



International Journal of ChemTech Research

CODEN(USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555 Vol.10 No.5, pp 748-753,2017

Biogenic Synthesis of Silver Nanoparticles from Medicinal Plant and its Antimicrobial Activity

Rahul Shah¹*, HiralVaghela² and Kokila Parmar²

¹Pacific University, Udaipur-313003, Rajasthan, India. ²Department of Chemistry, HNG University, Patan- 384265, Gujarat, India.

Abstract:Plant mediated biologically synthesized of nanoparticles is gaining importance due to its eco-friendliness. The synthesized metal nanoparticles are an expanding research area due to the potential applications for the development of novel technologies and very less toxic applications. In our research work, we describe a cost effective and environment friendly technique for green synthesis of silver nanoparticles and evaluate their Antibacterial activity. Synthesis and characterization of silver nanoparticles was carried out by using bark extract of *Moringapterygosperma* plant reducing agent as well as capping agent. The Synthesized nanoparticles were characterized with UV-Visible spectrometry (UV-Vis), Fourier transform infrared spectroscopy (FT-IR), Scanning electron microscopy (SEM) and X-ray diffraction spectroscopy (XRD). The antibacterial activity of silver nanoparticles has been observed. **Keywords**:*Moringapterygosperma* plant extract as a reducing agent, Antibacterial activity, AgNO₃ salt.

Rahul Shah et al/International Journal of ChemTech Research, 2017,10(5): 748-753.
