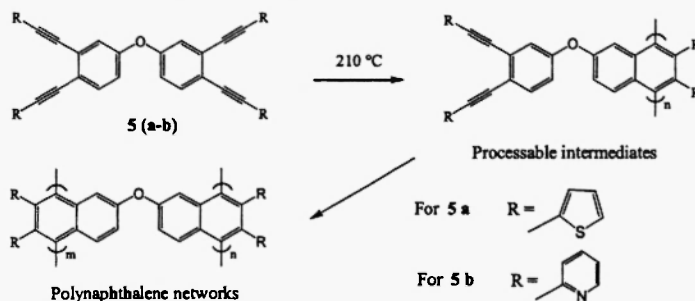


## Graphical Abstracts

Heterocycl. Commun. 8 (2002) 317-320

### SYNTHESIS OF HETEROCYCLE TERMINATED TETRAYNES AS PRECURSORS FOR OPTOELECTRO-ACTIVE POLYMERS

K. Prasanna U. Perera, Mariusz Krawiec and Dennis W. Smith Jr., Department of Chemistry  
Clemson University, Clemson, SC 29634



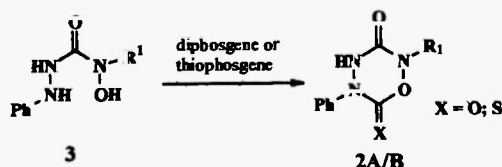
Heterocycl. Commun. 8 (2002) 321-324

### SYNTHESIS OF NOVEL 1,2,4,5-OXATRIAZINAN-3,6-DIONES AND 6-THIOXO-1,2,4,5-OXATRIAZINAN-3-ONES

Detlef Geffken\* and Sandra Zilz

Institute of Pharmacy, Pharmaceutical Chemistry Department, University of Hamburg;  
Bandesstrasse 45, 20146 Hamburg, Germany

The cyclic (thio)carbonylation of 1,4-disubstituted 4-hydroxysemicarbazides **3** with diphosgene or thiophosgene produces novel 1,2,4,5-oxatriazinan-3,6-diones or 6-thioxo-1,2,4,5-oxatriazinan-3-ones **2A/B**.



Heterocycl. Commun. 8 (2002) 325-328

### SYNTHESIS OF 2-METHYL-4,6-DIARYL-1,2,3-TRIAZINONES VIA DIARYLCYCLOPROPENONES

Kiyoshi Matsumoto,<sup>a</sup> Akihiro Okada,<sup>a</sup> Tomasz Girek,<sup>a</sup> Yukio Ikemi,<sup>a</sup> Jong Chul Kim,<sup>a</sup> Naoto Hayashi,<sup>a</sup>

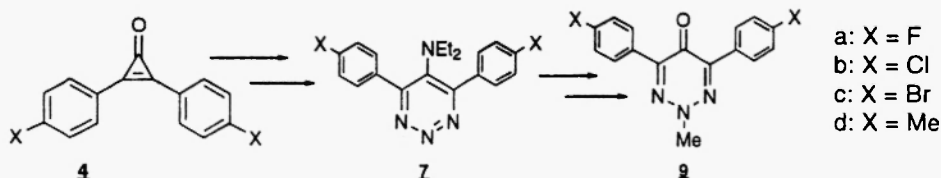
Hiroshi Yoshida,<sup>b</sup> and Akiyazu Kakehi<sup>c</sup>

<sup>a</sup> Graduate School of Human and Environmental Studies, Kyoto University, Kyoto 606-8501, Japan

<sup>b</sup> Faculty of Engineering, Shizuoka University, Hamamatsu 432-8561, Japan

<sup>c</sup> Faculty of Engineering, Shinshu University, Nagano 380-8553, Japan

**Abstract:** 2-Methyl-4,6-bis(4-substituted-phenyl)-1,2,3-triazin-5(2H)-ones **1a-d** were prepared from the corresponding cyclopropenones **4a-d** in a similar fashion as described by us previously. One of the the structure of **1b** was established by an X-ray analysis.



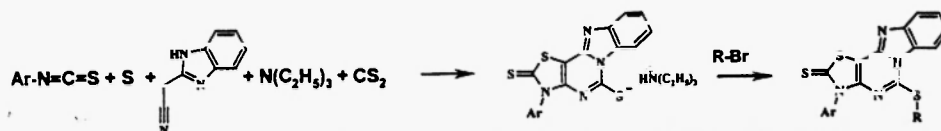
### SYNTHESIS OF 3-ARYL-5-R-THIO-[1,3]THIAZOLO[4',5':4,5]PYRIMIDO[1,6-a]BENZIMIDAZOLE-2(3H)-THIONES

Alexandre Ivachtchenko<sup>a</sup>, Sergiy Kovalenko<sup>b</sup>, Olexiy Parkhomenko<sup>c</sup>, Valentyn Chernykh<sup>d</sup>

<sup>a</sup>Chemical Diversity Labs. Inc., 11575 Sorrento Valley Rd., S.211, San Diego, CA 92121, USA; e-mail: chemdiv@san.rr.com

<sup>b</sup>Institute of Combinatorial Organic Chemistry, <sup>c</sup>National Academy of Pharmacy, Kharkiv, Ukraine.

A five-component condensation of isothiocyanates, sulfur, 2-cyanomethylbenzimidazole, triethylamine and carbon disulfide is described.



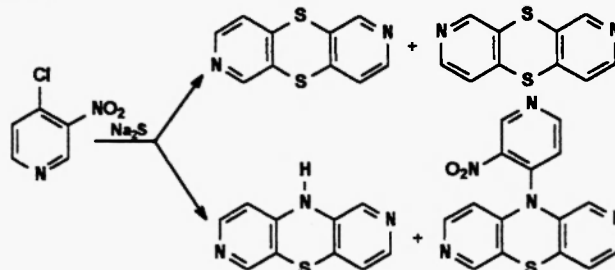
### UNEXPECTED SIMPLE ROUTE TO NOVEL DIPYRIDO-1,4-THIAZINE SYSTEM

Beata Morak,<sup>a</sup> Krystian Pluta<sup>a,b</sup> and Kinga Suwińska<sup>b</sup>

<sup>a</sup> Department of Organic Chemistry, The Medical University of Silesia, ul. Jagiellonska 4, 41-200 Sosnowiec, Poland. E-mail: pluta@slam.katowice.pl

<sup>b</sup> Institute of Physical Chemistry, Polish Academy of Sciences, ul. Kasprzaka 44/52, 01-224 Warsaw, Poland.

Reaction of 4-chloro-3-nitropyridine **1** with sodium sulfide led to different novel tricyclic ring systems depending on the nature of a solvent: in DMSO to expected dipyrido-1,4-dithiins **2** and **3** but in DMF unexpectedly to dipyrido-1,4-thiazines **4** and **5**.



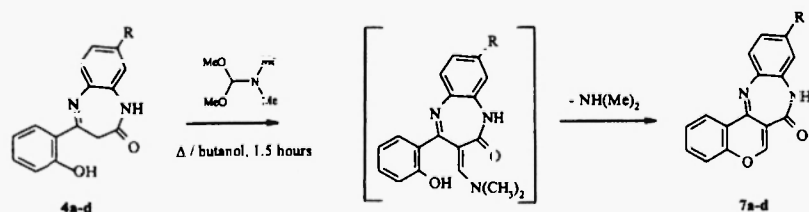
### SYNTHESIS OF NEW FUSED BENZOPYRANO-BENZODIAZEPINONES

Rafik Gharbi, Belsem Trimeche and Zine Mighri<sup>\*</sup>

Laboratoire de Chimie des Substances Naturelles et de Synthèse Organique  
Faculté des Sciences de Monastir - 5000, Monastir, Tunisia.

Marie-Thérèse Martin

Institut de Chimie des Substances Naturelles - CNRS, 91198 Gif-sur-Yvette, France.



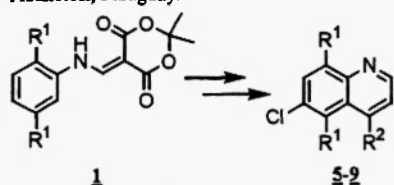
**SYNTHESIS OF 4-ALKYLAMINO-6-CHLOROQUINOLINES AS  
POTENTIAL TRYPANOCIDAL AGENTS**

 Ricardo A. Tapia,<sup>a\*</sup> Yolanda Prieto,<sup>a</sup> Jaime A. Valderrama,<sup>a</sup> Alain Fournet,<sup>b</sup> Antonieta Rojas de Arias,<sup>c</sup> Héctor Nakayama<sup>a</sup> and Susana Torres.<sup>c</sup>

a. Facultad de Química, Pontificia Universidad Católica de Chile, Correo 22, Santiago, Chile.

b. Institut de Recherche pour le Développement (IRD), 213 Rue La Fayette, 75480 Paris Cedex, France.

c. Instituto de Investigaciones en Ciencias de la Salud (IICS), Río de la Plata y Lagrenza, Casilla 2511, Asunción, Paraguay.

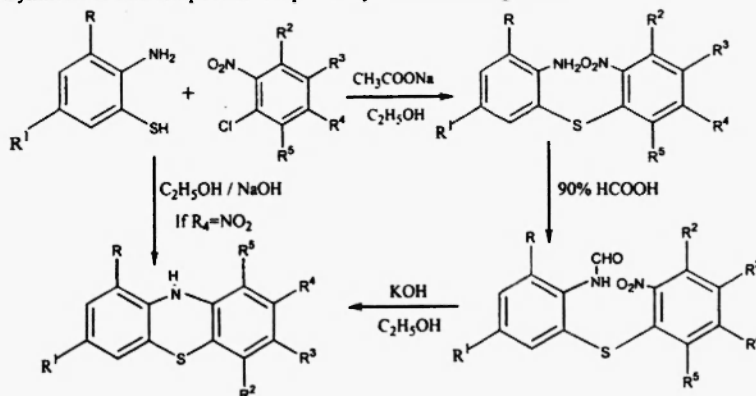

 Alkylamino-6-chloroquinolines **5-9** were obtained from arylaminomethylene Meldrum's acid derivative **1**. The *in vitro* trypanocidal activity of these compounds against trypomastigote forms of *Trypanosoma cruzi* is described.

**SYNTHESIS OF 1- AND 3- METHYL PHENOTHIAZINES**

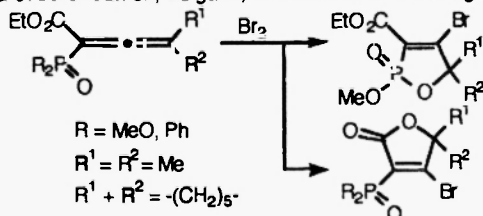
Leby Thomas, Archana Gupta and Vandana Gupta\*

Department of Chemistry, University of Rajasthan, Jaipur-302 004 (India).

Synthesis of title compounds is reported by Smiles rearrangement.


**BIFUNCTIONALIZED ALLENES. PART IV.  
1,2λ<sup>5</sup>-OXAPHOSPHOLE-3-CARBOXYLATES  
AND 3-PHOSPHORYL-2(5H)-FURANONES  
FROM 2-PHOSPHORYL-2,3-ALKADIENOATES**

Valerij Ch. Christov and Boris Prodanov

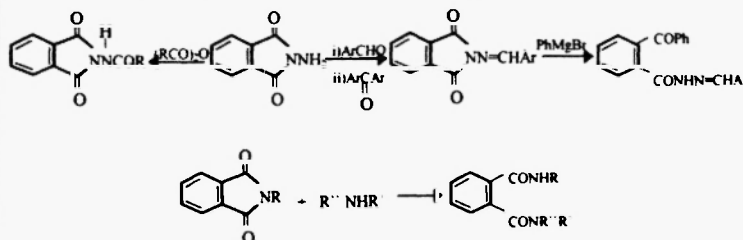
 Department of Chemistry, University of Shoumen,  
BG-9700 Shoumen, Bulgaria, E-Mail: vchristo@shu-bg.net


**ACTION OF AMINES AND GRIGNARD REAGENTS ON SOME NEW N-ARYLIDENEAMINOPHTHALIMIDES**

H.T. Zaky

Chemistry Department, College for Women, Ain Shams University, Helipolis, Cairo, Egypt.

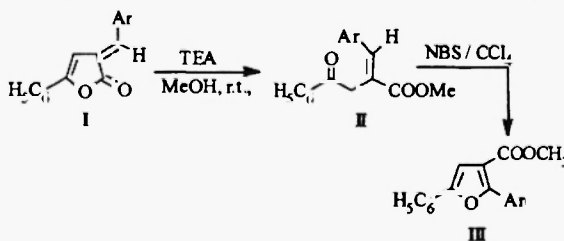
Some new N-arylmethyleneaminophthalimides have been synthesized from the interaction of N-aminophthalimides(I) with a variety of carbonyl compounds such as aliphatic and aromatic aldehydes and ketones. The effect of N-aminophthalimide on itaconic and citraconic anhydrides and the action of amines and Grignard reagent on some synthesized N-arylmethyleneaminophthalimides have been also reported.

**Conversion of  $\alpha$ -arylidene- $\gamma$ -keto esters to diarylfuran carboxylic acid esters**

Formation of unsymmetrical 2,5 diarylfuran-3-carboxylic acid methyl esters from  $\alpha$ -arylidene- $\gamma$ -oxo-benzenebutanoic acid methyl esters in presence of N-bromosuccinimide is described.

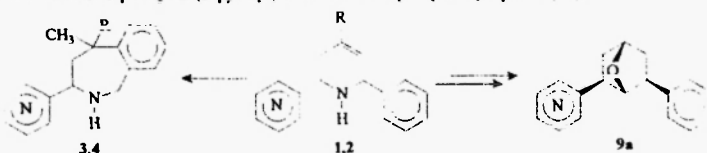
G. Sudhakar Reddy, Syed Salahuddin, Parvathi Neelakantan\* and D.S. Iyengar

Organic Chemistry Division-II, Indian Institute of Chemical Technology, Hyderabad-500 007, India.

**4-N-ARYL(BENZYL)AMINO-4-HETEROARYL-1-BUTENES AS BUILDING BLOCKS IN HETEROCYCLIC SYNTHESIS. 2. SYNTHESIS OF NEW TETRAHYDRO-2-BENZAZEPINE DERIVATIVES AND RELATED COMPOUNDS CONTAINING A PYRIDINE RING**Juliette Rivero Castro<sup>a</sup>, Cristian Ochoa Puentes<sup>a</sup>, Vladimir V. Kouznetsov<sup>a</sup>, Elena E. Stashenko<sup>a</sup>, Juan C Poveda<sup>a</sup>, Ali Bahsas<sup>b</sup>, and Juan Amaro-Luis<sup>b</sup>

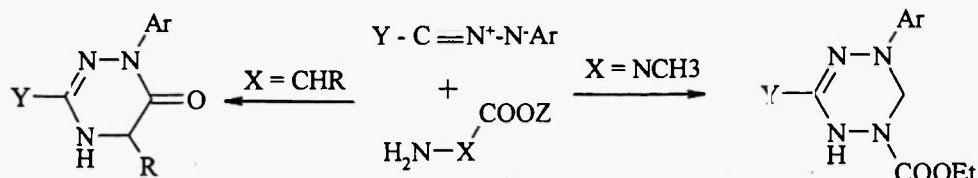
<sup>a</sup> - Laboratory of Fine Organic Synthesis, Research Center for Biomolecules, School of Chemistry, Industrial University of Santander, A.A. 678, Bucaramanga, Colombia. <sup>b</sup> - Laboratorio de RMN, Grupo de Productos Naturales, Departamento de Química, Universidad de los Andes, Mérida, Venezuela. 5101.

Chemical transformations of the aminobutenes (1,2) were studied. Their allyl cationic intramolecular cyclisation led to the preparation of new tetrahydro-2-benzazepines containing a pyridine ring (3,4). The acylation and oxidation reactions of these aminobutenes gave several amides (5,6,8) and nitronc (7a), which was converted into the 6-phenyl-2-(3-pyridyl)-7-oxa-1-azabicyclo[2.2.1]heptane (9a)



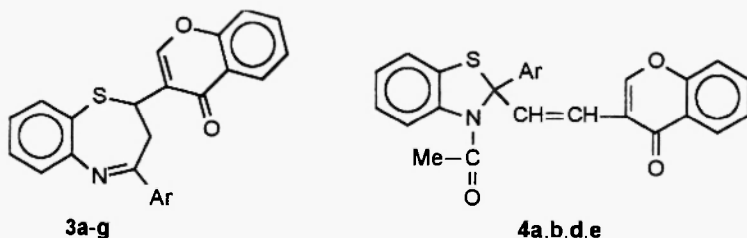
**CYCLOCONDENSATION REACTIONS OF NITRILIMINES:  
SYNTHESIS OF 1,2,4-TRIAZIN-6-ONES AND 1,2,4,5-TETRAZINES**

Adel M. Awadallah<sup>a\*</sup>, Abdel-Rahman S. Ferwanah<sup>b</sup>, Emtithal A. El-Sawi<sup>c</sup>, Hany M. Dalloul<sup>c</sup>  
a) Islamic University of Gaza, b) Al-Azhar University of Gaza, c), Ain Shams University, Cairo



**OXAZEPINES AND THIAZEPINES 40  
SYNTHESIS OF 4-ARYL-2-(3-CHROMONYL)-2,3-DIHYDRO-1,5-BENZO-  
THIAZEPINES AND THEIR CONVERSION INTO 3-ACETYL-2,3-DIHYDRO-  
BENZOTHIAZOLES**

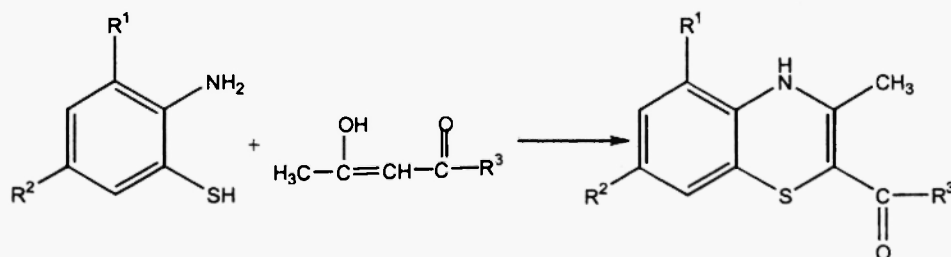
Albert Lévai  
Department of Organic Chemistry, University of Debrecen, H-4010 Debrecen, Hungary



**A CONVENIENT SYNTHESIS OF 5/7-CHLORO-4H-1,4-BENZOTHAZINES**

Gulshan Kumar, Vandana Gupta, D.C. Gautam and R.R. Gupta  
Department of Chemistry, University of Rajasthan, Jaipur-302004

5/7-Chloro-4H-1,4-benzothiazines have been synthesized by the condensation and oxidative cyclization of 2-amino-3/5-chlorobenzenethiols and  $\beta$ -diketone in dimethylsulfoxide.

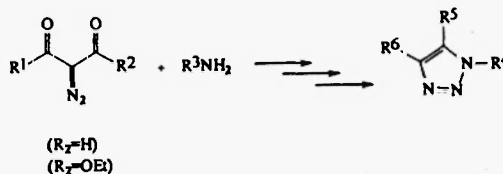


## SYNTHESIS OF 1,2,3-TRIAZOLE DERIVED POTENTIAL PEPTIDOMIMETICS

Kadir Dabak\* and Ahmet Akar

Istanbul Technical University, Faculty of Sciences, Department of Chemistry, Maslak 80626 Istanbul-Turkey.

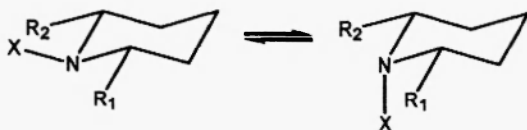
Abstract: Synthesis of some new 1,2,3-triazole derived potential scaffold type peptidomimetics are described. 1,4-Disubstituted-1,2,3-triazoles and 1,4,5-trisubstituted-1,2,3-triazoles were prepared by the reaction of  $\alpha$ -diazo- $\beta$ -oxoaldehyde, and  $\alpha$ -diazo- $\beta$ -oxoester derivatives with different amine compounds. Substituents of triazole compounds were chosen from amino acid side chains or their precursors.



## Conformational Study of N-Halopiperidines

J. V. Correia, M. N. Simões, A. C. Ferreira, L. R. Galveia, F. M. S. Brito Palma\*

CECUL and Department of Chemistry and Biochemistry, Faculty of Sciences, University of Lisbon, R. Ernesto Vasconcelos, C8, 1749-016 Lisbon, Portugal



- 2 X = Cl; R<sub>1</sub> = CH<sub>3</sub>; R<sub>2</sub> = H
- 3 X = Cl; R<sub>1</sub> = R<sub>2</sub> = CH<sub>3</sub>, *cis*
- 4 X = Cl; R<sub>1</sub> = CH<sub>2</sub>CH<sub>3</sub>; R<sub>2</sub> = H
- 5 X = Br; R<sub>1</sub> = R<sub>2</sub> = H
- 6 X = Br; R<sub>1</sub> = CH<sub>3</sub>; R<sub>2</sub> = H
- 7 X = Br; R<sub>1</sub> = R<sub>2</sub> = CH<sub>3</sub>, *cis*

Heterocyclic Fused Rings with Bridgehead Nitrogen Atoms: Single Step Synthesis of Several Polyfunctionally Substituted Fused Pyridines.

A.K. Khalafallah\*, R.M. Abd Elal and N.A.A. El Kanzi.

Department of Chemistry, Faculty of Science, South Valley University, Aswan,

81528, Egypt.

A series of several new polyfunctionally substituted fused pyridines has been synthesised from quinoline derivatives.

