

Supplementary Information

Controlled Dehydration of $\text{Fe}(\text{OH})_3$ to Fe_2O_3 : Developing Mesopores with Complexing Iron Species for the Adsorption of β -Lactam Antibiotics

Paula S. Pinto,^a Giovani D. Lanza,^a José D. Ardisson^b and Rochel M. Lago^{*a}

^aDepartamento de Química, Universidade Federal de Minas Gerais, 31270-901 Belo Horizonte-MG, Brazil

^bLaboratório de Física Aplicada, Centro de Desenvolvimento da Tecnologia Nuclear (CDTN/CNEN), 31270-901 Belo Horizonte-MG, Brazil

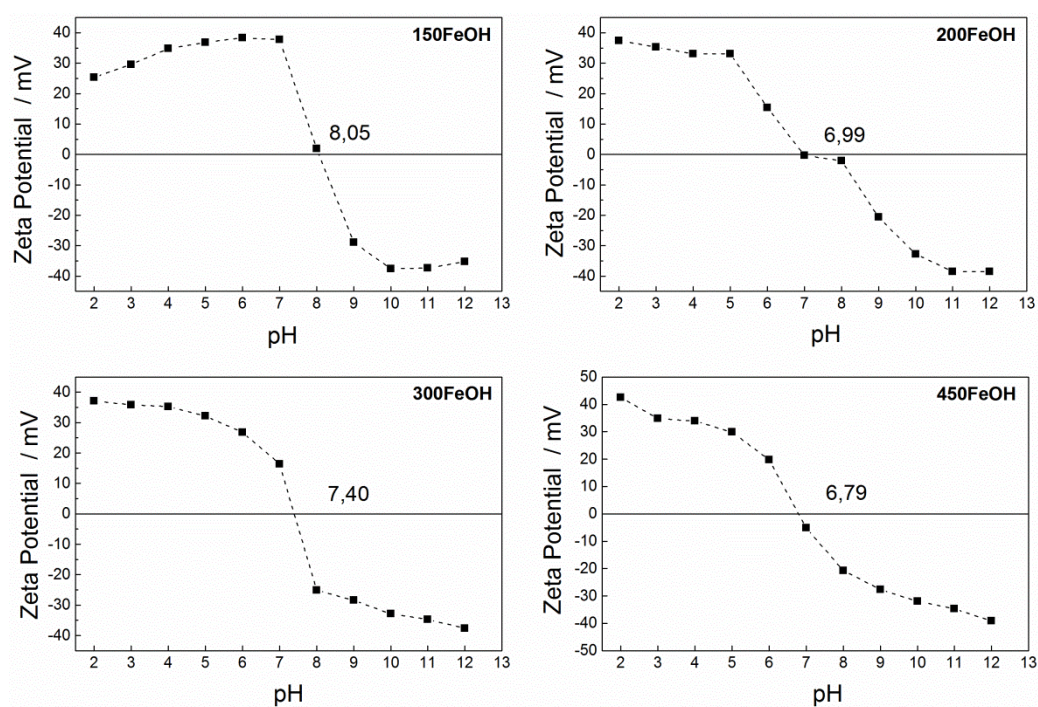


Figure S1. Zeta potential titration for 150FeOH, 200FeOH, 300FeOH and 450FeOH.

*e-mail: rochel@ufmg.br

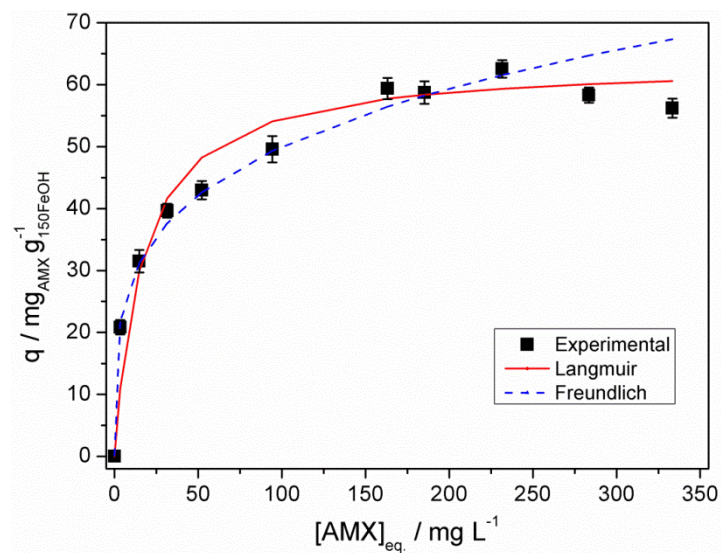


Figure S2. Adsorption isotherm of amoxicillin on 150FeOH at 25 ± 2 °C with Langmuir and Freundlich fittings.

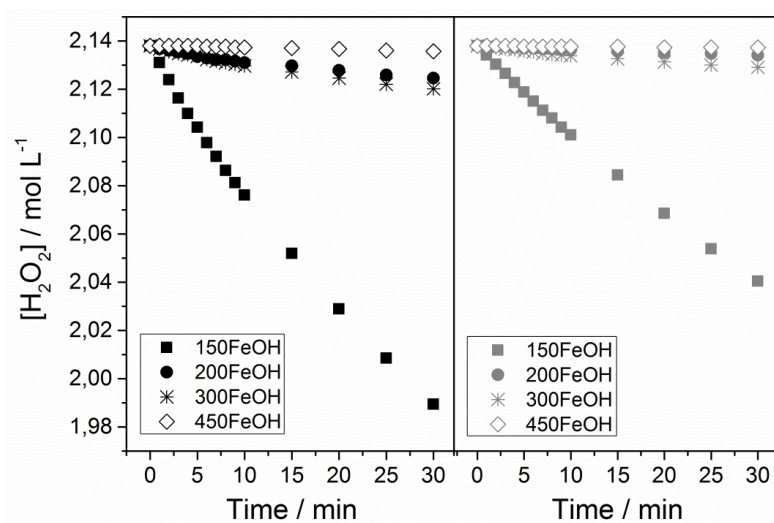


Figure S3. H₂O₂ decomposition kinetics in the absence (black) and presence (gray) of amoxicillin.

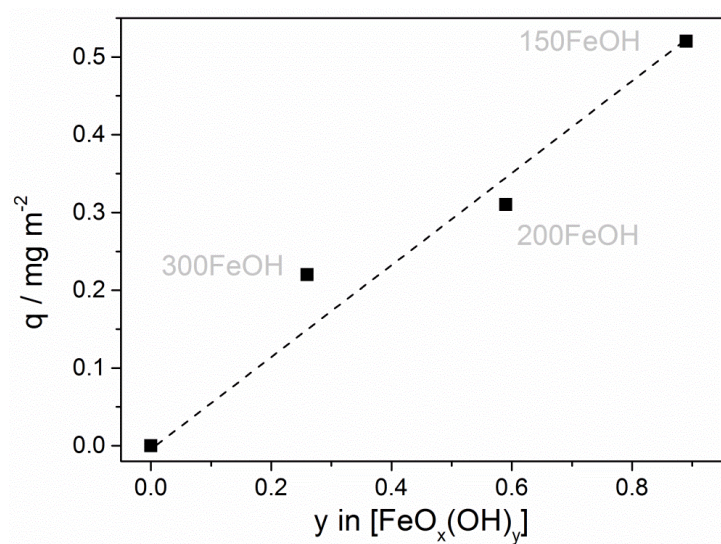


Figure S4. AMX adsorption capacity for the different $[\text{FeO}_x(\text{OH})_y]$ compositions.