Graphical Abstracts

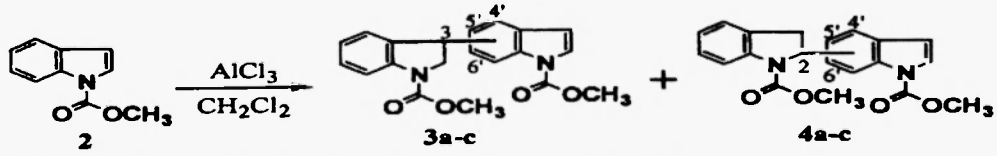
Heterocycl. Commun. **10** (2004) 265-268

NOVEL DIMERIZATION PRODUCTS OF *N*-ACYLINDOLES WITH $AlCl_3$

Kazutaka Fujino, Emiko Yanase and Shin-ichi Nakatsuka*

The United Graduate School of Agricultural Science, Gifu University, 1-1 Yanagido, Gifu 501-1193, Japan

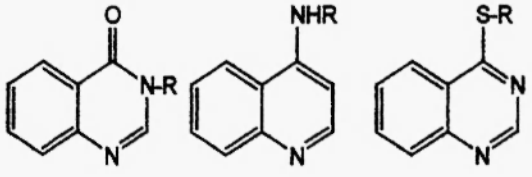
The reactivity of *N*-methoxycarbonylindole **2** in the presence of aluminum chloride was studied and the structures of the products were determined to be dimers **3a-c** and **4a-c**.



Heterocycl. Commun. **10** (2004) 269-272

SYNTHESIS OF NEW QUINAZOLINE DERIVATIVES

Milad Baitiche, Abdallah Mahamoud, Djaffar Benachour, Meriem Merbah and Jacques Barbe



Several compounds belonging to the 4-oxo, 4-thio and 4-amino quinazoline series were prepared and characterized by ^1H NMR

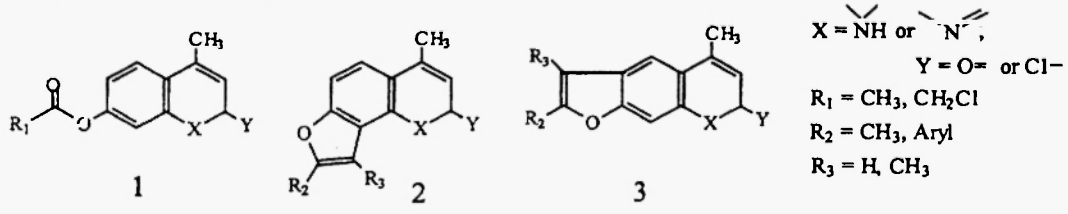
Heterocycl. Commun. **10** (2004) 273-278

NEW SYNTHESES OF FUROQUINOLINE DERIVATIVES

Valerii F. Traven*, Andrei V. Vasil'ev, N.Ya. Podhaljuzina

Department of Organic Chemistry, D. Mendeleev University of Chemical Tecnology of Russia, 125047, Moscow, Russia; e-mail: traven@muctr.edu.ru

Abstract: Fries rearrangement of 7-acyloxyquinolin-2-chloroquinoline derivatives 1 and their analogs provides useful intermediates for new ways of furoquinoline derivatives 2 and 3 syntheses.



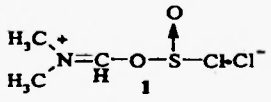
Heterocycl. Commun. **10** (2004) 279-282

A MILD AND FACILE METHOD FOR THE SYNTHESIS OF 3-CYANOCHROMONES FROM OXIMES DERIVED FROM 3-FORMYL-CHROMONES USING DIMETHYLFORMAMIDE-THIONYLCHLORIDE COMPLEX.

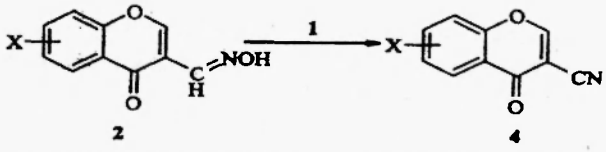
G. Jagath Reddy *, D. Latha and K. Srinivasa Rao

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.

A mild and facile method for the synthesis of 3-cyanochromones (4) from oximes (2) derived from 3-formylchromones using Dimethylformamide-thionylchloride complex (1) is herein reported.



1



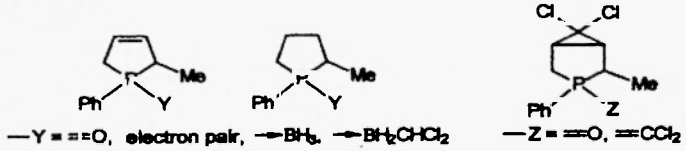
2 4

Heterocycl. Commun. **10** (2004) 283-288

THE REACTION OF DICHLOROCARBENE WITH PHOSPHINE DERIVATIVES RELATED ON THE 2-METHYL-1-PHENYL-2,5-DIHYDRO AND 2,3,4,5-TETRAHYDRO-1H-PHOSPHOLE MOIETY

János Kovács,[a] György Keglevich,[a]* Andrea Kerényi,[a] Tímea Imre,[b] Krisztina Ludányi,[b] and László Tőke[c]

[a] Department of Organic Chemical Technology, Budapest University of Technology and Economics, H-1521 Budapest, Hungary
[b] Hungarian Academy of Sciences, Chemical Research Center, H-1525 Budapest, Hungary
[c] Research Group of the Hungarian Academy of Sciences at the Department of Organic Chemical Technology, Budapest University of Technology and Economics, H-1521 Budapest, Hungary



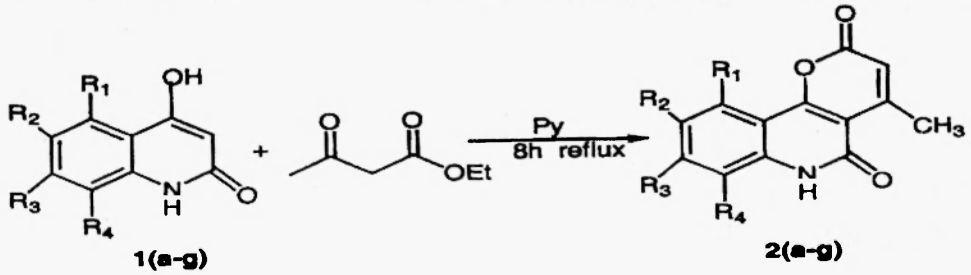
—Y = =O, electron pair, —BH_3, —BH_2CHCl_2 —Z = =O, =CCl_2

Heterocycl. Commun. **10** (2004) 289-294

A ONE POT SYNTHESIS OF 4-METHYLPYRANO[3,2-*C*]QUINOLIN-2,5[6*H*]-DIONES

N. Venkatesh Kumar and S.P. Rajendran*
Department of Chemistry, Bharathiar University, Coimbatore-46, Tamil Nadu, India

Series of title compounds were prepared by the sequence of reactions as outlined.



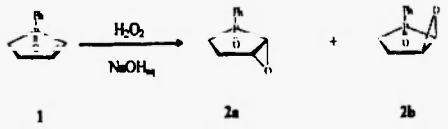
1(a-g) 2(a-g)

Heterocycl. Commun. **10** (2004) 295-300

DIASTEREO ISOMERIC *erythro* AND *threo* FORMS OF 2,3-EPOXY-1-PHENYLPHOSPHOLANE 1-OXIDES SYNTHESIZED BY AN ACTION OF HYDROGEN PEROXIDE WITH BASE ON 1-PHENYL-2-PHOSPHOLENE 1-OXIDE

Hirono Totsuka, Motoki Maeda, Valluru Krishna Reddy, Masaki Takahashi, and Mitsuji Yamamshita*
Department of Materials Chemistry, Faculty of Engineering, Shizuoka University Hamamatsu 432-8561, Japan

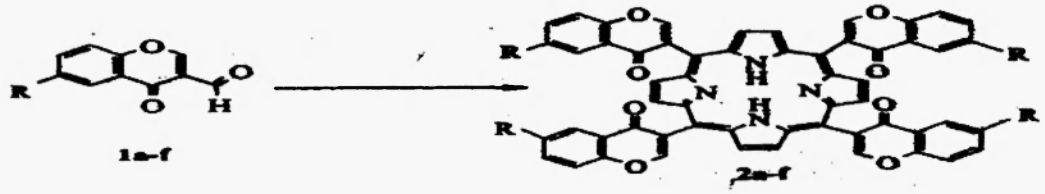
Diastereo isomeric *erythro* and *threo* forms of 2,3-epoxy-1-phenylphospholane 1-oxides (**2**) were synthesized from 1-phenyl-2-phospholene 1-oxide (**1**) using 30% hydrogen peroxide with NaOH.



Heterocycl. Commun. **10** (2004) 301-304

Synthesis of *meso* -tetrakis (chromene-3-yl) porphyrins

P. Narsimha Reddy, Y. Thirupathi Reddy, M. Amaravathi, M. Kanakalingeswara Rao, B. Rajitha*

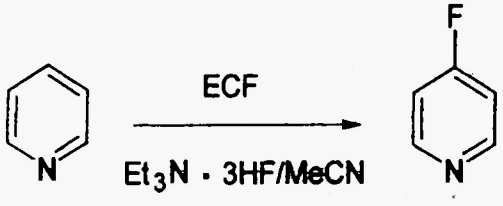


Heterocycl. Commun. **10** (2004) 305-306

Selective Electrochemical Synthesis of 4-Fluoropyridine Using Et_3N 3HF

Bin FANG*, Haisheng TAO, Xianwen KAN, Yongjia SHANG,
(College of Chemistry and Materials Science, Anhui Normal University, Anhui, Wuhu 241000, China)

4-Fluoropyridine has been synthesized through electrochemically fluorinatmg pyridine using $Et_3N{\cdot}3HF$.

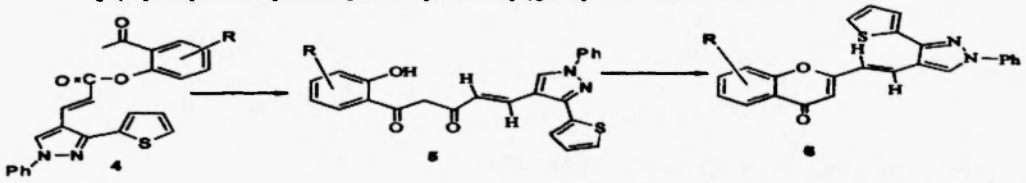


Heterocycl. Commun. **10** (2004) 307-312

SYNTHESIS AND CHARACTERISATION OF SOME 2-[2(1-PHENYL-3-THIOPHEN-2-YL-1*H*-PYRAZOL-4-YL)]-VINYL CHROMENE-4-ONES

N.S. Joshi, B.K. Karale and C.H. Gill* ,P.G. Dept. of chemistry, S.S.G.M. College, Kopargaon, Dist. Ahmednagar

Abstract: β-Diketone **5** is prepared by B.V. transformation of the ester **4**.The acid catalyzed cyclization of **5** yielded 2-[2(1-phenyl-3-thiophen-2-yl-1H-Pyrazol-4-yl)]-vinylchromene-4-one **6**.

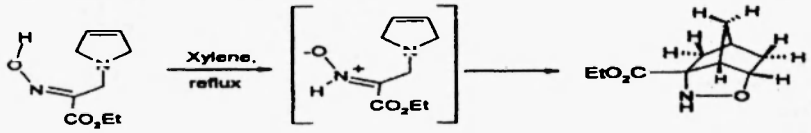


Heterocycl. Commun. **10** (2004) 313-318

SYNTHESIS OF SOME NOVEL TRICYCLIC α- AMİNOACID ESTERS AND POTENTIAL BIOACTIVE COMPOUNDS *VIA* 1,2-PROTOTROPY AND 1,3-APT CASCADE REACTIONS

H. Ali Dondas[a]* and Naciye Yaktubay Dondas[b]
a.Mersin University, Faculty of Pharmacy, Department of Chemistry, Mersin, 33342, Turkey
b.Çukurova University, Faculty of Medicine, Department of Pharmacology, 01330, Adana-Turkey

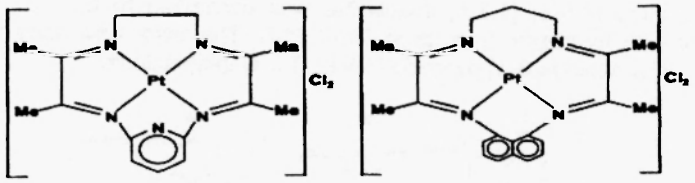
Some novel cyclic α –aminoacid esters and potential bioactive compounds were prepared *via* thermal 1,2-prototropy- and 1,3-APT oxime nitrone-1,3-dipolar cycloaddition cascades reactions. This substrate allows the influence of the new stereocentres on the cascade to be assessed with respect to the configuration of the nitrone that is generated and the facial selectivity of the subsequent cycloaddition.



Heterocycl. Commun. **10** (2004) 319-323

PLATINUM(II) COMPLEXES OF HETEROCYCLIC LIGANDS OF BIOLOGICAL IMPORTANCE

R.V. Singh* and Kripa Sharma
Department of Chemistry, University of Rajasthan, Jaipur - 302 004, India.
and
Mukta Jain
Department of Chemistry, Seth G.B. Podar College, Nawalgarh, Rajasthan

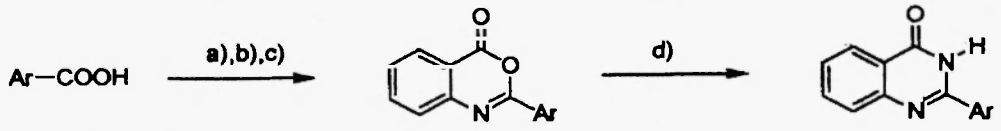


Heterocycl. Commun. **10** (2004) 325-330

SYNTHESIS AND BIOLOGICAL PROPERTIES OF SELECTED 2-ARYL-4(3*H*)-QUINAZOLINONES

Eung Seok Lee, Jong Keun Son, Young Hwa Na, Yurngdong Jahng*

College of Pharmacy, Yeungnam University, Kyongsan 712-749, Korea



Key: a) $SOCl_2$, b) anthranitic acid, c) Ac_2O, d) NH_4OH

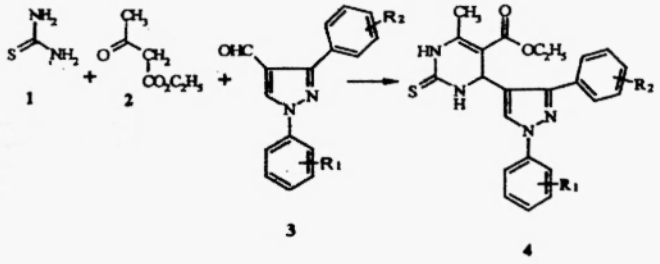
Heterocycl. Commun. **10** (2004) 331-334

Synthesis of some new Ethyl 4-(1,3-Diarylpyrazol-4-yl)-6-methyl-2-thioxo-1,3,4-trihydropyrimidine-5-carboxylates carboxylates

G. Jagath Reddy *, D. Latha, and K. Srinivasa Rao

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.

A series of some new 4-pyrazolyl-6-methyl-2-thioxo-1,3,4-trihydropyrimidine-5-carboxylates (4a-h) have been synthesised.

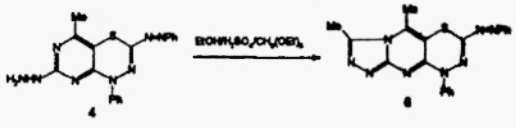


Heterocycl. Commun. **10** (2004) 335-338

Synthesis of Novel Heterocyclic System [1,2,4] Triazolo [4,3,a] pyrimido [4,5-e] [1,3,4] thiadiazines.

M.M. Heravi[a,b,*], M. Bakherad[b], M. Rahimizadeh[b], M. Bakavoli[b] and M. Ghassemzadeh[c], [a]Department of Chemistry, School of Sciences, Azzahra University, Vanak, Tehran, Iran; [b]Department of Chemistry, School of Sciences, Ferdowsi University of Mashhad, Mashhad, Iran; [c]Chemistry & Chemical Engineering Research Center of Iran.

Substituted 6-chloropyrimido [4,5-e] [1,3,4] thiadiazine was converted to the corresponding 6-hydrazino derivative by treatment with hydrazine hydrate in DMF/ Et_3N. The latter was used for the syntheses of a various substituted [1,3,4] triazolo [4,3-a] pyrimido [4,5-e] [1,3,4] thiadiazines.

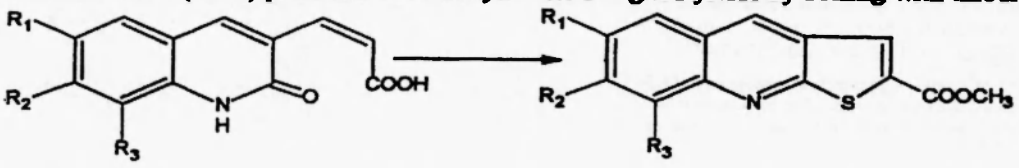


Heterocycl. Commun. **10** (2004) 339-342

SYNTHESIS OF THIENO(2,3-b)QUINOLINE-2-CARBOXYLIC METHYL ESTERS FROM 3-(2-OXO-1,2-DIHYDRO-3-QUINOLYL)ACRYLIC ESTERS

V.Nithyadevi, S. Mohanapriya and S.P.Rajendran* Department of Chemistry, Bharathiar University, Coimbatore-641046, TamilNadu, India

Bromination followed by dehydroxychlorination of acrylic esters yielded the trihalocompound. This afforded thieno(2,3-b)quinoline-2- carboxylic esters in good yields by boiling with thiourea.

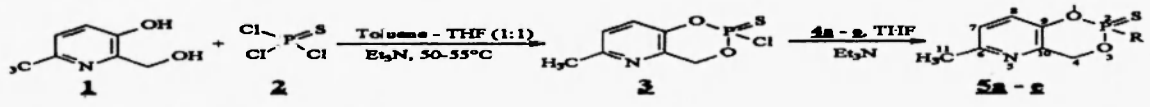


Heterocycl. Commun. **10** (2004) 343-348

SYNTHESIS OF 2-[AMINO ACID ESTER / BIS- (2-CHLOROETHYL)AMINO]-6-METHYL-4*H*-1,3,2-DIOXAPHOSPHORINO(5,4-*b*)PYRIDINE 2-SULFIDES

P. Vasu Govardhana Reddy, Y.B. Kiran and C. Suresh Reddy*
Department of Chemistry, Sri Venkateswara University College of Engineering, Tirupati - 517 502, India

The title compounds **5a - g** were synthesized by reacting 3-hydroxy-6-methyl pyridine methanol **1** with thiophosphoryl chloride **2** followed by addition of amino acid ester hydrochlorides **4a - d** and bis-(2-chloroethyl) amine hydrochloride **4e** in the presence of triethylamine in dry tetrahydrofuran.



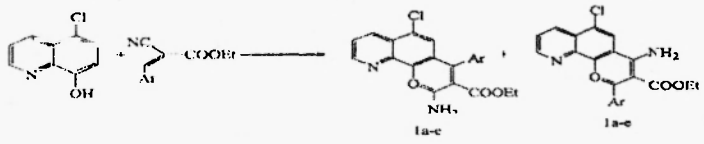
4a-d : Amino acid ester hydrochlorides
4e : Bis-(2-chloroethyl)amine hydrochloride

Heterocycl. Commun. **10** (2004) 349-358

Synthesis And Antibacterial Activities of Fused Pyranoquinoline Derivatives

Nariman M. Nahas and Ali A. Abdel-Hafez
Chemistry Department, Faculty of Science, Umm AlQura University, Makkah, PO Box 5576, Saudi Arabia

Ethyl 2-amino-4-aryl-6-chloro-4-H-pyrano[3,2-h]quinoline-3-carboxylate **1a-e** was converted into ethyl 2-(1-pyrrolyl)-4-aryl-6-chloro-4H-pyrano[3,2-h]quinoline-3-carboxylate **2a-e**. Several derivatives of the latter compound have been synthesized. Also, the synthesis of 7-aryl-5-chloropyrrolo[1",2":1',2']pyrazino[5,6:5',6']pyrano-[3,2-h]quinoline and other related heterocycles are described.



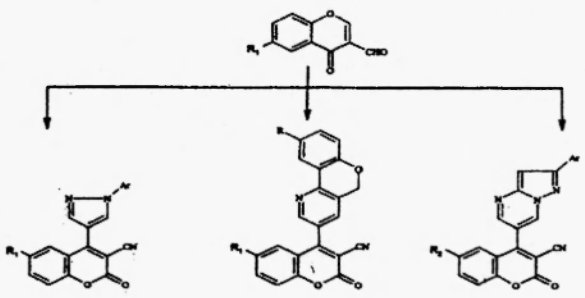
Heterocycl. Commun. **10** (2004) 359-362

Synthesis of some new 4-Heteroaryl substituted 3-cyanocoumarins starting from 3-formylchromones

G. Jagath Reddy *, D. Latha, C. Thirupathaiah and K. Srinivasa Rao

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.

A series of new 4-pyrazolyl/benzopyrano[4,3-b]pyridinyl/pyrazolo[1,5-a]pyrimidinyl-3-cyanocoumarins (5, 6 & 7) have been synthesized starting from 3-formylchromones (1).



Heterocycl. Commun. **10** (2004) 363-368

Facile and efficient synthesis of 1,2,4-triazolo[4,3-*a*][1,8]naphthyridines using $Hg(OAc)_2$ under microwave irradiation

K. Mogilaiah* and Ch. Srinivas Reddy
Department of Chemistry, Kakatiya University, Warangal - 506 009, India.

A simple and efficient protocol for the synthesis of 1,2,4-triazolo[4,3-*a*][1,8] naphthyridines using $Hg(OAc)_2$ under microwave irradiation is described.