## **Experimental Study of Boost Converter Based PV Energy System**

Authors : T. Abdelkrim, K. Ben Seddik, B. Bezza, K. Benamrane, Aeh. Benkhelifa

**Abstract :** This paper proposes an implementation of boost converter for a resistive load using photovoltaic energy as a source. The model of photovoltaic cell and operating principle of boost converter are presented. A PIC micro controller is used in the close loop control to generate pulses for controlling the converter circuit. To performance evaluation of boost converter, a variation of output voltage of PV panel is done by shading one and two cells.

Keywords : boost converter, microcontroller, photovoltaic power generation, shading cells

Conference Title : ICEESE 2014 : International Conference on Electrical, Electronics and Systems Engineering

Conference Location : Istanbul, Türkiye

Conference Dates : December 05-06, 2014