

Electronic Supplementary Information

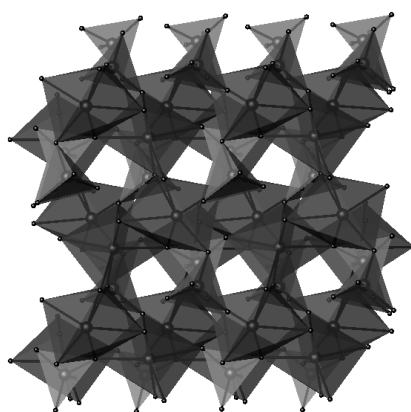


Figure 1-Structure of $\text{Fe}_2\text{O}(\text{HPO}_4)$ looking down the *a*-axis, where FeO_6 are shown as dark grey octahedra and HPO_4 as pale grey tetrahedra.

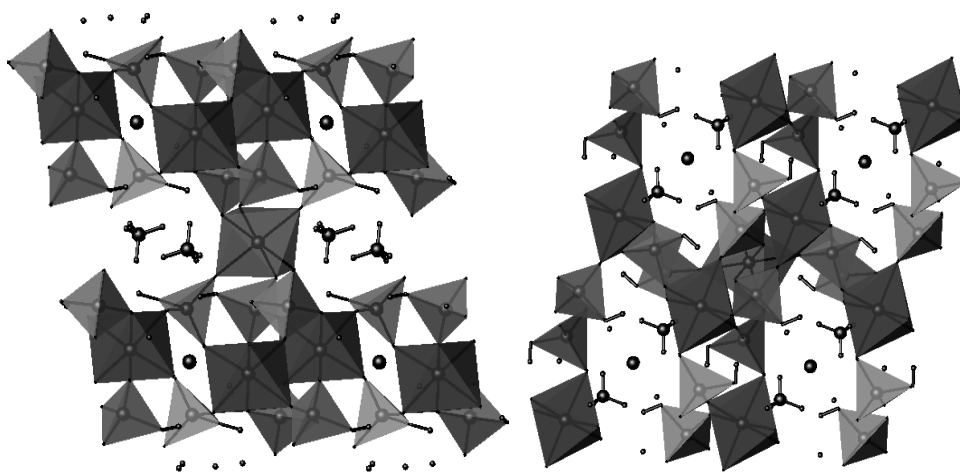


Figure 2-Structure of $\text{Fe}_3(\text{HPO}_4)_6(\text{NH}_4)_2(\text{NH}_4)$: a) looking down the *b*-axis; b) looking down the *c*-axis, where FeO_6 are shown as dark grey octahedra, HPO_4 as pale grey tetrahedra and the NH_4^+ cations in black.

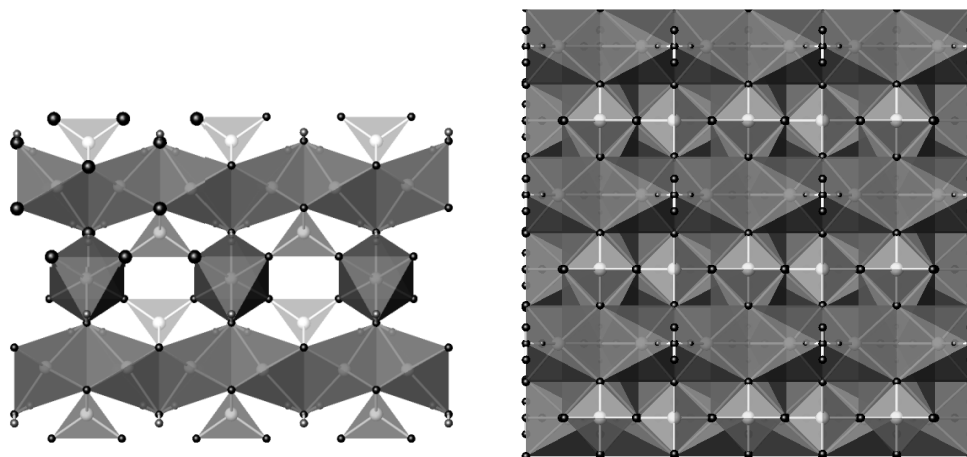


Figure 3-Structure of $\text{Fe}_{1.38}(\text{PO}_4)\text{OH}_{0.86}$: a) looking down the b -axis; b) looking down the c -axis, where FeO_6 are shown as dark grey octahedra and HPO_4 as pale grey tetrahedra.

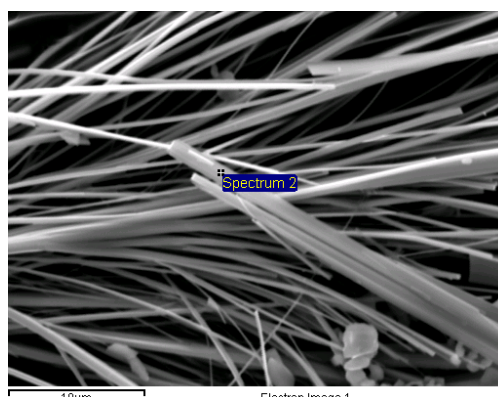


Figure 4-EDS image of $\text{Fe}_2\text{O}(\text{HPO}_4)$.

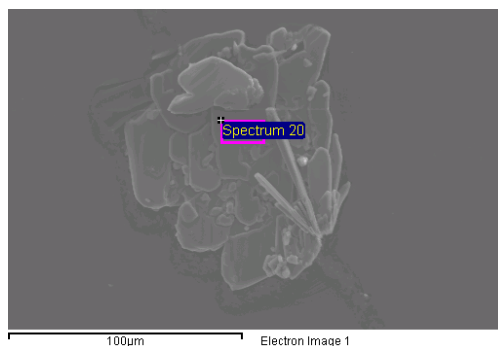


Figure 5-EDS image of $\text{Fe}_3(\text{HPO}_4)_6(\text{NH}_4)_2(\text{NH}_4)$.