

Fabrication of Thermoelectric Refrigerator

Kritika Wadhe¹, Kaustubh Sherey², Saurabh D. Patil³, Sneha Tembhurne⁴,
Sapna Pardeshi⁵, Yugal Bhaisare⁶

Students, Department of Mechanical Engineering^{1,2,3,4,5}
Faculty, Department of Mechanical Engineering⁶
NIT Polytechnic, Nagpur, Maharashtra, India

Abstract: Refrigeration is artificial (home-made) cooling. Energy in the form of heat is removed from a low- temperature reservoir and transferred to a high temperature reservoir. Contemporary refrigerators that utilize compressor-based cooling fail to retain their efficiency when their capacity is reduce in this context our project aim at providing an alternate, more efficient, means of cooling by making use of the thermoelectric effect opposed. The current day refrigeration devise utilize refrigerant gases like freons to do refrigeration which result in free of CFCs in to atmosphere which thereby consequence in depletion of ozone layer. But by utilize thermo electric refrigeration this collision can be reduced. This project distributes with design, fabrication and investigation of thermo electric refrigerator. This refrigerator contains thermoelectric module, switched mode power supply equipment, heat sinks, exhaust fans and temperature controlling switches. This project also includes the inspection of this refrigerator. Thermoelectric has a lot of range in refrigeration, electric generators etc.

Keywords: Thermoelectric Refrigerator, Peltier Element, Heat Sink, Thermoelectric Refrigerator and Water Heater, Thermal Paste

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