

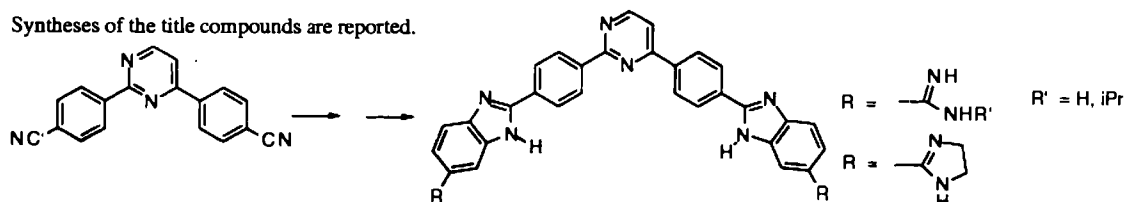
Graphical Abstracts

Heterocycl. Commun. 1 (1995) 225-230

SYNTHESIS OF 2,4-BIS[4-(5-AMIDINO AND 5-SUBSTITUTEDAMIDINO-2-BENZIMIDAZOYL) PYRIMIDINES

Miroslav Bajic and David W. Boykin*, Department of Chemistry and Center for Biotechnology and Drug Design, Georgia State University, Atlanta, GA 30303-3083 USA

Syntheses of the title compounds are reported.



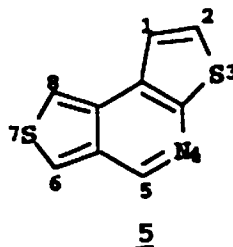
Heterocycl. Commun. 1 (1995) 231-238

SOME ELECTROPHILIC SUBSTITUTION REACTIONS OF DITHIENO [2,3-*b*:3',4'-*d*]PYRIDINE

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Abstract: Nitration, bromination and iodination of dithieno[2,3-*b*:3',4'-*d*]pyridine **5** have been studied and the results compared with those obtained for other isomeric systems. Nitration with concentrated nitric acid in trifluoroacetic acid gave selectively the 8-nitro isomer. The 8-bromo isomer was best obtained in 61% yield by bromination with *N*-bromosuccinimide in a biphasic system using picric acid as catalyst. Iodination was carried out with iodine and mercuric nitrate in dichloromethane and depending on the amount of iodine the 8-iodo and 6,8-diiodo derivatives were obtained.



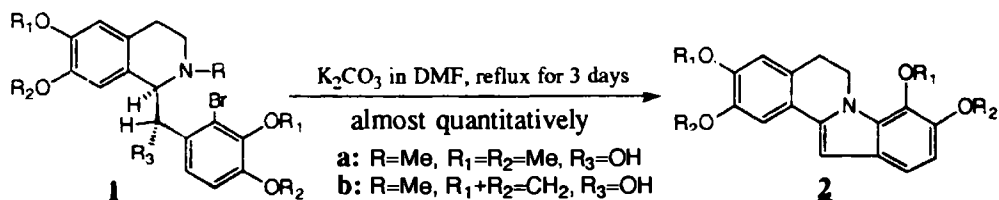
Heterocycl. Commun. 1 (1995) 239-240

A NEW ENTRY TO INDOLO[2,1-*a*]ISOQUINOLINE SKELETON

Kazuhiko Orito,* Mamoru Miyazawa and Hiroshi Suginome

Laboratory of Organic Synthesis, Division of Molecular Chemistry, Graduate School of Engineering, Hokkaido University, Sapporo 060, Japan

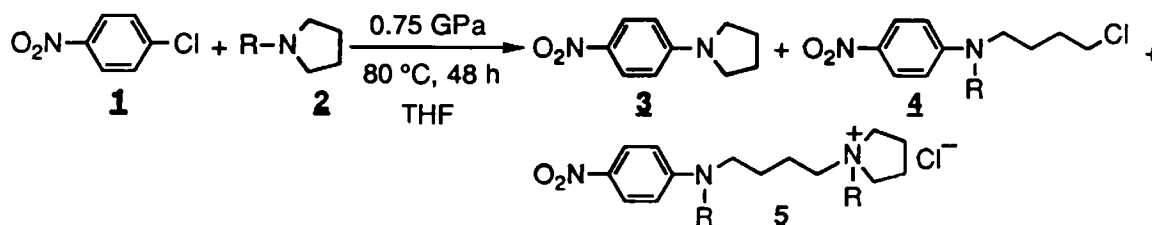
erythro-Amino alcohols **1a** and **1b** were almost quantitatively converted to 5,6-dihydroindolo[2,1-*a*]isoquinolines **2a** and **2b** by heating with potassium carbonate in *N,N*-dimethylformamide.



NUCLEOPHILIC SUBSTITUTION REACTION OF *p*-CHLORONITROBENZENE WITH *N*-SUBSTITUTED CYCLIC AMINES UNDER HIGH PRESSURE

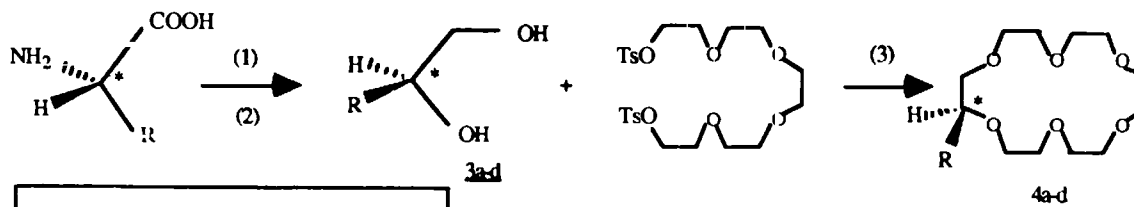
Toshikazu Iбата,* Muhong Shang and Tetsuo Demura
Department of Chemistry, Faculty of Science, Osaka University,
Toyonaka, Osaka 560, Japan

Nucleophilic substitution reaction of *p*-chloronitrobenzene with *N*-substituted cyclic amines under high pressure is reported.



SYNTHESIS OF SOME NEW CHIRAL CROWN ETHERS AND THEIR APPLICATION IN EXTRACTION OF RADIOELEMENTS

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Normandie-Niemen , BP 552, 13397 Marseille Cedex 13 France .



- (a) : R=CH(CH₃)₂ ,L-Valine
(b) : R=CH₂CH(CH₃)₂ ,L-Leucine
(c) : R=CH(CH₃)CH₂CH₃ ,L-Isoleucine
(d) : R=CH₂Ph ,L-Phenylalanine

(1) : NaNO₂ / CH₃COOH

(2) : LiAlH₄ / T.H.F.

(3) : NaOH / Dioxane / H₂O

NOVEL SYNTHETIC APPROACH TO ALKYLENE-DIOXY- PRECOCENES

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Department of Chemical Research, Alkaloida Chemical Company Ltd., Tiszavasvári, Hungary, H-4440

A novel synthetic route to alkylene-dioxy-precocenes 10 using the reaction of α,ω -dibromoalkanes with 6,7- or 7,8-dihydroxy-2,2-dimethyl-4-chromanones is described.

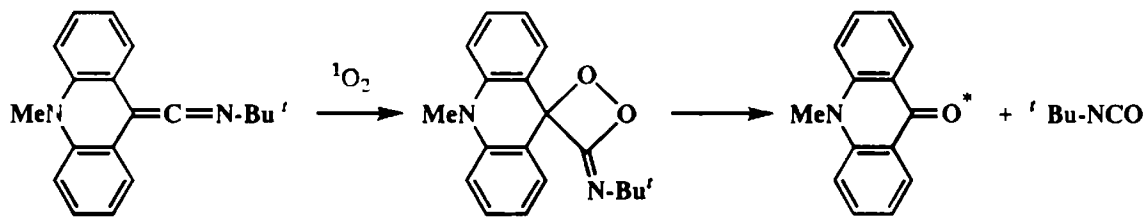


DIRECT CHEMILUMINESCENCE OF DIOXETANIMINE DERIVED FROM 9-(*N*-*tert*-BUTYLIMINO-METHYLIDENE)-10-METHYLACRIDAN. COMPARISON OF DIOXETANES BY SCF CALCULATIONS

Jiro Motoyoshiya,* Mayumi Mori, Susumu Narita and Sadao Hayashi

Department of Materials Creation Chemistry, Faculty of Textile Science & Technology, Shinshu University, Ueda, Nagano 386, Japan

Direct chemiluminescence was observed in thermal decomposition of the intermediate dioxetanimine derived from the titled ketenimine. The SCF calculations were performed in order to compare with other dioxetanes.

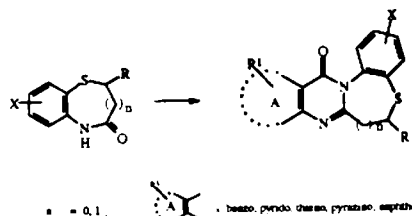
**SYNTHESIS OF SOME NOVEL ANNELATED 1,4-BENZOTHAZINE AND 1,5-BENZOTHAZEPINE DERIVATIVES AS POTENTIAL ANTIMICROBIAL AND CYTOSTATIC AGENTS(1)**Valeria AMBROGI¹, Leandro BAIOCCHI², Marilena GIANNANGELI², Ariella FURLANI³, Giuliano GRANDOLINI^{1*}, Aristotelis PAPAIOANNOU³, Luana PERIOLI¹, Vito SCARCIA,²

¹Istituto di Chimica Farmaceutica e Tecnica Farmaceutica - Universita degli Studi di Perugia, Via del Liceo 1 - 06123 Perugia, Italy

²Istituto di Ricerca Francesco Angelini - Pomezia, Italy

³Istituto di Farmacologia e Farmacognosia - Universita degli Studi di Trieste, Via A. Valerio, 32 - 34100 Trieste, Italy

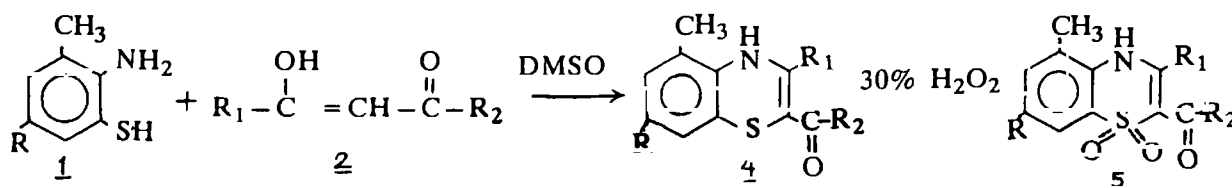
Some new annelated 1,4-benzothiazines and 1,5-benzothiazepine derivatives have been prepared. They showed moderate cytostatic activity.



SYNTHESIS OF SUBSTITUTED 4H-1,4-BENZOTHAZINES AND THEIR CONVERSION INTO SULFONES

Mukesh Jain, Mahmoud A. Alabdalla & R.R. Gupta*
Department of Chemistry, Rajasthan University, Jaipur-302004, India

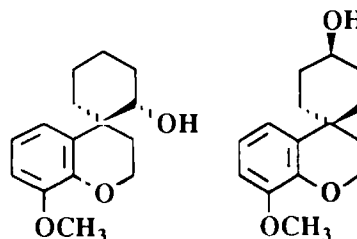
Synthesis of title compounds have been reported.



NEW STEREOSELECTIVE SYNTHESIS OF SPIROCYCLOHEXANBENZOPYRANS DERIVATIVES

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rue J.B. Clément, F 92296 Châtenay-Malabry Cedex, France.
P. Ducrot and C. Thai
Institut de Chimie des Substances Naturelles, CNRS, F 91198 Gif-sur-Yvette, France.

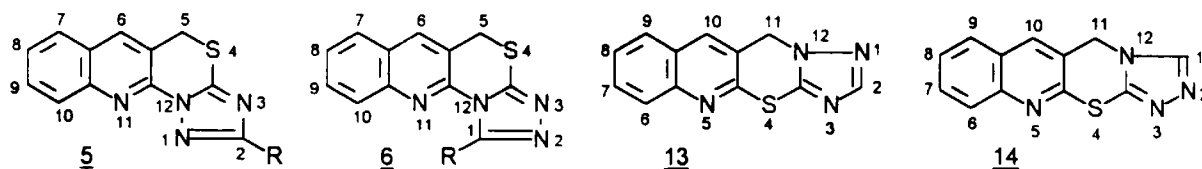
Synthesis of new spirocyclohexanbenzopyrans derivatives is described by using intramolecular Heck arylation and stereospecific epoxidation.



FUSED 1,2,4-TRIAZOLE HETEROCYCLES. III. SYNTHESIS AND STRUCTURES OF NOVEL [1,2,4]TRIAZOLO[1,3]THIAZINOQUINOLINES.

Ferenc Korodi* and Zoltán Szabo
Alkaloida Chemical Company Ltd., H-4440 Tiszavasvári, Hungary

Syntheses of 5*H*-[1,2,4]triazolo[5',1':2,3][1,3]thiazino[4,5-*b*]quinolines **5**, 5*H*-[1,2,4]triazolo[3',4':2,3]-[1,3]thiazino[4,5-*b*]quinolines **6**, 11*H*-[1,2,4]triazolo[5',1':2,3][1,3]thiazino[6,5-*b*]quinoline **13** and 11*H*-[1,2,4]triazolo[3',4':2,3][1,3]thiazino[6,5-*b*]quinoline **14** are described starting from 2-chloro-3-chloromethylquinoline and 1,2,4-triazole-5-thiols.

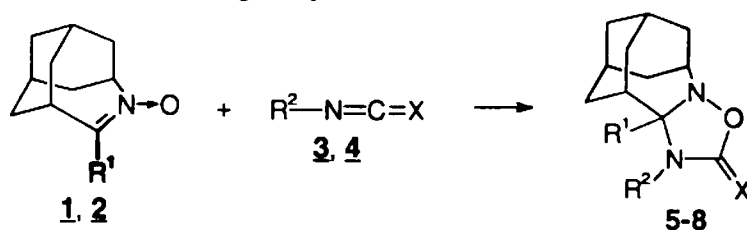


SYNTHESIS OF 2,5-DIAZA-3-OXATETRACYCLO[7.3.1.1^{7,11}.0^{2,6}]TETRADECAN-4-ONE AND -THIONE DERIVATIVES BY 1,3-DIPOLAR CYCLOADDITION REACTION OF HOMOADAMANTANE-INCORPORATED NITRONES WITH ISOCYANATES AND ISOTHIOCYANATES

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The 1,3-dipolar cycloaddition reaction of homoadamantane-incorporated nitrones **1** and **2** with isocyanates and isothiocyanates afforded the corresponding 1,2,4-oxadiazolidin-5-ones and 1,2,4-oxadiazolidine-5-thiones in good yields.



1, 5, 6: R¹ = H **2, 7, 8:** R¹ = Me **3, 5, 7:** X = O, **4, 6, 8:** X = S
a: R² = Ph **b:** R² = Me **c:** R² = cyclohexyl **d:** R² = Me₃Si **e:** R² = H

SYNTHESIS OF SUBSTITUTED 1,4-DIMETHYL PHENOTHIAZINES

Vandana Gupta* and Archana Gupta

Department of Chemistry, Rajasthan University, Jaipur-302004, India

Synthesis of title compounds is reported by Smiles rearrangement.

