2012 Summer Research Fellowships

NSF Research Experiences for Undergraduates

“Novel Advanced Materials and Processing with Applications in Engineering”

The Departments of Bioengineering, Chemical Engineering, Electrical Engineering, and Mechanical & Industrial Engineering at the University of Illinois at Chicago (UIC) are pleased to announce the availability of ten summer fellowships sponsored by the National Science Foundation (NSF) Research Experiences for Undergraduates (REU) Program.

PROGRAM OVERVIEW

- For approximately 10 weeks during the summer fellows take residence at UIC, and conduct research under the supervision of faculty and staff from BioEngineering, Chemical Engineering, Electrical Engineering, and Mechanical & Industrial Engineering.
- Fellows take part in a variety of organized scientific and social events, including seminars, tutorials, workshops, and visits to local industries and attractions.
- Award includes: $4,100 stipend and up to $400 for travel. Up to $1,300 is available for campus housing; this covers the full campus housing expense.
- Program dates: May 29 – August 3, 2012. (A later start date may be arranged if necessary.)

PROJECTS INCLUDE

- Atomic Layer Deposition of Novel Multifunctional Nanostructures
- Oxygen Modulation via Microfluidic Devices
- Percolation in Engineering
- The structure and Chemistry of Solid Surfaces
- Greener Solvent Selection and Solvent Recycling for CO₂ Capture
- Studying Thermoelectric Oxides using High-Resolution Scanning Transmission Electron Microscopy
- Protein Engineering of Spectrin Isoforms
- Enhanced Spray Cooling in Microelectronics: Nano-scale Textured “Furry Overcoats” are good for Cooling!
- High Pressure Shock Tube Studies of Fuel Combustion Engineering

Projects will utilize state-of-the-art experimental and computational facilities.

SELECTION AND ELIGIBILITY

- Open to students who are not graduating before December 2012. US citizenship or permanent residence is required.
- Selection is based on applicant’s academic standing, a brief statement of interest, and two faculty references.
- Women and minorities are especially encouraged to apply.

** Applications must be postmarked by February 29, 2012 **

Later applications will be considered if we have space remaining in the program

For more information visit [http://www.uic.edu/labs/AMReL/NSF-REU.htm](http://www.uic.edu/labs/AMReL/NSF-REU.htm) or contact us at reunsf@uic.edu

Applications should be mailed to the REU Directors Profs. C.G. Takoudis and G. Jursich, SEO 218, 851 S. Morgan Street, Chicago, IL 60607-7052 or submitted to reunsf@uic.edu.