S1. Rietveld refinement on the XRD pattern of MIL-88B(Fe)

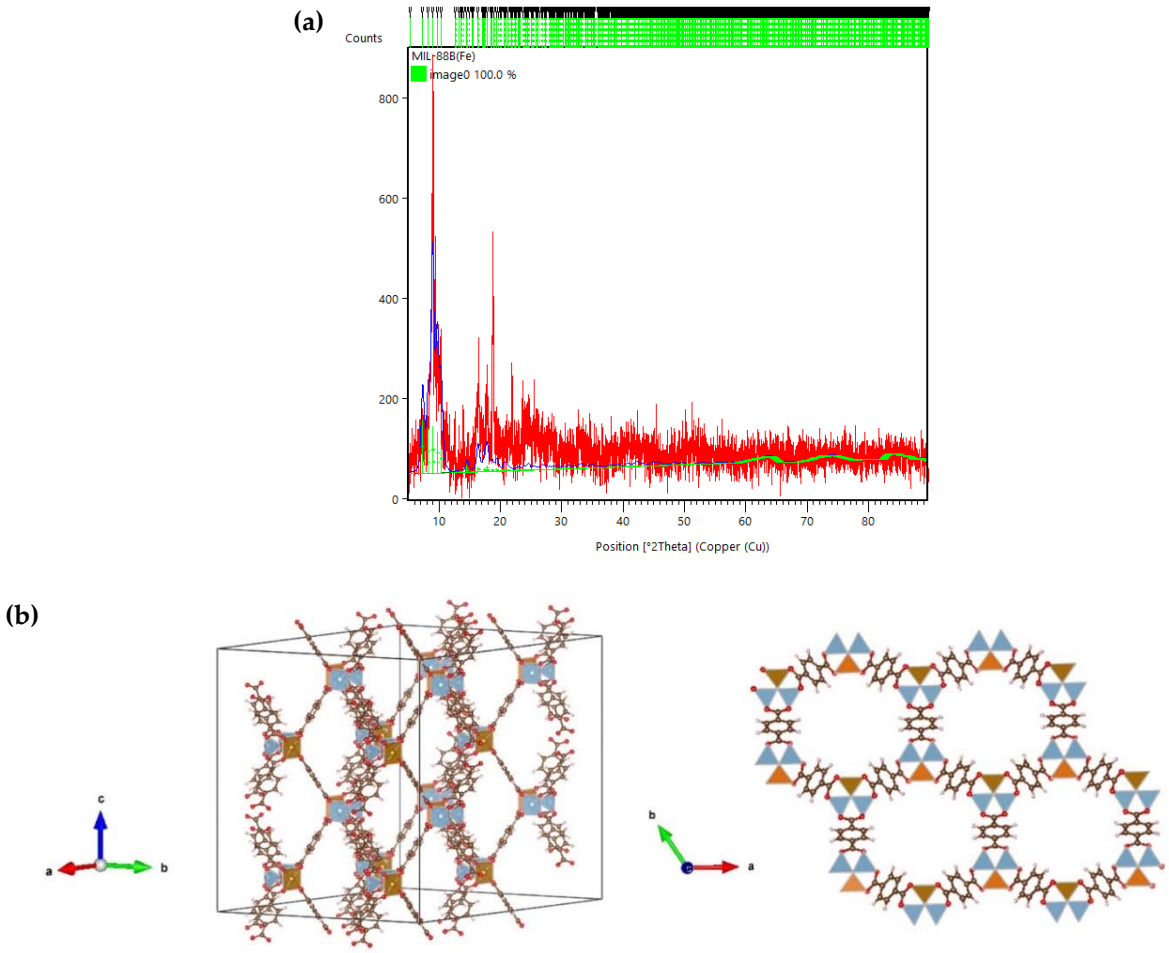

Figure S1. (a) Rietveld refinement on the XRD pattern of MIL-88B(Fe) based on the triclinic structure with *P-1* space group, and (b) Predicted crystal structure of MIL-88B(Fe), with goodness of fit (defined by $G = \chi^2$) is found at 1.068.

S2. EDX Spectrum of MIL-88B(Fe)

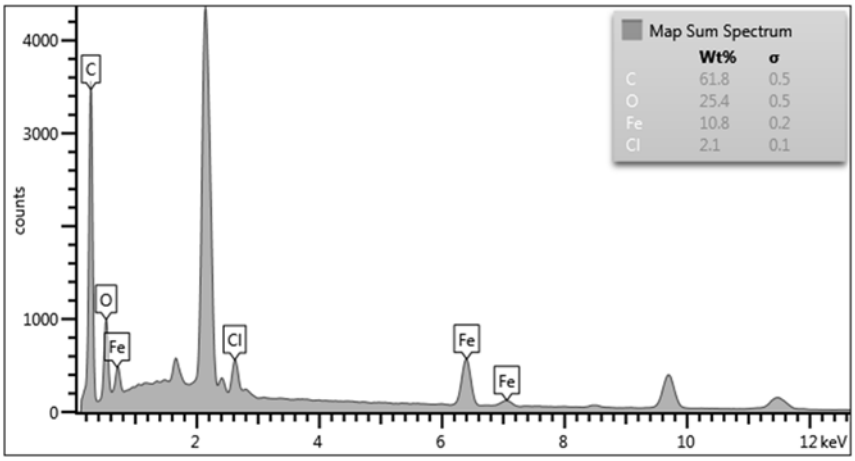

Figure S2. EDX spectrum of MIL-88B(Fe) polycrystalline crystals.

S3. N_2 physisorption Graphs

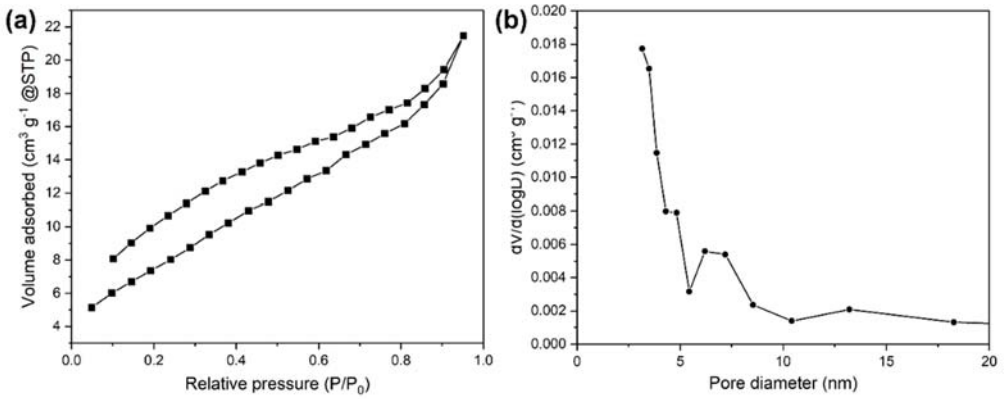

Figure S3. N_2 physisorption (a) adsorption-desorption isotherm and (b) pore size distribution of MIL-88B(Fe).

S4. Comparison between linear and non-linear fitting of the adsorption kinetics

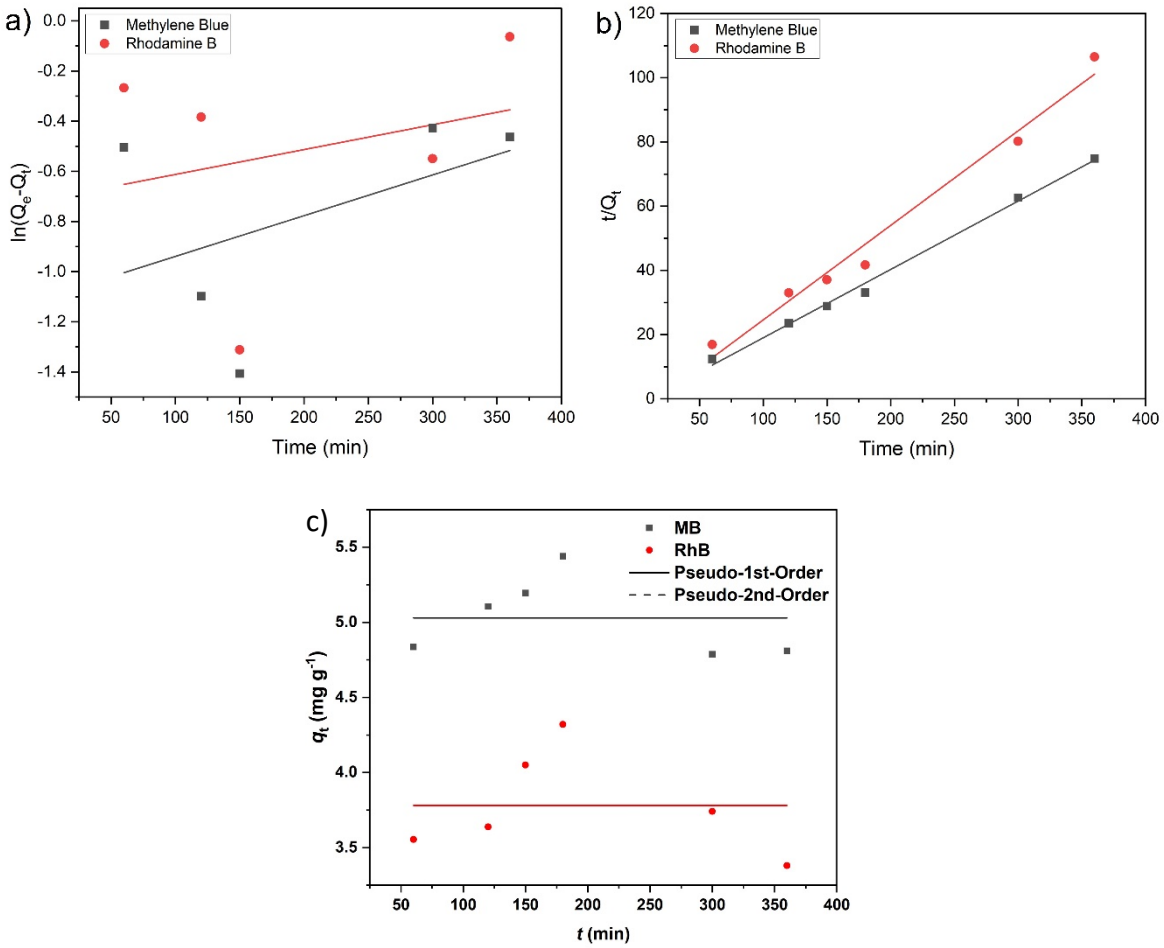

Figure S3. The linear-fitting kinetics by pseudo-first order (a) and pseudo-second order (b); also non-linear-fitting kinetics by pseudo-first and pseudo-second order of MB and RhB.