

## 2013/2014 Energy Research Grants – Cycle 8

**NCESR.** The Nebraska Center for Energy Sciences Research (NCESR), a collaboration between the Nebraska Public Power District (NPPD) and the University of Nebraska-Lincoln (UNL), was established in April 2006 to conduct research on renewable energy sources, energy efficiency and energy conservation; and to expand economic opportunities and improve quality of life for Nebraska and the nation.

**Goal.** The overall goal of the NCESR is to foster research and education in energy sciences by providing funding to support innovative research and collaboration among University of Nebraska-Lincoln faculty and other public- and private-sector organizations and businesses working in energy sciences.

**Request for Proposals.** The NCESR released the Request for Proposals (RFP) for its eighth competitive round Energy Research Grants on April 1, 2013.

**Selections.** The External Advisory Committee (EAC) met on December 4, 2013 and selected the following four energy research projects:

- *Co-synthesis of Bioenergy Proteins to Increase Microbial Biofuel Competitiveness* – Paul Blum, Professor, School of Biological Sciences
- *Conversion of CO<sub>2</sub> and Carbonates to Methane and (bio)Isoprene* – Nicole Buan, Assistant Professor, Department of Biochemistry
- *Numerical Modeling of the Formation of Micro/Nanostructures on Metals Using Femtosecond Laser Surface Processing* – George Gogos, Professor, Department of Mechanical and Materials Engineering
- *Scalable and Facile Nanomanufacturing of Conformal Graphene as Low-Cost Transparent Electrodes for Organic Solar Cells* – Xiao Cheng Zeng, Professor, Department of Chemistry

**Project Period.** Each project is intended to cover the two-year period of January 1, 2014 through December 31, 2015. Funding was provided for the first year. Funding for the second year is provisional and based on project performance.

January 2014