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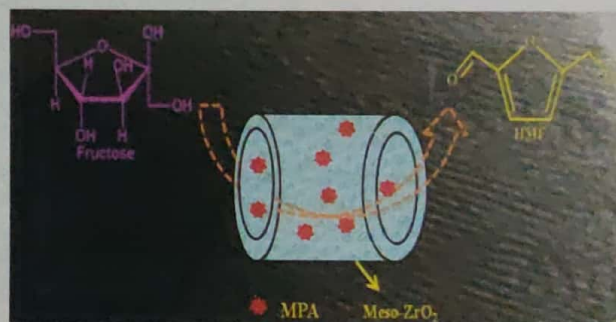
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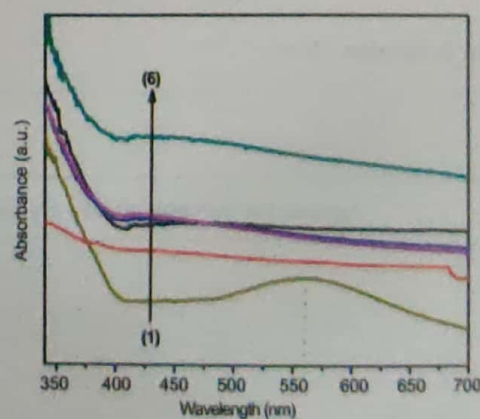
Papers

- 313 **Conversion of fructose into 5-hydroxymethylfurfural over mesoporous-ZrO₂-phosphomolybdic acid nanocomposite catalysts** Meso-ZrO₂ and phosphomolybdic acid containing mesoporous ZrO₂ nanocomposites prepared by surfactant-assisted sol-gel copolymerization technique, act as catalysts for fructose dehydration to HMF. Under the optimized conditions, ZMPA (30) catalyst showed complete conversion of fructose with 80.3% yield of HMF.



Nayem Pasha*, P Krishna Kumari, N Vamsikrishna, N Lingaiah, N J P Subhashini & Shivaraj*

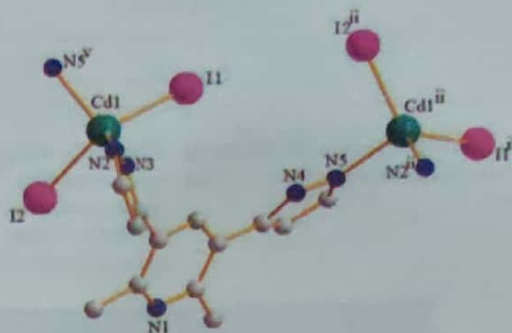
- 321 **Synthesis and luminescent properties of red-emitting Ba_{3-x}Al₂O₆:xEu³⁺ phosphor** The PLE spectra of the synthesised BaAl₂O₆:Eu³⁺ phosphors indicated their suitability for being excited by near UV and blue light, with the optimum doping concentration of Eu³⁺ being 9 mol%. The color coordinates of all samples have been recorded in the red area



Ying Zhao*, Yajie Han, Lei Shi, Lin Yang, Zhiwei Zhang, Jingmeng Jiao & Fengli Liu

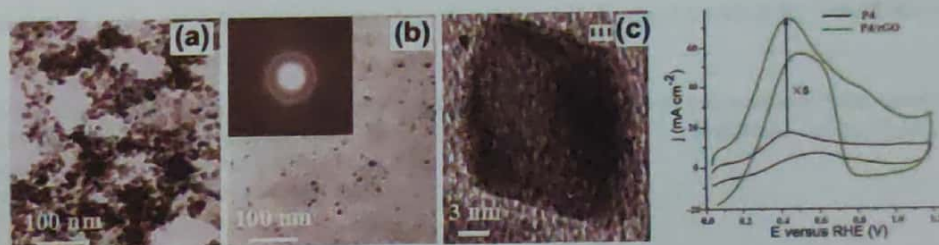
Notes

- 326 **Synthesis, crystal structure and properties of a 1D cadmium(II) coordination polymer with 2,6-dimethyl-3,5-bis(pyrazo-3-yl)pyridine** A new coordination polymer $\{[Cd(H_2dmbpzp)I_2] \cdot CH_3CH_2OH\}_n$ (where, $H_2dmbpzp = 2,6\text{-dimethyl-3,5-bis(pyrazo-3-yl)pyridine}$) prepared by the reaction of $H_2dmbpzp$ in aqueous ethanolic solution at room temperature with CdI_2 , exhibits a 1D chain structure.



Wen Tao Fan, Han Zhu, Quan Qing Xu, Jun Feng Kou* & Feng Yi Liu*

- 330 **Sonochemical synthesis of palladium nanoparticles and its electrocatalytic activity for oxidation of formic acid** Monodispersed palladium nanoparticles with mean sizes of about 10 nm, synthesised by sonochemical reduction of palladium(II) chloride in aqueous solution, in the presence of PVP as a stabilizing agent without any other reductant, present increased formic acid oxidation reaction (FAOR) in the presence of rGO.



Hong Du*, Xiaohui Sun & Shuxian Zhao

- 335 **Guide to Authors**

Authors for correspondence are indicated by (*)