

Figure S1. TEM images showing the homogenous size distribution of CheSeNPs (A) and OrgSeNPs (B) in the absence of bacteria.

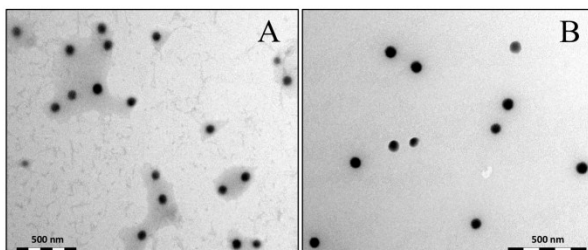


Figure S2. FEG-ESEM images showing the presence of SeNPs (white arrows) (A) and the organic material (mainly proteins coating the NPs and flagella-like proteins) (orange arrows) produced by *S. bentonitica* (B).

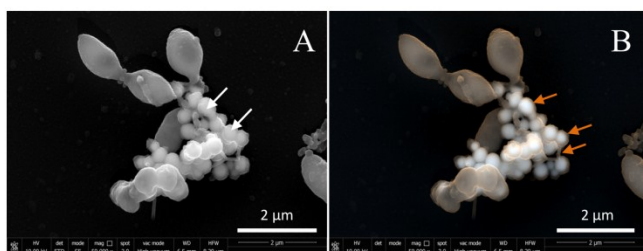


Figure S3. HAADF-STEM image showing SeNPs in the proximity of lysed cells of *S. bentonitica* (arrows) (A) and FEG-ESEM image clearly showing trans-membrane lysis tunnels in the cells (arrows) (B). Scale bars: 1 μm (A and B).

