

Supplementary Materials

Fe₃O₄-Zeolite Hybrid Material as Hetero-Fenton Catalyst for Enhanced Degradation of Aqueous Ofloxacin Solution

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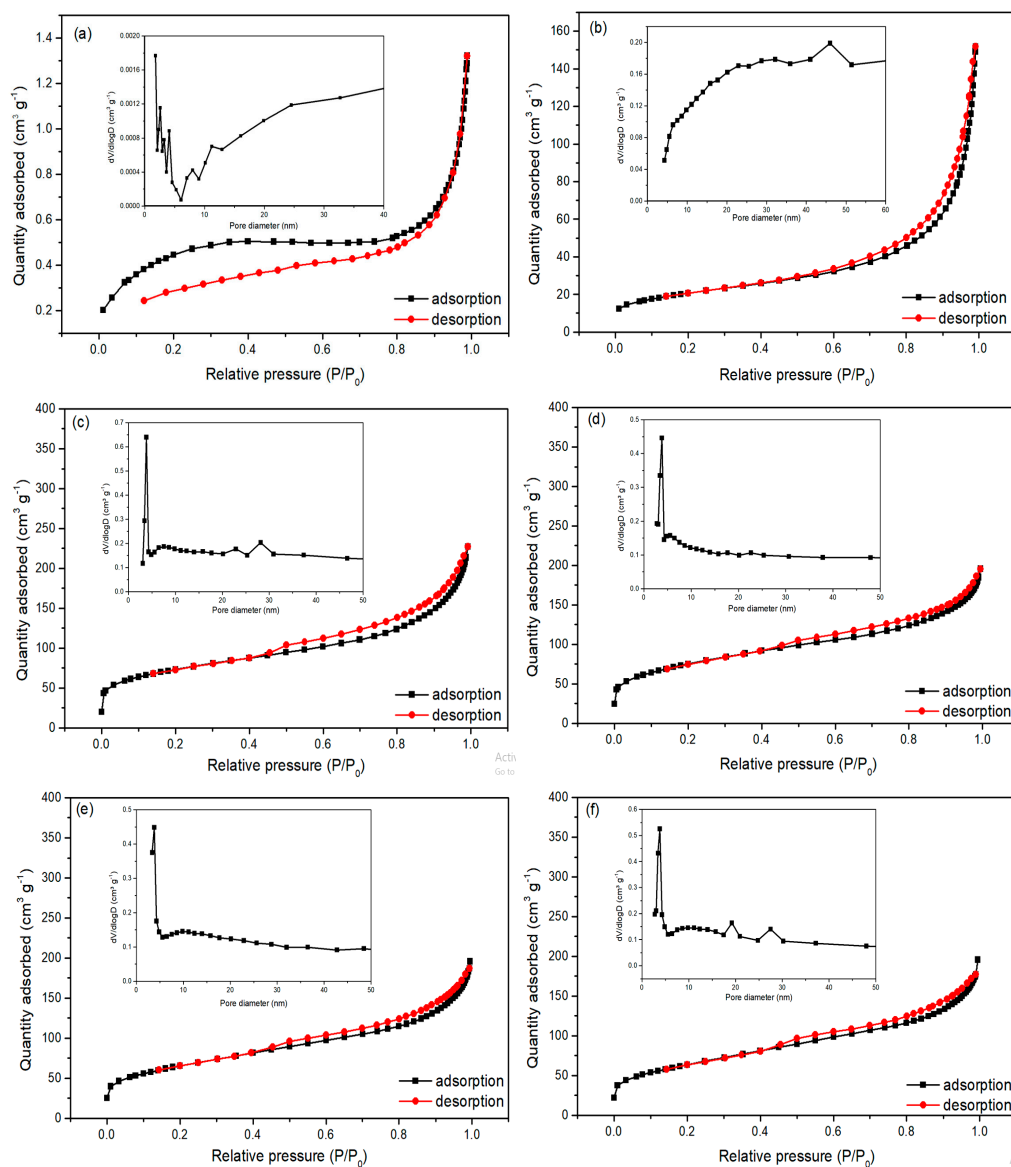


Figure S1: N₂ adsorption – desorption isotherms and the corresponding pore size distribution (insets) for zeolite (a), FeZ-1.5 (b), FeZ-3 (c), FeZ-5 (d), FeZ-8 (e) and FeZ-10 (f) composites.

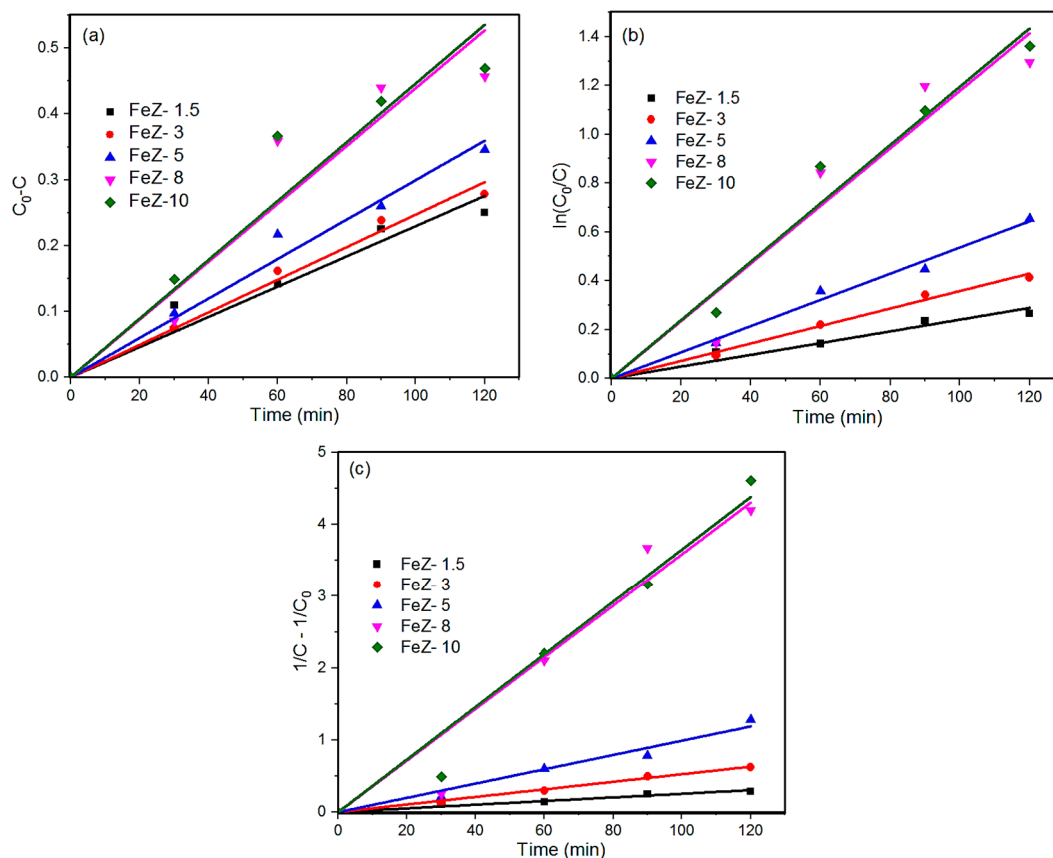


Figure S2: (a) $(C_0 - C)$ versus t plots based on the zero-order kinetics model; (b) $\ln(C_0/C)$ versus t plots based on first-order kinetics model and (c) $1/C - 1/C_0$ versus t plots based on second order kinetics model for the effect of Fe_2O_3 loading on zeolite on the degradation of OFL.

Table S1. Parameters of linear regression for different kinetic models in FeZ/ H_2O_2 systems.

Catalysts	Zero-order		Pseudo-first-order		Pseudo-second-order	
	k (1/min)	R ²	k (1/min)	R ²	k (1/min)	R ²
FeZ-1.5	0.0023	0.977	0.0024	0.982	0.002	0.986
FeZ-3	0.0024	0.994	0.0035	0.996	0.005	0.996
FeZ-5	0.0029	0.991	0.0053	0.995	0.009	0.987
FeZ-8	0.0043	0.958	0.0117	0.969	0.035	0.968
FeZ-10	0.0044	0.966	0.0119	0.988	0.036	0.965

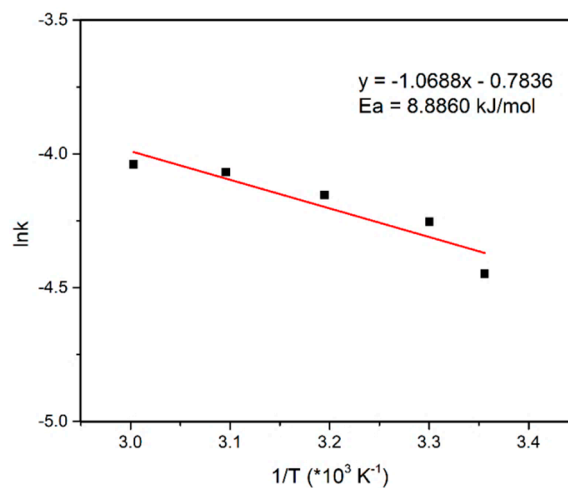


Figure S3. Plot of $\ln k$ against $1/T$ for the Fenton degradation of OFL using FeZ-8 catalyst.