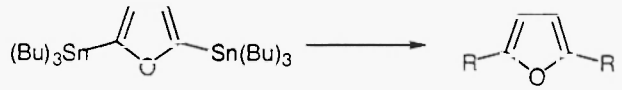
Graphical Abstracts

Heterocycl. Commun. **5** (1999) 301–304

Palladium Catalyzed Cross-Coupling Reactions for the Synthesis of 2,5-Disubstitutedfurans

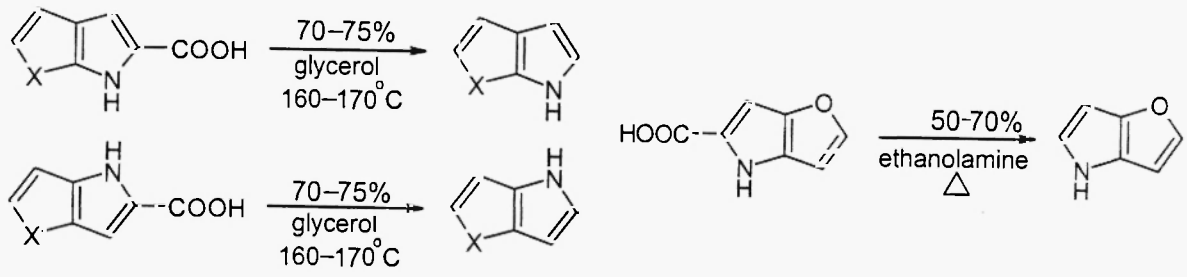
Arvind Kumar, Chad E. Stephens and David W. Boykin*
Department of Chemistry, Georgia State University, Atlanta, GA, 30303, USA



Heterocycl. Commun. **5** (1999) 305–310

Improved Syntheses of [3,2-*b*]- and [2,3-*b*]-fused Selenolo- and Thienopyrroles, and of Furo[3,2-*b*]pyrrole

Michael Welch and Robert S. Phillips*
Department of Chemistry, Department of Biochemistry and Molecular Biology, and Center for Metalloenzyme Studies, University of Georgia, Athens, GA 30602-2556, U.S.A.

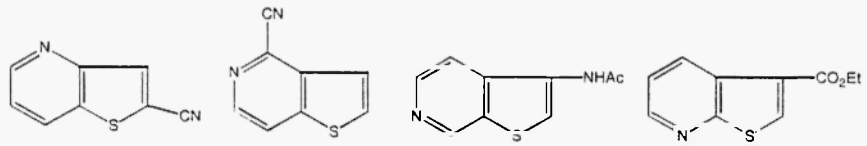


Heterocycl. Commun. **5** (1999) 311–318

X-RAY CRYSTALLOGRAPHIC STUDIES OF FOUR MONOSUBSTITUTED THIENOPYRIDINES. COMPARISON OF EXPERIMENTAL DATA WITH CALCULATED OR MEASURED VALUES FOR THE PARENT COMPOUNDS

LeRoy H. Klemm*, Timothy J. R. Weakley, and Myungok Yoon
Department of Chemistry, University of Oregon, Eugene, Oregon 97403-1253, USA

Bond lengths and bond angles have been measured for the thienopyridine compounds **1b**-**4b** and compared with values calculated by MO theory. Some ^{13}C NMR data are also reported.



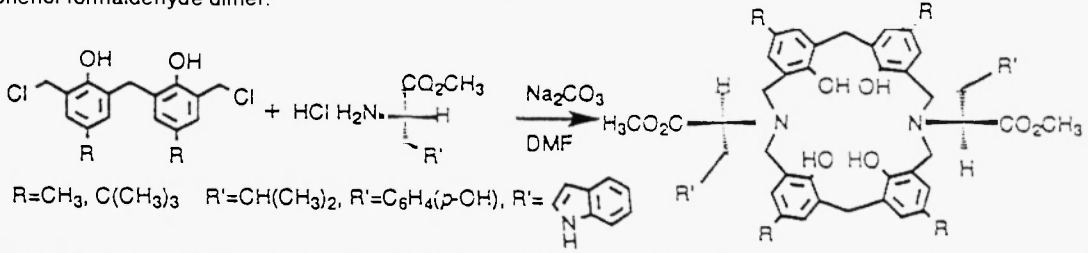
1b **2b** **3b** **4b**

Heterocycl. Commun. **5** (1999) 319–324

SYNTHESES OF CHIRAL TETRAHOMODIAZACALIX[4]ARENES INCORPORATING AMINO ACID RESIDUES: CHIRAL INDUCTION OF CYCLOPHANE MOIETY BY THE CHIRALITY OF AMINO ACID RESIDUE

Kazuaki Ito*, Takanori Ohta, Yoshihiro Ohba, and Tyo Sone
Department of Materials Science and Engineering, Faculty of Engineering, Yamagata University, Yonezawa 992-8510, Japan

Chiral homoazacalix[4]arenes were prepared by the reactions of *L*-amino acids with bis(chloromethyl) phenol-formaldehyde dimer.

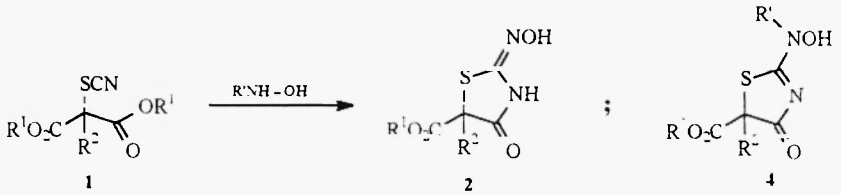


Heterocycl. Commun. **5** (1999) 325–328

CYCLIZATION OF THIOCYANATO MALONATES WITH HYDROXYLAMINES TO 5-CARBOXYALKYL-4-OXO-THIAZOLI(DI)NES

Thomas Kurz and Detlef Geffken*
Institute of Pharmacy, Pharmaceutical Chemistry Department, University of Hamburg, Bundesstrasse 45, 20146 Hamburg, Germany

Thiocyanato malonates **1** are cyclized with hydroxylamine or N-substituted hydroxylamines to thiazoli(di)nones of type **2** and **4**.



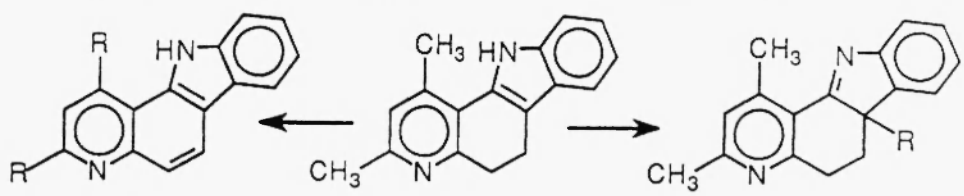
1 2 4

Heterocycl. Commun. **5** (1999) 329–330

OXIDATION OF INDOLO-QUINOLINE STRUCTURES

R. Barret *[1], A. Belaissaoui [2], Z. M. Du[2], T. Mulamba[2], J.Y. Laronze[2], J. Lévy[2].
1-Laboratoire de Chimie Thérapeutique- Faculté de Pharmacie, 8 Avenue Rockefeller, 69373LYON Cedex 08 FRANCE. e-mail: barret@rockefeller.univ-lyon1.fr
2-UPRESA 6013, Faculté de Pharmacie, 51, rue Cognacq-Jay, 51100 REIMS FRANCE.

Different oxidative reagents of 1 were studied (I_2-DMSO, MnO_2, PIFA, Na_4XeO_6).



R = CH_3
R = CHO

1

R = OCH_3, OH, Cl

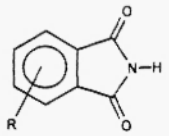
Heterocycl. Commun. **5** (1999) 331–338

FACILE ROUTE TO AMINO PHTHALIMIDES AND ISOTHIOCYANATE ANALOGUES; NOVEL REAGENTS TO PREPARE FLUORESCENT PROTEIN CONJUGATES.

René Miranda[a], Roberto Osnaya[a], Ibeth Oviedo[a], Abel Ciprian[a], Tonatiuh Cruz[a] and Mariano Martínez[b].

a Facultad de Estudios Superiores Cuautitlán, Universidad Nacional Autonoma de Mexico, Campo 1, Av 1 de mayo s/n, Cuautitlán Izcalli, Estado de Mexico, CP 54740, Mexico.
b Instituto de Quimica, Universidad Nacional Autónoma de Mexico, Ciudad Universitaria, Coyoacán, Mexico D.F., CP 04510, México.

A simple synthesis of 3 or 4-aminophthalimides as well as the corresponding isothiocyanates starting from phthalic anhydride is described; these molecules are suggested as new reagents to obtain fluorescent protein conjugates. Additionally a mass spectrometric study for the target compounds was performed.



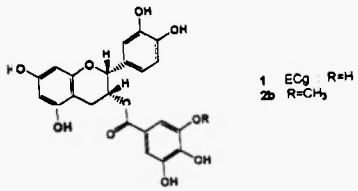
R = NH_2, SCN

Heterocycl. Commun. **5** (1999) 339–342

SYNTHESIS OF MONOMETHYL AND DIMETHYL DERIVATIVES OF EPICATECHIN GALLATE (ECg) AND THEIR PHOTO-SENSITIVITY

Emiko Yanase and Shin-ichi Nakatsuka*
The United Graduate School of Agricultural Science,
Gifu University, Yanagido, Gifu 501-1193, Japan

Epicatechin gallate(ECg) 1 was methylated with CH_2N_2 to give monomethyl derivatives 2a~c and dimethyl derivatives 3ab and their stabilities under exposure to visible light were examined.



1 ECg R=H
2b R=CH_3

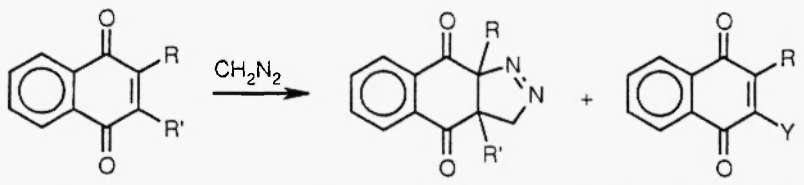
Heterocycl. Commun. **5** (1999) 343–348

SYNTHESIS AND PROTOZOOCIDAL ACTIVITY OF NEW 1,4-NAPHTHOQUINONES

Saïda Danoun, Geneviève Baziard-Mouysset, Jean-Luc Stigliani, Michele Ane-Margail, Marc Payard, Jean-Michel Leger, Xavier Canron, Henri Vial, Philippe M. Loiseau, Christian Bories.

Laboratoire de Chimie Pharmaceutique, Faculté de Pharmacie, 35, Chemin des Maraîchers. F 31062 Toulouse

Addition of diazomethane to 1,4- naphthoquinones gives rise to different adducts. In vitro activities against Plasmodium falciparum, Leishmania donovani, Trypanosoma brucei and Trichomonas vaginalis were determined

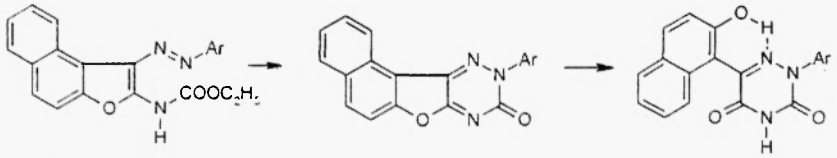


R, R' = H, CH_3, OH, OCH_3,
4- (p-chlorophenyl) cyclohexyl.
Y = H, CH_3, OCH_3

Heterocycl. Commun. **5** (1999) 349–354

Cyclization Reactions of Hydrazones XXVI: Synthesis of 2-Aryl-2,3-dihydro-naphto-[1′,2′:4,5]furo[2,3-e]1,2,4-triazin-3-ones and their use for the preparation of 1-Aryl-5-(2-hydoxy-1-naphtyl)-6-azauracils

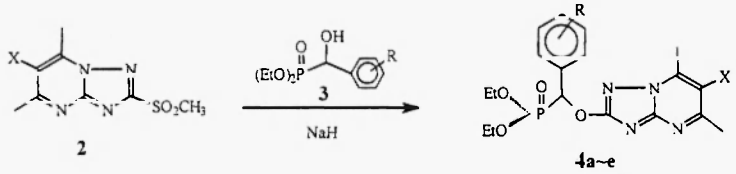
Jakub Styskala, Jan Slouka
Department of Organic Chemistry, Tr. Svobody 8, 771 46 Olomouc, Czech Republic



Heterocycl. Commun. **5** (1999) 355–358

SYNTHESIS AND HERBICIDAL ACTIVITY OF NOVEL α-(1,2,4-TRIAZOLO[1,5-a]PYRIMIDINE-2-OXYL)PHOSPHONATE DERIVATIVES. Guang-Fu Yang*[,a] and Hua-Zheng Yang[b] [a]Institute of Organic Synthesis, Central China Normal University, Wuhan 430079; [b]National Key Laboratory of Elemento-Organic Chemistry, Nankai University, Tianjin 300071, P. R. China

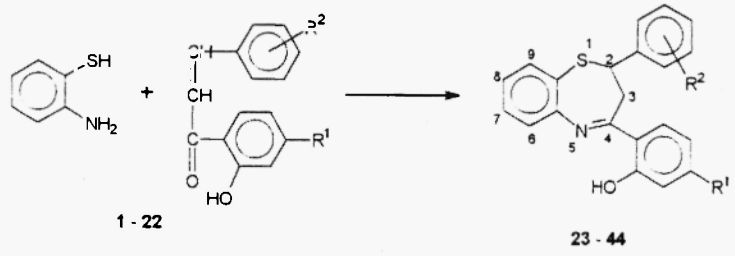
Some novel phosphonate derivatives containing triazolo[1,5-a]pyrimidine moieties have been synthesized in good yields by nucleophilic substitution reaction between α-hydroxyphosphonates **3** and 2-methanesulfonyl-1,2,4-triazolo[1,5-a]pyrimidines **2**.



Heterocycl. Commun. **5** (1999) 359–364

OXAZEPINES AND THIAZEPINES 38, SYNTHESIS OF 2,4-DIARYL-2,3-DIHYDRO-1,5-BENZOTHIAZEPINES BY THE REACTION OF 2'-HYDROXYCHALCONES WITH 2-AMINOTHIOPHENOL

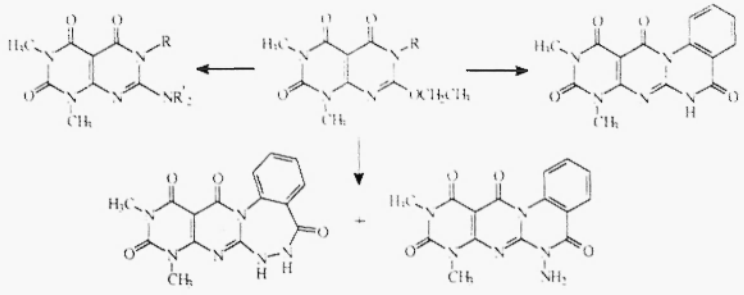
Albert Lévai
Department of Organic Chemistry, Lajos Kossuth University, H-4010 Debrecen, Hungary



Heterocycl. Commun. **5** (1999) 365–376

Subsequent Reactions of 7-Ethoxypyrimido[4,5-d]pyrimidines: Nucleophilic Exchange, Pyrimido[4,5:4',5']pyrimido[1,2-a]quinazoline, Benzo[f]pyrimido[4,5:4',5']pyrimido[1,2-d][1,3,4]triazepine

Heinrich Wamhoff*, Jürgen Muhr, Michael Horn, Pal Sohar, Antal Csampai

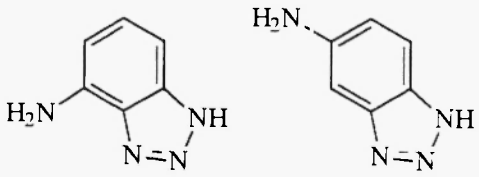


Heterocycl. Commun. **5** (1999) 377–378

Synthesis of Aminobenzotriazoles

Duncan Graham* and Gerard McAnally

Department of Pure and Applied Chemistry
University of Strathclyde
Glasgow
G1 1XL

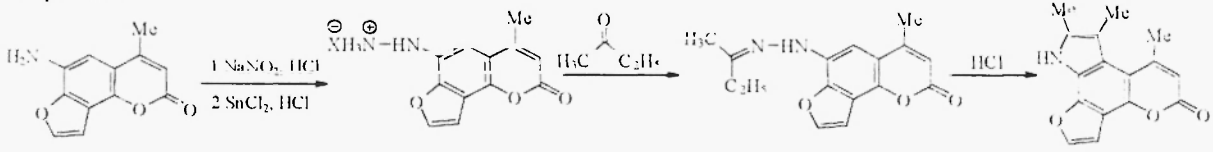


Heterocycl. Commun. **5** (1999) 379–384

THE FIRST PYRROLOFUROCOUMARINS

Valery F. Traven*, Igor I. Saharuk, Dmitrii V. Kravtchenko and Igor G. Makarov
Department of Organic Chemistry, D.Mendeleev University of Chemical Technology of Russia.
125047 Moscow.

The first pyrrolo[2,3-f]furo[2,3-h]coumarins have been prepared via the appropriate hydrazone angelicin derivatives by the Fisher's indole cyclization. The intermediate hydrazones were synthesized by the condensation of 6-hydrazino-4-methylangelicin HCl salt with the proper ketones. The salt was prepared by reduction of 4-methylangelicin 6-diazonium chloride at low temperature.



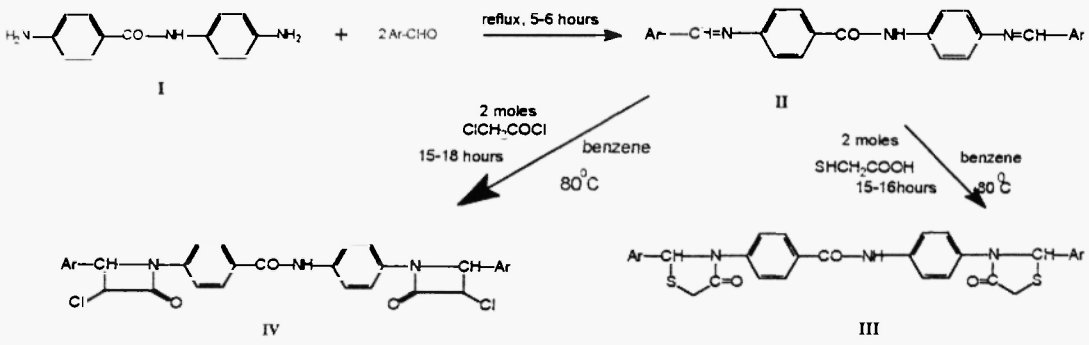
Heterocycl. Commun. **5** (1999) 385–390

SYNTHESIS OF NEW HETEROCYCLIC THIAZOLIDINONE AND AZETIDINONE COMPOUNDS AND THEIR ANTICANCER ACTIVITY

Sunil B Desai, P.B.Desai and K.R.Desai*

Department of Chemistry,South Gujarat University,Surat-395 007(India)

Thiazolidinones and azetidinones have been prepared by the reaction of various schiff bases with thioglycollic acid and chloroacetyl chloride respectively.The intermediate schiff bases were synthesised by the condensation of diaminobenzanilide with various aldehydes.The thiazolidinones and azetidinones were tested for their anticancer activity.



I II IV III