Abstract

Silver doped copper bimetallic nanoparticles with different ratios (1:1, 1:0.75, 1:0.50, and 1:0.25) have been synthesized by co-precipitation method by reducing Ag. These four samples were characterized using a variety of techniques as XRD, UV-vis, FTIR, SEM and their Antimicrobial application. UV-visible spectroscopy and XRD results show that the bandgap energy decreases by increasing crystallite size. FTIR-spectroscopy confirmed the
presence of vibrational modes corresponding to the different functional groups. SEM images reveal morphology of Ag doped cu bimetallic nanoparticles as spherical like structure with small and large scale agglomerations and with different diameters. Antimicrobial results depict that Ag-Cu BNPs shows better activity in case of Acinetobacter Baumannii in comparison to Klebisella pneumoniae. Specimen with 1:1 ratio shows best results in present study.