

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Raw cryo-ET volume corresponding to Fig. 1B and 1C. Unannotated tomographic volume of an *S. oneidensis* MR-1 biofilm region, shown without colored overlays to provide an unobstructed view of the underlying ultrastructure.

File Name: Supplementary Movie 2

Description: Raw cryo-ET volume corresponding to Fig. 1D and 1E. Unannotated tomographic volume of a second representative *S. oneidensis* MR-1 biofilm region, displayed without rendering or colored traces.

File Name: Supplementary Movie 3

Description: 3D visualization of extracellular multimeric particles in situ. Tomographic views highlighting aggregates in *S. oneidensis* MR-1 biofilms, including trimer-, tetramer-, and octamer-like particles. The movie shows representative particles in the tomographic context and the corresponding 3D reconstructions. Related panels are shown in Fig. 5H.

File Name: Supplementary Data 1

Description: Comparative proteomics of extracellular material from aerobic and anaerobic *S. oneidensis* MR-1 biofilms. LC-MS/MS quantification was performed on extracellular fractions prepared from anaerobic cultures, with aerobically grown cultures processed in parallel. The table lists proteins detected in both conditions and shows their integrated MS signal intensities and the corresponding enrichment ratio (Anaerobic/Aerobic).