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## **GENERATING ELECTRICITY FROM WASTE HEAT USING LOW COST THERMO-ELECTRIC POWER GENERATOR FOR USE IN DEVELOPING COUNTRIES**

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### **ABSTRACT**

Thermo electricity is the mechanism of electricity generation using heat. We have proposed a low cost solid state thermo-electric generator unit using readily available materials. This low cost solid-state thermo-electric generator unit consists of thirty Al-Fe junctions. This newly built module made as a prototype of a thermo-electric generator and we have obtained a maximum voltage of 10mV and current of 150 $\mu$ A by maintaining a temperature difference of 55°C.

**Keywords:** Thermo-electricity, semiconductors