

ABSTRACT

Nanochemistry is a burning field of the science. The current scientific work explains the importance and facilitation of the nanochemistry. An industry is increasing now days and these industries pollute the environment in a number of ways with different organic and inorganic material such as dyes, medicine, paints and other pigments. So, there are many methods of reducing organic material from the waste water such as photocatalysts. Current research work addressed the removal of the dye from industrial waste water by using the ZnO, ZnS, MnO₂, CuO, CuS nanoparticles and their nanocomposite ZnO/ZnS/MnO₂, CuO/CuS/MnO₂ and ZnS/CuS/CuO. The morphology, elemental purity, geometrical and functional properties confirmed by the characterization of SEM, EDX, XRD, FTIR and UV-VIS. spectroscopy. To check the photodegradation of dyes, UV-VIS spectrophotometer was used to measure the concentration of the dyes. The decrease in the concentration of dyes confirms the efficiency of the catalyst.