



# AIUB DSpace Publication Details

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## Abstract:

Generation of electricity by using concentrated solar power and thermo electric module is actually referring to the solar powered electricity with the help of some thermoelectric modules. It is a very simple way to produce green energy. It can actually make it possible to fulfill the demand of energy in low cost and in a very effective way. In this paper we have discussed about a possible way to concentrate heat energy from Sun using a solar dish and use Peltier module with heat sync to generate electricity. The main working principle of our proposed system is based on Seebeck effect. All the data has been experimentally extracted and also simulated using Matlab (v7.6.0) and Multisim (v12.0) simulator. We have used 3DMax to design our system. Later on the prototype was practically designed and tested. It has been found that with the proposed system we can generate an acceptable output voltage which can be used to run different house hold DC appliances. Further investigations to improve the system can result a significant contribution in producing electricity through renewable sources. Currently in Bangladesh we are mostly using PV to generate electricity from Sun, our proposed system can be used an alternative to PV system. We have discussed about the experimental setup along with the findings. The future work on this method and the limitations have been presented too.