Supplemental Material

In Situ Attenuated Total Reflectance Fourier-Transform Infrared Study of Oxytetracycline Sorption on Magnetite

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Fig. S1. OTC sorption % vs. pH at an initial OTC concentrations of 1 mM and I = 0.01 M.
Fig. S2. pH dependent speciation of oxytetracycline (considering pKa₁ = 3.57, pKa₂ = 7.49, and pKa₃ = 9.44), and surface speciation of magnetite (Three surface species of magnetite were assumed: >FeOH⁺, >FeOH, and >FeO⁻, pKa₁ = 8.2, pKa₂ = 4.6, Jordon et al. 2009).
Fig. S3. Sorption isotherm of OTC using 20 g L⁻¹ magnetite at ionic strength (I=0.01 M) at a buffered pH of 5.55. The initial concentrations of OTC were 2, 1, 0.75, 0.5, and 0.1 mM. Ce represents concentrations of OTC in solution, whereas qe indicates concentrations of sorbed OTC per g of magnetite.

Reference: