

Figure S1. Separation of γ -Fe₂O₃NPs with an external magnetic field (1.42–1.47 T).

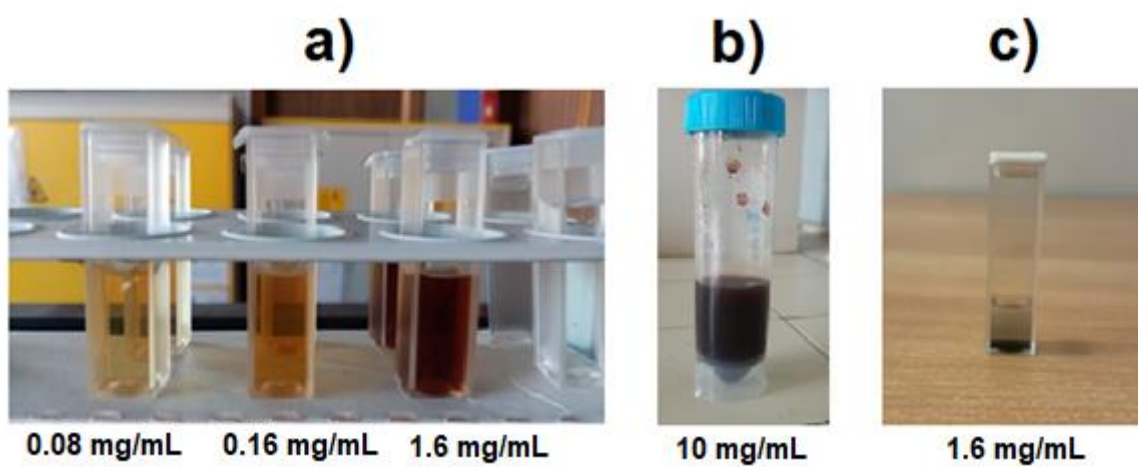


Figure S2. PAA-coated γ -Fe₂O₃NPs solutions after one week for a) 1.6, 0.16 and 0.08 mg/mL and b) 10 mg/mL; c) sedimentation of uncoated γ -Fe₂O₃NPs after 24 h.

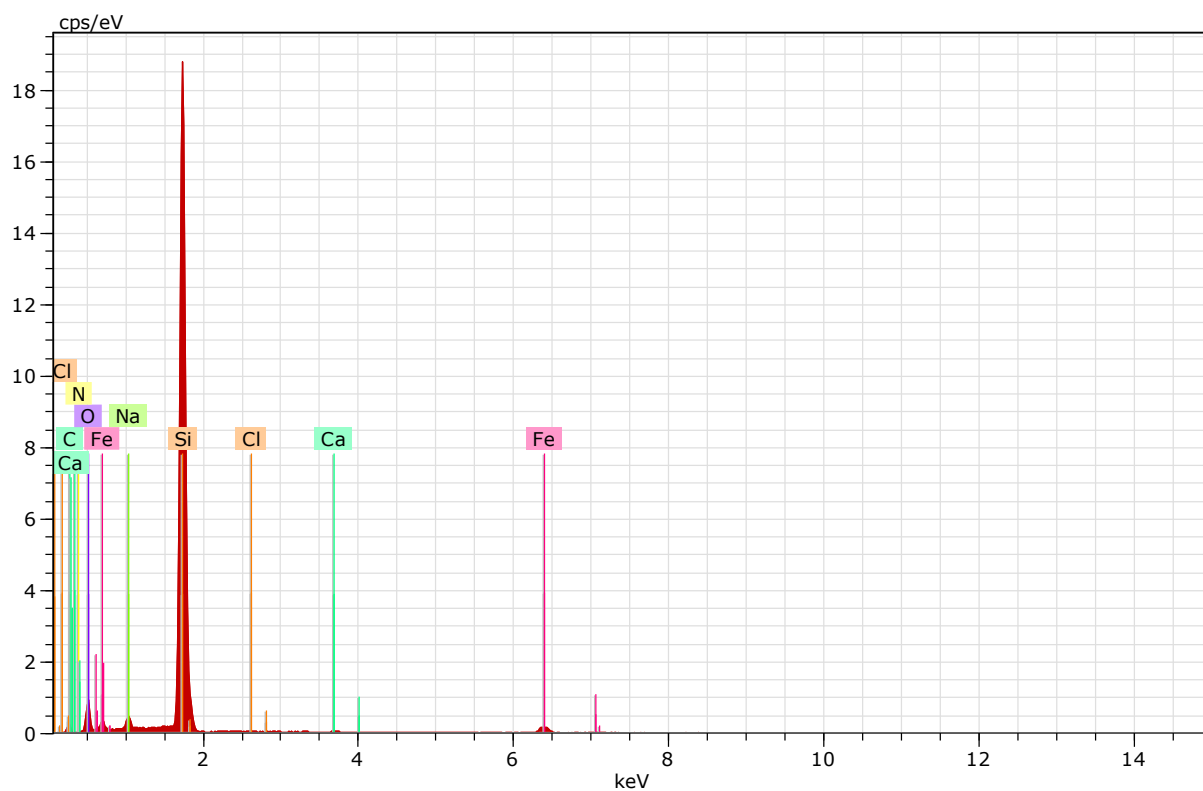


Figure S3. EDS spectrum of PAA-coated γ -Fe₂O₃NPs.

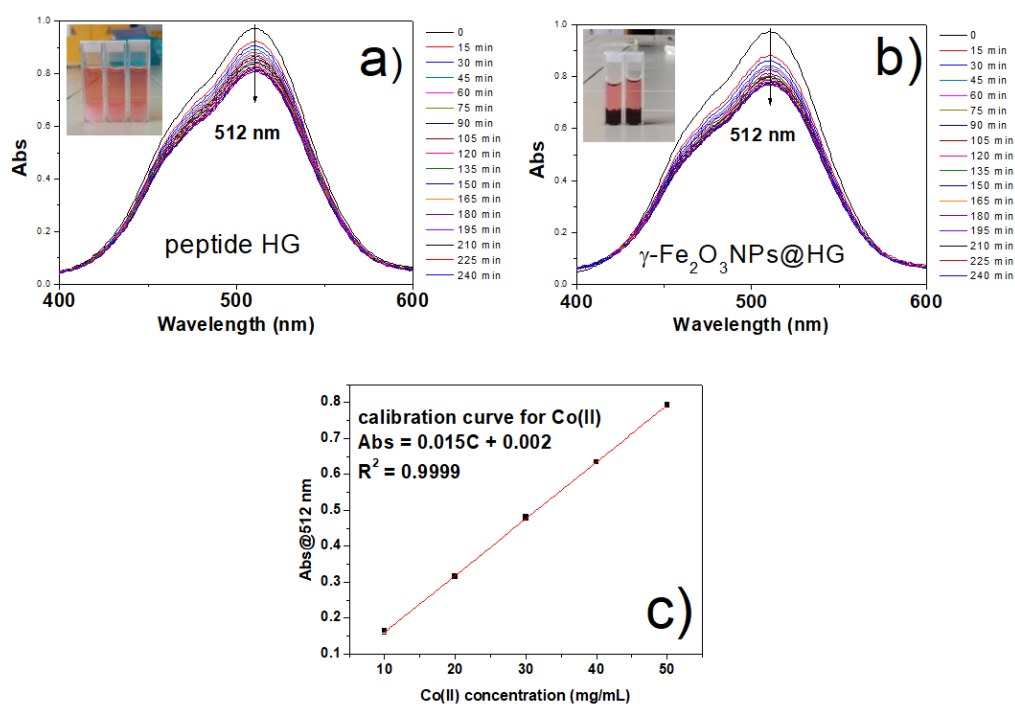


Figure S4. UV-Vis study of Co(II) adsorption for a) the peptide HG; b) γ -Fe₂O₃NPs@HG, and c) the calibration curve for Co(II) aqueous solutions.

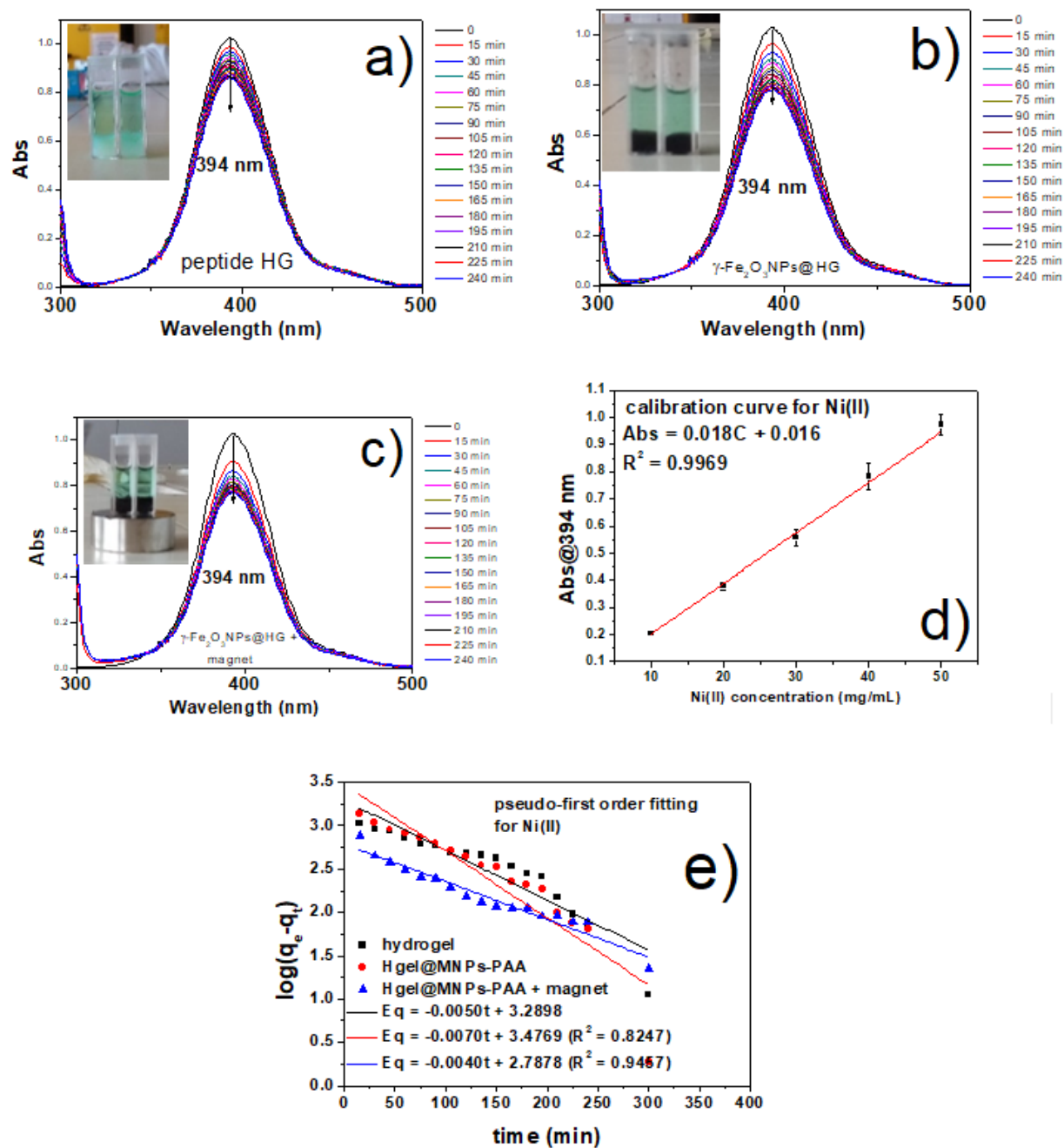


Figure S5. UV-Vis study of Ni(II) adsorption for a) the peptide HG; b) $\gamma\text{-Fe}_2\text{O}_3\text{NPs@HG}$; c) $\gamma\text{-Fe}_2\text{O}_3\text{NPs@HG}$ upon magnetic field application; d) the calibration curve for Ni(II) aqueous solutions, and e) fit of kinetic data to pseudo-first order model for Ni(II).

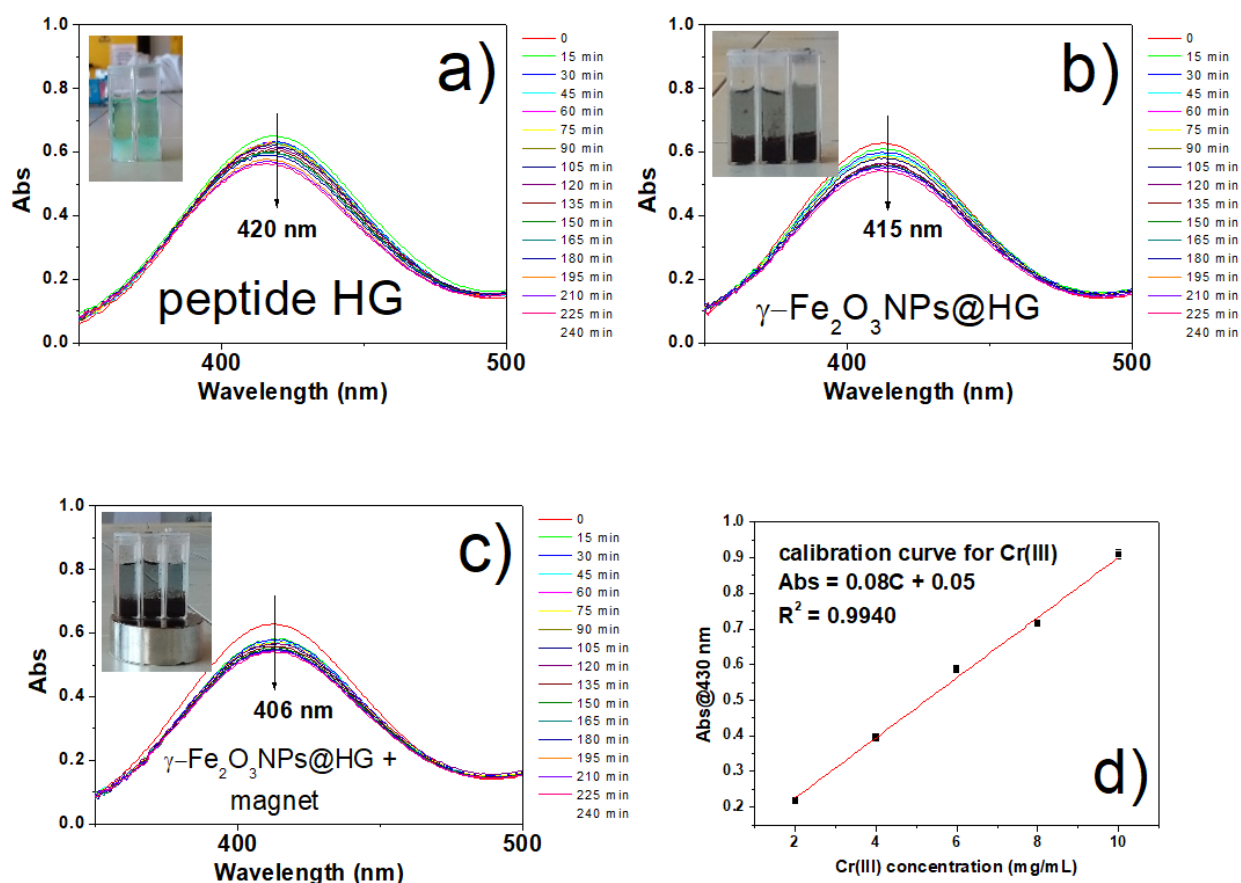


Figure S6. UV-Vis study of Cr(III) adsorption for a) the peptide HG; b) $\gamma\text{-Fe}_2\text{O}_3\text{NPs@HG}$; c) $\gamma\text{-Fe}_2\text{O}_3\text{NPs@HG}$ upon magnetic field application and d) the calibration curve for Cr(III) aqueous solutions.

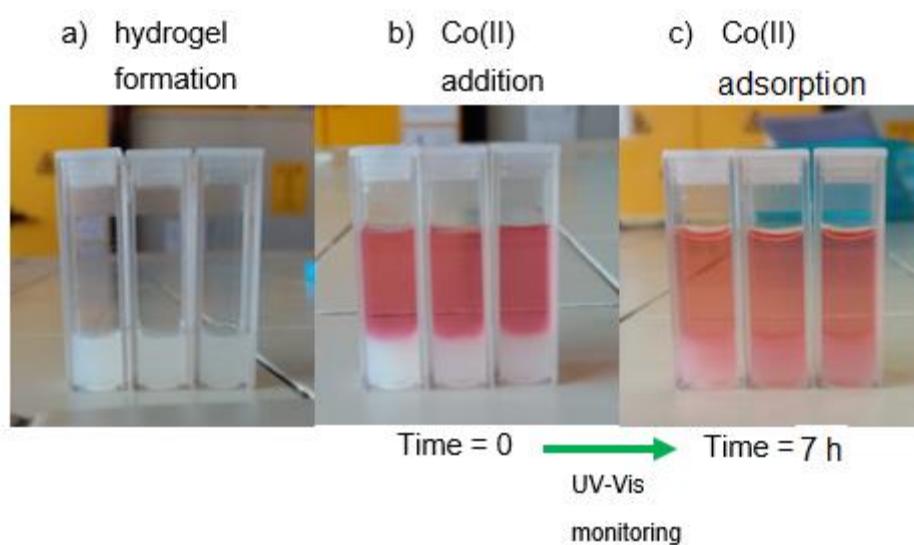


Figure S7. Methodology used for studying the removal efficiency of Co(II), as an example here.