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| **Title:** | Comparison of Current Density and Power Density Obtained From a Double Chamber Microbial Fuel Cell For Different Sludges | | |
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| **Abstract:** |  |
| This research paper analyzes the performance of Microbial Fuel Cell (MFC) under aerobic condition for drain sludge, tannery sludge and Turag sludge. Starch of boiled rice was applied as source of carbohydrates for the growth of bacteria. Saltbridge was used as the membrane. Water was placed in cathode chamber as electron acceptor. A total number of three experiments were carried out throughout the research and all of them were observed for seven days. A fixed amount of sludge (0.5L), substrate (0.5L) and water (1L) was used. Analysis of the MFCs constructed during this research work is based on the obtained current density and power density from each experiment across different loads. In this study 220.77 mV was measured as highest voltage across while 12.23 mA/m 2 and 2.7 mW/m 2 were recorded as maximum current density and power density respectively for Turag sludge. | |