**Abstract**

Nanotechnology promises breakthroughs in areas such as manufacturing nanoelectronics, medicine and healthcare, energy, biotechnology, information technology, and national security. The present work describes a general approach for the preparation of cyclodextrin functionalized (CD) graphene oxide nanosheets (GNs) for the embellishment of different concentrations of silver nanoparticles (Ag) on the surface of GNs. The graphene oxide nanosheets are synthesized by modified Hummer’s method. Firstly, CD/RGO nanosheets are synthesized through hydrazine reduction. The different concentrations of Ag nanoparticles are loaded on the CD/RGO nanosheets by the reduction of AgNO3 with NaBH4 as reducing agent. The synthesized CD/RGO/Ag nanocomposites are well characterized using Fourier transform infrared spectroscopy (FT-IR), X-ray diffraction (XRD), Field emission scanning electron microscopy (FE-SEM), Raman spectroscopy and EDAX analysis. The results confirmed that the CD is effectively covered on the RGO surface and the Ag nanoparticles are uniformly decorated on the CD/RGO nanosheets [1]. The modified glassy carbon electrode was employed for the selective determination of phenolic compounds. Cyclic voltammetry measurements suggested that the CD/RGO/Ag nanocomposites exhibits an excellent electrochemical activity towards oxidation of phenolic compounds due to the host-guest recognition and enrichment capability of β-CD as well as the outstanding electronic properties of RGO and Ag nanoparticles [2].