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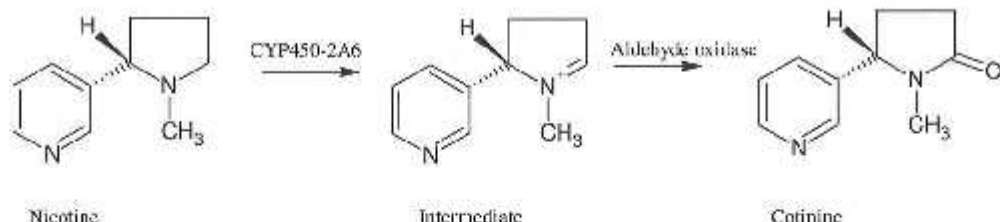
March 2016

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Advances in Contemporary Research

321 Chemistry of cigarette smoking – A review

This comprehensive article illustrates the facts about cigarette smoking, dealing primarily with the underlying chemistry and biochemical features linked to tobacco related effects. The overall chemistry and biochemistry involved in the use of tobacco is discussed in elaborate detail.

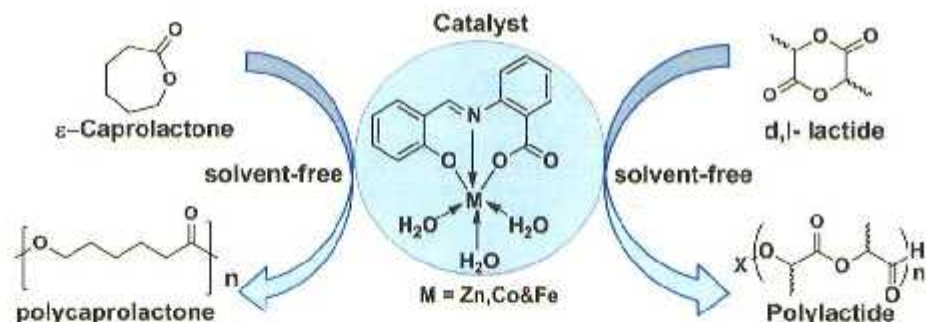


Sankar P Mitra

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Papers

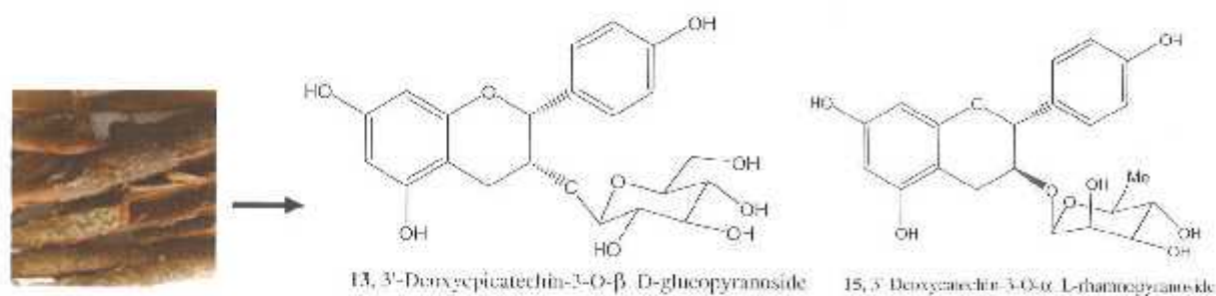
344 Transition metal complexes of tridentate Schiff base ligand as efficient reusable catalyst for the synthesis of polycaprolactone and polylactide



Somasundaram Saravanamoorthy & Sivan Velmathi*

Organic and Polymer Synthesis Laboratory, Department of Chemistry, National Institute of Technology, Tiruchirappalli 620 015, India

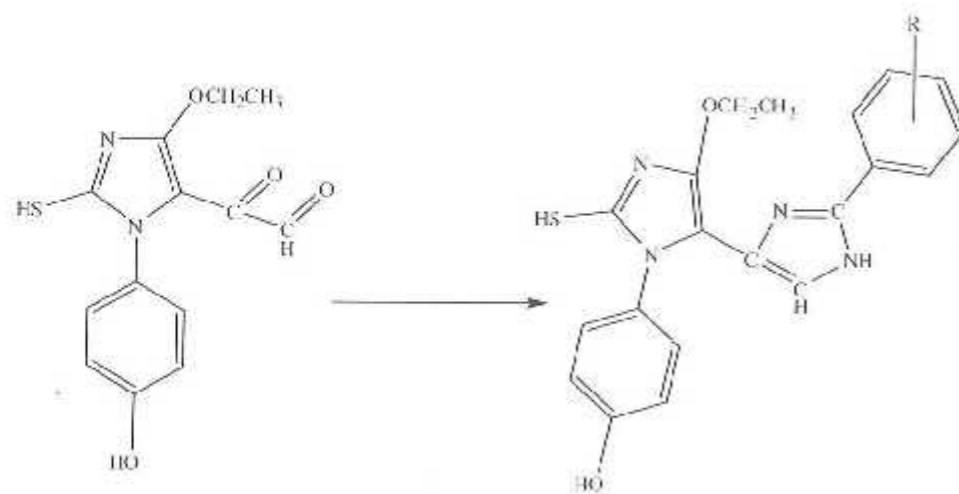
- 353 **Isolation and HPLC profiling of chemical constituents of *Saraca asoca* stem bark** Different extracts of *S. asoca* stem bark have yielded 17 compounds when chemically analyzed. HPLC profiling of methanol and aqueous methanol extracts have been developed which will be useful in the authentication of the material.



Furkan Ahmad, Laxminarain Misra*, Rashi Tewari, Preeti Gupta, Vivek K Gupta & Mahendra P Darokar

Chemical Sciences Division, CSIR-Central Institute of Medicinal and Aromatic Plants, P.O. CIMAP, Lucknow 226 015, India

- 362 **Synthesis and biological studies of thiol derivatives containing imidazole moiety** A series of thiol derivatives containing imidazole moiety have been synthesized and their antibacterial and antifungal activities have been reported. The structural elucidation of all the synthesized compounds have been confirmed by their spectral/elemental data analysis.

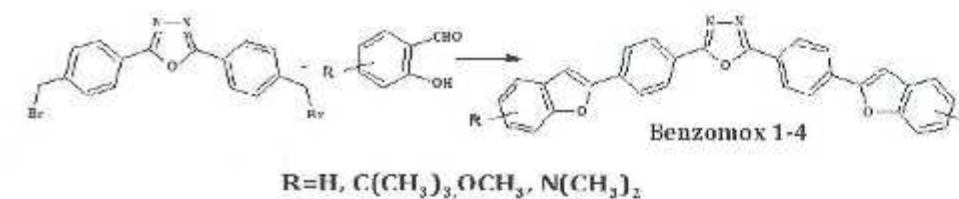


Where R= H, Cl, OH, NO₂, OCH₃, N(CH₃)₂, F

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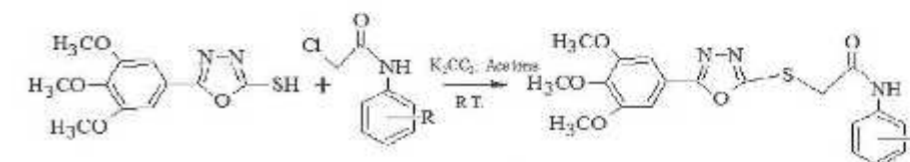
- 368 **Novel bipolar diaryloxadiazole-benzofuran conjugates: Synthesis, optical, electrochemical and thermal studies** A series of diaryloxadiazole-benzofuran conjugates has been synthesized. The results suggest that benzomox-2 and 3 could function as high emitting host materials on account of blue emission, decent quantum yields, large band gaps and high thermal stabilities.



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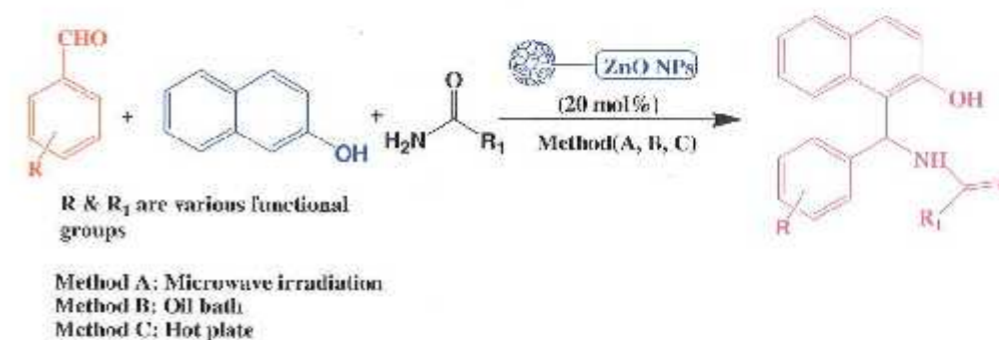
- 374 **Synthesis and antimicrobial activities of various N-phenyl-2-[[5-(3,4,5-trimethoxyphenyl)-1,3,4-oxadiazol-2-yl]sulfanyl]acetamides**



Maharshi B Shukla, Jyotindra B Mahyavanshi* & Koldla A Parmar

Department of Chemistry, Hemchandracharya North Gujarat University, Patan 384 265, India

- 381 **An efficient synthesis of 1-amidoalkyl-2-naphthols catalyzed by zinc oxide nanoparticles under solvent-free conditions** Various techniques have been studied to establish a clean and efficient method for the rapid synthesis of 1-amidoalkyl-2-naphthols employing zinc oxide nanoparticles as non-toxic and recyclable catalysts.



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- 387 **Synthesis and fluorescence studies of benzothiazole and 4,5-diarylimidazole substituted 2H-1-benzo/naphthopyran-2-one** The synthesis of benzothiazole-2-yl-coumarins **2a-k** and 4,5-diarylsubstituted imidazole-2-yl coumarins **3a-o** have been reported. The fluorescence properties of the isolated compounds have been studied. The emission spectra of benzothiazole-2-yl-coumarins **2a-k** and 4,5-diarylsubstituted imidazole-2-yl coumarins **3a-o** studied separately for each series showed maximum Stokes shift of 133 and 102 respectively.

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