

Department : **Mechanical**

Year : **2017-2018**

Group No: **1**

Guided By

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Project Title

TO DESIGN, DEVELOPMENT AND TESTING OF PARABOLIC TROUGH COLLECTOR WITH AUTOMATIC TRACKING MECHANISM

Abstract:

The purpose of this project is to use a parabolic trough collector with automatic tracking system which can increase the fluid temperature according to movement of the sun by using proper arrangement which have moderate cost and also works based on solar energy or radiation.

There is less amount of fossil fuel left on Earth. The energy that we produces is mainly comes from the fossil fuel of the Earth. On these days the human needs are increases very rapidly and behalf of that we are using the more amount of the fossil fuel which can create huge effect on the future of the Earth and human being. The daily average global radiation is around 5 kWh per sq. m. per day with the sun shine hours ranging between 2300 and 3200 per year. So we have to find out the efficient way to use the renewable resources to produce or convert the Energy.

The incoming solar radiation from the sun is used to the temperature of the fluid(water) which is passing through of the center tube of parabolic trough collector.

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