

Mechanical Engineering Thesis Defense

Effect of electrolyte concentration on the electric output of thermogalvanic cells with Schwartz-P plastic structures

School for Engineering of Matter, Transport and Energy

Xiaochuan Han

Advisor: Patrick Phelan

Abstract

This thesis focuses on a kind of thermogalvanic cell prototype and keep the same working temperature difference (10°C) but using different electrolyte concentrations (0.05, 0.10, 0.15, 0.20, and 0.25 mol/L) to obtain the electric output including open-circuit voltage, short-circuit current, and maximum output power, and the internal resistance.

The results indicate that the open-circuit voltage and maximum output power density increase with the rise of electrolyte concentrations; The short-circuit current density decreases with the rise of electrolyte concentrations.



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Zoom Link: <https://asu.zoom.us/j/86902836545>