

Supplementary Information:

In Situ Electrochemical Characterization of a Microbial Fuel Cell

Biocathode Running on Wastewater

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1. Polarization curve

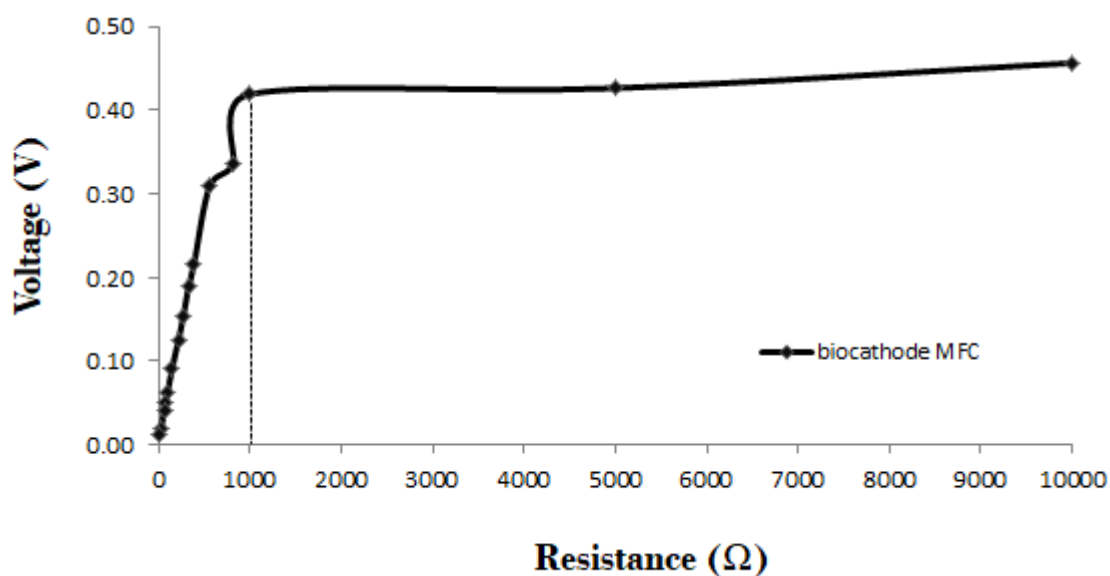


Figure S1. Variation of the MFC (running with a biocathode) output voltage versus the applied external resistance (between 15 to 15000 Ω); the remaining experimental conditions are described in the manuscript main text.

2. Abiotic MFC operational parameters

Table S1. Abiotic cathode MFC operating parameters

Operation Parameters	Abiotic cathode MFC
Batch mode operation time (days)	165
OCV (mV)	435
Power density (mW/m ²)	51
COD removal efficiency (%)	90
Coulombic efficiency (%)	31
Current density (mA /m ²)	122

3. Cyclic voltammograms of the ex-situ experiments (full scale)

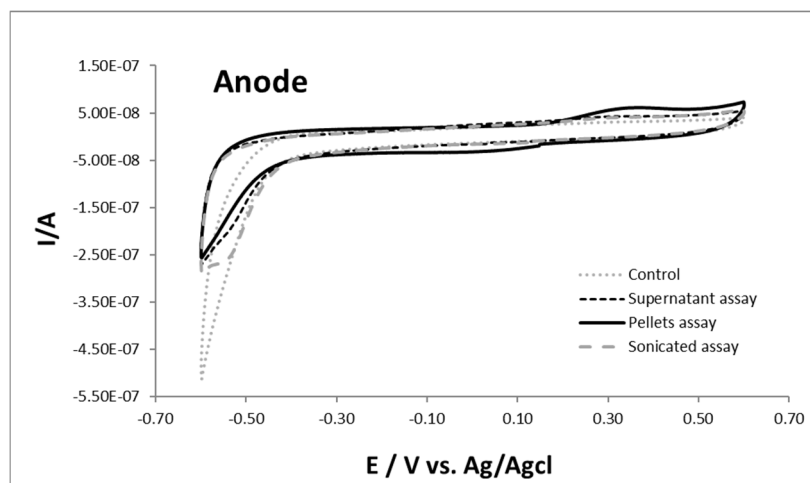


Figure S2. *Ex-situ* cyclic voltammograms attained with anodic chamber wastewater sample with bacteria cells in suspension (on gold electrode); full potential window; scan rate $20 \times 10^{-3} \text{ Vs}^{-1}$.

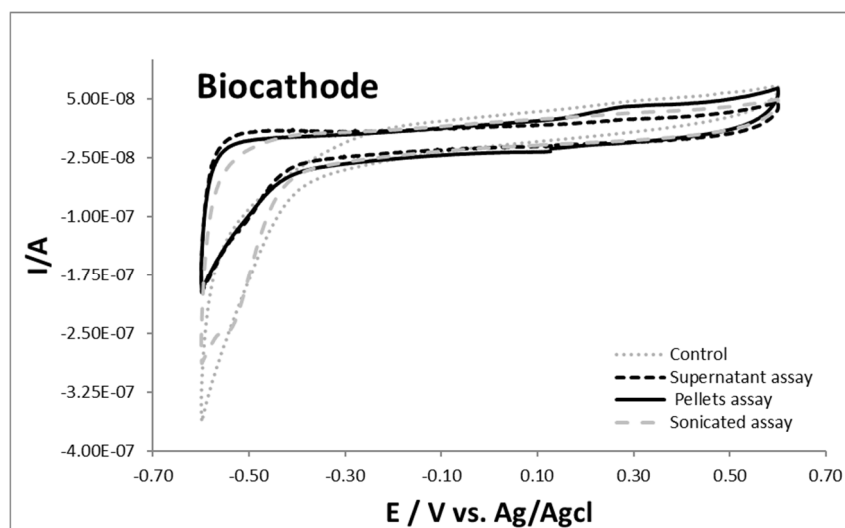


Figure S3. *Ex-situ* cyclic voltammograms attained in the biocathode chamber wastewater sample with bacteria cells in suspension (on gold electrode); full potential window; scan rate $20 \times 10^{-3} \text{ Vs}^{-1}$.