**ABSTRACT**

The CdWO4 nanocrystals were successfully synthesized by simple co-precipitation method. The X-ray diffraction pattern confirms the phase purity and the single phase formation of monoclinic Wolframite structure of CdWO4. The average crystallite size of 22 nm was calculated from Xray line broadening method. The FT-IR spectra confirm the presence of stretching and bending vibrations of metal cations like Cd-O, W-O and Cd-O-W bands in the CdWO4 structure. The morphological features were analyzed by TEM and HRTEM techniques. The electrical conductivity of the materials is found to increase with increasing temperature as well as frequency which enumerates the semiconducting behavior of the material.