

ABSTRACT

ANALYSIS OF THE ELECTRICAL CHARACTERISTICS OF SEAWATER AS A SOURCE OF RENEWABLE ELECTRICAL ENERGY

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The electrical characteristics of sea water can be determined by using two electrodes, it used a C-Zn, Cu-Zn and Cu-Al. Measurement of the electrical characteristics of sea water carried out on a no-load and load voltage, by used LED circuit with the barriers of 1000 Ω . The volume of sea water used varies of 30 ml, 40 ml, 50 ml, 100 ml and 200 ml. Voltage with no-load, the volume of sea water did not significantly affect but in the load measurements, the electrical characteristics of sea water is proportional to the volume. The no-load measurement electrode pair Cu-Zn produces the greatest voltage which is 17.46 volt with a volume of 100 ml and load measurement using electrode pairs that produce the greatest electrical characteristics is Cu-Zn which is voltage 4.34 volt, current 0.620 mA, and power 2.693 mW with volume 200 ml in the minute 10th.

Keyword: Electrical characteristics, electrodes, sea water.