

Supporting Information

In situ Polyaniline Immobilized ZnO Nanorods for the Efficient Adsorptive Detoxification of Cr (VI) from Aquatic System

Fahad A Alharthi *, Riyadh H. Alshammari and Imran Hasan *

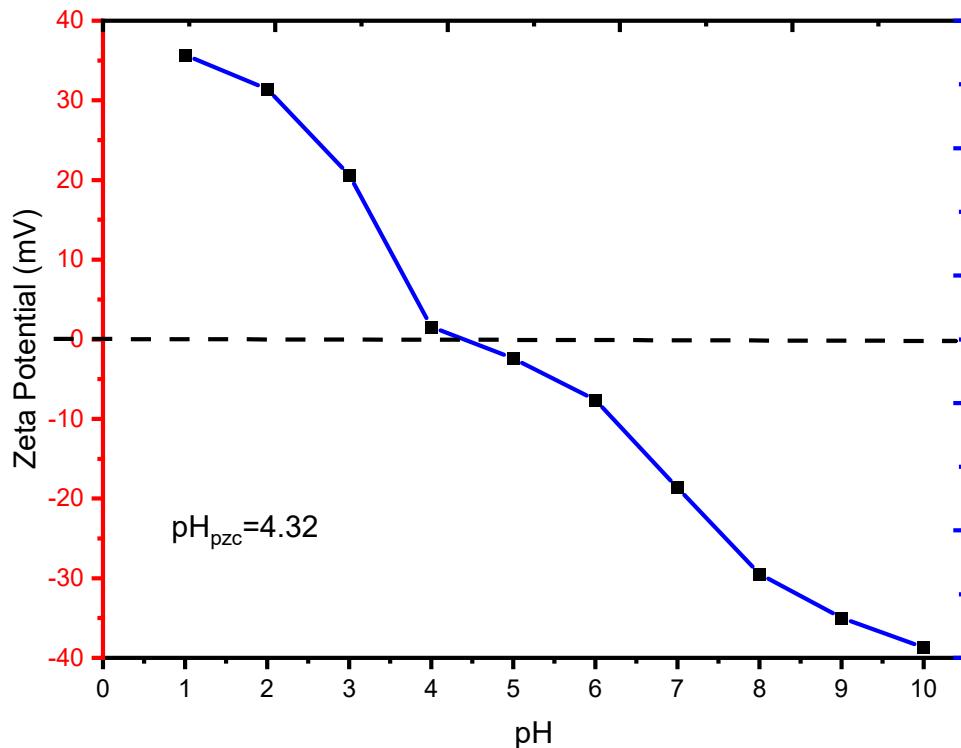


Figure S1. Point of zero charge (pH_{pzc}) analysis using Zeta potential

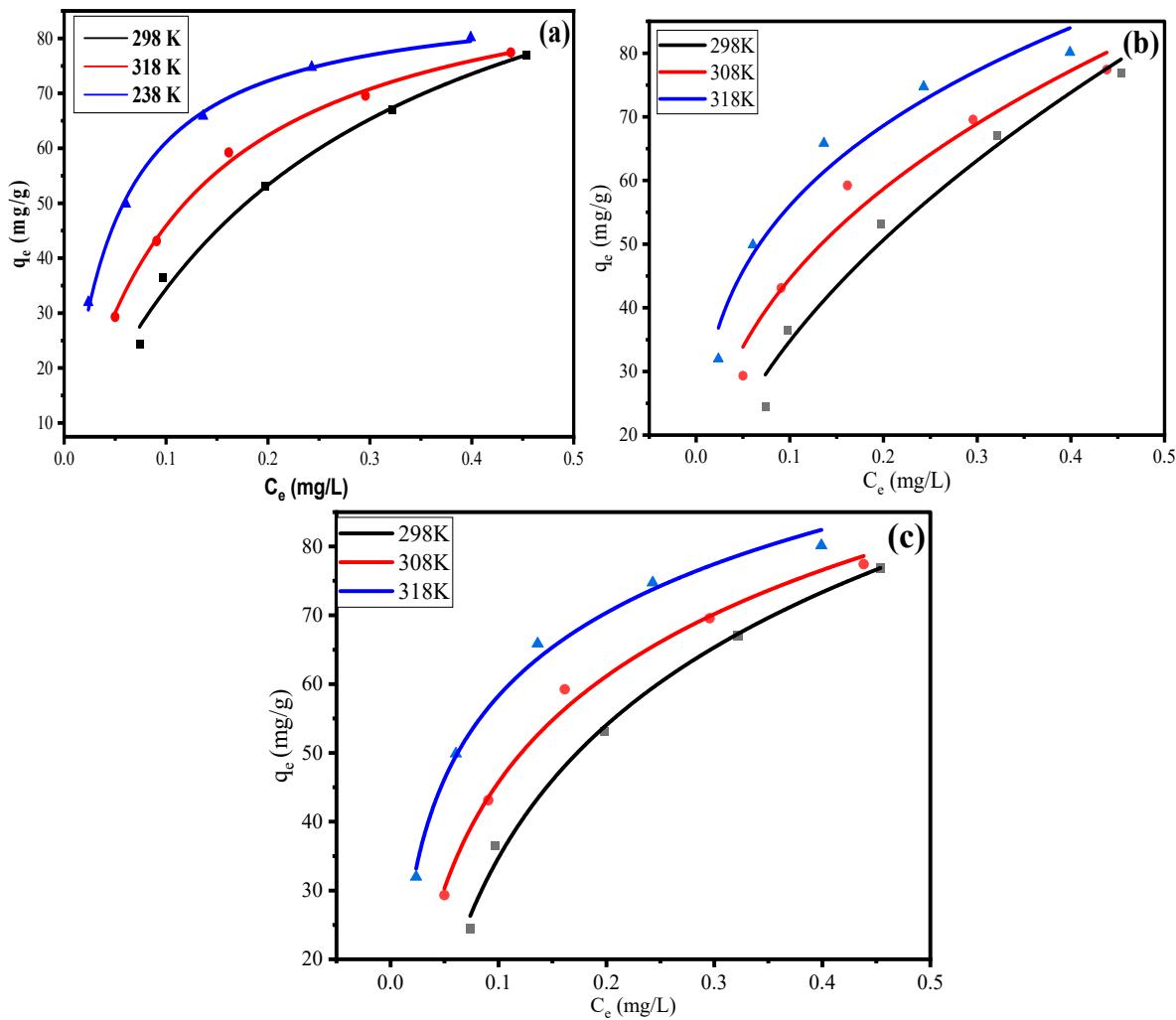


Figure S2. Non-linear regression for (a) Langmuir (b) Freundlich and (c) Temkin isotherms at 298 to 318 K temperature

Table S1. Adsorption isotherm parameters for the removal of (100 mg/L) Cr (VI) on ZnO@PAni NRs at 298K, 308K and 318K obtained by non-linear regression analysis

Model	Parameters	298 K	308K	318K
Langmuir	q_m (mg/g)	142.27	219.18	310.47
	K_L (L/mg)	0.412	0.767	0.849
	R^2	0.99	0.99	0.99
Freundlich	K_F (mg/g) ^{1/n}	109.79	111.17	121.44
	n	1.84	2.52	3.42
	R^2	0.98	0.97	0.96
Temkin	A (L/mg)	39.82	77.99	135.81
	b (J/mol)	88.96	115.04	152.47
	R^2	0.99	0.98	0.98