

**Old Dominion University**  
**College of Engineering and Technology**  
**Department of Electrical and Computer Engineering**

All lectures to be held at 3:00 p.m. on Tuesdays in Kaufman 224. For more information, contact Dr. Dimitrie Popescu at (757) 683-3741 or e-mail [dpopescu@odu.edu](mailto:dpopescu@odu.edu). Refreshments provided after the seminar.

**Tuesday, September 13, 2016 Seminar Topic:**

**Cu(In,Ga)Se<sub>2</sub> THIN FILM SOLAR CELLS:  
FABRICATION AND CHARACTERIZATION**

by

**Shankar Karki, Ph.D. Student,  
Physics Department at Old Dominion University**

**Abstract:**

We report device results on Cu(In,Ga)Se<sub>2</sub> (CIGS) thin film solar cell and strategies employed for the device optimization. Additionally, we present an overview on CIGS solar cell fabrication technique, the significance of alloy composition on the device performance and various optical and electrical characterizations used in an attempt to understand the causes that limit the power conversion efficiency.

**Bio:**

Name: Shankar Karki

Degree: M.S. in Physics (Old Dominion University - 2014)

Currently Ph. D. student in Physics Department at Old Dominion University

Dissertation topic: "High efficiency CIGS solar cell fabrication and characterization."

Advisor: Dr. Sylvain Marsillac