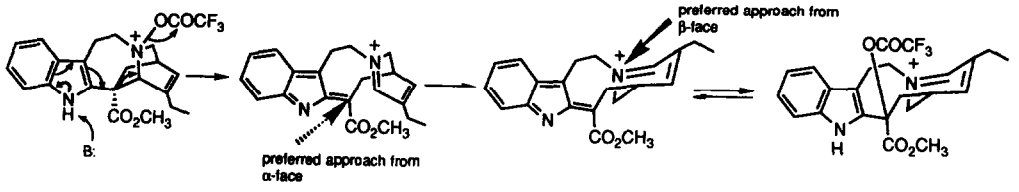
GRAPHICAL ABSTRACTS

Tetrahedron, **1992**, *48*, 277

MECHANISTIC ASPECTS OF THE FORMATION OF ANHYDROVINBLASTINE BY POTIER-POLONOVSKI OXIDATIVE COUPLING OF CATHARANTHINE AND VINDOLINE. SPECTROSCOPIC OBSERVATION AND CHEMICAL REACTIONS OF INTERMEDIATES. Richard J. Sundberg, Kumar G. Gadamasetti and Phyllis J. Hunt
Department of Chemistry, University of Virginia, Charlottesville, Virginia, USA, 22901

The fragmentation of catharanthine-N-oxide mediated by trifluoroacetic anhydride has been shown to be base-catalyzed. Certain intermediates have been observed spectroscopically and mechanistic details are discussed.

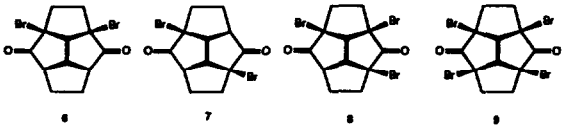


Tetrahedron, **1992**, *48*, 297

X-Ray Crystallographic Study of α-Brominated Diketo Tetraquinanes. Conformational Effects of the Number of Halogens and their Position on Bond Length and Solid-State Conformation

Leo A. Paquette,* Bruce M. Branan, and Robin D. Rogers,* *Departments of Chemistry, The Ohio State University, Columbus, Ohio 43210 and Northern Illinois University, DeKalb, Illinois 60115*

The manner and degre to which the tetracyclo-[7.2.1.$0^{4,11}$.$0^{6,10}$]dodecane-5,12-dione framework is modified by bromine substitution have been assessed by X-ray crystallographic analysis of **6-9**.



Tetrahedron, **1992**, *48*, 307

LARGE-SCALE SYNTHESIS OF ANTICOAGULANT DECAPEPTIDE MDL 28050

William J. Hoekstra*, Shyam S. Sunder and Robert J. Cregge
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Louis A. Ashton, Kenneth T. Stewart and Chi-Hsin R. King*
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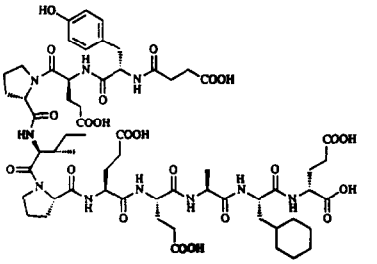
A solution phase synthesis of the anticoagulant decapeptide Suc-Tyr-Glu-Pro-Ile-Pro-Glu-Glu-Ala-Cha-*D*-Glu-OH (1, MDL 28050) on a large scale is described.



1, MDL 28050

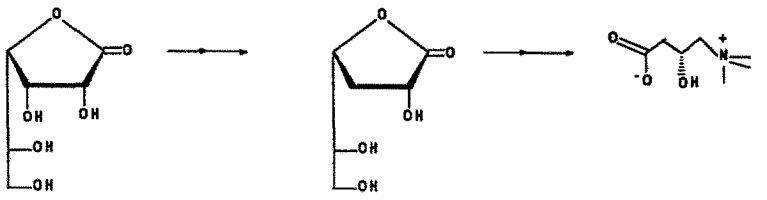
Tetrahedron, **1992**, *48*, 319

SIMPLE SYNTHESIS OF (R)-CARNITINE FROM D-GALACTONO-1,4-LACTONE.

Mikael Bols, Inge Lundt and Christian Pedersen,

Department of Organic Chemistry, The Technical University of Denmark Building 201, DK-2800 Lyngby,Denmark.

(R)-Carnitine was prepared from D-galactono-1,4-lactone by two different sequences.

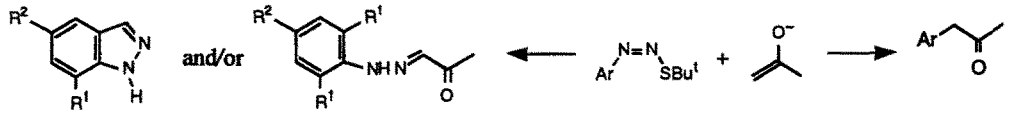


Tetrahedron, **1992**, *48*, 325

BEHAVIOUR OF ARYLAZO *tert*-BUTYL SULFIDES WITH KETONE ENOLATES. COMPETITION BETWEEN $S_{RN}1$ α-ARYLATION AND AZOCOUPLING REACTIONS.

C. Dell'Erba, M. Novi, G. Petrillo and C. Tavani

The reactions of azosulfides 1 with acetone enolate give good yields of arylacetones 5 or, competitively, indazoles and/or 2-oxopropanal arylhydrazones. Likewise, the α-phenylation of pinacolone or acetophenone enolates has been successfully carried out.



$R^1 = R^2 = Me, H$ $R^1 = H, Me; R^2 = Me, Bu^i$ 1 5

Tetrahedron, **1992**, *48*, 335

HETEROAROMATICITY 5. A UNIFIED AROMATICITY INDEX

C. W. Bird

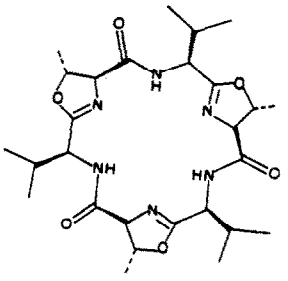
Department of Chemistry, King's College, The Strand, London WC2R 2LS, U.K.

A unified aromaticity scale is presented based upon the family of aromaticity indices previously introduced for differing ring systems. The resonance energies of a range of heterocycles have been calculated, on a common basis, from experimental heats of formation and correlated with the foregoing indices.

Tetrahedron, **1992**, *48*, 341

CYCLOXAZOLINE: A CYTOTOXIC CYCLIC HEXAPEPTIDE FROM THE ASCIDIAN *LISSOCLINUM BISTRATUM.*

T.W. Hambley[1], C.J. Hawkins[2], M.F. Lavin[3], A. van den Brenk[2] and D.J. Watters[3*]; [1]School of Chemistry, University of Sydney, (Australia), [2]Department of Chemistry, University of Queensland, (Australia) and [3]Queensland Institute of Medical Research, (Australia).



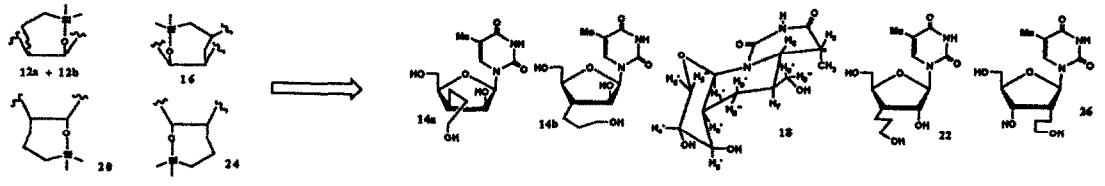
A new cyclic hexapeptide has been isolated from a marine ascidian and its X-ray structure has been determined.

Tetrahedron, **1992**, *48*, 349

NEW STEREOCONTROLLED SYNTHESIS OF ISOMERIC *C*-BRANCHED-β-D-NUCLEOSIDES BY INTRAMOLECULAR FREE-RADICAL CYCLIZATION-OPENING REACTIONS BASED ON TEMPORARY SILICON CONNECTION

Zhen Xi, Peter Agback, Janez Plavec, Anders Sandström & Jyoti Chattopadhyaya*
Department of Bioorganic Chemistry, Box 581, Biomedical Center, University of Uppsala, S-751 23 Uppsala, Sweden

Silicon-bearing allyl groups tethered to a 2' or 3'-hydroxyl group onto the radical generated at the vicinal 2' or 3' center in the free-radical precursors were used to promote intramolecular stereocontrolled free-radical-cyclization to give cis-fused 7-endo cyclized products **12a, 12b, 16, 20** and **24** which were oxidized and 5'-deprotected to give **14a, 14b, 18, 22** and **26**, respectively, in high yields.



Tetrahedron, **1992**, *48*, 371

Reduction of Carboxylic Acids into Alcohols Using $NaBH_4$ in the Presence of Catechol and/or CF_3COOH

Yantrapragada Suseela and Mariappan Periasamy*
School of Chemistry, University of Hyderabad, Hyderabad 500 134, India.