## **BENEMÉRITA UNIVERSIDAD AUTÓNOMA DE PUEBLA**



INSTITUTO DE FÍSICA "Luis Rivera Terrazas"

**SEMINARIO** 



## "Defect physics in the Cu(In,Ga)Se<sub>2</sub> absorbers of thin film solar cells and how it affects the **CIGS cell efficiency**"

## Prof. Malgorzata Igalson Faculty of Physics Warsaw University of Technology.

Cu(in,Ga)Se<sub>2</sub> (CIGS) is a semiconducting compound successfully employed as an absorber in thin film heterojunction solar cells. More than 20% conversion efficiency on laboratory cells has been achieved and commercialization of CIGS technology is in progress. CIGS optoelectronic properties are significantly influenced by numerous intrinsic defects unavoidably present in such multicomponent material. Specific properties of some of them give rise to a range of intriguing phenomena interesting both from fundamental and application-oriented point of view. The talk will focus on intrinsic defects in CIGS and methods of their investigation employed In Warsaw University of Technology. Special attention will be devoted to defect-related metastable effects observed in the electrical characteristics of CIGS compounds and cells. The impact of metastabilities on the cells efficiency will be discussed.

> Auditorio-IFUAP Viernes 05 de Octubre de 2012 13:00 Hrs.