

Supplementary Material

Simultaneous adsorption of trace sulfamethoxazole and hexavalent chromium by biochar/MgAl layered double hydroxide composites

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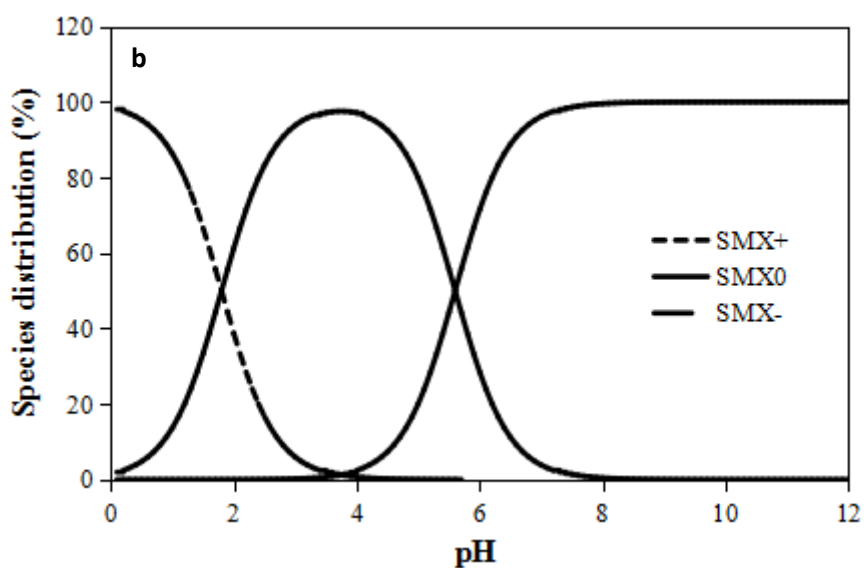
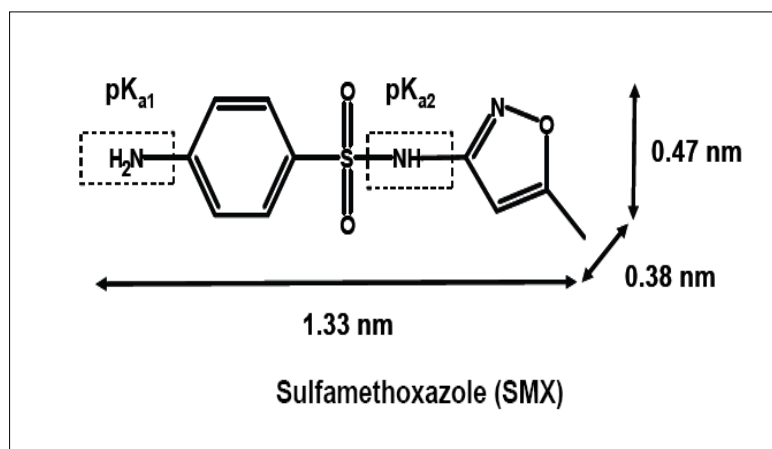


Fig. S1. Molecular structure of sulfamethoxazole (SMX) (a) and solution speciation of SMX as a function of pH (b).

The formula of SMX is $C_{10}H_{11}N_3O_3S$; molecular weight is $235.28 \text{ g mol}^{-1}$; water solubility is 0.37 g L^{-1} , the n-octanol-water partition coefficient $\log K_{ow}$ is 0.89 and the pK_a values are 1.8 and 5.6 (Gao and Pedersen 2005; Pérez et al. 2005; Ji et al. 2011).

References:

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Pérez S, Eichhorn P, Aga DS (2005). Evaluating the biodegradability of sulfamethazine, sulfamethoxazole, sulfathiazole, and trimethoprim at different stages of sewage treatment. *Environmental Toxicology & Chemistry* **24**, 1361-1367.