

Graphical Abstract

Heterocycl. Commun.1(2010) 9-12

Synthesis and cholesterol level lowering activity of macrocyclic silicon containing benzimidazole sulfides

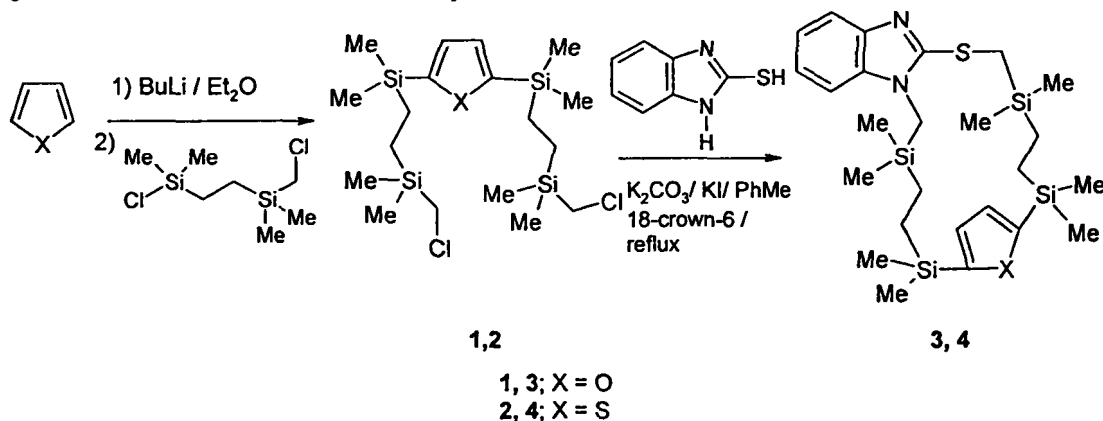
Ramona Abele, Pavel Arsenyan, Maris Veveris, Edgars Abele *

Latvian Institute of Organic Synthesis 21 Aizkraukles Street,

Riga, LV-1006, Latvia,

e-mail: abele@osi.lv

New silicon containing macrocyclic benzimidazole sulfides were synthesized using organometallic and phase transfer catalytic methods. 7 compounds were tested for cholesterol level lowering activity. It has been found that macrocycle 4 produced a high antiatherosclerotic activity protected against increase LDL cholesterol level. This compound has excellent atherosclerotic coefficient (0.074 ± 0.026).



Heterocycl. Commun.1(2010) 13-20

Efficient Synthesis Of Dihydrochromeno[4,3-b]Chromenone Derivatives In Aqueous Media

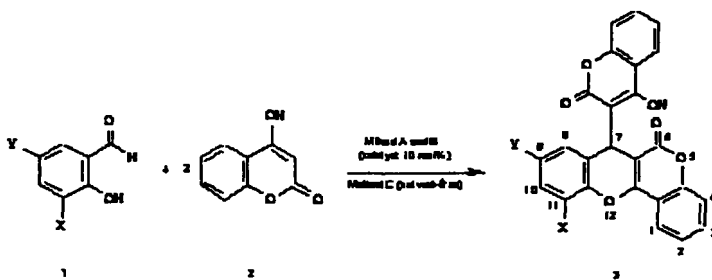
Shahrzad Abdolmohammadi,^a Hooshang Pirelahi,^a Fatemeh Balalaie,^b and Saeed Balalaie^{c*}

^aSchool of Chemistry, College of Science, University of Tehran, P.O. Box 14155-6455, Tehran, Iran

^bGuilan Science & Technology Park, P.O. Box 41635-1719, Rasht, Iran

^cPeptide Chemistry Research Group, K.N.Toosi University of Technology, P.O. Box 15785-4416, Tehran, Iran, and Fax: +98-21-2285 3650,

E-mail: balalaie@Kntu.ac.ir

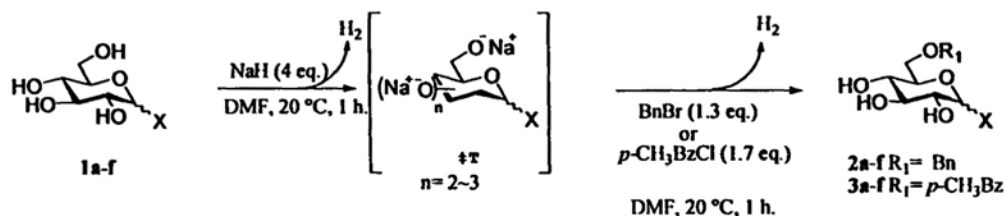


Selective Protection of Hydroxy Group at C6 Position of Glucose Derivatives

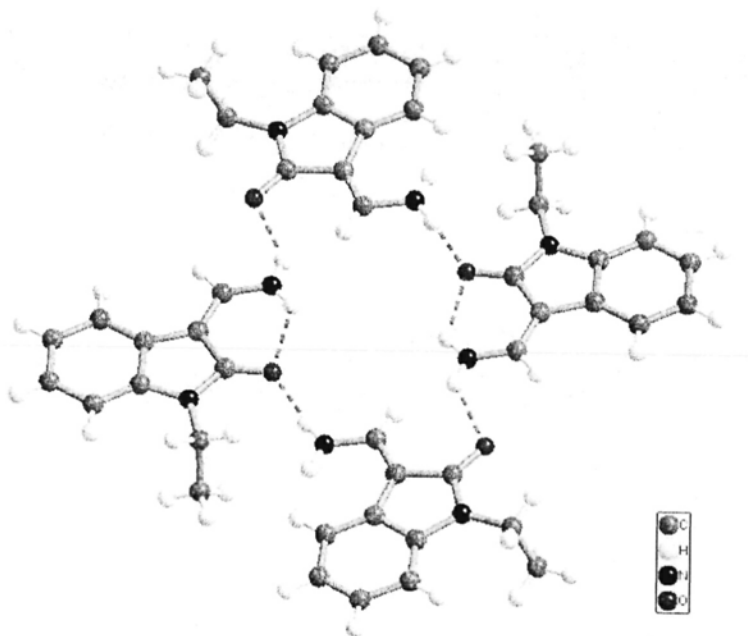
Yoshiharu Sawada, Naoki Nanboku, Emiko Yanase and Shin-ichi Nakatsuka*

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

6-*O*-Benzyl derivatives and 6-*O*-toluoyl derivatives, **2a-f** and **3a-f**, were prepared in high yields from glucose derivatives **1a-f** through multi-level anion formation using an excess of sodium hydride (4 eq.).

Synthesis and novel crystal structure of (*E,Z*) 3-aminomethylene-1-ethyl-indol-2-oneGang Chen,^{1,*} Bin Liu,² Ying Tang,¹ Qiang Deng,¹ and Xiao-jiang Hao³¹College of Chemistry and Chemical Engineering, Xi'an Shiyou University, Xi'an, 710065, China²College of Environment and Chemical Engineering, Xi'an Polytechnic University, Xi'an, 710048, China³State Key Laboratory of Phytochemistry and Plant Resources in West China, Kunming Institute of Botany, Chinese Academy of Sciences, Kunming, 650204, China

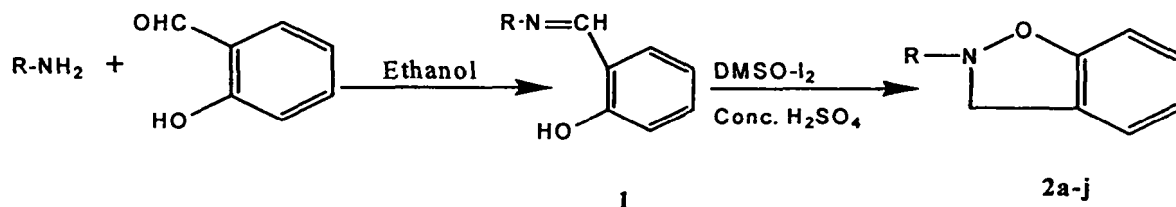
Abstract: The title compounds, (*E,Z*)3-aminomethylene-1-ethyl-indol-2-one, were synthesized firstly by the reduction of 3-nitromethylene-1-ethyl-indol-2-one. The crystal structure was determined from single-crystal X-ray diffraction data. It crystallizes in the monoclinic space group, *P2₁/c*, with unit cell dimensions *a* = 8.7193 (5) Å, *b* = 9.2507 (5) Å, and *c* = 23.6462 (15) Å. It was found that the novel crystal was consisted with centrosymmetric tetramer units, and the tetramer units were built up by the molecules linking as ABAB in a cycle, governed by intermolecular hydrogen bonds.



Synthesis And Antifungal Activity Of Some New 1,2-Benzisoxazole

V* Sareen, V. Khatri, D. Shinde, S.Chugh and S. Sareen
 Department of Chemistry, University of Rajasthan, Jaipur-302004
 E. Mail address for correspondence : deeptishinde77@yahoo.in

Various 3H-N-substituted phenyl / thiazolyl 1,2-benzisoxazole have been synthesized by the reaction of schiffs base with DMSO-I₂ in presence of H₂SO₄ and characterized by IR and NMR spectral studies. These compounds showed significant activities against plant pathogenic fungi viz. *Alternaria burnsii* and *Macrophomina phaseolina*.

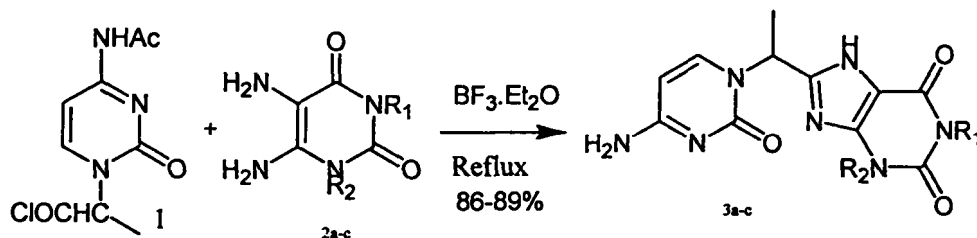


R = 2-Cl.C₆H₄, 3-Cl.C₆H₄, 4-Cl.C₆H₄, 5-Cl.C₆H₃NS, 2,4-F.C₆H₃,
 4-Br.C₆H₄, 4-Cl.C₆H₃NS, 2,3-CH₃.C₆H₃, 4,6-CH₃.C₆H₂NS, 6-F.C₆H₃NS

A Simple Synthesis of New Pyrimidinyl Purine Diones

V. S. Yadava*, Neeraj Singh, Vijay S. Yadav, Tej Bahadur and S. S. Yadav
 Department of chemistry, Lucknow university, Lucknow-226007, India
 e-mail : nirvirendra@rediffmail.com

In this paper we report one-pot synthesis of three novel pyrimidinyl purine-2,6- diones using BF₃.Et₂O for cyclodehydration of N- acyl derivatives.



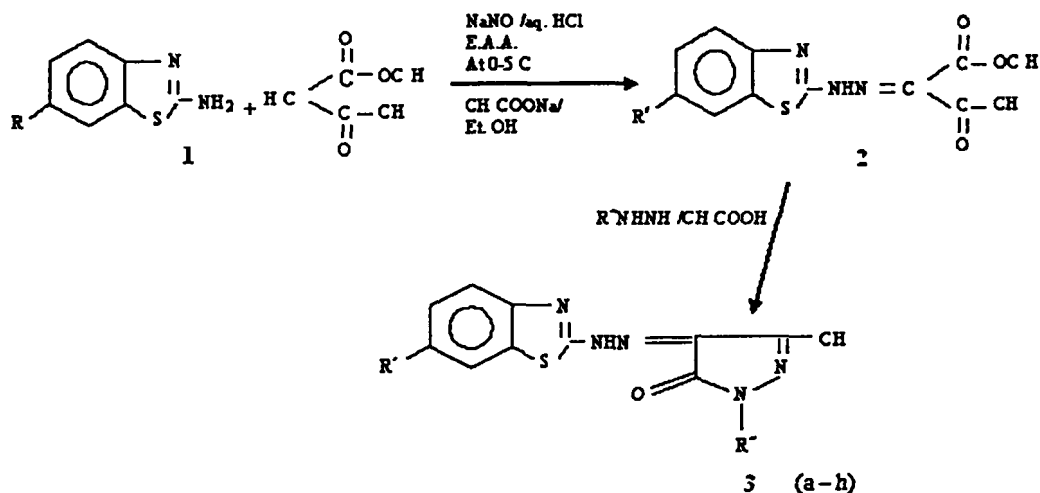
Synthesis and bioefficacy test of some novel Halogenated -4-[(substituted-benzothiazol-2-yl)-hydrazono] -2- (substituted phenyl)-5-methyl -2, 4-dihydro-pyrazol-3-one

V. Sareen, V. Khatri, K.Sharma*,D. Shinde and S. Sareen

Department of Chemistry, University of Rajasthan, Jaipur,Rajasthan-302004, India

E.mail : drkanti@gmail.com

Reaction of substituted benzothiazol-2-yl amine (1) with acetoacetic ester gives 2-[substituted benzothiazol -2-yl)-hydrazono]-3-oxo-butyric acid ethyl ester (2) which on react with different hydrazines to give the title compound (3).



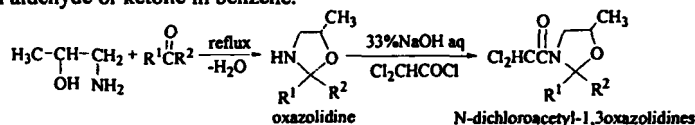
Synthesis and Biological of N-Dichloroacetyl -1,3-Oxazolidine Derivatives

Ying Fu¹, Fei Ye¹, Weijun Xu²

¹College of Science, Northeast Agricultural University, Harbin 150030, P.R. China

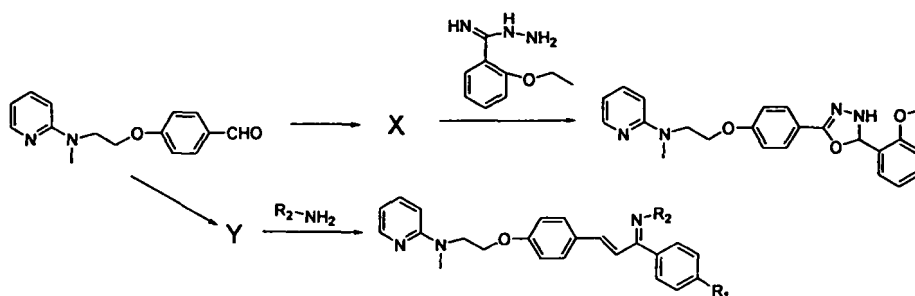
²Academy of Agricultural Sciences of Heilongjiang, Harbin 150086, P.R. China

A series of novel N-dichloroacetyl-1,3-oxazolidine derivatives were synthesized by a convenient one-pot synthesis involving cycloaddition reaction of β-amino alcohol with aldehyde or ketone in benzene.



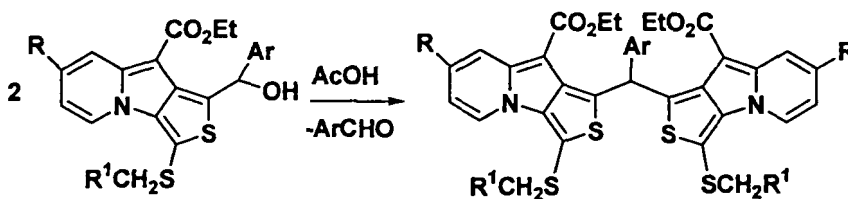
Synthesis of 4-[2-(methyl-2-pyridin-2-yl-amino)-ethoxy] –benzaldehyde derivatives*L.K.Ravindranath¹, Rangaraju.K², K.Srikanth³ and S Radhakrishana⁴

Professor in Chemistry S.K.University Anantapur, Andrapradesh, India

Author to whom correspondence should be addressed -lkravindranath@gmail.com**Preparation of new nitrogen-bridged heterocycles. 69. Synthesis and Reaction of 1-(α -Hydroxybenzyl)thieno[3,4-*b*]indolizine Derivatives**

Akikazu Kakehi,* Hiroyuki Suga, Yukihiisa Okumura, Kennosuke Itoh, Shin Hatayama, Daisuke Kubo, and Kouji Kobayashi
 Department of Chemistry and Material Engineering, Faculty of Engineering, Shinshu University,
 Wakasato, Nagano 380–8553, Japan

The title compounds, 1-(α -hydroxybenzyl)thieno[3,4-*b*]indolizine derivatives, were obtained in good yields by the reduction of the corresponding 1-benzoylthieno[3,4-*b*]indolizines with sodium borohydride in refluxing ethanol. These compounds were considerably unstable and decomposed gradually even at room temperature, but, on exposure to acetic acid, unexpected condensation took place to afford α,α -bis(thieno[3,4-*b*]indolizin-1-yl)toluenes in low to moderate yields.



Synthesis and Spectral studies of Nitrosoare derivatives of 3-Methyl - 5/7- Substituted -2- (3,4-dichloro) benzoyl-4H-1,4-Benzothiazines as Bifunctional Anticancer Agents.

Rajni Gupta* and Vandana Gupta

Department of Chemistry, University of Rajasthan, Jaipur-302004, India

Email: rajni187@yahoo.co.in

The synthesis of nitrosoare derivatives of substituted 4H-1,4-benzothiazines by the isocyanation and successive nitrosation have been reported. The synthesized compounds have been characterized by their elemental analyses and spectral characteristics.

