

## عنوان مقاله:

Experimental investigation solar heat transfer of parabolic collector with / without vacuum tube on low-temperature heating systems

## محل انتشار:

دومین همایش ملی کاربردهای سیستم های مکترونیکی و رباتیکی (سال: 1397)

تعداد صفحات اصل مقاله: 10

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## خلاصه مقاله:

This study investigates and compares with vacuum tube and without vacuum tube of solar parabolic collector in low – temperature condition. The experiments were conducted in Tabriz, Iran during the month of 20, 21 August 2016. Flow rate in during experiments was about 0.001 kg / s. Based on comparison two models, it has found that instantaneous thermal efficiency of vacuum tube model was about 6% more than without vacuum model. The average efficiency for vacuum tube model and without vacuum tube reached about to 60 % and 55 %, respectively. The highest outlet temperatures occurred at 13:30-14:30 pm, which the maximum solar intensity is obtained at 13-14 pm. According to the obtained results it can be found that thermal efficiency in both model of parabolic collectors depends to mass flow rate and solar intensity

## کلمات کلیدی:

.Solar Energy - Parabolic Collector –Vacuum Tube- Without Vacuum Tube – ThermalEfficiency

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/853730>

