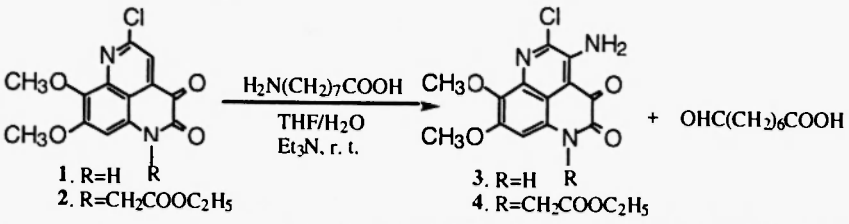
Heterocycl. Commun. 6 (2000) 495-500

STUDIES ON THE REACTIONS OF 2,3-DIKETOPYRIDO[4,3,2-*de*] QUINOLINES WITH AMINO ACIDS AND AMINO ESTERS

Huawu Shao, Qizhu Ding and J. William Lown*
Department of Chemistry, University of Alberta, Edmonton, AB, Canada, T6G 2G2

A reaction of 2,3-diketopyrido[4,3,2-*de*]quinolines with α, β, γ, δ, ε and ω amino acids and amino esters in the presence of triethylamine is described. The reaction is simple in execution and work-up, occurring under ambient conditions.

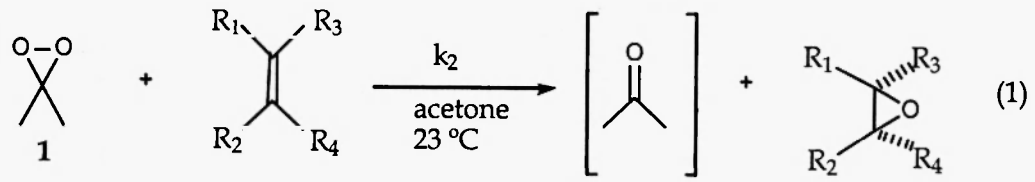


KINETICS OF EPOXIDATION OF α,β-UNSATURATED CARBONYL COMPOUNDS AND ENOL ESTERS BY DIMETHYLDIOXIRANE

Heterocycl. Commun. 6 (2000) 501-504

A.L. Baumstark,* Hsinhung Chen, Sonia N. Singh and Pedro C. Vasquez
Department of Chemistry, Center for Biotech and Drug Design, Georgia State University, Atlanta, Georgia 30303-3083, USA

Kinetic data for epoxidation of several series of α,β-unsaturated carbonyl compounds and enol esters by dimethyldioxirane in dried acetone are reported.

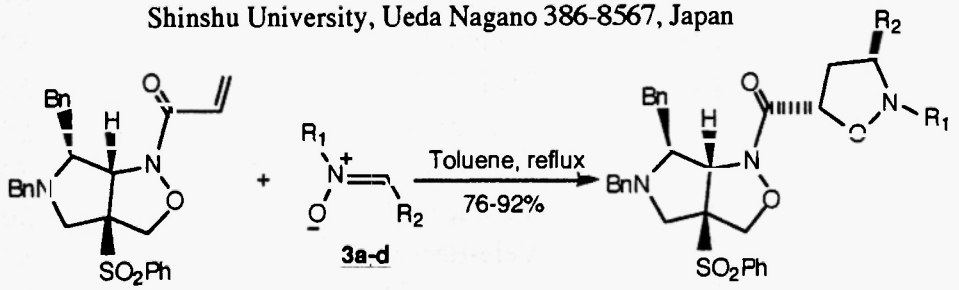


R_1 = R-(O)C **2-14** , R_1 = R-O-(O)C **15-20** , R_1 = R-(O)C-O **21-25**

Heterocycl. Commun. 6 (2000) 505-510

ISOXAZOLIDINE BASED NEW CHIRAL AUXILIARY FOR ASYMMETRIC SYNTHESIS

Md. Jashim Uddin, Akiko Shinooka, Tetsuya Fujimoto, Hirofusa Shirai, Iwao Yamamoto*
Department of Functional Polymer Science Faculty of Textile Science and Technology, Shinshu University, Ueda Nagano 386-8567, Japan



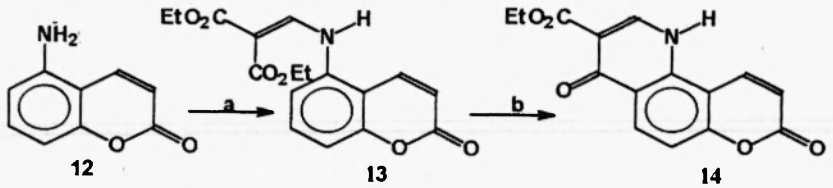
The acrylamide (-)-**2** underwent dipolar cycloaddition reactions with nitrones and an azide with a high level of diastereoselectivity.

SYNTHESIS OF A NEW PYRANOQUINOLONIC DERIVATIVE FROM COUMARIN.

Heterocycl. Commun. 6 (2000) 511-514

Alex Sander D. da Matta, Cesar D. de Oliveira and Gilberto A. Romeiro*. Universidade Federal Fluminense, Instituto de Quimica, Departamento de Quimica Organica, Campus do Valonguinho S/N, Niteroi, CEP 24210-150, Rio de Janeiro, Brasil.

Searching for new biological active compounds having the quinolonic system, the synthesis of new pyranoquinolonic compound, ethyl-7,10-dihydro-7-oxo-3H-pyran[2,3-h]quinolin-3-one-8-carboxylate **14**, it was carried out by condensation of the appropriated 5-aminocoumarin **12**, with ethoxymethylenemalonate and subsequent cyclization reaction through Gould-Jacobs conditions.



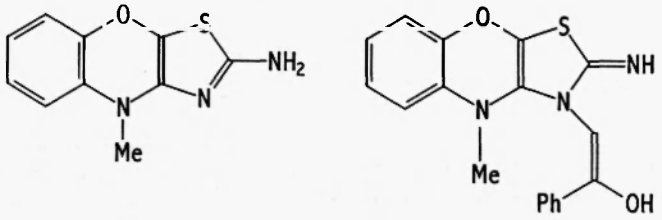
12 **13** **14**

New 1,4-Benzoxazine fused heterocycles II: Synthesis of 5-methyl-2-phenyl-5*H*-benzo[*b*] Imidazo[2 ,1 :2,3][1,3]thiazolo[4,5-e]oxazine.

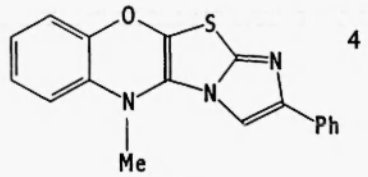
Heterocycl. Commun. 6 (2000) 515-518

Lingaiah Nagarapu* & Narender Ravirala

New heterocyclic system namely 5-methyl-2-phenyl-5H-benzo[b]imidazo[2',1':2,3][1,3]thiazolo[4,5-e] Oxazine 5 is reported via the reaction of 2-(2-imino 4-methyl-2,3-dihydro-4H-benzo[b][1,3]thiazolo [4,5-e][1,4]oxazin-3-yl)-1-phenyl-1-ethen-1-ol intermediate 4 with phenacyl bromide.



3 4



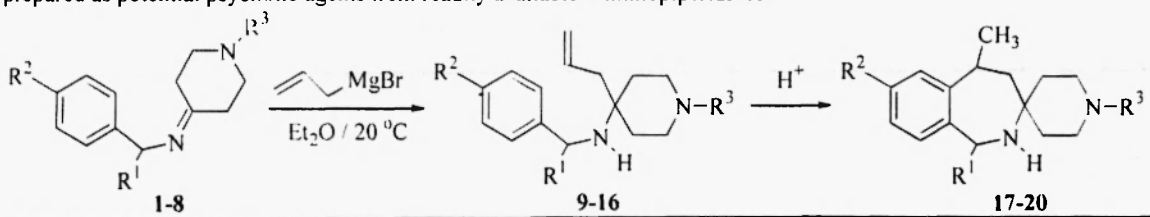
5

SYNTHESIS OF NEW 4-ALLYL-4-N-BENZYLAMINOPIPERIDINES AND THEIR SPIROCYCLIC PRODUCTS

Heterocycl. Commun. 6 (2000) 519-523

Vladimir Kouznetsov*[a], Alirio Palma[a], Sandra Salas[a], Elena Stashenko[a], Gisela Montenegro N[b]., and Angel Fontela G[b].
[a] Laboratory of Fine Organic Synthesis, School of Chemistry, Industrial University of Santander, A.A. 678, Bucaramanga, Colombia; [b] Department of Pharmacology, Santiago de Compostela University, Campus Sur, S/N, C.P. 15706, Santiago de Compostela, Spain

A new series of N-substituted 4-allyl-4-N-benzylaminopiperidines and spiro[3H-2-benzazepine-3,4'-piperidines] have been prepared as potential psychotic agents from readily available 4-iminopiperidines.



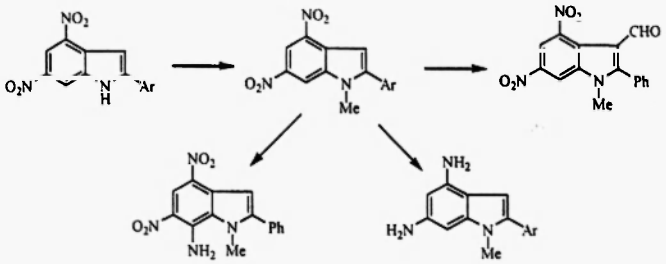
1-8 **9-16** **17-20**

Heterocycl. Commun. 6 (2000) 525-528

TRANSFORMATION OF 2-ARYL-4,6-DINITROINDOLES

Vladimir V. Rozhkov *, Alexander M. Kuvshinov, Syatoslav A. Shevelev

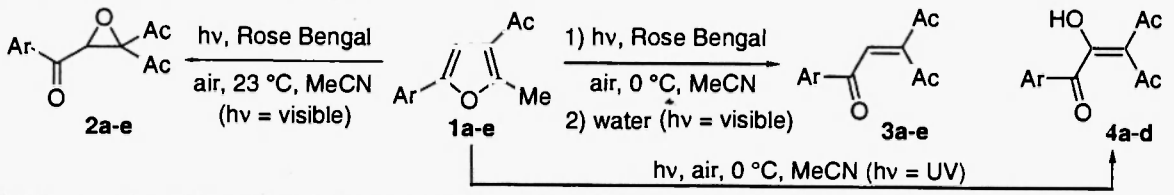
N. D. Zelinsky Istitute of Organic Chemistry, Russian Academy of Sciences, Leninsky Prosp., 47, Moscow, Russia
Fax: +7(095)135 5328



Heterocycl. Commun. 6 (2000) 529-532

SELECTIVE TRANSFORMATION OF 3-ACETYL-5-ARYL-2-METHYLFURANS USING PHOTOOXYGENATION

Satoaki Onitsuka,[a] Hiroshi Nishino,[b]* and Kazu Kurosawa[c]
[a]Department of Materials and Life Science, Graduate School of Science and Technology, Kumamoto University, Kurokami, Kumamoto 860-8555, Japan; [b]Institute for Fundamental Research of Organic Chemistry (IFOC), Kyushu University, Hakozaki, Higashi-ku, Fukuoka 812-8581, Japan; [c]Department of Environmental Science, Faculty of Science, Kumamoto University, Kurokami, Kumamoto 860-8555, Japan



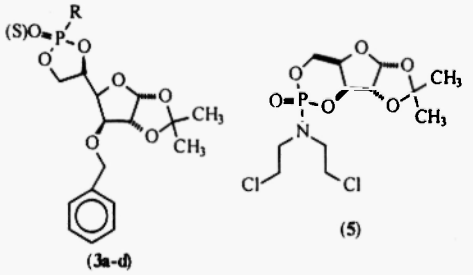
Photooxygenation of furans **1a-e** in the presence of Rose Bengal gave oxiranes **2a-e**. Treatment with water after the photooxygenation yielded 2-pentene-1,4-diones **3a-e**. Direct UV irradiation of **1a-d** afforded 2-hydroxy-2-pentene-1,4-diones **4a-d**.

Heterocycl. Commun. 6 (2000) 533-538

NOVEL PHOSPHORUS DERIVATIVES OF SUGARS

M. Venugopal, C. Devendranath Reddy*, M.F. Stephen Babu and C. Suresh Reddy
Department of Chemistry, Sri Venkateswara University, Tirupati - 517 502, India

Novel 1,2-O-(1-methylethylidene)-3-O-(phenylmethyl)-α-D-glucofuranose cyclic phosphoramidate/phosphates/phosphorothioate (3a-d) and 1,2-O-(1-methylethylidene)-α-D-xylofuranose cyclic bis(2-chloroethyl)phosphoramidate (5) have been synthesized and characterized by IR, ^1H, ^{31}P NMR and mass spectral data.

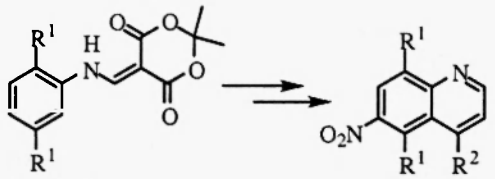


Heterocycl. Commun. **6** (2000) 539-544

SYNTHESIS AND EVALUATION OF THE TRYPANOCYDAL ACTIVITY OF 4-ALKYLAMINO-6-NITROQUINOLINES

Ricardo A. Tapia,[a]* Yolanda Prieto,[a] Gaston Zamora,[a] Antonio Morello[b] and Yolanda Repetto[b]
a. Facultad de Química, Pontificia Universidad Católica de Chile, Correo 22, Santiago, Chile.
b. Departamento de Bioquímica, Facultad de Medicina, Universidad de Chile, Casilla 70086, Santiago 7, Chile.

The synthesis of 4-alkylamino-6-nitroquinolines 5-9 starting from compound 1 is described. The compounds 5-9 were tested *in vitro* as potential anti-trypanosomal agents.



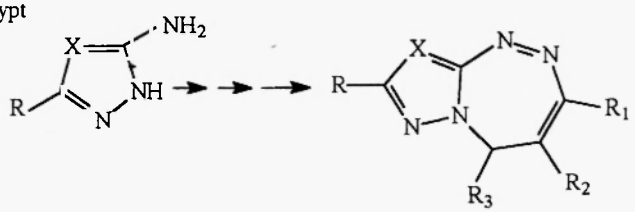
1 5-9

Heterocycl. Commun. **6** (2000) 545-551

A Facile Synthesis of New Pyrazolo- and triazolo[5,1-c][1,2,4]triazepines Derivatives via Intermolecular Wittig Ring-Closure Reaction

F. M. abd El latif, M. A. Barsy, E. A. Elrady and M. E. Hassan
Chemistry Department, aswan Faculty of science, Aswan Egypt

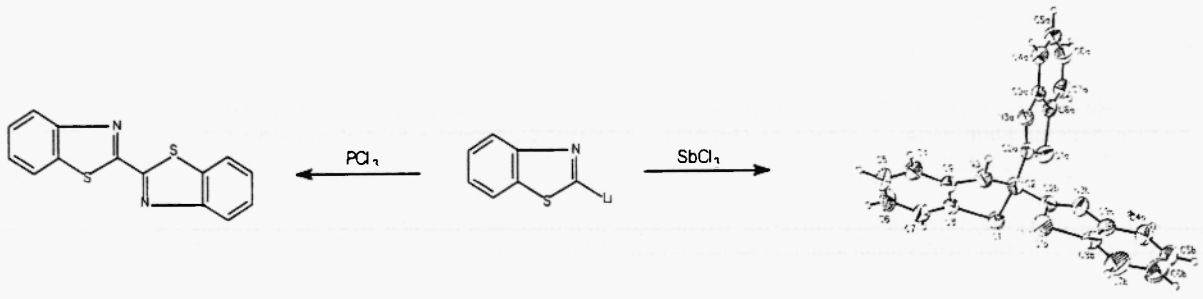
New pyrazolo- and triazolo[5,1][1,2,4]triazepines were obtained starting from 5-amino-1H-pyrazole and 5-amino-1*H*-triazole derivatives *via* intermolecular Wittig reaction in good yield.



Heterocycl. Commun. **6** (2000) 553-556

ANTIMONY TRICHLORIDE MEDIATED TRIMERIZATION OF BENZOTHIAZOLE: CRYSTAL STRUCTURE OF 2,2-BIS[BENZOTHIAZOLYL]BENZOTHIAZOLE.

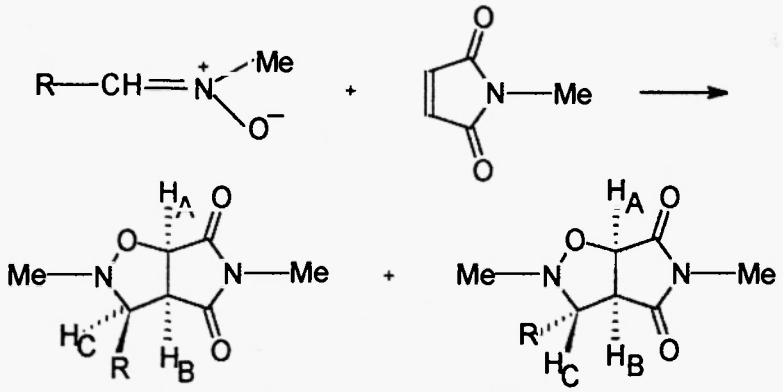
J. Vela-Becerra, P. Sharma*, A. Cabrera, C. Álvarez, A. Toscano and G. Penieres.
Instituto de Química, UNAM. Circuito Exterior. Coyoacán 04510 México D. F. México.



Heterocycl. Commun. 6 (2000) 557-562

1,3-DIPOLAR CYCLOADDITION REACTIONS OF N-METHYL-C-SUBSTITUTED-PHENYLNITRONES WITH N-METHYLMALEIMIDE

Hikmet Agırbaş* and Selahattin Güner
Department of Chemistry, Kocaeli University, 41300 Izmit, Turkey

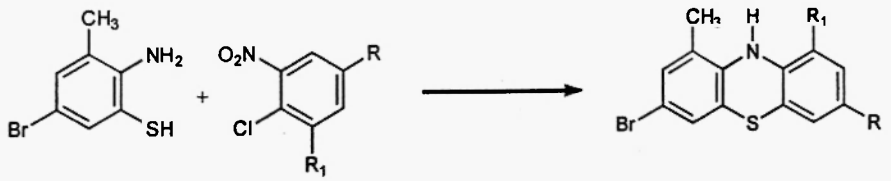


Heterocycl. Commun. 6 (2000) 563-566

SYNTHESIS OF 3-BROMO-1-METHYLPHENOTHIAZINES BY SMILES REARRANGEMENT

VIBHA SRIVASTAV, RAJNI GUPTA AND R.R. GUPTA*
Department of chemistry, University of Rajasthan , Jaipur -302004, India

Synthesis of title compound is reported via Smiles rearrangement

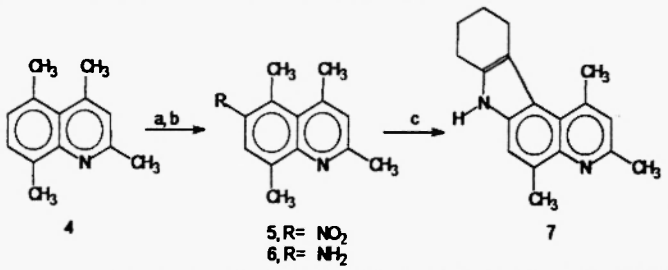


Heterocycl. Commun. 6 (2000) 567-570

FISCHER INDOLE SYNTHESIS WITH ALKYL GROUP ELIMINATION: A THREE-STEP PREPARATION OF A PYRIDO[2,3-c]CARBAZOLE DERIVATIVE

Gilberto A. Romeiro*, Vitor F. Ferreira, Marília dos S. Costa and Maurício G. da Fonseca; Universidade Federal Fluminense, Instituto de Química - GQO/CEG, Campus do Valonguinho S/N, Niteroi, CEP 24210-150, RJ, Brazil.

An angular tetrahydropyridocarbazole derivative was synthesized in a three-step reaction sequence involving the Fischer Indole cyclization with elimination of a methyl group.



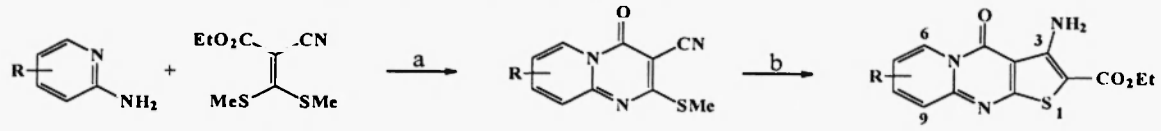
Heterocycl. Commun. 6 (2000) 571-578

SYNTHESIS OF 3-AMINO-2-ETHOXYCARBONYL PYRIDO[1,2-a]THIENO-[2,3-d]-4-PYRIMIDONE DERIVATIVES AND THEIR ANTIMALARIAL AND CYTOTOXIC ACTIVITIES *IN VITRO*.

Jaime Charris[1]*, Jose Dominguez[1], Mary Cordero[1], Luz Orfila[1], Flavia Riggione[1], Simon Lopez[2], Daniel Enriz[3] and Fernando Suviere[3].

[1]Laboratorio de Síntesis Orgánica, Facultad de Farmacia, Universidad Central de Venezuela, Aptdo. 47206, Los Chaguaramos 1041-A, Caracas Venezuela.[2]Departamento de Química, Universidad Simón Bolivar, Caracas, Venezuela.[3]Departamento de Quimica, Universidad Nacional de San Luis, San Luis, Argentina.

A series of 3-amino-2-ethoxycarbonyl pyrido[1,2-a]thieno[2,3-d]-4-pyrimidone **10-13** were prepared in order to investigate their cytotoxicity and antimalarial activities. Some of the them showed a promising activity.



1-4 **5** **6-9** **10-13**

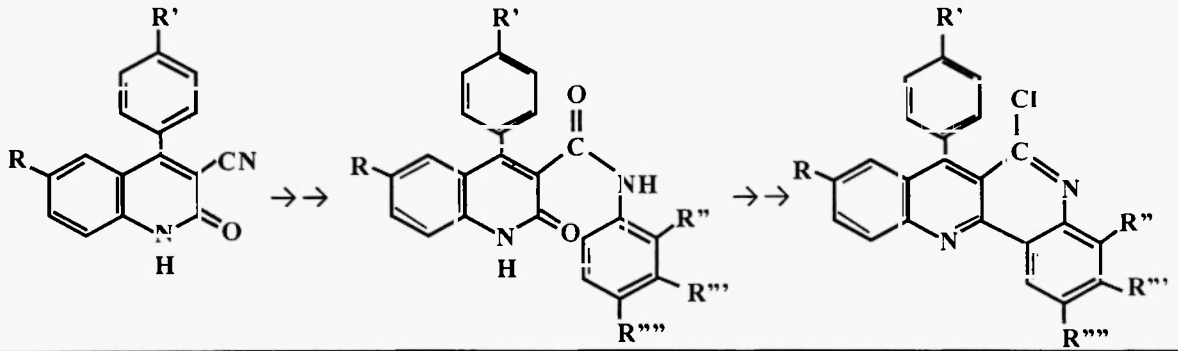
a. n-butanol, Δ; b. $HSCH_2CO_2Et$, Na, EtOH, Δ.

Heterocycl. Commun. 6 (2000) 579-584

SYNTHESIS OF 6-CHLORO-7-PHENYLDIBENZO[b,h][1,6]NAPHTHYRIDINES

S. Vijayalakshmi and S.P. Rajendran*, Department of Chemistry, Bharathiar University, Coimbatore-46.

Synthesis of title compounds is reported by the sequence of reactions as outlined.



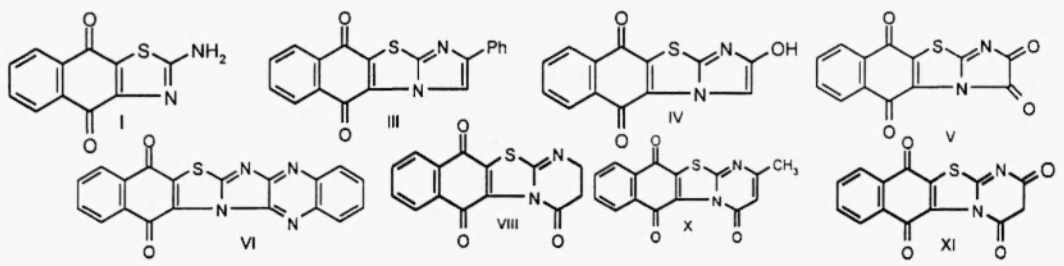
Heterocycl. Commun. 6 (2000) 585-589

Synthesis of Heterocyclic Quinones Containing Bridgehead Nitrogen Atom from 2-Aminonaphtho [2,3-d] thiazole-4,9-dione.

Ragab F. Fandy

Chemistry Department, Faculty of Science, South Valley University, Qena, Egypt

Imidazonaphthothiazole derivatives III - VI were prepared by treatment of I with phencyl bromide, chloroacetic acid, diethyl oxalate and 2,3-dichloroquinoxaline respectively. The reaction of I with ethyl acrylate, ethyl acetoacetate and diethyl malonate gave the corresponding naphthothiazolopyrimidine derivatives VIII-XI.



Heterocycl. Commun. 6 (2000) 591-596

[1,5]-REARRANGEMENT OF 4a-HETEROACYL-4a, 5,8,8a-TETRAHYDRO-1,4-NAPHTHOQUINONES

R.T. Pardasani[a*], P. Pardasani[a], M.M. Agrawal[a], R. Ghosh[a], G. Mathur[a], S.Yadav[a] and T. Mukherjee[b]
[a]Department of Chemistry, University of Rajasthan, Jaipur 302004 India
[b]Chemistry Division, Bhabha Atomic Research Centre, Mumbai 400085 India

2-Heteroacyl-5,8-dihydro-1,4- dihydroxynaphthalene derivatives have been prepared by [1,5]- sigmatropic rearrangement of the adduct tetrahydro-1,4-naphthoquinones. The structures of the synthesised products have been established by spectral data as well as by semiempirical molecular orbital calculations.