

August 11, 2006

UCSB Announces \$2.75 Million NSF Grant for Research and Education in Materials

UCSB will partner with Jackson State University to develop and apply new materials.

Program will also educate, train and mentor minority students and postdoctoral fellows and develop a materials-focused master's program at JSU.

Partnerships are designed to link minority-serving institutions with those already funded by NSF's Division of Materials Research.

Santa Barbara, Calif. ? August 11, 2006 ? The College of Engineering at UC Santa Barbara has received a \$2.75 million Partnerships for Research and Education in Materials (PREM) award from the National Science Foundation to partner with Jackson State University (JSU), in Jackson, Mississippi. The five-year grant is designed to accomplish two distinct but related goals: to develop and apply new materials research in organic semiconductors and optical nanosystems; and to focus on the education, training and mentoring of minority students and postdoctoral fellows, including developing a master's program in materials at JSU.

This grant is one of five others given to university partnerships designed to enhance minority participation in materials research, representing total funding of \$15.4 million.

The UC Santa Barbara partnership with JSU will focus specifically on 1) organic semiconductors based on small molecules or conjugated polymers which have potential applications ranging from electronic circuitry to flexible displays, and from solar cells to biological and chemical sensors; and 2) optical nanosystems that use laser-induced fluorescence techniques to detect DNA damage, RNA interaction and modification of nucleic acids.

An essential part of the grant includes developing hands-on undergraduate and graduate courses at JSU to prepare minority students to pursue careers in science; establishing an undergraduate Materials Science Interns program, and creating a two-year materials-focused master's program at JSU which bridges to the UCSB doctoral programs in materials.

"This work has the potential to have an extraordinary impact on preparing and developing a pipeline of minority students able to pursue advanced study and research," said Craig Hawker, professor of chemistry and materials, and Director of the Materials Research Lab at UCSB. "It is very exciting to be building on the infrastructure we have already established here at UCSB."

About the Materials Research Lab at UCSB

The Materials Research Laboratory (MRL) at the University of California, Santa Barbara, was established in September 1992 with funding from the National Science Foundation (NSF), and became an NSF Materials Research Science & Engineering Center (MRSEC) in 1996. Its primary role is to support interdisciplinary research, training and education through the study of materials with chemical and structural complexity. These

materials range from self-assembling polymers to atomically layered semiconductor materials and have the common theme that multiple length-scales play an important role in their physical properties.

About the College of Engineering at UCSB

The College of Engineering at UC Santa Barbara is considered a global leader in bioengineering, chemical and computational engineering, materials science, nanotechnology and physics. UCSB boasts five Nobel Laureates (four in engineering and the sciences) and one winner of the prestigious international Millennium Technology Prize. Our students, professors and staff thrive in a uniquely-successful interdisciplinary and entrepreneurial culture. Our professors' research is among the most cited by their peers, evidence of the significance and relevance of their work.

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