

## Graphical Abstracts

Heterocycl. Commun. 11 (2005) 211 - 214

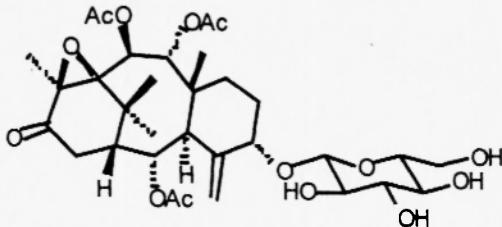
### First example of 11,12-epoxytaxane-glucoside from the needles of *Taxus cuspidata*

Chun-Lin Wang<sup>1</sup>, Man-Li Zhang<sup>1</sup>, Cong-Mei Cao<sup>1</sup>, Qing-Wen Shi<sup>1\*</sup>, Hiromasa Kiyota<sup>\*2</sup>

<sup>1</sup>School of Pharmaceutical Sciences,  
Hebei Medicinal University, China

<sup>2</sup>Graduate School of Agricultural Science, Tohoku University,  
Japan

A new 11,12-epoxytaxane-glucoside, 2 $\alpha$ ,9 $\alpha$ ,10 $\beta$ -triacetoxy-11,12-epoxytax-4 (20)-en-13-one-5 $\alpha$ -O- $\beta$ -D-glucopyranoside was isolated from the needles of *Taxus cuspidata*.



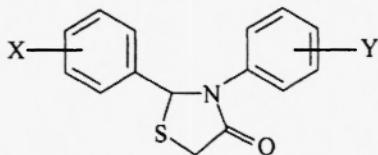
Heterocycl. Commun. 11 (2005) 215 - 222

### A preliminary study on predicting the $^{13}\text{C}$ chemical shifts for a series of disubstituted 2,3-diphenyl-1,3-thiazolidin-4-ones

John Tierney,<sup>a</sup> Douglas Sheridan,<sup>a</sup> Linda Mascavage,<sup>b</sup> Daniela Gorbecheva,<sup>b</sup> Michelle Ripp<sup>b</sup> and Sonjoo Son<sup>b</sup>

<sup>a</sup> Department of Chemistry, Pennsylvania State University, Delaware County Campus, Media, Pennsylvania 19063, USA

<sup>b</sup> Department of Chemistry, Arcadia University, Glenside, Pennsylvania, 19038, USA



Series 1: X = *p*-NO<sub>2</sub>, *m*-NO<sub>2</sub>, *p*-F, *m*-F, *p*-Cl, *p*-Br, *m*-Br, H, *p*-CH<sub>3</sub>, *m*-CH<sub>3</sub>, *p*-OCH<sub>3</sub>, *m*-OCH<sub>3</sub>; Y = H

Series 2: Y = *p*-NO<sub>2</sub>, *m*-NO<sub>2</sub>, *p*-F, *m*-F, *p*-Cl, *p*-Br, *m*-Br, H, *p*-CH<sub>3</sub>, *m*-CH<sub>3</sub>, *p*-OCH<sub>3</sub>, *m*-OCH<sub>3</sub>; X = H

Series 3: X = Y = *p*-NO<sub>2</sub>, *m*-NO<sub>2</sub>, *p*-F, *m*-F, *p*-Cl, *p*-Br, *m*-Br, *p*-CH<sub>3</sub>, *m*-CH<sub>3</sub>, *p*-OCH<sub>3</sub>, *m*-OCH<sub>3</sub>

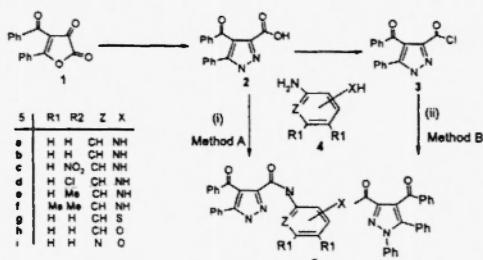
Heterocycl. Commun. 11 (2005) 223 - 234

### Synthesis and theoretical calculations of the 1*h*-pyrazole-3-carboxamide and -3-carboxylate derivatives

Ismail Yıldırım<sup>1</sup> and Fatma Kandemirli<sup>\*2</sup>

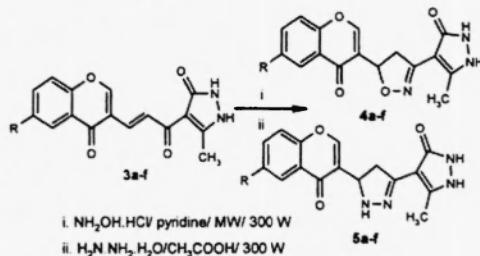
<sup>1</sup>Department of Chemistry, Erciyes University, TR -38039, Kayseri, Turkey

<sup>2</sup>\*Department of Chemistry, Kocaeli University, TR -41300, Izmit, Turkey

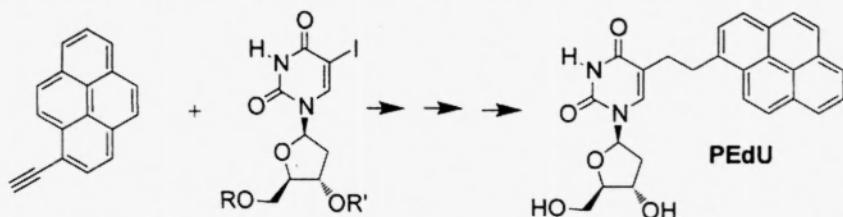


**Synthesis of new hetero aroyl chromen-4-ones***P Narasimha Reddy, Y Thirupathi Reddy, V Naveen Kumar & B Rajitha\**

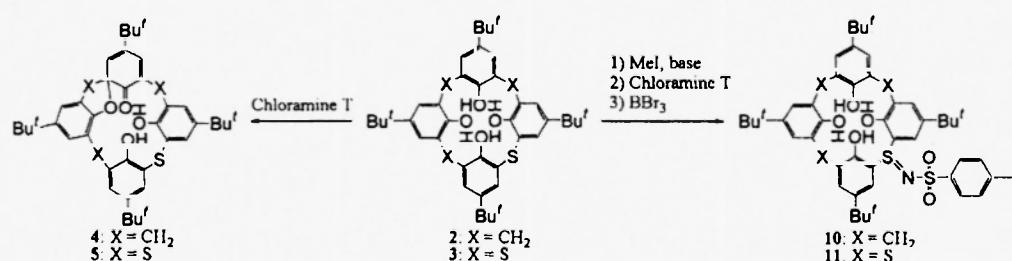
Synthesis of 5-methyl-4-[3-(4-oxo-4H-chromene-3-yl)-acryloyl]-1,2-dihydro-pyrazol-3-ones **3a-f**, synthesis of 5-methyl-4-[5-(4-oxo-4H-chromene-3-yl)-4,5-dihydro-isoxazol-3-yl]-1,2-dihydro-pyrazol-3-ones **4a-f** and 5'-methyl-5-(4-oxo-4H-chromen-3-yl)-4,5,1',2'-tetrahydro-1H-[3,4']bipyrazole-3'-ones **5a-f** in good yields is described under microwave irradiation conditions.

**Synthesis of 5-(2-pyren-1-yl-ethenyl)-2'-du as a fluorescent probe for studying electron transfer in DNA***Samir T. Gaballah<sup>1</sup> and Thomas L. Netzel<sup>2</sup>*

Department of Chemistry, Georgia State University, P.O. Box 4098, Atlanta, GA 30302-4098

<sup>1</sup>Current Address: Department of Photochemistry, National Research Center, Dokki, Cairo 12311, Egypt**Conversion of mono- and tetra-thiacalix[4]arenes to sulfilimine derivatives and unexpected formation of monospirodieneone derivatives***Naoya Morohashi, Makoto Kojima, Akihiro Suzuki, Yoshihiro Ohba\**

Department of Chemistry and Chemical Engineering, Faculty of Engineering, Yamagata University, Yonezawa 992-8510, Japan



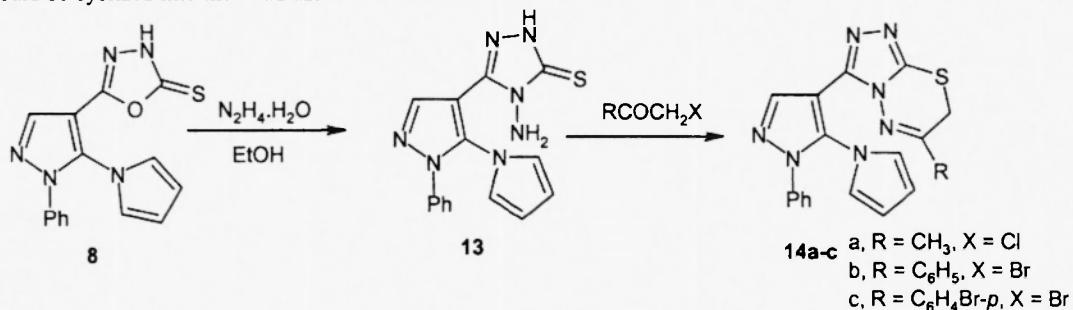
## Synthesis, reactions and antimicrobial activity of some new 1,3,4-oxadiazoles, 1,2,4-triazoles and 1,3,4-thiadiazazines derived from pyrazole.

A. A. Farghaly<sup>a</sup>, P. Vanelle<sup>b</sup> and H. S. El-Kashef<sup>a</sup>

<sup>(4)</sup>Chemistry Department, Faculty of Science, Assiut University, 71516 Assiut, Egypt, <elkashef@acc.aun.edu.eg>

(b) Laboratoire de Chimie Organique Pharmaceutique LCOP-UMR CNRS 6517, Faculté de Pharmacie, 27 Boulevard Jean Moulin, 13385 Marseille Cedex 5, France, <patrice.vanelle@pharmacie.univ-mrs.fr>

The interaction of the oxadiazole **8** with hydrazine hydrate afforded the aminotriazolethione compound **13** which could be cyclized into the thiadiazine derivatives **14a-c**.



## Synthesis and antibacterial activities of fused pyranoquinoline derivatives

Nariman M. Nahas and Ali A. Abdel-Hafez

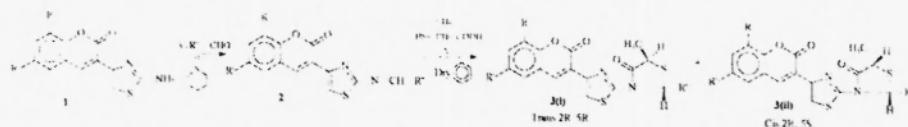
**Chemistry Department, Faculty of Science, Umm AlQura University, Makkah,  
P.O. Box 16222, Saudi Arabia**

Ethyl 2-amino-4-aryl-6-chloro-4H-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.

## Synthesis and evaluation of anticancer and antiviral activity of some 2-aryl-3-(4-(2H-1-benzopyran-2-one-3-yl)-2-thiazolyl)-5-methyl-4-thiazolidinones

V. Rajeswar Rao\*, P. Vijaya Kumar, V. Ravinder Reddy and K.M. Reddy

Department of Chemistry, National Institute of Technology,  
Warangal - 506 004, India.



2-Aryl-3-(4-(2H-1-benzopyran-2-one-3-yl)-2-thiazolyl)-5-methyl-4-thiazolidinones (3), have been prepared by the reaction of Schiff's bases (2) with 2-mercaptopropionic acid. The Schiff's bases in turn are obtained by the reaction of various aldehydes with 3-(2-amino-4-thiazolyl)coumarins. The compounds 3 have been evaluated for their anticancer and antiviral activity.

**Chiral (S)-(+)-1-substituted aryl-4-(1-phenyl) ethylformamido-5-amino-1, 2, 3-triazole: a new class of chiral ligands for the silver(I)-promoted enantioselective allylation of aldehydes**

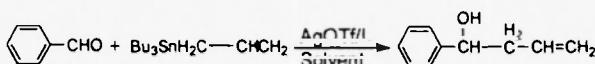
*Mindong Chen<sup>a,c</sup>, Shengli Guo<sup>b</sup>, Youfei Zheng<sup>a</sup>, Liang Chen<sup>a</sup>, Feng Tang<sup>c</sup>, Weiyi Hua<sup>c</sup>*

<sup>a</sup> Department of Environmental Sciences and Engineering, Nanjing University of Information Science & Technology, Nanjing, 210044

<sup>b</sup> Department of Physics, Nanjing University of Information Science & Technology, Nanjing, 210044

<sup>c</sup> College of Medicine, China Pharmaceutical University, Nanjing, 210009

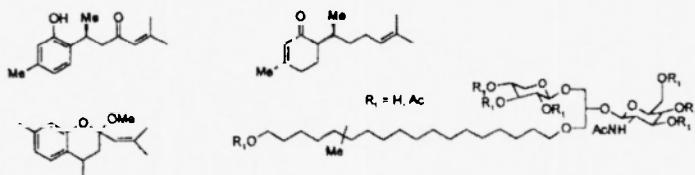
Some novel chiral ligands (S)-(+)-1-substituted aryl-4-(1-phenyl) ethylformamido-5-amino-1, 2, 3-triazole were prepared starting from 1-substituted aryl-4-ethoxycarbonyl-5-amino-1, 2, 3-triazoles and other reagents. They were used as catalytic chiral ligands in the silver (I)-promoted enantioselective allylation reaction of aldehydes with allyltributyltin



**Isolation and characterization of new tetrahydropyranyl substituted sesquiterpene and myrmekiodermin glycolipid ether isolated from the marine sponge *myrmekioderma***

*Vyes Letourneau\*, Jean Michel Brunel, Rogelio Fernandez, Michel Dherbomez and Cécile Debitus*

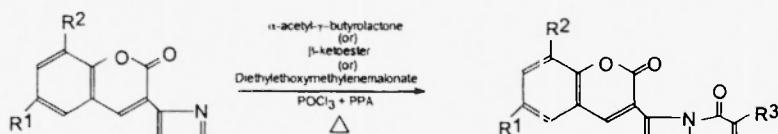
\*Laboratoire de Synthèse et Etude de Substances Naturelles à Activités Biologiques (SESNAB), IMRN UMR INRA 1111, Case 342, Faculte de St Jerome, Av. Escadrille Normandie Niemen, F-13397 Marseille, Cedex 20, France. e-mail : vyesletourneau@yahoo.fr



**Synthesis of some new 3-(2-oxo-2H-chromen-3-yl)-5H-[1,3]thiazolo[3,2-a] pyrimidine-5-ones**

*V. Ravinder Reddy and V. Rajeswar Rao*

Department of Chemistry, National Institute of Technology, Warangal (A.P.) 506 004, India  
e-mail: vrajesw@yahoo.com, vrajesw@nite.ernet.in



Condensation of 3-(2-amino-4-thiazolyl)coumarins (I) with  $\alpha$ -acetyl- $\gamma$ -butyrolactone in a mixture of polyphosphoric acid and  $\text{POCl}_3$  affords 6-(2-chloromethyl)-7-methyl-3-(2-oxo-2H-chromen-3-yl)-5H-[1,3]-thiazolo[3,2-a] pyrimidine-5-one (IIa-f), while condensation of I with  $\beta$ -ketoesters gives 7-methyl-3-(2-oxo-2H-chromen-3-yl)-5H-[1,3]thiazolo [3,2-a]pyrimidine-5-ones (IIIa-g). Reaction between I and diethyl methoxy methylene malonate under solvent free conditions gives 3-(2-oxo-2H-chromen-3-yl)-5H-[1,3]thiazolo[3,2-a]pyrimidine-5-one-6-carboxylic acid ethyl ester (IV). The structures of newly synthesized compounds have been established by elemental analysis and spectral data.

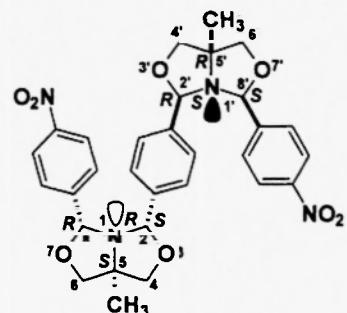
**First example of long distance stereo controlled synthesis in 1-aza-3,7-dioxabicyclo[3.3.0.]octane series**

Carmen Maiereanu,<sup>a</sup> Mircea Darabantu,<sup>a</sup> Eric Condamine,<sup>b</sup> Gérard Plé,<sup>b</sup> Yvan Ramondenc,<sup>b</sup> Marijana Fazekas,<sup>a</sup> Monica Pintea<sup>a</sup> and Camelia Berghian<sup>c</sup>

<sup>a</sup>"Babes-Bolyai" University, Department of Organic Chemistry, 11 Aranyi János str., RO-3400 Cluj-Napoca, Romania

<sup>b</sup>Université de Rouen, Institut de Recherche en Chimie Organique Fine (I.R.C.O.F.), 76131 Mont Saint-Aignan, France

<sup>c</sup>"Babes-Bolyai" University, Department of Inorganic Chemistry, 11 Aranyi János str., RO-3400 Cluj-Napoca, Romania



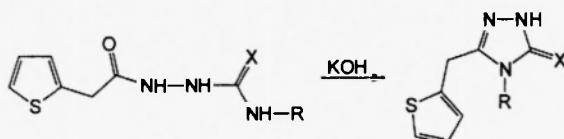
**Organic sulfur compounds. vi. 5-(2-thienylmethyl)-1,2,4-triazole derivatives**

Gheorghe Roman<sup>a</sup>, Ileana Manciulea<sup>a</sup>, Rodinel Ardeleanu<sup>b</sup>, Lucia Dumitrescu<sup>a</sup>

<sup>a</sup>Department of Chemistry, Transilvania University, 29 Eroilor Blvd., Brașov, 500036, Romania

<sup>b</sup>P. Poni Institute for Macromolecular Chemistry, 41A Gr. Ghica Vodă Alley, Iași, 700487, Romania

New 1,2,4-triazole-3-thiones and 1,2,4-triazole-3-ones bearing a 2-thienylmethyl moiety in position 5 have been synthesized through the cyclization in the presence of aqueous KOH of the corresponding 1-(2-thienylacetyl)thiosemicarbazides and 1-(2-thienylacetyl)semicarbazides respectively. Potassium N'-(2-thienylacetyl)hydrazinecarbodithioate led to 4-amino-3-mercaptop-5-(2-thienylmethyl)-1,2,4-triazole on treatment with hydrazine hydrate.



**Reactions of 5-aminopyrazoles: Synthesis of pyrazolo [5',1': 2,3]pyrimido[5,4-*b*][1,4]-benzothiazines. a new tetracyclic ring system under microwave irradiation conditions**

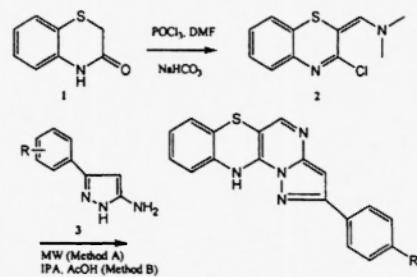
K. N. Jayaveera and S. Sailaja

Oil Technological Research Institute, Jawaharlal Nehru Technological University, Anantapur - 515001  
and

G. Jagath Reddy \* and K. Srinivasa Rao

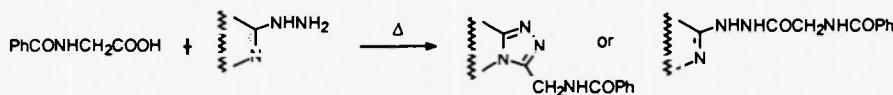
R & D Laboratories, Dr. Jagath Reddy's Heterocyclics, 81, S.V.Co-op Industrial Estate, Balanagar, Hyderabad – 500 037, India.  
E-mail: jagathreddy@usa.net; Fax # 91-40-23773487.

A series of pyrazolo[5',1': 2,3]pyrimido[5,4-*b*][1,4]-benzothiazines (**4a-f**), a new tetracyclic ring system have

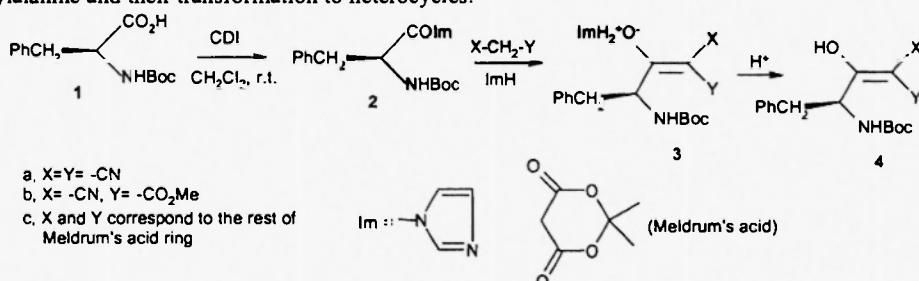


**Reactions of acylglycines with heteroarylhydrazines***Irena Music and Bojan Vercek\**

Faculty of Chemistry and Chemical Technology, University of Ljubljana, 1000 Ljubljana, Aškerčeva 5, Slovenia

Reactions of hippuric acid with heteroarylhydrazines leading to *N*-(heteroaryl methyl)benzamides or *N*-[2-oxo-2-(heteroarylhydrazino)ethyl]benzamides are described.**Synthesis of acylated active methylene compounds with *n*-Boc-L-phenylalanine and their heterocyclization, both achieved enantioselectively***Stylianos Hamilakis and Athanase Tsolomitis\**The Laboratory of Organic Chemistry, The School of Chemical Engineering,  
The National Technical University of Athens, Athens 157 80, Greece

E-mail : tsolom@chemeng.ntua.gr

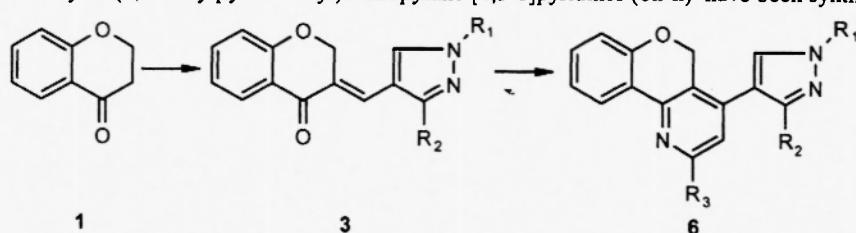
An overall enantioselective simple synthesis of acylated active methylene compounds with *N*-Boc-L-  
Phenylalanine and their transformation to heterocycles.**Synthesis of 2-Aryl-4-(1,3-diarylpyrazol-4-yl)-benzopyrano[4,3-*b*]pyridines***G. Jagath Reddy \* and K. Srinivasa Rao*

R &amp; 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.

and

*Md. Khalilullah, D. Latha and C. Thirupathaiah*

Department of Chemistry, Jawaharlal Nehru Technological University, Hyderabad - 500 072, India

A series of 2-Aryl-4-(1,3-diarylpyrazol-4-yl)benzopyrano [4,3-*b*]pyridines (**6a-h**) have been synthesized.

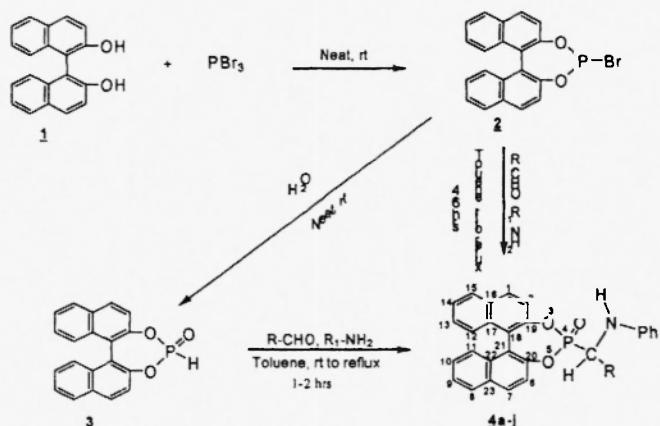
**Synthesis and Antimicrobial activity of 2, 10 - dibromo dibenzo [d,g] [1,3,6,2] dioxathiaphosphocin 6-sulfido-6-amino acid esters**

P. Haranath, U. Anasuyamma, C. Devendranath Reddy and C. Suresh Reddy\*

Department of Chemistry, Sri Venkateswara University, Tirupati, A.P., India.

E-mail : csureshsvu@yahoo.com

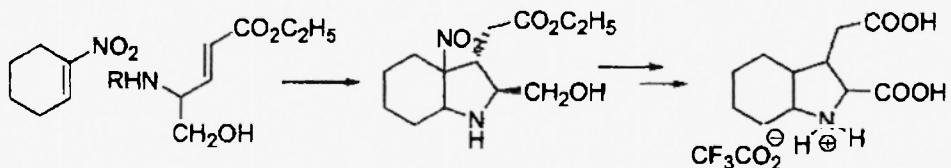
4- $\alpha$ -Arylamino benzyl dinaphtho [2,1-d:1',2'-f][1,3,2] dioxaphosphepin 4-oxides **4a-j** were synthesized in excellent yield from three-component one pot reaction of aldehydes, anilines and dinaphtho [2,1-d:1',2'-f][1,3,2] dioxaphosphorobromodite **2** / corresponding hydrogen-phosphite **3** intermediates and characterized by IR,  $^1\text{H}$ ,  $^{13}\text{C}$  and  $^{31}\text{P}$  NMR spectral data and the title compounds were screened for their antimicrobial activity.



**Synthesis of an analog perhydroindole of kanaic acid**

Matheieu Danel, Akram Hijazi, Roland Barret\*

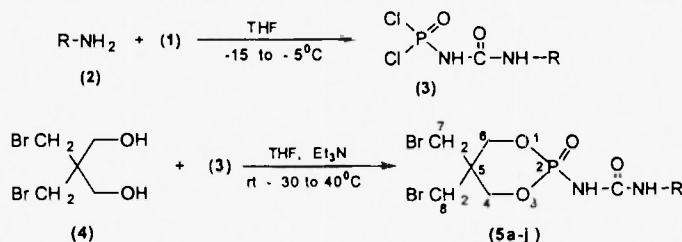
Laboratoire de Chimie Thérapeutique, EA 3741,  
Faculté de pharmacie, Université Claude Bernard,  
8 Avenue Rockefeller, F69373 Lyon Cedex 08



**Synthesis of *N*-(substituted)-*N'*- [5,5'-bis(bromomethyl)-2-oxido-1,3,2-dioxaphosphorinane-2yl] ureas**

*M.F. Stephen Babu, Y.B. Kiran, K.Ananda Kumar, C.Devendranath Reddy and C. Suresh Reddy\**

The title compounds have been synthesized by condensation of equimolar quantities of chlorides of various carbamidophosphoric acids **3** with 2,2'-bis(bromomethyl)1,3-propanediol **4** in the presence of triethylamine in dry tetrahydrofuran at 30-40°C.



**Synthesis of new fluorescent  $\beta$ -cyclodextrin sensor**

*Mathieu Becuwe,<sup>a</sup> François Delattre,<sup>a</sup> Georgiana G Surpateanu,*

*<sup>b</sup> Francine Cazier,<sup>a</sup> Patrice Woisel,<sup>a</sup> Guillaume Garçon,*

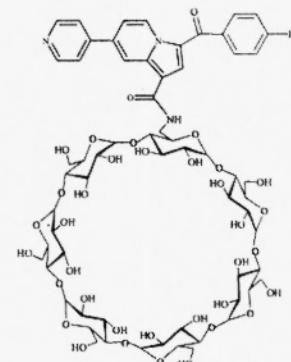
*<sup>b</sup> Pirouz Shirali,<sup>b</sup> Gheorghe Surpateanu<sup>a\*</sup>*

<sup>a</sup> Laboratoire de Synthèse Organique et Environnement, EA 2599, Université du Littoral Côte d'Opale,

145 avenue Maurice Schumann, 59140 Dunkerque

<sup>b</sup> Laboratoire de Recherche en Toxicologie Industrielle et Environnementale, Université du Littoral Côte d'Opale, 189A avenue Maurice Schumann, 59140 Dunkerque

Fax : (33) 03 28 23 76 05 ; e-mail : surpatea@univ-littoral.fr



The synthesis of a new fluorescent sensor incorporating a fluoro pyridine indolizinic unit and a  $\beta$ -cyclodextrin fragment by two different synthetic ways is described.

**Synthesis and spectral studies of some novel dialkyl/diaryl  $\beta$ -diketones and  $\beta$ -ketoesters from diazonium salt of 3n-propyl-4-amino-5-carboxamido-N-methyl pyrazole**

*Rajesh Kumar<sup>a</sup>, Y.C. Joshi<sup>a</sup> and P. Joshi<sup>b</sup>*

<sup>a</sup>Department of Chemistry, University of Rajasthan, Jaipur-302015

<sup>b</sup>S.S. Jain Subodh P.G. College, Jaipur, Rajasthan

Various novel  $\beta$ -diketones and  $\beta$ -ketoesters (**4a-4e**) has been prepared by the condensation of diazonium salt of 3n-propyl-4-amino-5-carboxamido-N-methyl pyrazole with  $\beta$ -diketones and  $\beta$ -ketoesters (**3a-3e**).

