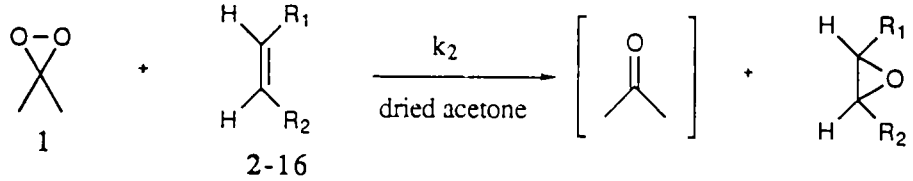
Heterocycl. Commun. **3** (1997) 393-396

EPOXIDATION BY DIMETHYLDIOXIRANE: KINETICS FOR *cis*-ALKENES

A.L. Baumstark,* Elba Michelena-Baez, Angela M. Navarro and Harold D. Banks
Department of Chemistry, Center of Biotechnology and Drug Design, Georgia State University, Atlanta, Georgia 30303-3083 and U.S. Army ERDEC, APG, MD 21010-5423, USA

Kinetic data for epoxidation of a series of *cis*-alkenes and cycloalkenes by dimethyldioxirane in dried acetone are reported; the results are consistent with a concerted, electrophilic process with a spiro-transition state.



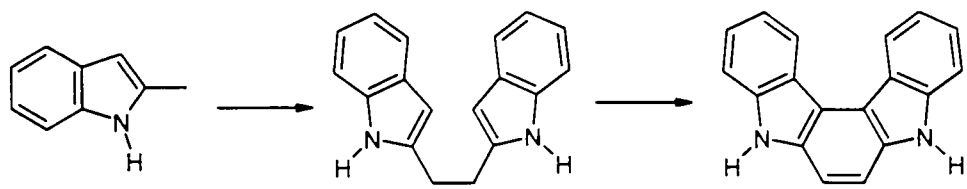
1 2-16

Heterocycl. Commun. **3** (1997) 397-400

COUPLING REACTIONS OF 1,2-BIS(2-INDOLYL)ETHANE. FORMATION OF INDOLO[2,3-*c*]CARBAZOLES.

Jan Bergman*, Eric Desarbre, Tomasz Janosik, Göran Lidgren, and Lennart Venemalm
Department of Organic Chemistry, Royal Institute of Technology, S-100 44 Stockholm, Sweden, and Department of Organic Chemistry, CNT, NOVUM Research Park, S-141 57 Stockholm, Sweden

2-Methylindole has been coupled to 1,2-bis(2-indolyl)ethane **6**, which in turn has been further coupled to indolo[2,3-*c*]carbazole **3**. Attempts to couple **6** with CoF_3 in trifluoroacetic acid gave new 7-membered compounds as the main products.



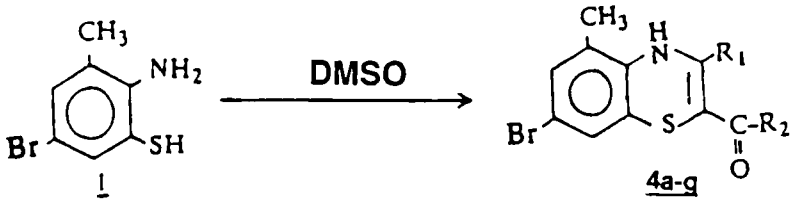
6 **3**

Heterocycl. Commun. 3 (1997) 401-404

SINGLE STEP SYNTHESIS OF SUBSTITUTED 4H-1,4-BENZOTHIAZINES

Naveen Gautam, D.C. Gautam and R.R. Gupta
Department of Chemistry, Rajasthan University, Jaipur -302 004, India

Synthesis of title compounds have been reported.



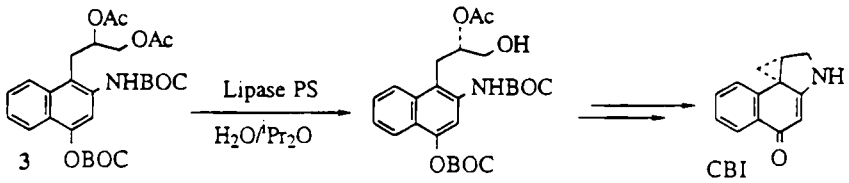
1 4a-g

Heterocycl. Commun. 3 (1997) 405-408

A PRACTICAL ROUTE TO OPTICALLY ACTIVE CBI, A POTENT ANALOG OF THE CC-1065 ALKYLATION SUBUNIT

Lei Ling, Yu Xie, and J. William Lown*
Department of Chemistry, University of Alberta,
Edmonton, Alberta, Canada T6G 2G2

Racemic **3** was resolved by Lipase PS catalyzed hydrolysis in water-saturated isopropyl ether. A practical route for synthesis of optically active CBI starting from the resolved material was developed.

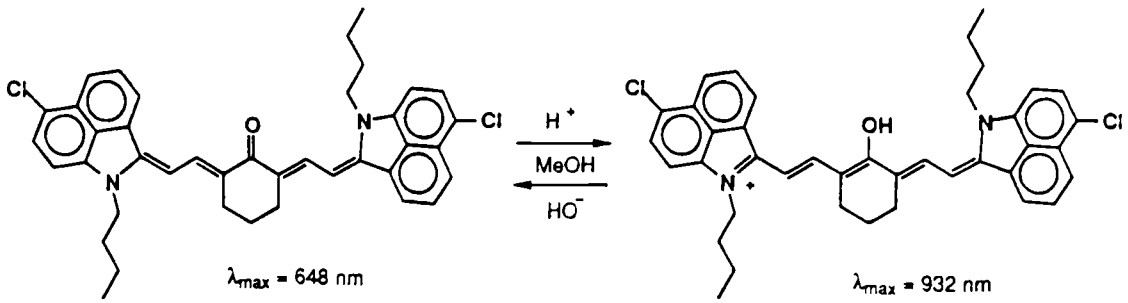


3 CBI

Heterocycl. Commun. 3 (1997) 409-411

A NEW pH-SENSITIVE NEAR-INFRARED CHROMOPHORE

J. Christian Mason, Gabor Patonay, and Lucjan Strekowski*
Department of Chemistry, Georgia State University, Atlanta, Georgia 30303, USA

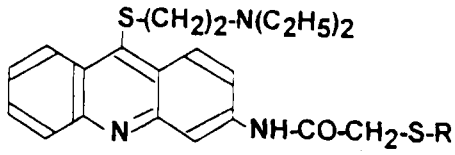


Heterocycl. Commun. 3 (1997) 413-418

SYNTHESIS OF NEW 3-(AZOLYLTHIOACETAMIDO)-ACRIDINYL-9-THIOETHERS

Adriana FIFIKOVA and Jacques BARBE, GERCTOP-UPRESA CNRS 6009, Faculté de Pharmacie, 27 bvd Jean-Moulin, F-13385 Marseille Cedex 5

A series of new 9-diethylaminoethylthioacridines substituted in position 3 with several azolyl-thio-amido groups, has been prepared with the aim to optimize antiparasitic activity of acridinyl thioethers.



Heterocycl. Commun. 3 (1997) 419-425

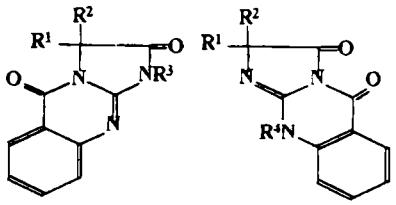
STRUCTURE AND ACTIVITY STUDIES OF GLYCINE RECEPTOR LIGANDS. PART 2. IMIDAZOQUINAZOLINODIONES - DERIVATIVES WITH THE EXPECTED ANTICONVULSANT ACTIVITY.

K.Kieć- Kononowicz[1], J.Karolak-Wojciechowska[*2], H.B.Trzeźwińska[2], I.Tchuew[3]

[1] Department of Chemical Technology of Drugs, Collegium Medicum of Jagiellonian University, 30-688 Kraków;

[2] Institute of General and Ecological Chemistry, Technical University, 90-924 Łódź, Żwirki 36, Poland;

[3] Institute of Physical Chemistry, Academy of Science, Chernogalovka, Russia.



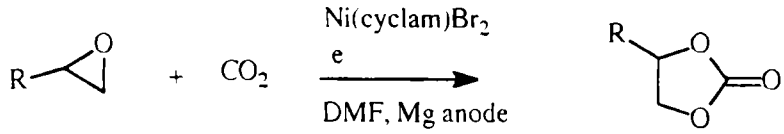
IV V

Imidazoquinazolinodiones (V and IV) have been prepared via the reaction of cyclization of respective methylated 2-thiohydantoins with anthranilic acid in the version of diphenyl and (un)substituted arylidene derivatives.

Heterocycl. Commun. 3 (1997) 427-432

SYNTHESIS OF FUNCTIONALISED CYCLIC CARBONATES FROM EPOXIDES AND CARBON DIOXIDE CATALYSED BY ELECTROGENERATED NICKEL COMPLEXES

Patricia Tascedda, Elisabet Duñach
Laboratoire de Chimie Moléculaire, associé au CNRS, Université de Nice-Sophia Antipolis, 06108 NICE Cedex 2, France



R = functional containing group

Yields 50-98%

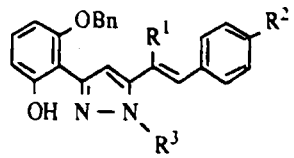
Electrosynthesis of cyclic carbonates with functional groups such as chlorine, bromine, ether, ester or olefin, under mild conditions : atmospheric carbon dioxide pressure and room temperature.

Heterocycl. Commun. 3 (1997) 433-436

NOVEL (*E*)-3-(2′-BENZYLOXY-6′-HYDROXYPHENYL)-5-STYRYLPYRAZOLES FROM (*E*)-2-STYRYLCHROMONES

Diana C. G. A. Pinto, Artur M. S. Silva and José A. S. Cavaleiro

Department of Chemistry, University of Aveiro, 3810 Aveiro, Portugal



1

The synthesis of novel (*E*)-3-(2′-benzyloxy-6′-hydroxyphenyl)-5-styrylpyrazoles 1 from (*E*)-2-styrylchromones and hydrazines is reported. The stereochemistry of each product was established by NOE experiments.

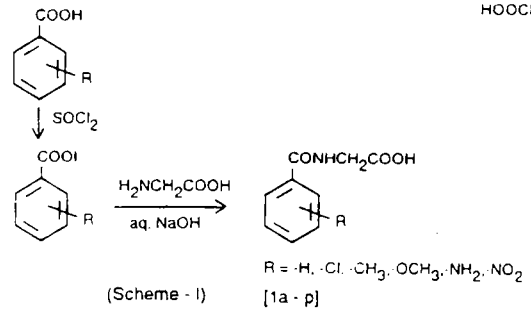
Heterocycl. Commun. 3 (1997) 437-441

PREPARATION AND ANTIMICROBIAL EVALUATION OF 1,1,1-TRICHLORO-2,2-BIS(CARBOXY METHYLAMINOCARBONYLARYL)-ETHANES HAVING POTENT OF SOME NEW DDT ANALOGUES.

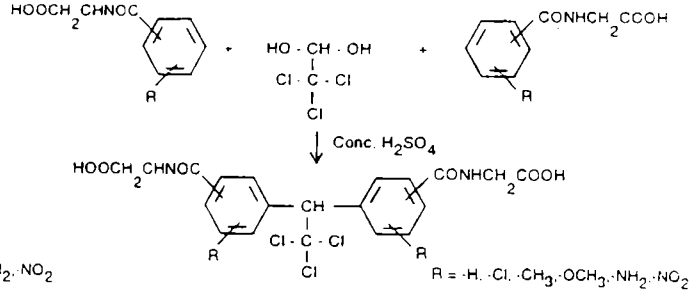
D. M. Purohit and V. H. Shah*

Department of Chemistry, Saurashtra University, Rajkot - 360 005 - INDIA.

Some new DDT analogues (2a-p) have been synthesised by the action of substituted benzoyl glycines with chloralhydrate in the presence of conc. sulphuric acid. The benzoylglycines were prepared by the action of aromatic acids with thionyl chloride and the latter were synthesised by the action of α-amino acetic acid in basic medium. The biological activity of these compounds have been determined against various Gram +ve, Gram -ve baceteria and fungi. The constitution of the Products have been elucidation is based on elemental analysis and spectral (IR and PMR) data.



(Scheme - I) [1a - p]



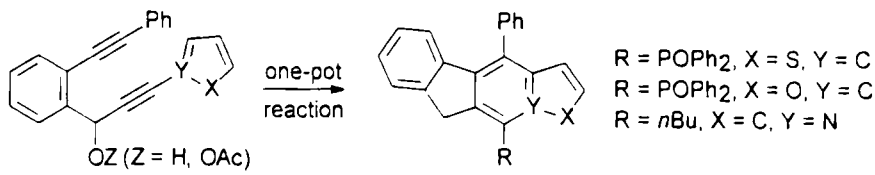
(Scheme - II) [2a - p]

Heterocycl. Commun. 3 (1997) 443-447

DOMINO REACTION CASCADES TO HETEROARENE FUSED BENZOFLUORENES FROM ENEDIYNE ALCOHOLS: [2,3]-SIGMATROPIC REARRANGEMENT OR S_N2' REACTION FOLLOWED BY A THERMAL C^2-C^6 BIRADICAL CYCLIZATION.

Michael Schmittel,* Jens-Peter Steffen and Ingo Bohn

Bayerische Julius-Maximilians Universität Würzburg, Institute of Organic Chemistry, Am Hubland, D-97074 Würzburg, Germany

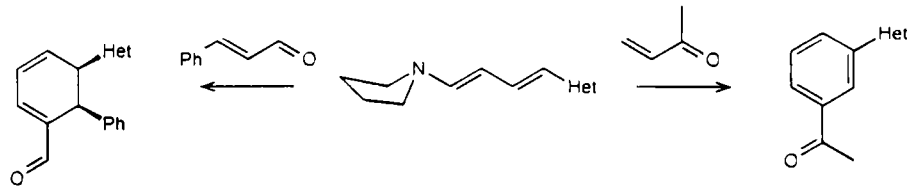


Heterocycl. Commun. 3 (1997) 449-452

"IONIC DIELS-ALDER" REACTION OF HETARYLDIENAMINES

András Kotschy[a], György Hajós[a*], Géza Timári[a], András Messmer[a] and Joachim G. Schantl[b]
[a]Central Research Institute for Chemistry, Hungarian Academy of Sciences, H-1525 Budapest, P.O.Box 17., Hungary
[b]Institute of Organic Chemistry, University of Innsbruck, A-6020 Innsbruck, Innrain 52/A, Austria

Diels-Alder reaction of Hetaryldienamines with α,β-unsaturated oxo compounds is reported.

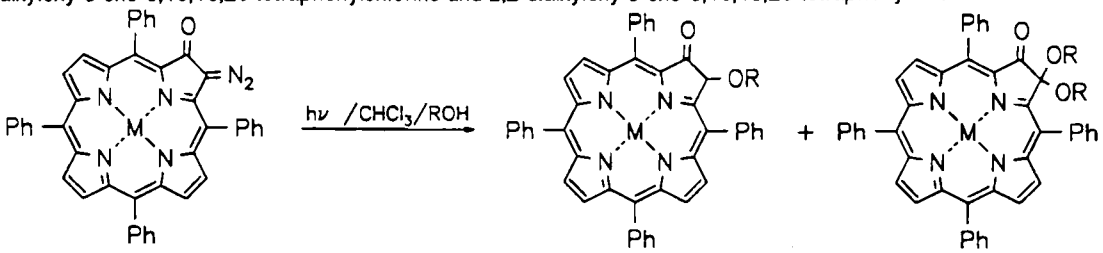


Heterocycl. Commun. 3 (1997) 453-460

PHOTOINDUCED REACTION OF 2-DIAZO-3-OXO-5,10,15,20-TETRAPHENYLCHLORINS WITH ALCOHOLS

Hermann K. Hombrecher*[a], Viviana M. Gerdan[a], José A. S. Cavaleiro[b] and Maria G. P. M. S. Neves[b]
a) Institut für Chemie der Medizinischen Universität zu Lübeck, Ratzeburger Allee 160, D-23538 Lübeck, Germany
b) Department of Chemistry, University of Aveiro, P-3810 Aveiro, Portugal

The title compounds react under irradiation with visible light to lead to a mixture of four compounds among which are 2-alkyloxy-3-oxo-5,10,15,20-tetraphenylchlorins and 2,2-dialkyloxy-3-oxo-5,10,15,20-tetraphenylchlorins.

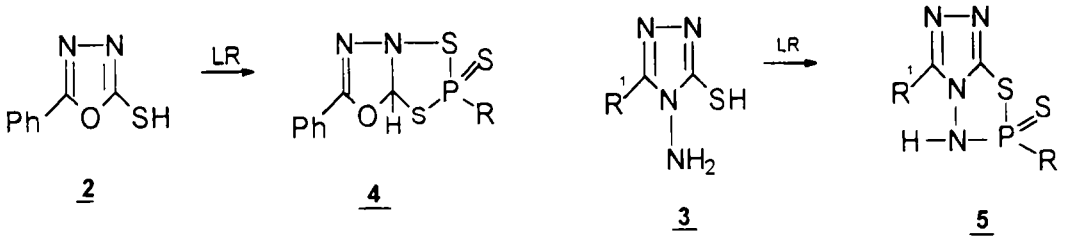


Heterocycl. Commun. 3 (1997) 461-463

Organophosphorus Heterocycles(X III):
Simple Routes to Phospholanes from 2-Mercapto-1,3,4-oxadiazole and 3-Mercapto-1,3,4-triazoles

Liang-Nian He*[a] , Ru-Yu Chen[b]
a Institute of Organic Synthesis,Central China Normal University,Wuhan,430079,P.R.China b Institute of Elemento-Organic Chemistry, Nankai University,300071,P.R.China

Lawesson's reagent reated with 1,3,4-oxadiazole 2 and 1,3,4-triazoles 3 at 100 ℃ in toluene to give cycles 4 and 5 . respectively.



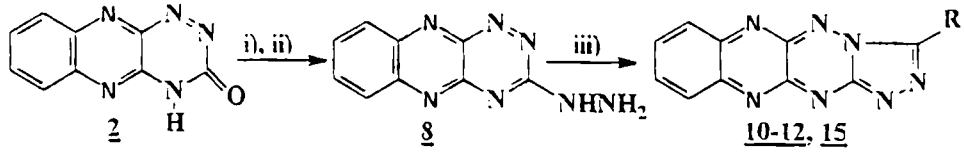
2 4 3 5

Heterocycl. Commun. 3 (1997) 465-471

Synthesis of New Triazolo[4',5':2,3]-triazino[5,6-b]quinoxalines

O.S. Moustafa and M.Z.A. Badr
Chemistry Department, Faculty of Science, Assiut University, Assiut 71516, Egypt.

Hydrazino compound 8 was prepared from the reaction of 2 with $POCl_3$ followed by refluxing of the desired chloro compound 7 with hydrazine hydrate in ethanol. Cyclization of the hydrazino derivative 8 with variant reagents afforded the corresponding triazolotriazinoquinoxalines.

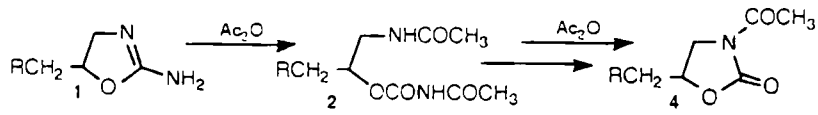


I) $POCl_3$, ii) Hydrazine hydrate/ethanol, iii) a) ClCOOEt, 10; b) CS_2/pyridine, 11; c) PhCOCl, 12; d) HCOOH, 15.

Heterocycl. Commun. 3 (1997) 473-478

ACETYLATION OF 2-AMINO-2-OXAZOLINES: EVIDENCE OF A RING CLEAVED ACETYLATED COMPOUND

Isabelle Forfar[a], Christian Jarry[a]* and Jean-Michel Leger[b]
[a]Laboratoire de Chimie Physique, [b]Laboratoire de Chimie Analytique, Université Victor Segalen Bordeaux 2, 146 rue Léo Saignat, 33076 Bordeaux Cedex, France.



Reaction of 2-amino-2-oxazolines with acetic anhydride led to acetylated compounds which exhibit or not an heterocyclic structure.