

**Acid green crystals-based *in situ* synthesis of polyaniline hollow
nanotubes for adsorption of anionic and cationic dyes**

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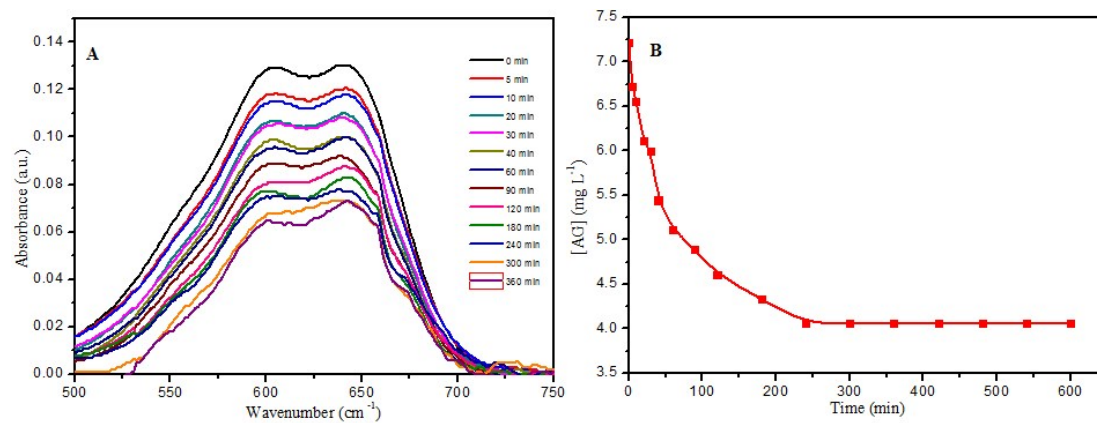


Figure S1. A) UV-VIS spectrum of removal of AG dye from aqueous solution by PANI-HNTs, B) Effect of contact time on the removal of AG dye (PANI-HNTs = 10 mg, [AG] = 7.2 mg L⁻¹, pH = 3).

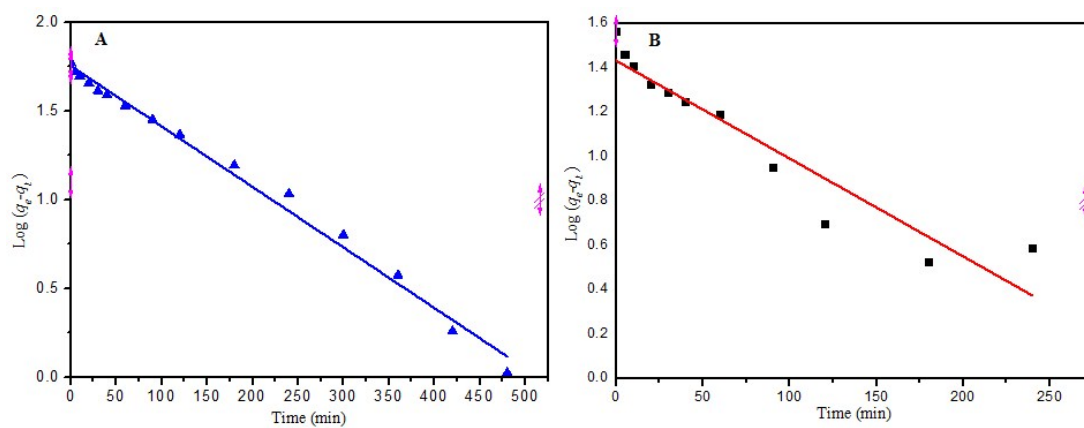


Figure S2. A) Pseudo-first-order reaction for MB adsorption onto PANI-HNTs at pH 9, B) Pseudo-first-order reaction for AG adsorption onto PANI-HNTs at pH 3.

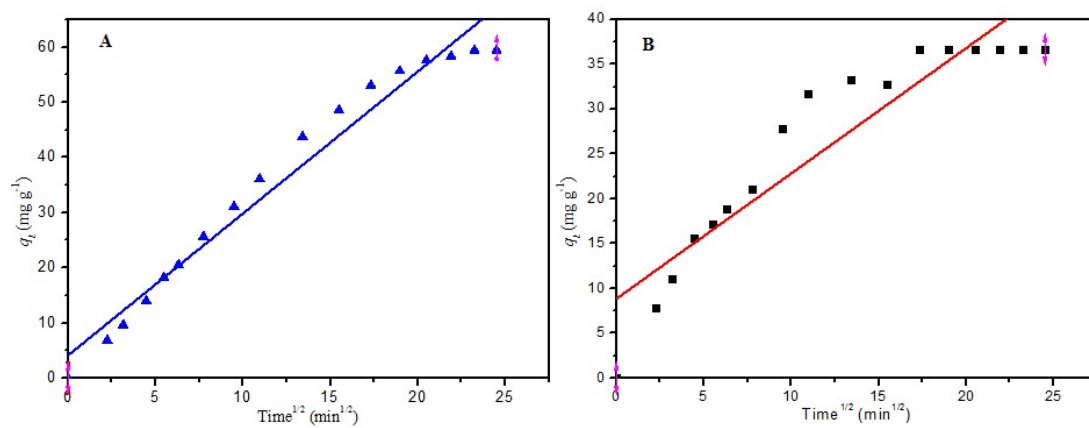


Figure S3. A) Intraparticle diffusion model plots of MB adsorption onto PANI-HNTs at pH 9. B) Intraparticle diffusion model plots of AG adsorption onto PANI-HNTs at pH 3.

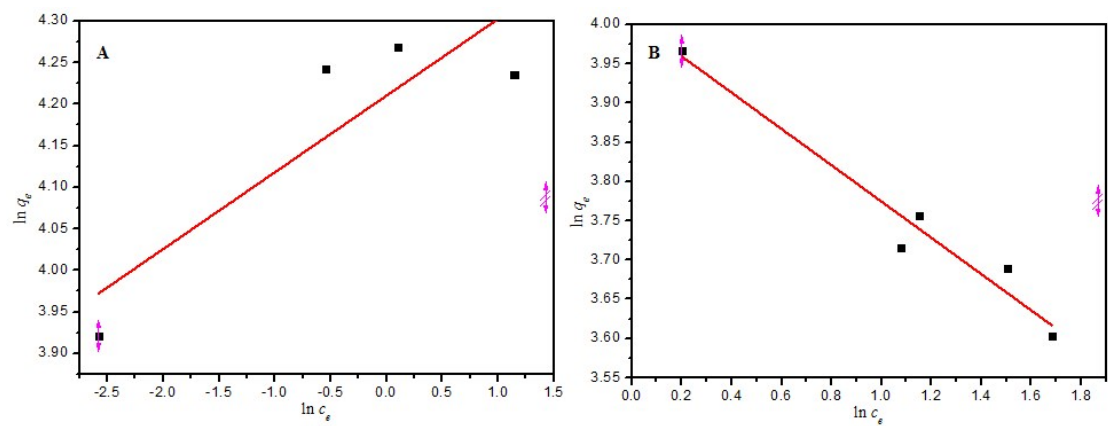


Figure S4. A) Freundlich isotherm for adsorption of MB (PANI-HNTs = 10 mg, [MB] = 5-10 mg L⁻¹), at pH = 9, B) Freundlich isotherm for adsorption of AG (PANI-HNTs = 10 mg, [AG] = 5-10 mg L⁻¹), at pH = 3.

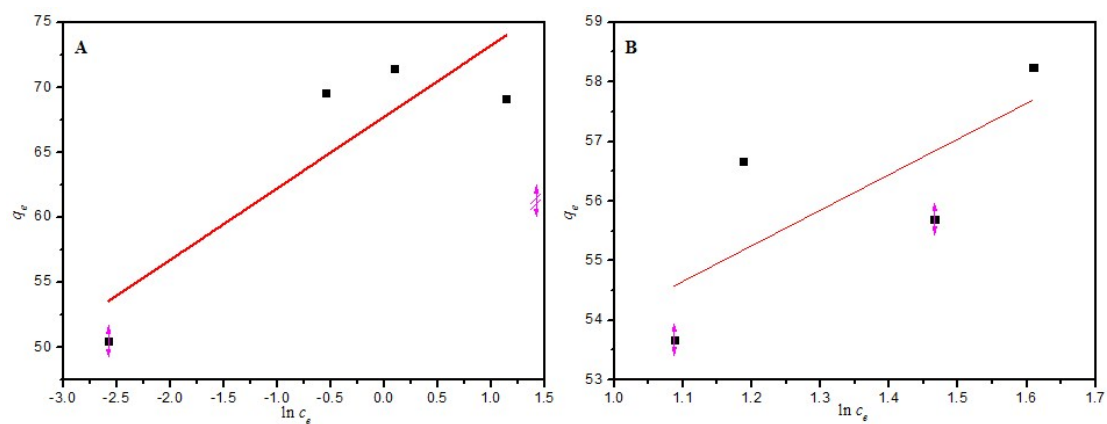


Figure S5. A) Temkin isotherm for adsorption of MB (PANI-HNTs = 10 mg, [AG] = 5-10 mg L⁻¹), at pH = 9, B) Temkin isotherm for adsorption of AG (PANI-HNTs = 10 mg, [AG] = 5-10 mg L⁻¹), at pH = 3.