Graphical Abstract

Heterocycl. Commun. 5 (2008) 307-318

Thermodynamic Study Of The Complexation Of Some Thiacrown Ethers And Iodine Monobromide In Carbon Tetrachloride Solution

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Abstract: Complexation of TT9C3, TT12C4 and HT18C6 as n-donor, with IBr as σ-acceptor has been studied at different temperatures in carbon tetrachloride solution.

Macrocycle + IBr $\rightleftharpoons$ Macrocycle. IBr (1)

Marcocycle = TT9C3, TT12C4, HT18C6

Heterocycl. Commun. 5 (2008) 319-322

Synthesis of unusual benzimidazole nucleosides

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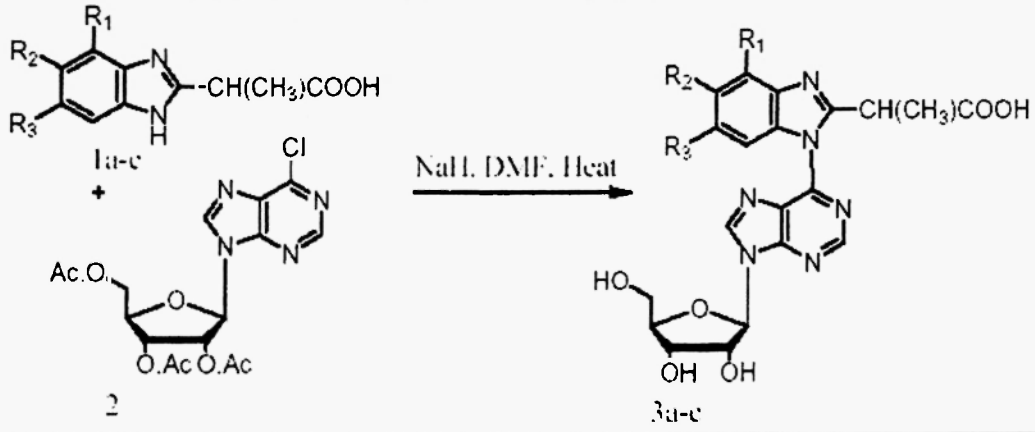
Abstract: Synthesis of some unusual benzimidazole nucleoside analogues viz.2-{1-[9-(3,4-Dihydroxy-5-hydroxyl-methyl-tetrahydro-furan-2-yl)-9H-purin-6-yl]-1H-benzimidazol-2-yl}-propionic acid (3a), 2-{5-Bromo-1- [9-(3,4-dihydroxy-5-hydroxymethyl-tetrahydro-furan-2-yl)-9H-purin-6-yl]-6-nitro-1Hbenzoimidazol-2-yl}-propionic acid (3b) and 2-{5-Bromo-1-[9-(3,4-dihydroxy-5-hydroxymethyltetrahydro-furan-2-yl)-9H-purin-6-yl]-4-nitro-1H-benzoimidazol-2-yl}-propionic acid (3c) have been reported.



Heterocycl. Commun. 5 (2008) 323-328

Synthesis And Biological Activity Of 3-Aryl-1-(3-Methyl-5-Styryl-4-Isoxazolyl)-2-Oxo-(1*h*,3*h*,5*h*)-Pyrimidine-4,6-Diones

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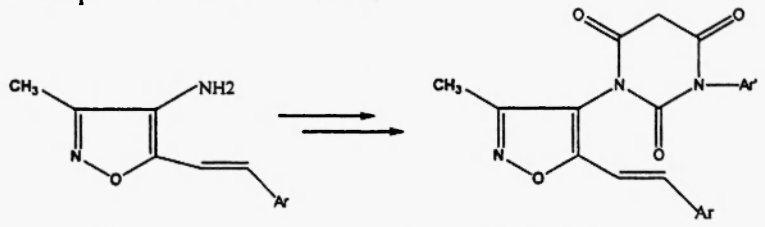
Abstract: A Series of 3-aryl-1-(3-methyl-5-styryl-4-isoxazolyl)-2-oxo-(1*H*,3*H*,5*H*)-pyrimidine-4,6-diones **3** have been prepared from 1-aryl-3-(-3-methyl-5-styryl-4-isoxazolyl)ureas **2** by heating with malonic acid in acetyl chloride. Compounds **2** are obtained by interaction of 4-amino-3-methyl-5 styrylisoxazole **1** with aryl isocyanates. The analytical and spectral data agree well with the structures of **2** and **3**. Antibacterial and antifungal activity of compounds **2** and **3** have been studied.



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Heterocycl. Commun. 5 (2008) 329-335

1-Alkyl-4-Ethoxythiocarbonyl-5- Hydroxy-3-Methylpyrazole : Synthesis, Copper Complexes And Solvent Extraction Studies

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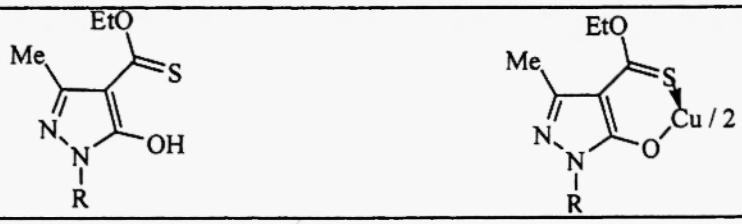
Abstract: 1-Alkyl-4-ethoxythiocarbonyl-5-hydroxy-3-methylpyrazole (HETCP) were synthesized in good yield by the reaction of 1-alkyl-3-methyl-2-pyrazolin-5-one with sodium acetate and bis (ethoxythiocarbonyl)sulfide in DMF. These compounds are O, S bidentate ligands of Cu (II) forming $Cu(ETCP)_2$ complexes and behave as extractant of this metal ion in liquid-liquid solvent extraction/back- extraction process.



Heterocycl. Commun. 5 (2008) 337-344

A facile synthesis of angular and linear 8/2-methyl furo[2,3-h]/[3,2-g] chromones and angular pyrano[2,3-f] isoflavones from 7-propargyloxy chromones and isoflavones

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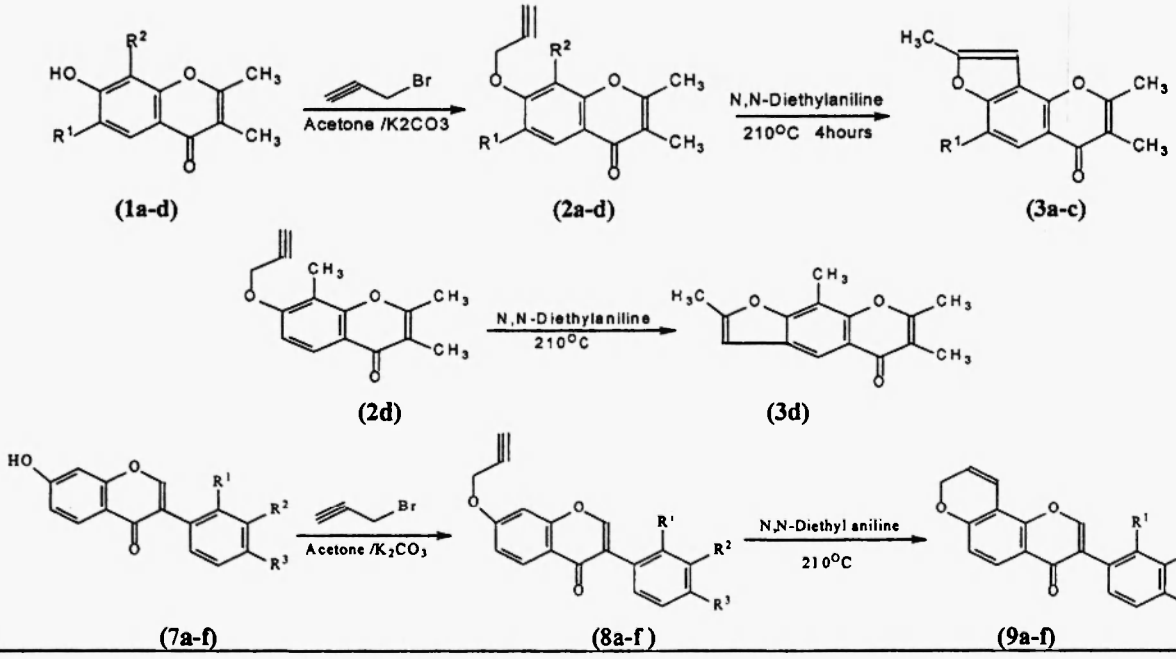
Abstract: The Claisen rearrangement of 7-propargyloxy chromones **(2a-d)** and 7-propargyloxy isoflavones **(8a-f)** in N,N-Diethylaniline at 195°C gave 8/2-methylfuro[2,3-h]/[3,2-g] chromones **(3a-d)** and pyrano [2,3-f] isoflavones **(9a-f)** respectively.



Heterocycl. Commun. 5 (2008) 345-356

A convenient synthesis of [1,2,4]triazolo[1,5-a]pyridines and 1,8-naphthyridine of analgesic and anti-inflammatory profiles

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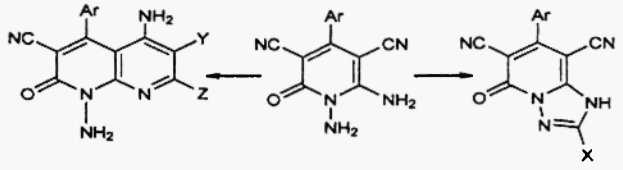
ABSTRACT - 1, 6-diamino-pyridine is a simple precursor for fused triazolopyridine and 1,8 naphthyridine



Heterocycl. Commun. 5 (2008) 357-361

Biginelli Reactions In Molten Ammonium Bromides

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ABSTRACT 3,4-Dihydropyrimidin-2(1H)-ones were synthesized in good yields by solvent-free one-pot three-component Biginelli condensation in the presence of molten tetrabutylammonium bromide or ammonium bromide as catalyst, irrespective of the presence of electron donating or electron withdrawing groups aromatic aldehydes.

Heterocycl. Commun. 5 (2008) 363-366

Microwave synthesis of Lansoprazole drug intermediate

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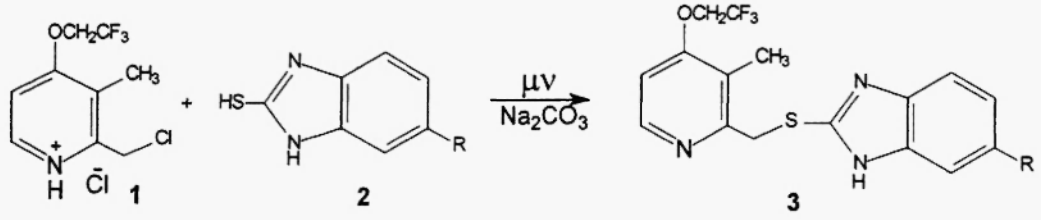
The sulfide intermediate, ('2-[[[3-Methyl-4- (2,2,2-trifluoroethoxy)-2-pyridinyl] methyl] thio]-1H-benzimidazole) (**3**), required for the industrial synthesis of the anti-ulcer drug Lansoprazole, has been prepared in excellent yields by microwave irradiation of a dry mixture of 2-chloromethyl-3-methyl-4- (2,2,2-trifluoroethoxy)pyridine hydrochloride (**1**) and 2-mercaptobenzimidazole (**2**) in the presence of Na_2CO_3



2,3	a	b	c	d	e	f
R	H	Cl	CH_3	OCH_3	OH	NO_2

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Synthesis Of 3-[2-(Substituted Sulfonyl)-1h-Imidazol-Yl] Chromen-2-One Derivatives

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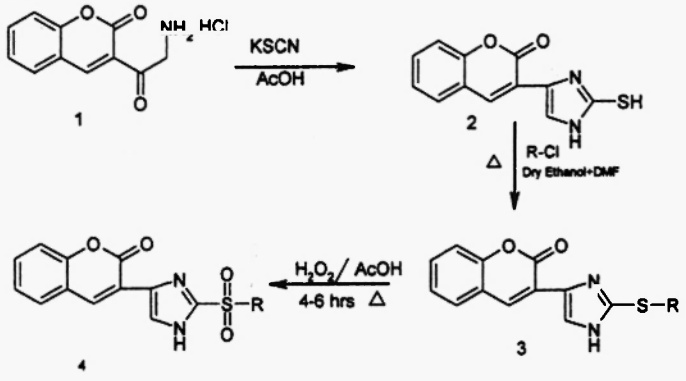
Absract: Reaction of 3-(2-Mercapto-1H-imidazol-4-yl)chromen-2-one (1) with various alkyl/aryl/phenacyl halides in a mixture of anhydrous ethanol and dimethyl formamide gave the corresponding 3-(2-substituted sulfanyl-1H-imidazol-4-yl)chromen-2-ones (2).These on further reaction with hydrogen peroxide in acetic acid resulted in the formation of corresponding sulfones(3) in good yields the structure of the synthesized compounds were established from evidences like IR,NMR and mass spectral data.



a) R= CH_3 d) R= $PhCOCH_2$ g) R= $PhCH_2$

b) R= Et e) R=PhCO h) R= NO_2-$PhCH_2$

c) R= f) R= $COCH_2Cl$ i) R= Ph-$PhCOCH_2$

Heterocycl. Commun. 5 (2008) 375-384

A novel method for the synthesis of 1(2H)- phthalazinone derivatives using heteropolyacids as heterogeneous and recyclable catalysts

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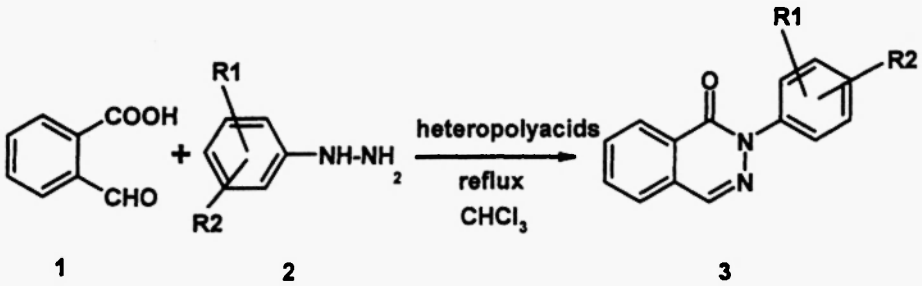
Abstract: A highly efficient procedure for the synthesis of 1(2H)- phthalazinone derivatives by condensation of phthalaldehydic acid and phenylhydrazine is achieved using a catalytic amount of (HPAs) in refluxing chloroform.



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Heterocycl. Commun. 5 (2008) 385-388

2-(3-ARYLACRYLOYL)-3-METHYLQUINOXALINE 1,4-DIOXIDES AS POTENTIAL HYPOXIC SELECTIVE CYTOTOXINS

Kristin Dittenhafer[1], Umashankar Das[2], Brent L. Younglove[1], Hilary Mackay[1], Toni Brown[1], Jonathan R. Dimmock,[2] Moses Lee[1*] and Hari Pati[2]

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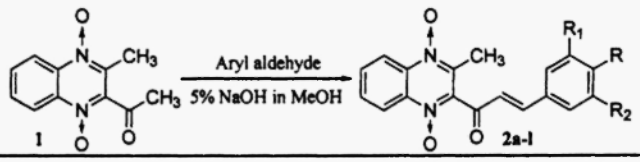
[2]College of Pharmacy and Nutrition, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 5C9, Canada.
email: lee@hope.edu

Abstact: The synthesis of twelve 2-(3-arylacryloyl)-3-methylquinoxaline 1,4-dioxides as well as their cytotoxicity against murine cancer cells are reported.



1 2a-l