Supplementary Materials: Graphene-Supported Spinel $CuFe_2O_4$ Composites: Novel Adsorbents for Arsenic Removal in Aqueous Media

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This provides further information about the scanning electron microscopy (SEM) and transmission electron microscopy (TEM) images for obtaining the graphene nanoplates (GNPs)/ $CuFe_2O_4$ composite, adsorption isotherm of GNPs/$CuFe_2O_4$ toward As(III), Langmuir and Freundlich isotherm parameters for As (V) adsorption on GNPs/$CuFe_2O_4$ composite, and the assembly of column test. This material is available free of charge via the internet.

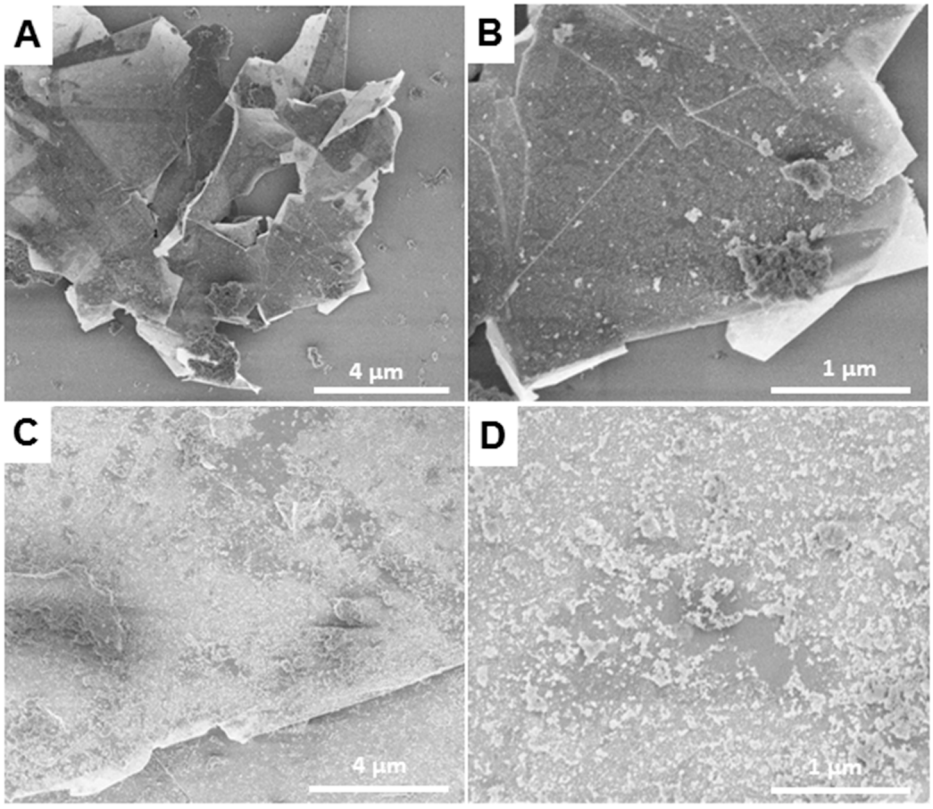

Figure S1. (**A**–**D**) low and high resolution SEM images of the GNPs/$CuFe_2O_4$ composite, respectively.

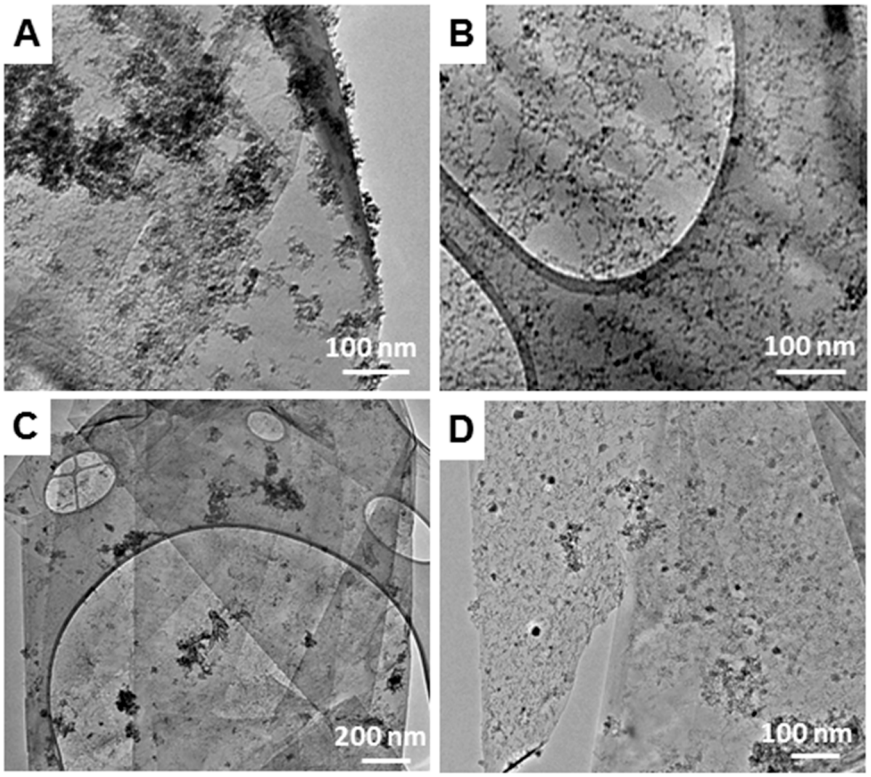

Figure S2. (**A**–**D**) low and high resolution TEM images of the GNPs/$CuFe_2O_4$ composite, respectively.

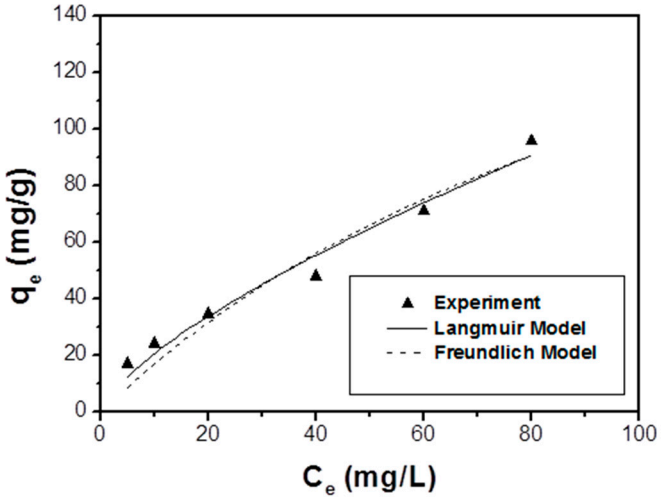

Figure S3. Adsorption isotherm for As(III) by GNPs/$CuFe_2O_4$ composite.

Table S1. Langmuir and Freundlich isotherm parameters for As(III) adsorption on GNPs/$CuFe_2O_4$ composite.

	Langmuir Model			**Freundlich Model**		
	Q_m (mg/g)	K_L (L/mg)	R^2	K_F	n	R^2
As(III)	236.29	0.007	0.935	4	0.7	0.966

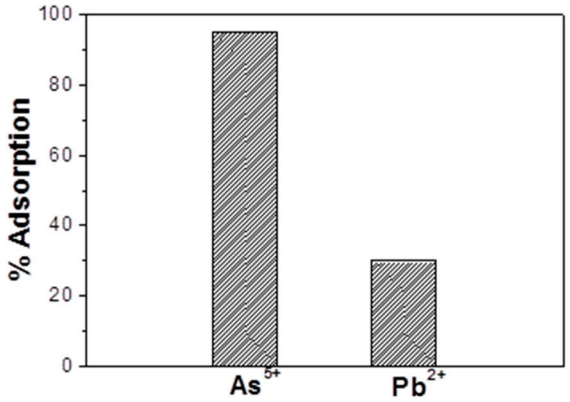

Figure S4. Adsorption of 10 mg GNPs@Fe_2CuO_4 composite toward 3 mg/L of As^{5+} and Pb^{2+} for 2 h.

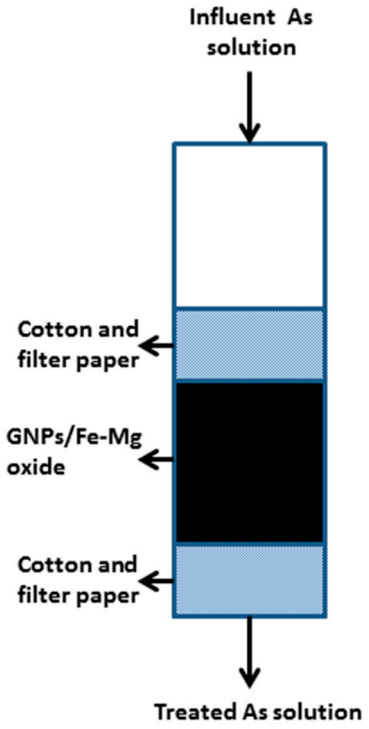

Figure S5. Filter column with a diameter of 2 cm and a height of 10 cm for recyclability.