

SUPPLEMENTARY MATERIAL

STUDY OF THE CHROMIUM (VI) REMOVAL FROM AQUEOUS SYSTEMS BY COBALT NANOPARTICLES

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Figure 1S. NPs-Co in the presence of an external magnetic field

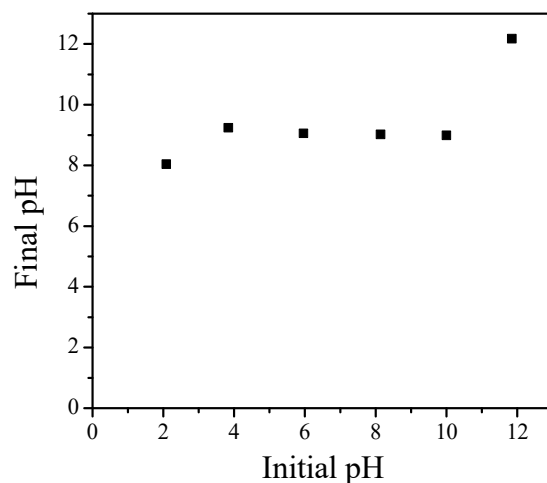


Figure 2S. Point of Zero Charge (PZC) of NPs-Co

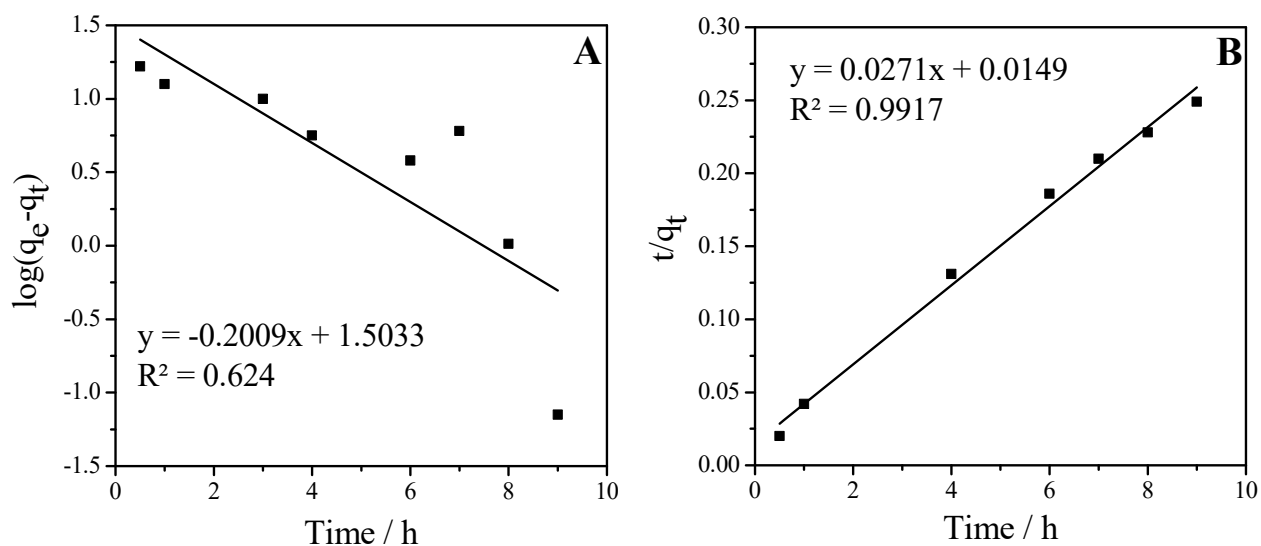


Figure 3S. Removal kinetics of the Cr(VI) by NPs-Co adjusted to the (A) pseudo-first order, (B) pseudo-pseudo-second order. Experimental conditions: $C_{Cr(VI)} = 40.0 \text{ mg L}^{-1}$; volume of solution = 20.0 mL; system temperature = 25 °C; dose of NPs-Co = 1.0 g L⁻¹; without pH adjustment (8.5); reaction time = 10 hours

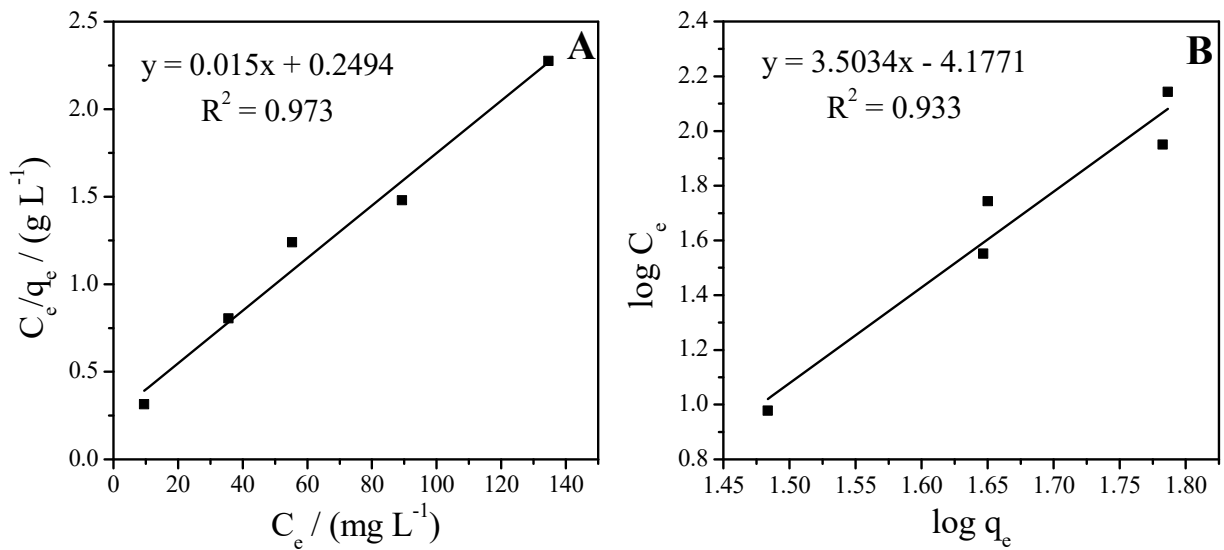


Figure 4S. (A) Langmuir isotherm; (B) Freundlich isotherm. Experimental conditions: $C_{Cr(VI)} = 40.0, 80.0, 100.0, 150.0,$ and 200.0 mg L^{-1} ; volume of solution = 20.0 mL ; system temperature = $25 \text{ }^\circ\text{C}$; dose of NPs-Co = 1.0 g L^{-1} ; without pH adjustment (8.5); reaction time = 10 hours