

ANTI BACTERIAL EFFECT OF ZnO-Au NANOCOMPOSITES

V.Femi¹, P. Hema Prabha², P.Sudha³, B.Devibala⁴, A. Lovelin Jerald⁵.

E-mail:hemanano@gmail.com, Ph:9677972222

ABSTRACT

The synthesis of ZnO-Au nanocomposites prepared by dissolving 1:1 concentration of Zinc Nitrate and Chloroauric acid in the presence of Sodium Hydroxide. The formation of ZnO-Au nanocomposites can be observed by a change in color from a colorless solution to yellowish white precipitate. Characterization studies of this stable ZnO-Au nanocomposites were carried out. AFM, UV absorption, SEM and XRD characterization of the synthesized nanocomposites showed an even distribution of gold nanoparticles. The ZnO-Au nanocomposite can be effectively used for controlling antimicrobial activity in human physiological systems.

Keywords: Nanocomposites, Nanoparticles