**Abstract**

In this present work Graphene oxide/Chitosan/MnO2 nanocomposites are synthesized via chemical reduction method for various concentrations of Manganese oxide. The crystallite size is found to be around 19 nmand increases with the increase in the concentration of manganese oxide as investigated by x-ray diffraction analysis. Field emission scanning electron microscopy (FE-SEM) analysis shows the agglomerated spherical shapedMnO2 nanopartices found over the crumbled wave like GO/CS sheets. The presence of functional groups in the synthesized nanocomposites is studied by Fourier transform infrared spectroscopy (FT-IR) and the most prominent band of Mn–Ois observed around 513 cm−1. The Energy dispersive spectroscopy analysis (EDAX) confirms the elemental presence of the nanocomposites without any impurities. The adsorption properties of Graphene oxide/chitosan/MnO2 towards the industrial dyes are investigated along with the measured effect of adsorption by initial concentration, contact time and pHvalues. The resulting adsorption isotherm is analyzed systematically. The prepared nanocomposites are found to be more efficient adsorbent for the removal of anionic industrial dyes such as methyl orange.