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Synthesis and characterization of zinc oxide-polymernanocomposite

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ABSTRACT

Zinc oxide and Zinc oxide-Polyvinyl alcohol (PVA) -Polyvinylpyrrolidone (PVP) composites have been prepared by co-precipitation method. It is a simple and low cost method for preparing composites. The concentrations of PVA and PVP were varied during the process of synthesis.FTIR characterization was performed to study the characteristic functional group. The presence of metal oxide group were conformed using FTIR graph and several other functional group were also been conformed using FTIR graph.UV-VIS characterization was performed to observe the absorption bands. UV-VIS spectra of the sample in the range 200-800nm is recorded.Using antibacterial studies it is known that the prepared sample acts as a good antibacterial agent.

KEYWORDS

ZnO; Polyvinyl alcohol;Polyvinylpyrrolidone;Nanocomposite;