**Abstract**

Copper sulfide nanoparticles which are promising materials with potential applications in solar energy conversion, catalysis, sensing etc., have attracted the interest of researchers in view of their non-toxic nature. In the present study, CuS nanoparticles have been synthesized by the facile Chemical Route method which has received much attention due to the simple operation, low cost, faster reaction rate, high yield, environmental safety, and low energy consumption. The synthesized nanoparticles have been characterized by X-Ray diffraction (XRD), Scanning electron microscopy (SEM) with energy-dispersive X-ray analysis (EDAX) and UV-VIS spectrophotometry.