Supplementary Materials

Characterization and applications of robustly grafted kaolinite using ionic liquid with naphthyl functionality

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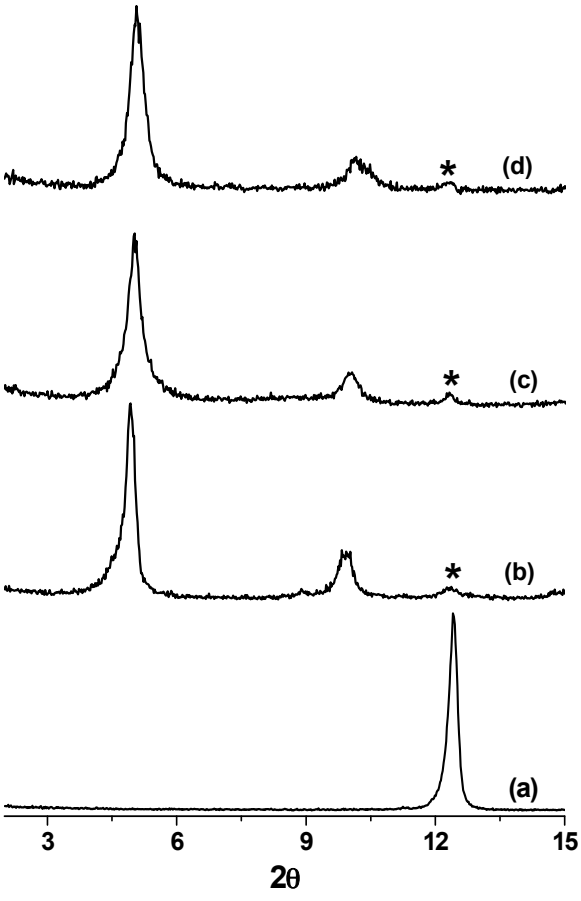

Figure S1. Powdered XRD patterns of (a) kaolinite, (b) K-NI and K-NI sonicated for 30 minutes in (c) water and (d) toluene.

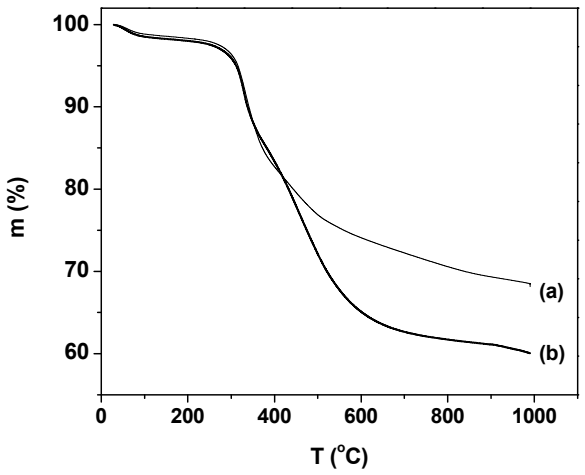

Figure S2.TGA curves of K-NI (a) under N_2, (b) under air.

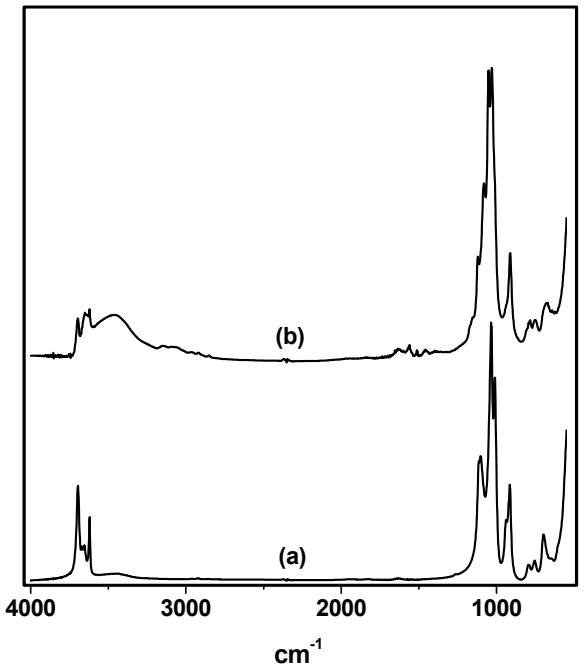

Figure S3. FTIR Spectra of (a) kaolinite and (b) K-NI.

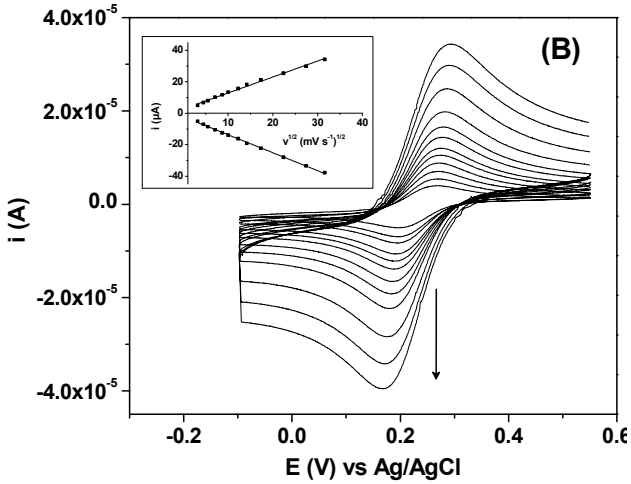

Figure S4. Effect of the scanning rate on the signal recorded on GCE/K-NI. Voltammograms recorded in 1 mM solution of $K_3Fe(CN)_6$ and 0.2 M KCl as supporting electrolyte at varying scanning rate. Inset variation of peak currents as a function of the square root of the scan rate.

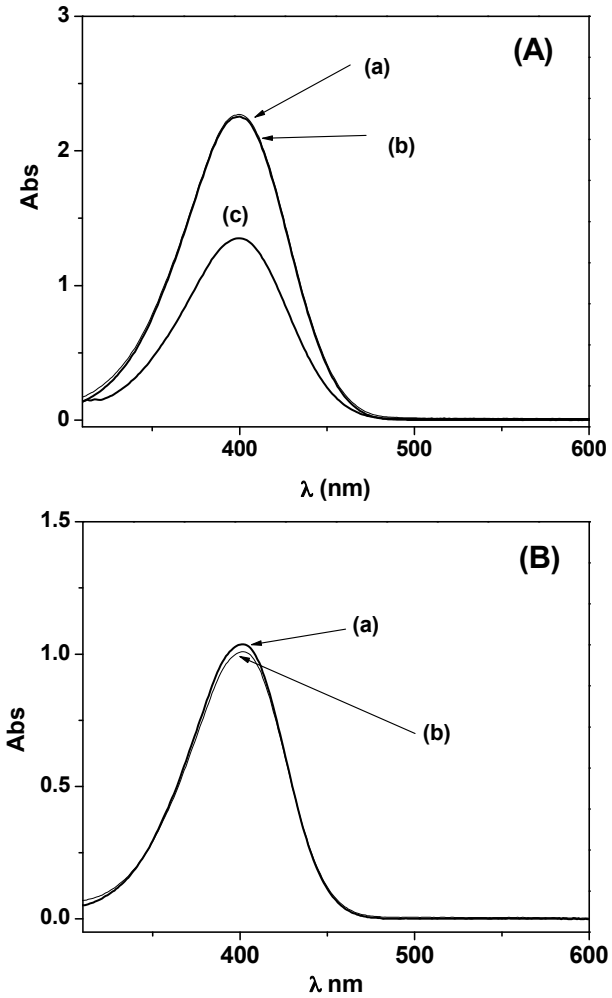

Figure S5: UV-Vis spectra of (A) 10^{-4} M PNP aqueous solution: (a) before adsorption, after 10 hours contact time with (b) kaolinite 2g $L^{-1}$and (c) K-NI 2g L^{-1}; (B) $5x10^{-5}$ M PNP ethanol solution, (a) before adsorption and (b) after 10 hours contact time with K-NI 1g L^{-1}.