

ABSTRACT

The study of microbial cell cell (STM) systems from tofu and mud has the goal to utilize the tofu liquid waste as a source of electrical energy. The STM system used is a 2 chamber compartment of anode and cathode, this study uses volume variation from the mixture of liquid waste of tofu, mud and water in the anode compartment and aquades on the cathode compartment with the electrodes used are copper (Cu) and zinc (Zn) with a surface area of 30cm² and a salt bridge made of stove axis then immersed using a NaCl. Data retrieval is done for 30 days, the voltage data using by datalogger while for current data using multimeter. The first compartment with a volume variation of liquid waste substrate of 250 ml and 400 ml of mud obtained the highest electricity production compared to other compartments of about 612.1 mJ and the lowest was about 95.6 mJ. As for the value of voltage and current tertinggipun generated by the first compartment that is 0.78 V and 0.29 mA and produced on day 17

Keywords: MFC, tofu liquid waste, variation substrate volume