Molecular fractionation of a soil fulvic acid (FA) and competitive sorption of trace metals

(Cu, Zn, Cd, Pb) in hematite-solution systems: effect of the FA-to-mineral ratio.

GUILLAUME FLEURY*, MIRELLA DEL NERO AND REMI BARILLON

Institut Pluridisciplinaire Hubert Curien, UMR 7178 CNRS/UdS, 23 rue du Loess, BP 28, 67037 Strasbourg Cedex 2, France

Corresponding author: Guillaume Fleury E-Mail: guillaume.fleury@iphc.cnrs.fr Phone: 33 3 88 10 61 68

Supporting information: 4 figures

Fig. S1: Percentage of PPH organic carbon sorbed onto hematite ($r = 1.4 \text{ mgC/m}^2$).

Fig. S2: Negative ion ESI mass spectra in the ranges 120-400 m/z and 400-798 m/z of (a) PPH native solution (excerpted from Fleury et al. ²¹), and (b) the supernatant of PPH sorption experiment onto hematite at pH 3.9 and r = 1.4.

Fig. S3: VK diagram showing elemental formulae assigned to ESI(-) FTMS peaks detected at pH 3.9 on the ranges 120-400 m/z (a) and 400-798m/z (b) for the PPH native solution. Excerpted from Fleury et al. ²¹.

Fig. S4: Results of experiments of competitive Cu sorption (with Pb, Zn and Cd as possible competitors) onto 0.375g/L hematite in the absence of PPH, and of competitive and single Cu sorption for an initial PPH-to-mineral ratio of 0.1 mgC/m².

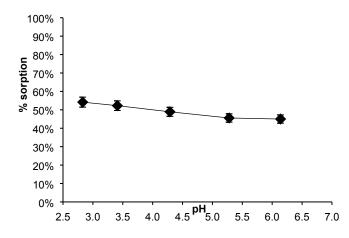


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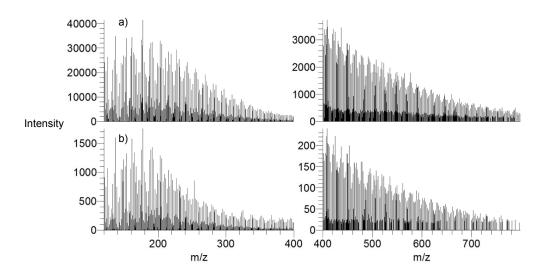


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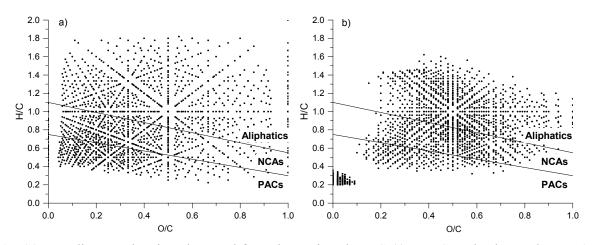


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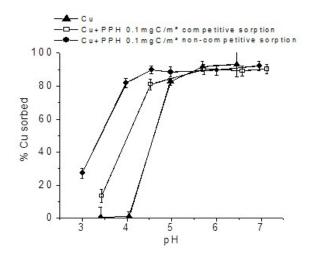


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