

# **ICY BAG WITH SOLAR**

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## **ABSTRACT**

Refrigerator is a home necessary that used to conserve the quality of food products. The quality of food products were depends on temperature and air distribution inside the compartment to keep the freshness of the food. Presently, most of the refrigerators that available in marketplace are powered by electricity. This will become problem to people to use refrigerator for outdoor activities such as camping and medical purpose for instance to deliver medical to village. Because of this limitation, this project introduces a portable refrigerator in convenient design which is bag pack and powered by solar system using Bluetooth application. The system of refrigerator is utilizing a thermoelectric device that use temperature gradient and create an electric voltage, which can be used to heat or cool an object. The solar power generated from the sun for energy supply so, this project do not need to use electricity for charging the battery. Additionally, with Bluetooth application that make user can control the temperature from a distance.

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 INTRODUCTION**

Recently there are foremost environmental concerned regarding on conservative refrigerator technologies in term of involvement to ozone layer depletion and global warming. Normal refrigerators which contain ozone depleting and global warming material such as chlorofluorocarbons (CFCs), will be the most harmful to our nature [1]. Another substance is hydrochlorofluorocarbons (HCFCs) that also give bad impact to our environment. Both are environmentally long-suffering as global warming chemicals. The use of solar energy refrigerator can minimize the harmful impact refrigerators on the atmosphere.

Refrigerators existing in the market have been designed in assorted sizes and different purposes but it is limited for indoor handling since it large and powered by electricity. In this project, we draw attention to on designing and produce a small solar powered refrigerator in form of bag pack with Bluetooth application. This design can be very convenient and useful solicitation especially in outdoor activities such as picnic and camping. It also can help doctor to deliver the medicine at the village or rural area.