

Figure 2. FTIR spectra of the control ferrihydrite (Fh), the original forest floor extract (FFE), the adsorption complexes (AFhD, AFhB, AFhA), and the coprecipitates (CFhD, CFhB, CFhA). Second derivatives are given for spectra of the forest floor extract and the two ferrihydrite-organic matter complexes with the highest C concentration.

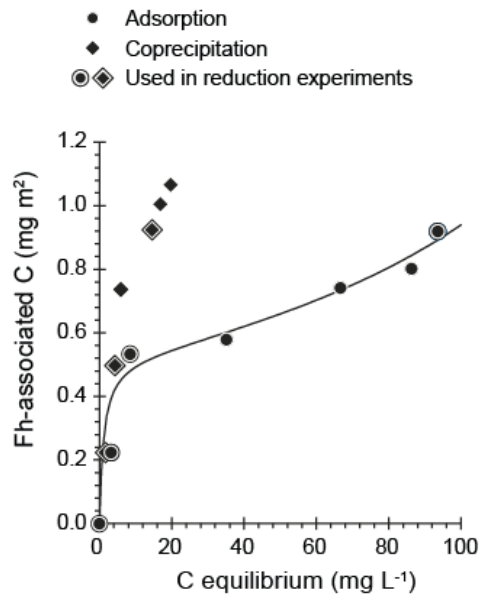


Figure 3. Ferrihydrate-associated C (normalized to the specific surface area of 197 m<sup>2</sup> g<sup>-1</sup> of the control ferrihydrate) vs. C in the equilibrium solution. The line represents a BET-isotherm

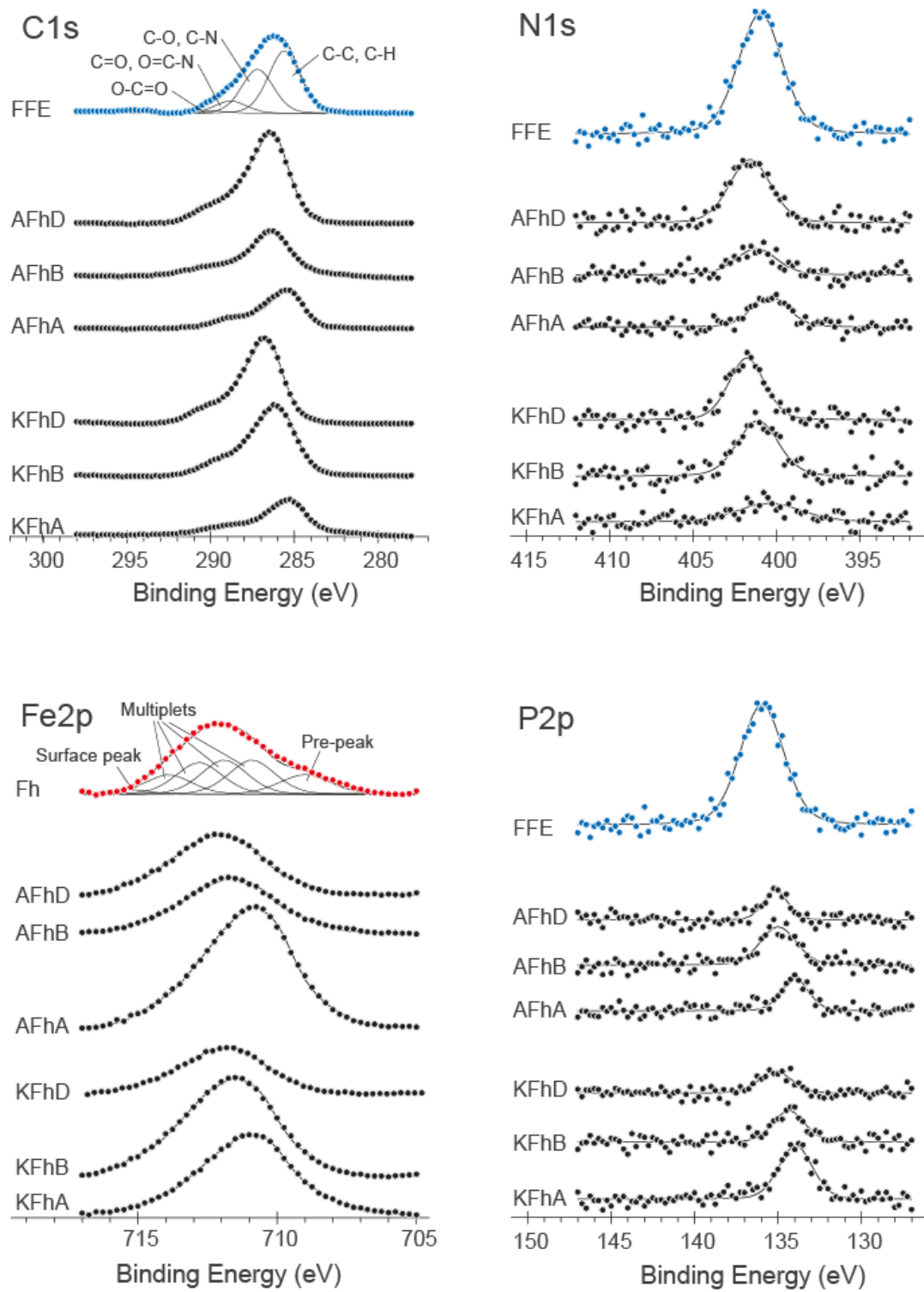


Figure 4. Background corrected XPS spectra of the control ferrihydrite Fh (only Fe2p, red), the forest floor extract FFE (only C1s, N1s, P2p, blue) and the incubated coprecipitates (CFhD, CFhB, CFhA) and adsorption complexes (AFhD, AFhB, AFhA).

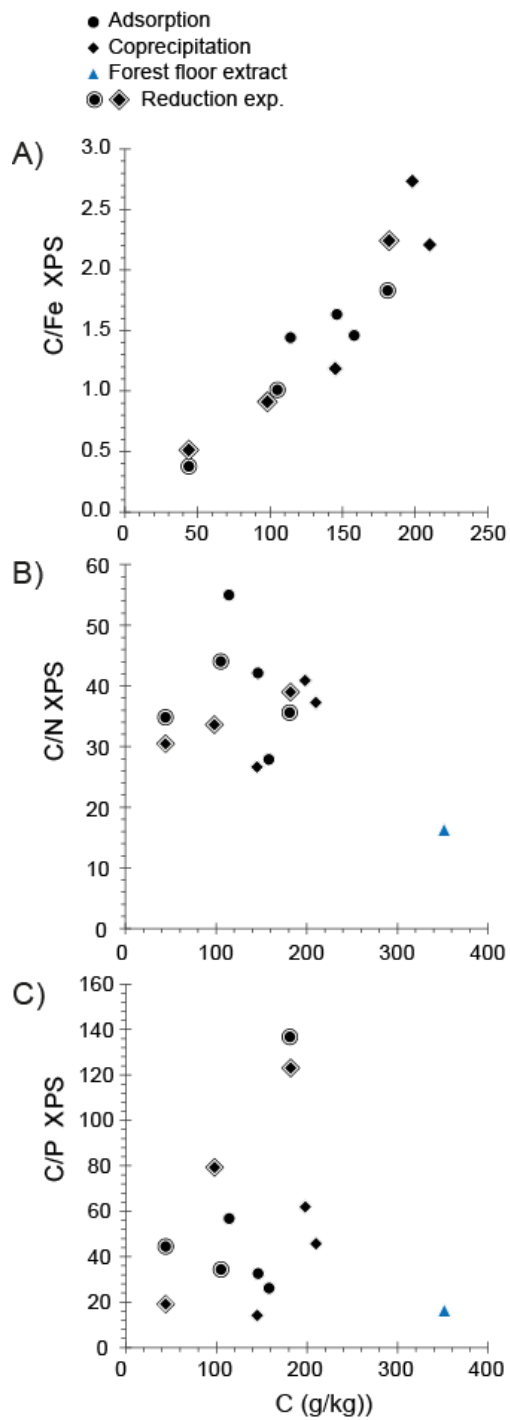


Figure 5. Comparison of chemical surface composition expressed in XPS intensity ratios (C/Fe, C/N, and C/P) and bulk C content of Fh-OM associations.