

### **Conferences / Seminars / Lecture attended :**

1. Regional level two days seminar on medicinal and Aromatic plants of Malnad, their cultivation, utilization, extraction or its phytochemical studies” Sahyadri science college, Shimoga, Karnataka state, India, Dec 18th-19th, 2004.
2. Second International symposium on drug Discovery and process research”, held at KLE’s college of pharmacy, Belgaum from 10th - 12th February-2006.
3. International symposium on Advances in organic chemistry held at Mahatma Gandhi University, Kottayam, Kerala from 9th - 12th January-2006.
4. National symposium on modern trends in chemical sciences held at Kurukshetra University, Kurukshetra (Haryana) from 6th - 7th October - 2006.



INSOC-2006

January 9-12, 2006

INTERNATIONAL  
SYMPOSIUM  
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CHEMISTRY



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**Synthesis of Biologically Active Biheterocyclic oxadiazolyl  
Naphtho[2,1-*B*]Furans and other Derivatives Of Naphtho  
[2,1-*B*]Furan**

**D.Ramesh, C. Chandrashekhara, H. Rajashekhara  
and V. P. Vaidya\***

*Department of Chemistry, Kuvempu University, Jnana Sahyadri,  
Shimoga Dist., Karnataka, India. E-mail: vaidyavijaya@hotmail.com*

The survey of the literature revealed that 1,3,4-oxadiazoles and their derivatives have wide range of therapeutic activities. Encouraged by these reports and in continuation of work carried out in our laboratory for pharmacologically potent naphthofuran derivatives, we report in this paper the synthesis of various biheterocyclic oxadiazolynaphtho[2,1-*b*]furans and other derivatives of naphthofuran of biological interest. Bromination of ethyl naphtho[2,1-*b*]furan-2-carboxylate (1) results in the formation of ethyl-3-bromonaphtho[2,1-*b*]furan-2-carboxylate (2) which has been converted into the hydrazide (3) by refluxing with hydrazine hydrate. The compound (3) has been converted into *N*-(aroyl-1-bromonaphtho[2,1-*b*]furan-2-carboxylate)hydrazides (5a-e) which on cyclisation with phosphorous oxychloride produce 2-(3-bromonaphtho[2,1-*b*]furan-2-yl)-5-aryl-1,3,4-oxadiazoles (6a-e). The compounds (6a-e) have also been synthesized by oxidative cyclodehydrogenation of (7a-k) which were synthesized by condensation of (3) with various substituted aldehydes. 2-(3-bromonaphtho[2,1-*b*]furan-2-yl)-1,3,4-oxadiazoles (4) was prepared by treating with triethyl orthoformate. The structures of newly synthesized compounds have been established by analytical and spectral studies. Some of the compounds have been evaluated for antimicrobial and anthelmintic activities.



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