

Supplementary Materials

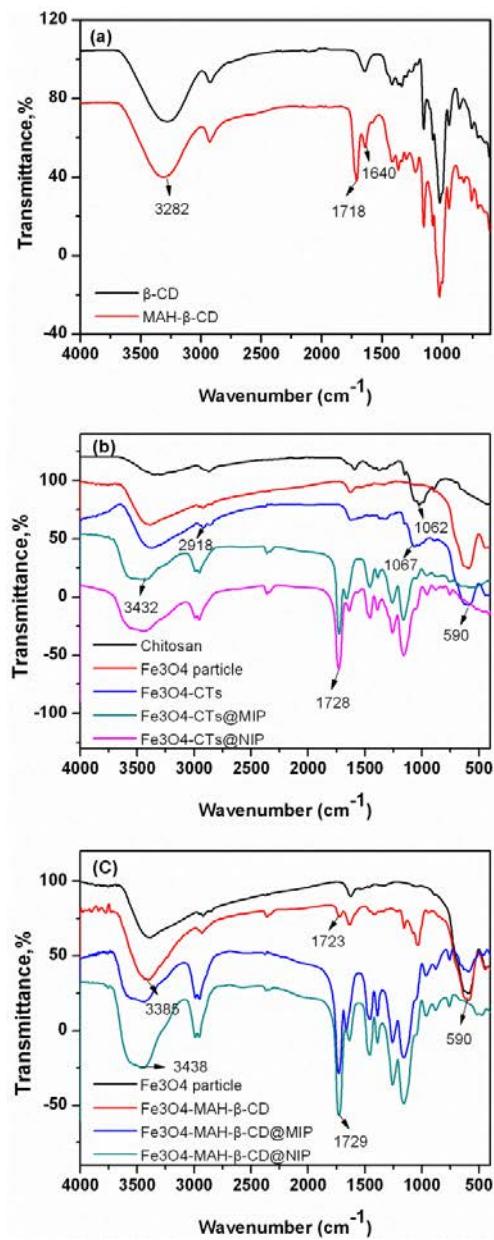


Figure S1. The FT-IR spectra of MAH- β -CD (a); Fe₃O₄-CTs@MIP and Fe₃O₄-CTs@NIP (b); Fe₃O₄-MAH- β -CD@MIP and Fe₃O₄-MAH- β -CD@NIP (c).

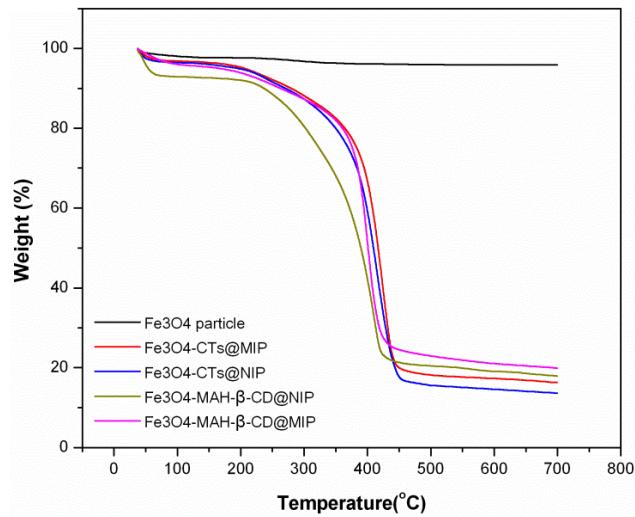


Figure S2. TGA curves of the Fe₃O₄ particle, Fe₃O₄-CTs@MIP, Fe₃O₄-CTs@NIP, Fe₃O₄-MAH-β-CD@MIP and Fe₃O₄-MAH-β-CD@NIP.

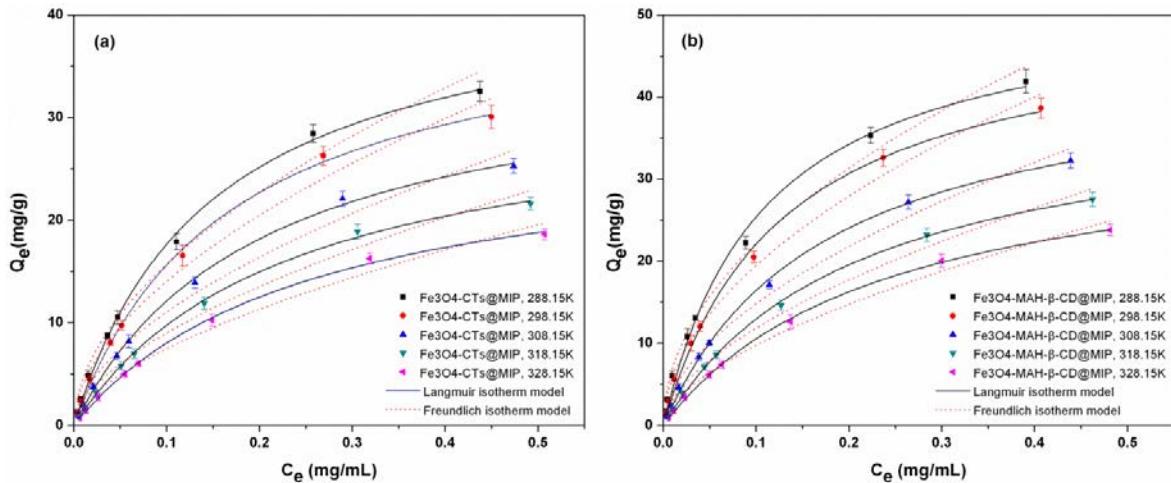


Figure S3. Adsorption isotherms of 2-aminopyridine binding onto Fe₃O₄-CTs@MIP **(a)** and Fe₃O₄-MAH-β-CD@MIP **(b)** at different temperatures.

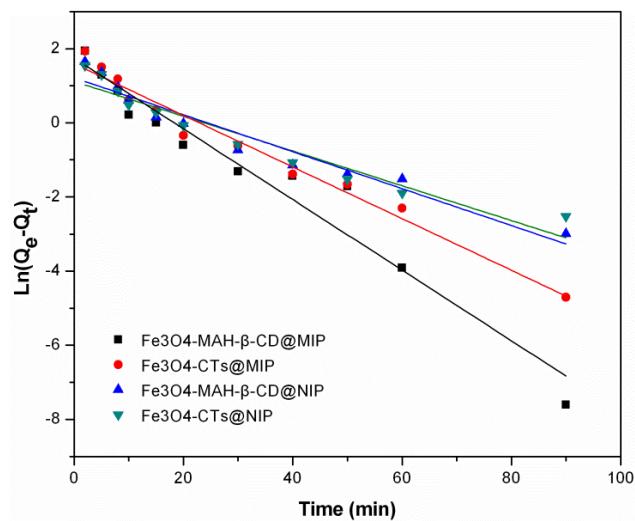


Figure S4. Pseudo-first-order kinetic model for the adsorption of 2-aminopyridine adsorption on Fe₃O₄-CTs@MIP, Fe₃O₄-CTs@NIP, Fe₃O₄-MAH-β-CD@MIP and Fe₃O₄-MAH-β-CD@NIP.

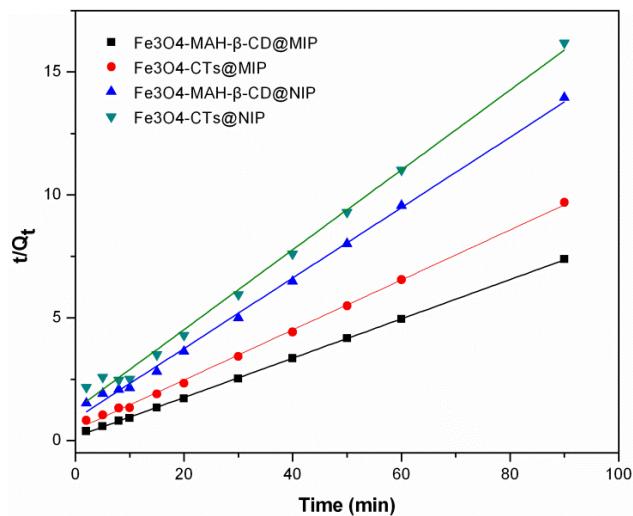


Figure S5. Pseudo-second-order kinetic model for the adsorption of 2-aminopyridine adsorption on Fe₃O₄-CTs@MIP, Fe₃O₄-CTs@NIP, Fe₃O₄-MAH-β-CD@MIP and Fe₃O₄-MAH-β-CD@NIP.

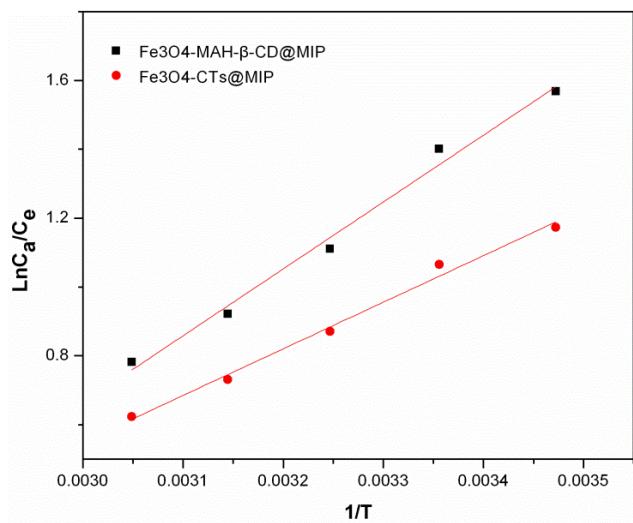


Figure S6. Van't Hoff plots of the uptake of 2-aminopyridine on Fe₃O₄-CTs@MIP and Fe₃O₄-MAH-β-CD@MIP.

Table S1. Kinetic parameters of the pseudo-first-order and pseudo-second-order rate equations for 2-aminopyridine adsorption on Fe₃O₄-CTs@MIP, Fe₃O₄-CTs@NIP, Fe₃O₄-MAH-β-CD@MIP and Fe₃O₄-MAH-β-CD@NIP (mean ± SD, n=3).

Polymer	Pseudo-First Order		R ²	Pseudo-Second Order		R ²
	k ₁ (min ⁻¹)	Q _{e,cal} (mg·g ⁻¹)		k ₂ (g·mg ⁻¹ ·min ⁻¹)	Q _{e,cal} (mg·g ⁻¹)	
Fe ₃ O ₄ -CTs@MIP	0.0696	4.93	0.9731	0.0239	9.83	0.9995
Fe ₃ O ₄ -CTs@NIP	0.0469	3.05	0.9252	0.0208	6.15	0.9945
Fe ₃ O ₄ -MAH-β-CD@MIP	0.0953	5.71	0.9460	0.0416	12.50	0.9997
Fe ₃ O ₄ -MAH-β-CD@NIP	0.0498	3.37	0.9375	0.0232	6.98	0.9971