Graphical Abstracts

Heterocycl. Commun. 9 (2003) 221-224

OXIDATION METHODS FOR AROMATIC DIAZINES. Part II. CHLORINATED PYRAZINE *N*-OXIDES

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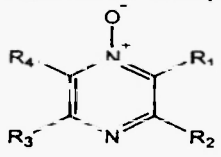
Chlorinated pyrazines are directly oxidized to the *N*-oxides using dimethyldioxirane. The reactions were found to be completely regioselective and the products were easily isolated in good yields.



1a $R_1, R_3, R_4 = H$; $R_2 = Cl$
1b $R_1, R_3 = CH_3$, $R_2 = Cl$; $R_4 = H$
1c $R_1, R_4 = H$; $R_2, R_3 = Cl$

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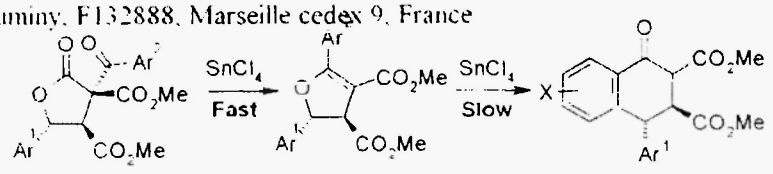
$SnCl_4$ MEDIATED REARRANGEMENT OF α-AROYL-γ-BUTYROLACTONES: REINVESTIGATION OF THE MECHANISM

Frederic Garzino, Alain Meou and Pierre Brun
Laboratoire de Synthèse Organique Selective, GCOMM, Universite de la Mediterranee,
163 Av. de Luminy, F132888, Marseille cedex 9, France



Mechanisms of these two $SnCl_4$-mediated rearrangements leading to 4-aryltetralones were compared.

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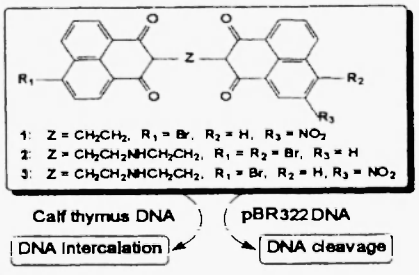
A NEW CLASS OF DNA INTERCALATOR AND PHOTOCLEAVER: BIS-NAPHTHALIMIDES WITH BROMO AND NITRO SUBSTITUENTS

Wen Zhang[a,*,†], Xuhong Qian[b], Yanling Wu[c] and Hiroshi Ohrui[d]
[a]*Institute of Pesticides and Pharmaceuticals, East China University of Science and Technology, P. O. Box 544, 130 Meilong Road, Shanghai 200237, China, and Shanghai Key Lab. of Chemical Biology, China.*
[b]*State Key Lab. of Fine Chemicals, Dalian University of Technology, P. O. Box 40, 158 Zhongshan Road, Dalian 116012, China*
[c]*Department of Pediatrics, Tohoku University School of Medicine, Seiryomachi, Aobaku, Sendai 980-8574, Japan*
[d]*Department of Applied Bioorganic Chemistry, Division of Life Science, Tohoku University, 1-1 Tsutsumidori Amamiyamachi, Aoba-ku, Sendai 981-8555, Japan*



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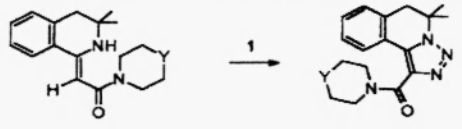
SYNTHESIS OF NOVEL AND HARDLY-OBTAINABLE 1,2,3-TRIAZOLES WITH POTENTIAL ANTITUMORAL ACTIVITY BY A DIAZO-TRANSFER REACTION FROM 5,7-DINITRO-3-DIAZO-1,3-DIHYDRO-2H-INDOL-2-ONE TO ENAMINONES

J. O. F. Melo,[a] C. L. Donnici,[a]* R. Augusti,[a] M. T. P. Lopes,[a] and A. G. Mikhailovskii[b]
[a]Universidade Federal de Minas Gerais, Belo Horizonte, MG, 31270-901, Brazil;
[b]Institute of Technical Chemistry, Ural Branch of Russian Academy of Sciences, Perm 614600, Russia



5 7

Novel and barely accessible 1,2,3-triazoles 7 with potential antitumoral activity were synthesized with good to moderate yields by a diazo-transfer process from 5,7-dimtro-3-diazo-1,3-dihydro-2H-indol-2-one 1 to polycyclic enaminones 5.

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A Convenient Synthesis of Pyrrolo[3,4-c]quinolines

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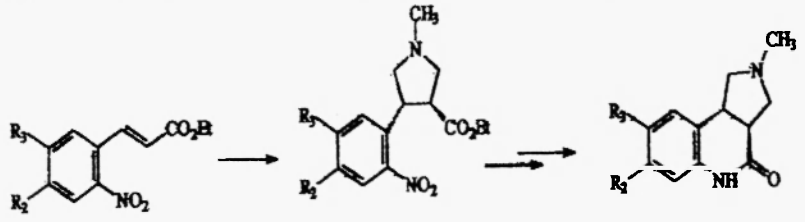

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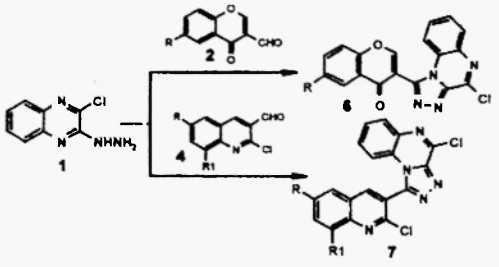
A FACILE SYNTHESIS OF CHROMONYL & QUINOLINYL 1,2,4-*s*-TRIAZOLO [4,3-a] QUINOXALINES BY DEHYDROGENATIVE CYCLIZATION USING DDQ.

G. Jagath Reddy *, D. Latha and C. Thirupathaiah
R & D Laboratories, Dr. Jagath Reddy's Heterocyclics, 81, S.V.Co-op Industrial Estate, Balanagar, Hyderabad 500 037, India. E-mail-jagathreddy@usa.net; Fax # 91-40-23773487.

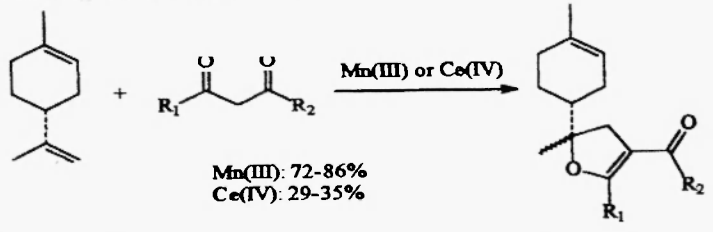
1-Chromonyl and Quinolinyl triazoloquinoxalines were conveniently prepared from Schiff's bases derived from Formylchromones and Formyl quinolines with hydrazinoquinoxalines.



Heterocycl. Commun. 9 (2003) 247-250

Manganese(III) Acetate and Cerium(IV) Ammonium Nitrate Mediated Oxidative Radical Additions of β-Diketones and β-Ketoesters to Limonene: Chemo and Regiospecific Preparation of 2,3-Dihydrofuranes

Marcio C.S. de Mattos[a*], Soraia P.L. de Souza[a] and Simone M. Elias[b]
[a]*Instituto de Química, Departamento de Química Orgânica, UFRJ, Caixa Postal 68545, 21945-970, Rio de Janeiro, Brazil.* [b]*Instituto de Química, UERJ, Rio de Janeiro, Brazil.*



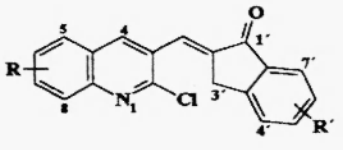
Heterocycl. Commun. 9 (2003) 251-256

SYNTHESIS OF SOME (E)-2-CHLORO-METHOXY-3-[2-(1 INDANOYL)METHYLIDEN]-QUINOLINES AND THEIR CYTOTOXICITY AND ANTIFUNGAL ACTIVITIES

Jaime Charris[a*], Patricia Martinez[b], José Dominguez[a], Simón López[b], Jorge Angel[a], and Gustavo Espinoza[c]

Laboratorio de Síntesis Orgánica[a], Facultad de Farmacia, Universidad Central de Venezuela, Aptdo. 47206, Los Chaguaramos 1041-A, Caracas, Venezuela. [b]Departamento de Química, Universidad Simón Bolívar, Caracas, Venezuela. [c]Departamento de Química, Facultad Experimental de Ciencias, Universidad del Zulia, Maracaibo, Venezuela.

A series of 2-cloro-3-indanoyl-methoxyquinolines were prepared in order to investigate their cytotoxicity and antifungal activities. The compounds synthesized were identified by ^{1}H-NMR, IR, MS and micro analysis. Some of them showed a promising activity as cytotoxic. The detailed synthesis, spectroscopic and biological data are described



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SYNTHESES AND STRUCTURE DETERMINATIONS OF SOME SELENOCYANATO- AND THIOCYANATO-KOJIC ACID DERIVATIVES.

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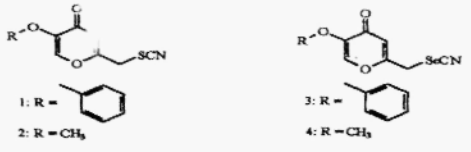
Institute of Chemistry, Västergårdgymnasiet, Södertälje, Sweden
M. UHER
Department of Organic Chemistry, Faculty of Chemical and Food Technology, Slovak Technical University, Bratislava, Slovak Republic
J. BRTKO*
Institute of Experimental Endocrinology, Slovak Academy of Sciences, Bratislava, Slovak Republic

Kojic acid (5-hydroxy-2-hydroxymethyl-4-pyranone) and analogues have been reported as biologically active compounds. Four kojic acid thiocyanato and selenocyanatoanalogues (1–4) have been prepared in order to investigate them for antineoplastic effects.



Structures of kojic acid derivatives

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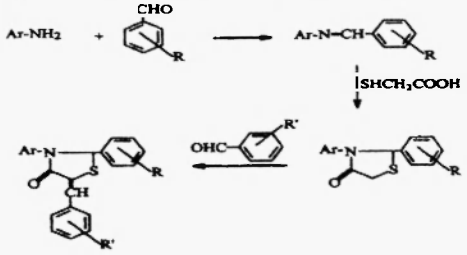
Synthesis And Comparison Of Biological Activities Of Azetidinone, Thiazolidinone And Related Compounds

Govindarajan, R*., Beena, T.**, and Bhat, A. R. †

†Dept. of Pharmaceutical Chemistry, KLES's College of Pharmacy, Belgaum - 590 010
*Pharmacognosy & Ethnopharmacology Division, National Botanical Research Institute, Rana Pratap Marg, Lucknow – 226 001 Email: govind108@yahoo.com
**Chennithala [H], Ponkunnam P.O, Kottayam Dist., Kerala – 686 506

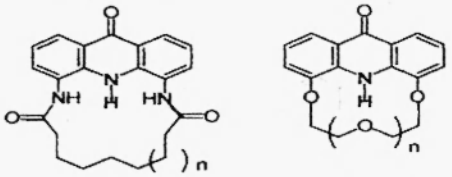


Heterocycl. Commun. 9 (2003) 265-270

New Macrocycles Derived from 4,5-Diamino- and 4,5-Dihydroxyacridin-9(10*H*)-ones

Vanina Santini, Gérard Boyer* and Jean-Pierre Galy

UMR 6009, Faculté des Sciences de Saint-Jérôme. Case 552. Av. Escadrille Normandie Niemen. 13397 Marseille Cédex 20. France.



Several original macrocycles and crown ethers have been obtained by alkylation and acylation of 4,5-diamino- and 4,5-dihydroxyacridin-9(10*H*)-ones.

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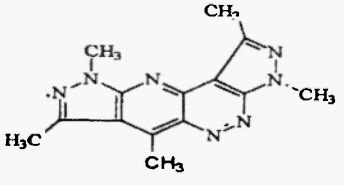
DIPYRAZOLO[4",3":5,6][4',3'-*e*]PYRIDO[3,2-*c*]PYRIDAZINE - A NEW HETEROAROMATIC TETRACYCLIC SYSTEM

Alice Maria Rolim Bernardino* ; Misbahul Ain Khan; Luiz Carlos da Silva Pinheiro and Alexandre Reis de Azevedo. Universidade Federal Fluminense, Instituto de Química, Departamento de Química Orgânica, Outeiro de S. João Batista, s/n°, Centro, Niterói, CEP 24020-150, Rio de Janeiro, Brazil.



An intramolecular diazo-coupling reaction of an amino-pyrazolyl-pyrazolo[3,4-*b*]pyridine was employed to give the title ring system.

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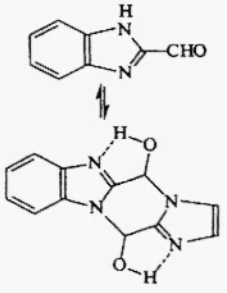
STABILITY OF THE DIMERS OF *AZA* ANALOGS OF 2-FORMYLPYRROLE. CONJUGATION VERSUS HYDROGEN BONDING

Ryszard Gawinecki,*[a] Borys Ośmiałowski,[a] Erkki Kolehmainen[b] and Henryk Janota[a]

[a] Department of Chemistry, Technical and Agricultural University, Seminaryjna 3, PL-85-326 Bydgoszcz, Poland
[b] Department of Chemistry, University of Jyväskylä, P.O. Box 35, FIN-40351 Jyväskylä, Finland



Formation of the hydrogen bonds in the molecule of 6*H*,13*H*-bis(benzo[4,5]imidazo)[1,2-*a*;1',2'-*d*]pyrazine is responsible for its spontaneous formation from 1*H*-benzimidazole-2-carboxaldehyde.

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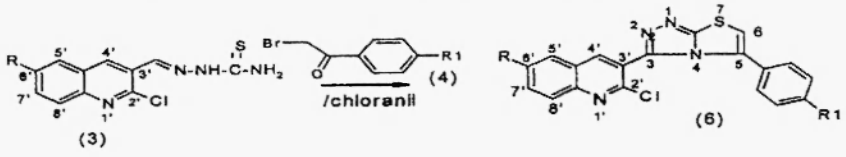
SYNTHESIS OF SOME NOVEL3-(2-CHLORO-3-QUINOL-YL)-5-PHENYL[1,3] THIAZOLO[2,3-c] [1,2,4] TRIAZOLES.

P.K.Dubey*, S.Srinivas Rao, V. Aparna
Department of Chemistry, College of Engineering, J N T University,Kukatpally, Hyderabad-72, A.P. India.

2-chloro-3-quinolinecarboxaldehydes (2) was reacted with thiosemicarbazide followed by phen- acyl bromides (4) gave quinoline substituted thiazoles (5). The dehydrogenative cyclisation of 5 with chloranil resulting in novel 3-(2-chloro-3-quinolyl)-6-phenyl [1,3] thiazolo [2,3-c] [1,2,4] triazoles (6).



Heterocycl. Commun. 9 (2003) 287-292

FUSED HETEROCYCLES 10 SYNTHESIS OF TRICYCLIC FUSED PYRAZOLINES BY THE REACTION OF (*Z*)-3-ARYLIDENE-1-THIOFLAVANONES WITH HYDRAZINES

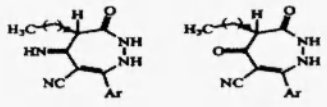
Albert Levai
Department of Organic Chemistry, University of Debrecen, H-4010 Debrecen, Hungary

Heterocycl. Commun. 9 (2003) 293-298

Fatty acid hydrazides in organic synthesis: novel synthesis of 6-alkyl-3-aryl-5-amino-7-oxo-2,5,6,7-tetrahydro-1H-1,2-diazepine-4-carbo-nitrile and 6-alkyl-3-aryl-5,7-dioxo-2,5,6,7-tetra-hydro-1H-1,2-diazepine-4-carbonitrile.

Elham A. A. Yousef[a] , M. E. A. Zaki[b] and M. E. Megahed

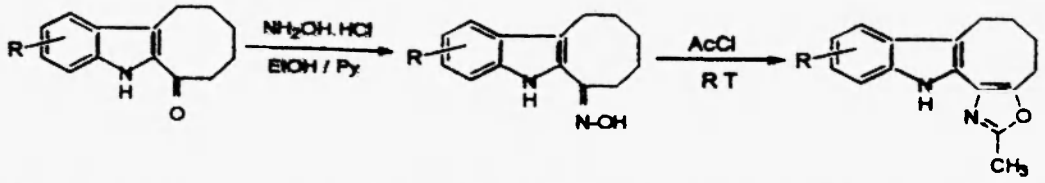
a) Fats and Oils Department, NRC, Cairo, Egypt.
b) Photochemistry Department, NRC, Cairo, Egypt



Heterocycl. Commun. 9 (2003) 299-306

TETRACYCLIC COMPOUNDS FROM 1-OXO-1,2,3,4,5,6-HEXAHYDROCYCLOOCTA[*b*]INDOLE. SYNTHESIS OF OXAZOLO[4'5 :8,7]CYCLOOCTA[*b*]INDOLES

T.Vandana, K.Velumani and K.J.Rajendra Prasad*
Department of Chemistry, Bharathiar University, Coimbatore-641046, India



Heterocycl. Commun. 9 (2003) 307-312

HETEROCYCLIC SYNTHESIS USING NITRILIMINES: PART 2. SYNTHESIS OF NEW 1,2,4,5-TETRAZINE DERIVATIVES

Hany M. M. Dalloul
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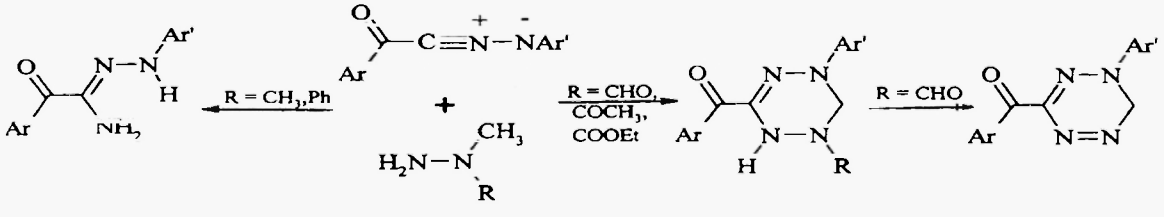
E-mail: dalloul15@hotmail.com

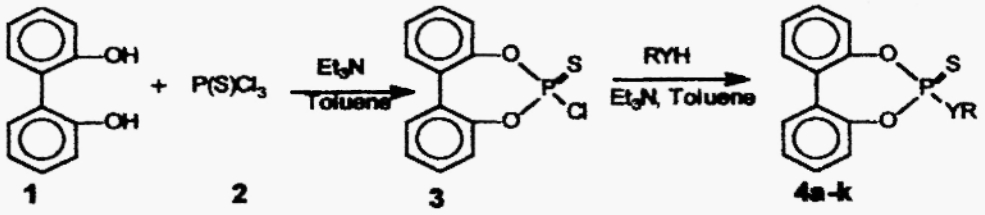


Heterocycl. Commun. 9 (2003) 313-318

A FACILE SYNTHESIS, SPECTRAL (IR, ^1H, ^{13}C & ^{31}P NMR) CHARACTERISTICS AND ANTIMICROBIAL ACTIVITY OF 6-ARYLOXY/ ARYLTHIO/ALKYLAMINO DIBENZO [d,f][1,3,2]-DIOXAPHOSPHEPIN 6-SULFIDES

K. Ananda Kumar, M. Kasthuraiah, C. Suresh Reddy* and C. Nagaraju
Department of Chemistry, Sri Venkateswara University, Tirupati - 517 502, India.

The title compounds (4a-k) were synthesized by reacting 2,2'-dihydroxybiphenyl (1) with thiophosphoryl chloride (2) followed by addition of substituted phenols / thiophenols / alkylamines in the presence of triethylamine in dry toluene.



1 2 3 4a-k