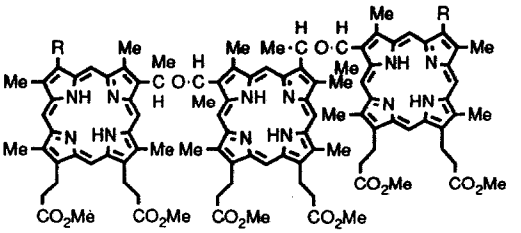
Tetrahedron, **1991**, *47*, 9571

REGIOSELECTIVE SYNTHESES OF ETHER-LINKED PORPHYRIN DIMERS AND TRIMERS RELATED TO PHOTOFRIN-II®.

Ravindra K. Pandey, Fuu-Yau Shiau, Thomas J. Dougherty and Kevin M. Smith,* Department of Chemistry, University of California, Davis, CA 95616 and Department of Radiation Medicine, Roswell Park Cancer Institute, Buffalo, NY 14263.

Regiochemically pure ether-linked porphyrin dimers and trimers (e.g. **A**) are synthesized from porphyrin monomers.



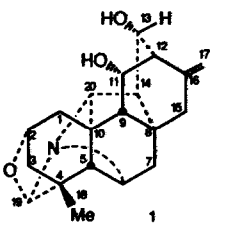
A R = COMe, CH(OH)Me, CH=CH_2

Tetrahedron, **1991**, *47*, 9585

DELATISINE, A NOVEL DITERPENOID ALKALOID FROM *DELPHINIUM ELATUM* L.

Samir A. Ross[a], Balawant S. Joshi[a], Haridutt K. Desai[a], S. William Pelletier[a]*, M. Gary Newton[b], Xiolin Zhang[c] and John K. Snyder[c]
[a]Institute for Natural Products Research and School of Chemical Sciences, The University of Georgia, Athens, GA 30602; [b]X-Ray Diffraction Laboratory, School of Chemical Sciences, The University of Georgia 30602; [c]Department of Chemistry, Boston University, Boston, MA 02215

The structure of delatisine (**1**) isolated from *Delphinium elatum* L. was established by ^{1}H COSY, long-range COSY, HETCOR, 2D nOe, fixed evolution HETCOR and selective INEPT nmr studies. The structure was confirmed by an X-ray crystal structure analysis.



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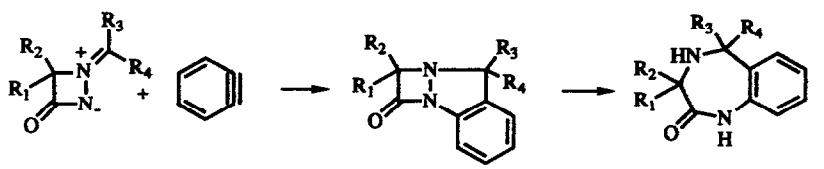
Tetrahedron, **1991**, *47*, 9599

"BICYCLOBENZODIAZEPINONES" FROM 3-OXO-1,2-DIAZETIDINIUM HYDROXIDE, INNER SALTS

Edward C. Taylor* and Denis M. Sobieray
Department of Chemistry, Princeton University, Princeton, NJ 08544

The preparation of tricyclic adducts from 1,3-dipolar cycloaddition of benzyne to 3-oxo-1,2-diazetidinium and 3-oxopyrazolidinium hydroxide, inner salts, and their conversion, *inter alia*, to benzodiazepinones and benzodiazocinones, are described.

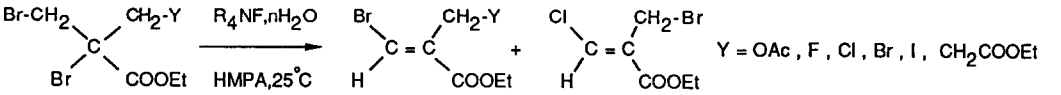


Tetrahedron, **1991**, *47*, 9621

ADDITION OF BROMINE TO β'-(FUNCTIONAL ALKYL) α, β-UNSATURATED ESTERS: STEREOSELECTIVE SYNTHESIS OF β-HALODERIVATIVES .

Taïcir BEN AYED, Hassen AMRI and Mohamed Moncef EL GAIED*
Laboratoire de Chimie Organique, Faculté des Sciences , Campus Universitaire 1060 TUNIS (TUNISIE)

A new convenient stereoselective synthesis of β-brominated β'-(functional alkyl) α,β-unsaturated esters.

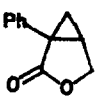


Tetrahedron, **1991**, *47*, 9629

RECIO- ET STEREO-REACTIVITE D'UNE LACTONE DISSYMETRIQUE. DETERMINATION DE STRUCTURE PAR EFFETS NUCLEAIRES OVER-HAUSER ET MODELISATION MOLECULAIRE.

[a]C. Berrier*[a], B. Bonnaud, J.F. Patoiseau[b], et D. Bigg[b].
[a]Laboratoire de Chimie XII - URA CNRS - Faculté des Sciences
40, Avenue du Recteur Pineau, 86022 POITIERS Cedex France.
[b]Centre de Recherche Pierre Fabre Médicament, 17, Avenue Jean Moulin
81106 CASTRES Cedex France.

Reactivity of lactone 1, precursor of VIIIa and VIIIb has been studied. Conformations and structures were assigned by ^{1}H NMR NOE DIFF experiments and molecular modelling.



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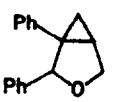


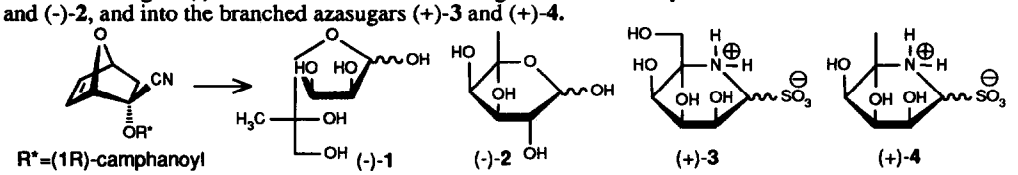
VIIIa cis
VIIIb trans

Tetrahedron, **1991**, *47*, 9641

TOTAL, ASYMMETRIC SYNTHESIS OF HEXOSES AND AZASUGARS BRANCHED AT C(5).[1]

Jürgen Wagner and Pierre Vogel*, Section de chimie de l'Université de Lausanne, Switzerland

The "naked sugar" (-)-**5** has been converted with high stereoselectivity into the branched hexoses (-)-**1** and (-)-**2**, and into the branched azasugars (+)-**3** and (+)-**4**.



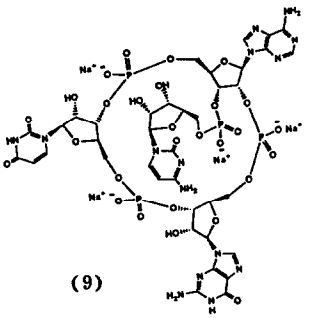
Tetrahedron, **1991**, *47*, 9659

SYNTHESIS OF TETRAMERIC CYCLIC BRANCHED-RNA (LARIAT) MODELLING THE INTRONS OF GROUP II AND NUCLEAR PRE-mRNA PROCESSING REACTION (SPLICING)

C. Sund, P. Agback & J. Chattopadhyaya*

Department of Bioorganic Chemistry, Box 581, Biomedical Center, University of Uppsala, S-751 23 Uppsala, Sweden

First synthesis of a Lariat-RNA **9** modelling the Lariat intermediate formed in the ligation of exons in the Splicing reaction is described.



(9)

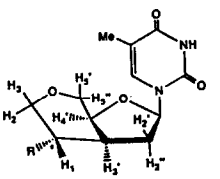
Tetrahedron, **1991**, *47*, 9675

SYNTHESIS OF FURO[2,3-c]PYRAN-β-D-NUCLEOSIDES BY RADICAL-CYCLIZATION & THEIR CONFORMATIONAL ANALYSIS BY 500 MHz ^{1}H-NMR SPECTROSCOPY

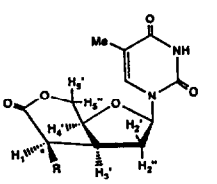
Z. Xi, P. Agback, A. Sandström & J. Chattopadhyaya*

Department of Bioorganic Chemistry, Box 581, Biomedical Center, University of Uppsala, S-751 23 Uppsala, Sweden

Intramolecular free-radical trapping reaction by 5'-O-allyl or alkyne or 5'-ester-linked-α,β-olefins gave various [3.4.0]-cis-fused-furo[2,3-c]pyrans **6 - 9** or [3.4.0]-cis-fused δ-lactones **13 - 15**, respectively. Construction of molecular models from $^3J_{HH}$ coupling constants show that the pyran ring in **6 - 9** are in chair conformation and the pentofuranose ring is in C2'-*exo*, C3'-*endo* conformation, while the δ-lactone ring in **13 - 15** are in boat conformation and the pentofuranose ring is locked in C2'-*endo*, C3'-*exo* conformation.



6-9



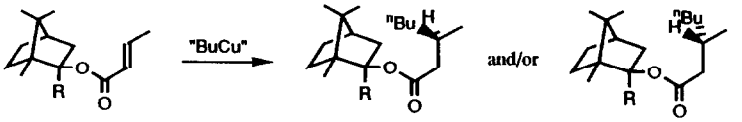
13-15

Tetrahedron, **1991**, *47*, 9691

HIGHLY DIASTEREOSELECTIVE ADDITION OF ORGANOCOPPER REAGENTS TO 2-EXO-BORNYL CROTONATES

Mikael Bergdahl, Martin Nilsson, Thomas Olsson,* and Kaye Stern
Department of Organic Chemistry, Chalmers University of Technology, S-412 96 Göteborg

Monoorganocopper compounds and cuprates add to bornyl crotonates with excellent diastereoselectivities to give different stereoisomers depending on the reagent.



Tetrahedron, **1991**, *47*, 9703

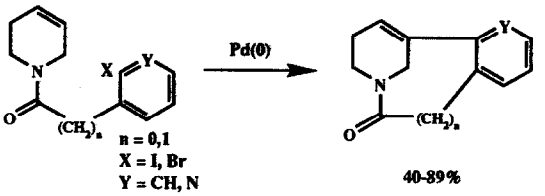
THE SYNTHESIS OF BRIDGED-RING CARBO- AND HETERO- CYCLES VIA PALLADIUM CATALYSED REGIOSPECIFIC CYCLISATION REACTIONS.

Ronald Grigg[a]*, Vijayaratnam Santhakumar[a], Visuvanathar Sridharan[a], Paul Stevenson[b], Andrew Teasdale[a], Mark Thornton -Pett[a], and Tanachat Worakun[b].

a. School of Chemistry, Leeds University, Leeds LS2 9JT.

b. Chemistry Department, Queen's University, Belfast BT9 5AG.

Bridged-ring carbo- and heterocycles are formed in excellent yield by Pd(0) catalysed 5-, 6-, and 7-exo-trig and 7-endo-trig cyclisation of aryl halides onto proximate alkenes.



Tetrahedron, **1991**, *47*, 9721

Directed, Iterative, Stereoselective Synthesis of Oligosaccharides by Use of Suitably 2-O-Substituted 2-Pyridyl 1-Thioglycopyranosides on Activation by Methyl Iodide

Hari Babu Mereyala* and G Venugopal Reddy
Indian Institute of Chemical Technology, Hyderabad 500 007, India

The title synthesis is described by the proven methyl iodide activation procedure to obtain the α-linked oligosaccharides.