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| **Title:** | Analysis of Measured Current Densities and Power Densities Obtained From a Microbial Fuel Cell Using Saltbridge as Membrane | | |
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| **Abstract:** |  |
| This research paper analyzes the performance of Microbial Fuel Cell (MFC) for different sludges (drain sludge, tannery sludge and Turag sludge). Saltbridge was used here as proton exchange membrane whereas starch of boiled rice was utilized as a source of carbohydrates for the growth of the microorganism. Water was placed in the cathode chamber as the electron acceptor. A total number of three experiments were carried out throughout the research and all of them were inspected for seven days under aerobic condition. A fixed amount of sludge (1 L), substrate (1 L) and water (2 L) were used. Analysis of the MFCs constructed during this research work is based on the measured current density and power density from each experiment across different loads. In this study 359.6 mV was measured as the highest voltage across while 13.07 mA/m 2 and 4.7 mW/m 2 were recorded as maximum current density and power density respectively for Turag sludge. | |