

ABSTRACT

Synthesis of iron doped tin oxide titanium oxide nanoparticles was carried out by sol gel method while CdO₂-NiO₂ nanocomposites were prepared by hydrothermal method. The techniques used for the characterization of nanoparticles, Fourier Transform Infrared Spectroscopy (FTIR), Thermal Gravimetric Analysis (TGA), Powder X-Ray Diffraction (XRD), Transmission Electron Microscopy Analysis (TEM), and Scanning Electron Microscope / Energy Dispersive X-Ray Microanalysis (SEM/EDX), confirm successful synthesis of nanoparticles. The prepared nanoparticles were applied to degrade methylene blue. Results suggested that these nanocatalysts may be envisaged for the treatment of waste waters in textile industries.