



MRI Opening Seminar and Ceremony

Monday May 7th, 2012

Presentations: 1:10-1:40pm in SCI 110

Lab opening: 1:40-2pm in SCI 213E



Temperature-controlled Probe Station and Semiconductor Parameter Analyzer to Enhance Research and Research Training at SFSU

Abstract:

SF State College of Science & Engineering has recently been awarded a Major Research Instrumentation (MRI) grant by the National Science Foundation for the acquisition of a state-of-the-art probe station with thermal control and a semiconductor parameter analyzer. The instrument is used for probing and characterizing integrated circuits and devices, circuit boards and modules, nanostructures, and electro-optic devices, thereby opening up new avenues for research at our institution and creating research opportunities for our students. The Summit™ probe station (Cascade Microtech Inc.) offers a platform for probing and characterizing devices ranging from single chips to 200mm wafers and is equipped with an Agilent B1500A semiconductor parameter analyzer. The instrument provides the involved faculty members and students new research opportunities and is selected on the basis of its precision, versatility, and robustness for working with the most aggressively-scaled devices and advanced semiconductor processes, as well as for its suitability to accommodate the needs of a multi-user facility.

The instrument is currently installed and fully functional in SCI 213E and available to our research community. The instrument is currently used in primary research areas in engineering and physics: reliable nano-electronic circuits design, developing analog integrated circuits for bioengineering, characterizing nanomaterials, sensor characterization for structural testing, and developing photonic band gap materials.

Speakers: Hamid Mahmoodi, Hao Jiang, Kwok Teh, Cheng Chen, and Weining Man

Speakers' Bio:

Hamid Mahmoodi is an Associate Professor in Electrical and Computer Engineering at the SF State School of Engineering. Hao Jiang is an Assistant Professor in Electrical and Computer Engineering at the SF State School of Engineering. Kwok Teh is an Assistant Professor in Mechanical Engineering at the SF State School of Engineering. Cheng Chen is an Assistant Professor in Civil Engineering at SF State School of Engineering. Weining Man is an Assistant Professor at the SF State Department of Physics and Astronomy.

