



# BUENAVENTURA AEROSPACE SOCIETY CHAPTER

## UCSB's Nanofabrication Lab Capabilities and a Few Research Highlights

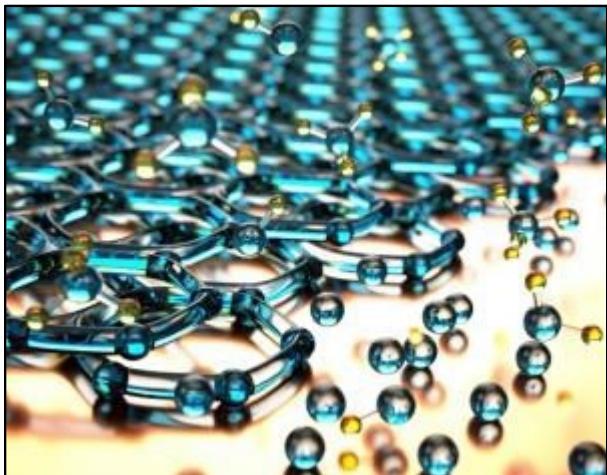
Mark Rodwell, Ph.D. and Brian Thibeault, UCSB Nanofabrication Facility

**Thu Sep 17, 2015 at 6:30 pm**

Location of event announced at the registration site

Meetings are free and open to the public

Register at this site



Mark Rodwell and Brian Thibeault will present some of the new capabilities of the UCSB nanofabrication lab, a shared facility with comprehensive tools for fabrication of nanometer-scale devices. The facility is open for research use, with an hourly charge, not only to UCSB students and staff, but also to qualified researchers from other universities, research institutions, and industry. The facility is used by researchers in photonics, electronics, thermoelectrics, lighting, solar devices and materials. There are comprehensive tools for fabrication of III-As/P/Sb electronics, (e.g. nm & THz transistors), III-N electronics, (e.g. GaN microwave

power and kV switching transistors), III-As-P photonics, (e.g. InGaAsP lasers, modulators and photonic integrated circuits), Si and Si/InP hybrid photonics, and III-N optoelectronics from visible to UV, (e.g. solid-state lighting and blue lasers). There is extensive physics research, including spintronics, THz physics, and Quantum computing. The speakers will describe the facility and its tools. They will also highlight key research accomplishments by the lab users.

**Mark Rodwell**, IEEE Fellow, holds the Doluca Family Endowed Chair in Electrical and Computer Engineering. He is a Professor in the Electrical and Computer Engineering Department at UCSB. He also directs the UCSB Nanofabrication laboratory and its participation in the NSF National Nanofabrication Infrastructure Network (NNIN). **Brian Thibeault** is the nanofabrication project scientist who manages the process group in the facility and is the primary outside user contact for new projects, performs outside user fabrication work, provides guidance of equipment purchases, directs characterization of new processes, facilitates troubleshooting of process and equipment related to processing problems, and acts as a general cleanroom process consultant for all laboratory users.