

Review of: "On-Line Monitoring of Minor Oil Spills in Seawater Using Sediment Microbial Fuel Cells: A Preliminary Study"

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Potential competing interests: No potential competing interests to declare.

The manuscript is not ready for publication due to the absence of several important model experiments and some errors.

1 The model system of MFC without any sedimentation microorganisms should be checked under the same conditions. I mean that seawater should be placed on the pure electrodes without any sediment samples additions.

2 The wrong axis caption on Fig. 2: Voltage instead of Power density.

3 The power of the FC is equal to the square of voltage at zero current (U_0) multiplied by R_{ext} (external resistance) and divided by the square of the sum of the apparent internal resistance (R_{app}) and R_{ext} .

$$P = \frac{U_0^2 R_{ext}}{(R_{app} + R_{ext})^2}$$

What was the internal resistance? Was it equal or different for various s-MFCs?

4 Authors wrote: "The microbes in the sediment are exoelectrogenic, meaning that they transfer electrons externally." How did they prove this fact? Some conclusions in the manuscript look speculative.