

ABSTRACT

Nanotechnology is the red hot field of research nowadays. This technology deals with the particles of nano size. Nanoparticles have various applications in the fields of medicine, cosmetics, textiles, pharmaceuticals and forensic. Researchers are trying to devise various nano-powders that can help in development of fingerprints on porous and non-porous surfaces. In this research work, green approach was used for fabrication of silver nanoparticles. Wet chemical reduction method was used in which *Coriandrum sativum* leaves and seed extracts were used as capping agent. Characterization of silver nanoparticles confirmed their spherical shape. The average size of the synthesized AgNPs was found to be 30nm. The techniques that were used for characterization of silver nanoparticles include UV/VIS spectroscopy, SEM and FTIR. The synthesized particles were found applicable for enhancement of fingerprints on porous surface. Papers having fingerprint impressions were dipped in the solution of silver nanoparticles having different concentrations. Best results were obtained by the solution having low concentration.