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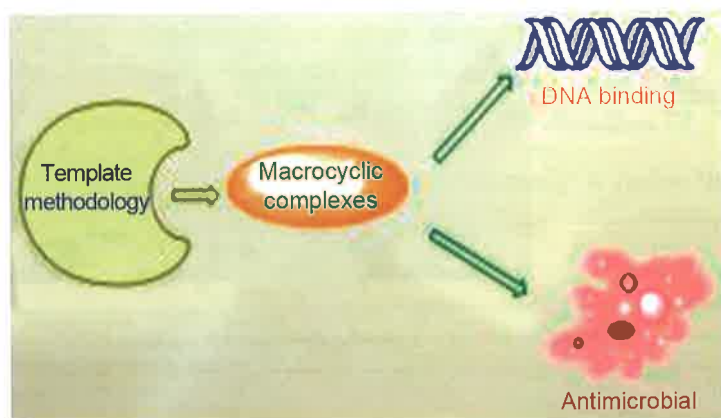
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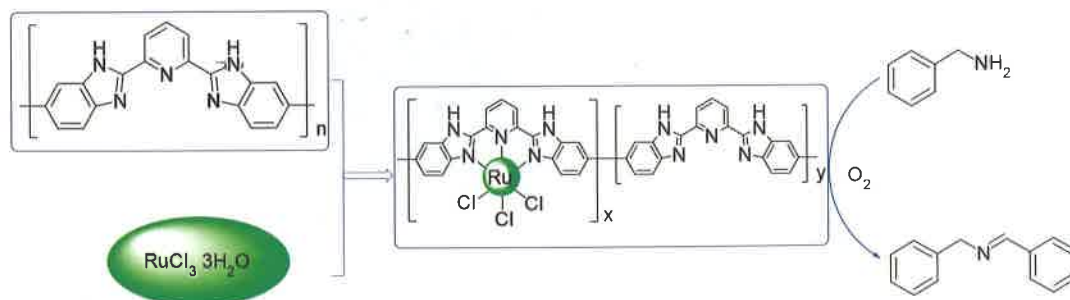
Papers

- 1235 **Pyrrolidinedione based macrocyclic schiff base complexes: synthesis, PXRD, antimicrobial and DNA binding studies** Synthesis and biological studies of five macrocyclic complexes of divalent transition metal ions are reported in the present study. The characterization of the complexes by spectroscopic techniques reveals the distorted octahedral geometry of the complexes. Crystalline nature of the complexes is elucidated with the help of PXRD technique.



Vikas Sangwan & D P Singh*

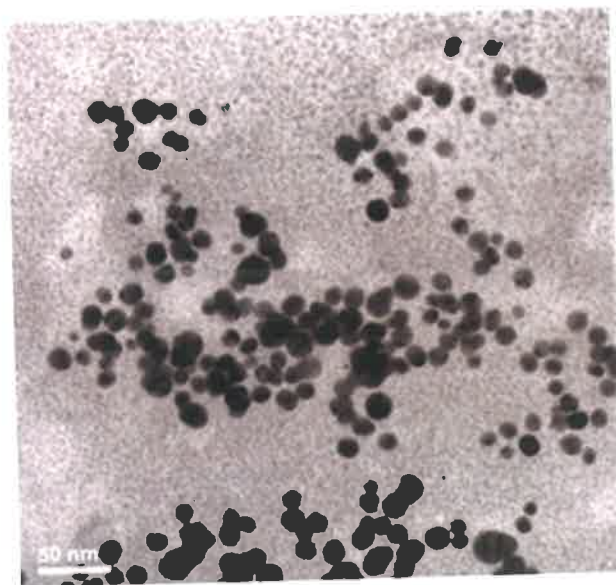
- 1242 **Polymeric 2,6-bis(benzimidazol-2-yl)pyridine-RuCl₃ complex as a catalyst for aerobic oxidative self-condensation of amines to imines** As a heterogeneous catalyst, pbbp-RuCl₃ shows high efficiency in the aerobic oxidative self-condensation of primary amines to imines. This heterogeneous catalyst can be easily recovered and exhibits good reusability in the reaction.



Jiangting Yang, Ruosi Chu, Hong-Yu Zhang, Yuecheng Zhang & Jiquan Zhao*

- 1249 **Synthesis and characterization of Cu and Ag based mixed metal nanoparticle composite for antibacterial applications**

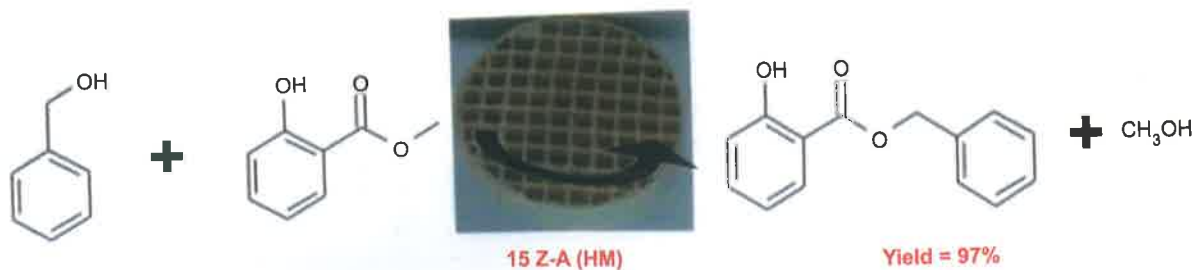
Bimetallic mixed NPs composites comprising Ag NPs and Cu NPs in CS matrix along with molecular iodine, exhibit antibacterial effects. I₂-CS-Ag NP-Cu NP composites have superior bactericidal properties as compared to the individual components. Electron microscopic analysis reveals that the I₂-CS-Ag NP-Cu interaction of the NP composite with the bacterial cell wall leads to the destabilization of its integrity.



Sadhucharan Mallick

- 1257 **Facile and smart synthesis of benzyl salicylate via vapor-phase transesterification over monoliths coated with zirconia and its modified versions**

For the first time, synthesis of benzyl salicylate by vapor phase transesterification over cordierite monoliths coated with alumina zirconia as an efficient and facile catalytic system is carried out.

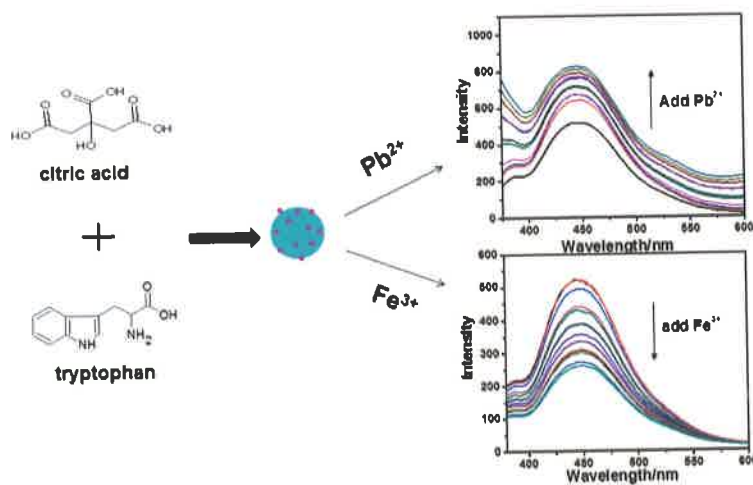


S R Pratap, S Z Mohammed Shamsuddin*, N Thimmaraju & M Shyamsundar

Notes

- 1270 **Tryptophan-based carbon dots as fluorescent probe for detection of Pb²⁺ and Fe³⁺ ions**

A tryptophan-based metal ions' probe synthesized through a one-step method by introducing tryptophan as recognizing group shows enhanced fluorescence in the presence of Pb²⁺ and decreased fluorescence in the presence of Fe³⁺ over other 14 metal ions.



Yong-Qiang Dang, Shao-Zhao Ren, Jiangtao Cai, Guoyang Liu, Yating Zhang* & Jieshan Qiu*

- 1275 Guide to Authors

Authors for correspondence are indicated by (*)

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