

ABSTRACT

The present study focuses on the synthesis of nanoparticles. Co-precipitation technique was adopted for the fabrication of pure and doped zinc oxide nanoparticles. Nanocomposites are synthesized of ZnO doping with nickel and copper (Ni-Cu-ZnO). Doping is done in order to examine the photocatalytic activity efficiency. UV absorption spectrum showed overall red shift for the doped nanoparticles as the bandgap decreased, as the wavelength shifted from 360nm to 390nm. In order to evaluate the efficiency of tri-metallic composites dyes that are used in this study are methyl blue, methyl green and methyl orange. Degradation study is done both at room temperature and under UV lamp.