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## Abstract

Hydrogels based polymers are getting importance in the synthesis of wide nature of silver nanoparticles (Ag NPs) having biological uses. Here we study the microwave assisted synthesis of silver nanoparticles having great antimicrobial activities. Arabinoxylans separated from ispaghol husk was used as stabilizing agent to synthesize nanoparticles (NPs) by using different concentrations of Silver nitrate ( $\text{AgNO}_3$ ). The development of reaction was studied by using UV-Vis spectrophotometer and their specific surface plasmon resonance was studied in the range of 390-440 nm. The antimicrobial activities of prepared nanoparticles can be further studied on different strains of bacteria and fungi.