

Spring 2010 Facility Grants

Awarded by the OSU Institute for Materials Research (IMR)

Eight new research projects were awarded by the IMR in June 2010, for a total investment of \$16,000. The eight projects support faculty researchers from seven departments within the College of Engineering, the College of Biological, Mathematical and Physical Sciences, and the College of Dentistry.

June 2010 IMR Facility Grant Awards

FIB Characterization of MFM Probes

Lead Investigator: P. Chris Hammel, Physics; Co-Investigators: Gunjan Agarwal, Biomedical Engineering; Michael Page, Physics Undergraduate Student

Development of low work function metal "end-on" contacts to Si nanowires with high-quality Si/SiO₂ interfaces

Lead Investigator: Jonathan Pelz, Physics

Lithium-ion Batteries, LiFePO₄, Aging, High Resolution Characterization

Lead Investigator: Sudarsanam Suresh Babu, Materials Science and Engineering

Raman Microscopy of Poly-Diamond Films and Nanostructures

Lead Investigator: Ezekiel Johnston-Halperin, Physics

XPS and Liquid AFM Facility Support for MIG Chemical Bonding and Conjugation on AlGaN Biosensors

Lead Investigator: Stephen Lee, Biomedical Engineering; Co-Investigator: Leonard Brillson, Electrical and Computer Engineering

Mobile Magnetic Traps for Cell Manipulation and Sorting

Lead Investigator: R. Sooryakumar, Physics; Co-Investigator: Jeff Chalmers, Chemical and Biomolecular Engineering

Steep Sub-Threshold Quantum Tunneling Transistors

Lead Investigator: Paul R. Berger, Electrical and Computer Engineering

Characterization of Protein-Block Copolymer Interactions for Biomaterials Development

Lead Investigator: Bharat Bhushan, Mechanical Engineering, Co-Investigators: Scott R. Schrickler, Restorative and Prosthetic Dentistry, Manuel Palacio, Mechanical Engineering Staff