ABSTRACT

Graphene quantum dots (GQDs) are new emerging Nano composites having a wide range of applications in many field of nanoscience. They possess the distinctive properties like photoluminescence and biocompatibility. GQDs can be synthesized by using top down and bottom up approaches. As the Pakistan is an agricultural country and the most common way of suicide involve the use of pesticides. We can use the GQDs in the detection of agricultural pesticides which are used as a poisons. In this research, citric acid was precursor for the synthesis of graphene quantum dots. UV-Visible, Fourier transform infrared technique, photoluminescence, x-ray diffraction and scanning electron microscope was used for characterization. Maximum peak of UV-visible absorbance was obtained. Mesotyrone, abamectin and lambda cyhalothrin are used in this research. Fluorescence spectra are used for the analysis. The analysis are done by using different concentrations. This provides us the limit and range of detection