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New Zinc(II) Mixed Ligand Coordination Polymers at Nano and Bulk Size, Precursor for Preparation of ZnO Nanoparticles

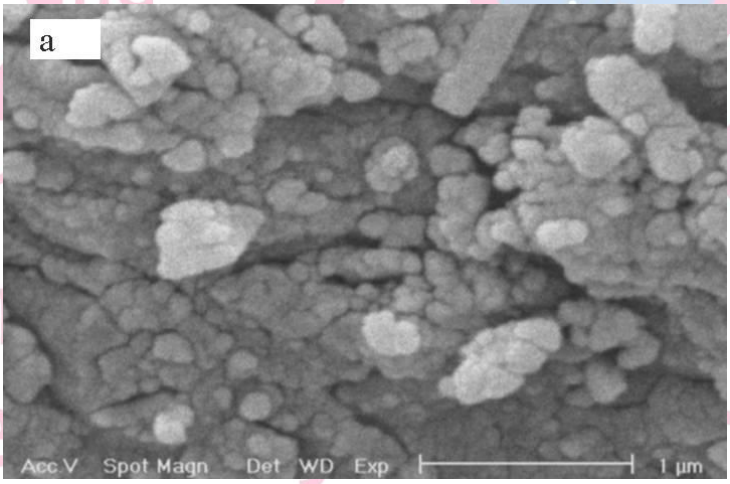
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Three-Dimensional ZnII coordination polymer containing 4,4´-bipyridine (4,4´-bipy) and benzene 1,4-dicarboxilic acide (BDCA), [Zn2(μ-4,4´-bipy)(μ-BDCA)$_2$]n has been synthesized and characterized by elemental analysis, IR spectroscopy, Raman and its structures studied by single Crystal X-ray crystallography. ZnO nanoparticles were obtained by calcination of compound at 500ºC under air atmosphere and were characterized by X-Ray Diffraction (XRD), Raman spectroscopy, solid state UV and Scanning Electron Microscopy (SEM) [1-2].



Keywords: Zinc(II), Coordination Polymers, Nanostructure, Mixed Ligands, ZnO

References

[1] Seyid Javad Musevi , Ertan Sahin , Alireza Aslani, *Powder Technology*, 229, **2012**, 30-36
[2] Alireza Aslani , Ali Morsali , Veysel T. Yilmaz , Canan Kazak, *Journal of Molecular Structure*, 929, 1-3, **2009**, 187-192.