

Green Synthesis, Characterization and Application of Zinc Oxide and Silver Oxide Nonparticipants

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Abstract : As metallic nanoparticles are increasingly used in many economic sectors, there is interest in the biological and environmental safety of their production. The main methods of synthesizing nanoparticles are chemical and physical approaches that are often expensive and potentially harmful to the environment. The present study is devoted to the possibility of the synthesis of silver nanoparticles and zinc oxide from silver nitrate and zinc acetate using basilica plant extracts. The products obtained are characterized by various analysis techniques, such as UV/V, XRD, MEB-EDX, FTIR, and RAMAN. These analyzes confirm the crystalline nature of AgNps and ZnONps. These crystalline powders having effective biological activities regarding the antioxidant and antibacterial, which could be used in several biological applications.

Keywords : green synthesis, bio-reduction, metals nanoparticles, Plants extracts

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