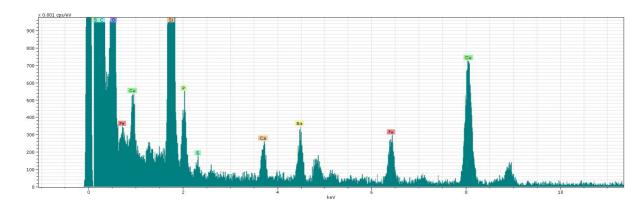
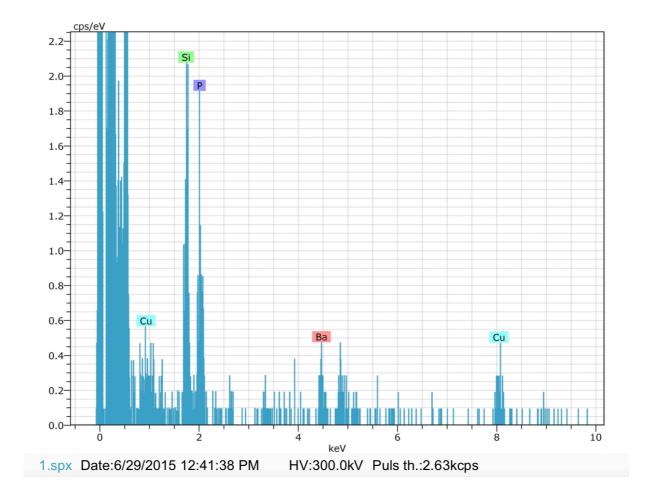


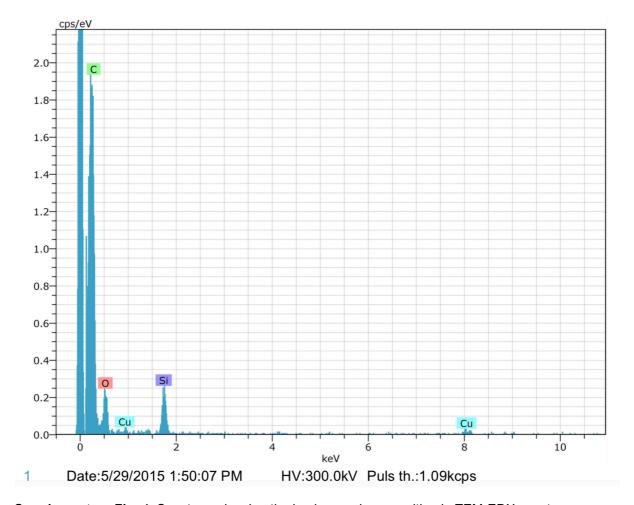
**Supplementary Fig. 1.** SEM-EDX spectrum showing the composition of the glass coverslips used for the experiments.



Supplementary Fig. 2. TEM-EDX spectrum showing the composition of the Ba precipitates (Fig. 4b).



**Supplementary Fig. 3.** TEM-EDX spectrum showing the composition of a likely polyphosphate grain in bacterial cells (Fig. 3c).



**Supplementary Fig. 4**. Spectrum showing the background composition in TEM-EDX spectra.