Italy.

Chemical or enzymatic oxidation of the neurotoxin 6-aminodopamine (1) at concentrations higher than 5 x 10^{-3}M affords the hitherto unknown dimer 7.

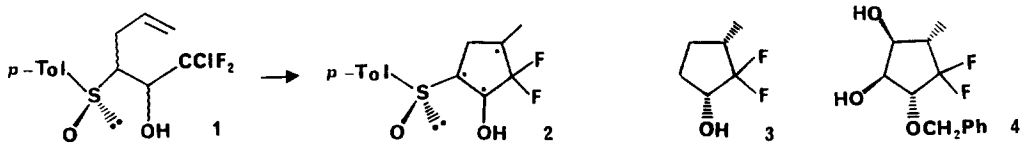


1 7

Tetrahedron, **1992**, *48*, 8523

EPC SYNTHESIS OF *gem*-DIFLUOROCYCLOPENTANE DERIVATIVES

Alberto Arnone, Pierfrancesco Bravo*, Giancarlo Cavicchio[a], Massimo Frigerio, and Fiorenza Viani
C.N.R.- Centro di Studio per le Sostanze Organiche Naturali, Dipartimento di Chimica, Politecnico, Milano, Italy;
[a]Dipartimento di Chimica, Università di L'Aquila, L'Aquila, Italy.

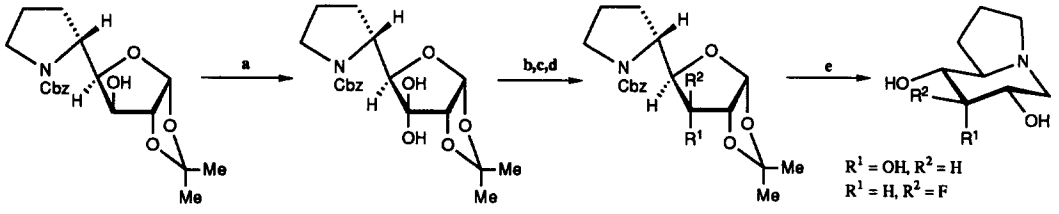


Thermal or photochemical radical cyclization of enantiomerically pure haloalkenes (**1**) afforded the corresponding *gem*-difluorocyclopentane derivatives (**2**) which, after chiral auxiliary removal and appropriate elaborations, gave enantiomerically pure difluoro-cyclopentanol (**3**) and -cyclopentantriol (**4**).

Tetrahedron, **1992**, *48*, 8541

ENANTIOMERIC SYNTHESIS OF POLYHYDROXYLATED INDOLIZIDINE ANALOGUES RELATED TO CASTANOSPERMINE: 1-DEOXY-7-EPI-CASTANOSPERMINE AND 1,7-DIDEOXY-7-FLUOROCASTANOSPERMINE

C.-Kuan Lee*, K.Y. Sim, and Jun Zhu; Department of Chemistry, National University of Singapore, Kent Ridge, (Singapore)



a. DMSO-P_2O_5, DMF, 65-70°C, 75%, b. $NaBH_4$, aq. ethanol, 78%, c. $(CF_3SO_2)_2O$, C_5H_5N-CH_2Cl_2, d. TASF, CH_2Cl_2, ~-5°C, 78%, e. 10% Pd/C, methanol, 95%.