

**NKU, OFFICE OF RESEARCH, GRANTS, AND CONTRACTS**  
**PROPOSALS SUBMITTED**  
**FISCAL YEAR 2009 (JANUARY 2009)**

Department	Principal Investigator	Project Title	Funding Agency	Submission Date	Project Duration	Amount Requested
Biological Sciences	Hazel Barton	Isolation and Enumeration of Oligotrophs from the Spacecraft and Associated Surfaces	Jet Propulsion Laboratory	01/21/2009	2/6/09 - 10/5/09	\$3,500

The objectives of the proposed work are to isolate and enumerate Oligotrophs from the spacecraft and associated surfaces. Within the context of this proposal, Northern Kentucky University (NKU) team will aim to better synergize oligotroph cultivation studies, towards fully understanding the type of species present in spacecraft assembly facilities and their mechanisms of survival and subsistence.

Biological Sciences	Richard Boyce	Ecological Assessment of Newly-Acquired Property at Woodland Mound Park	Hamilton County Park District	01/30/2009	3/1/09 - 11/30/09	\$1,780
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The field survey of the newly acquired Woodland Mounds property will consist of a floristic survey, a rare plant survey, an invasive exotic survey, and the production of a vegetation map.

Biological Sciences	Richard Boyce	Assessing the Effects of Amur Honeysuckle Control on Native Plant Communities at Woodland Mound Park 4 Years after Removal	Hamilton County Park District	01/30/2009	3/1/09 - 11/30/09	\$1,392
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This study will examine the long-term effects of Amur Honeysuckle removal, with special focus on recolonization by honeysuckle and other problem invasive species, as well as on the response of woody plant seedlings, as my previous work showed little woody regeneration (other than honeysuckle) in stands with old honeysuckle canopies. This will aid the Park District in determining the long-term effects of honeysuckle stand removal.

Chemistry	Patrick Hare	Acquisition of a Time-Resolved Fluorescence Instrument for Chemistry Research and Education	National Science Foundation	01/22/2009	8/1/09 - 7/31/10	\$64,230
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Funds are requested for the acquisition of an upgrade to an existing fluorescence instrument to provide picosecond time resolution and multiple excitation wavelengths. The instrument will support research and education in the chemistry department. Research described in the proposal includes photophysical study of endocrine disruptors present in surface waters, ORGANOMETALLIC and BIO. Uses of the instrument in student coursework is also included.

Department	Principal Investigator	Project Title	Funding Agency	Submission Date	Project Duration	Amount Requested
Infrastructure Management Institute	Timothy Ferguson	Proxy Internet Management Project	Kentucky Department of Education	01/07/2009	12/1/08 - 6/30/09	\$6,500

The Infrastructure Management Institute will provide the Office of Education Technology (OET) with a web reporting tool to allow the OET to report on internet usage.

Kentucky Transitional Assistance Program	Susan Mospens	Covering the Basics	St Wahlbergs Monastery	01/29/2009	7/1/09 - 6/30/10	\$5,000
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Covering the Basics provides household and academic supplies for KTAP eligible students each academic term.

Mathematics	Gail Mackin	Collaborative Research: INfluence of Process Zone Structure and Connectivity on Sediment Sources, Transport, and Storage, Mkabela Catchment, South Africa	National Science Foundation	01/15/2009	7/1/09 - 6/30/12	\$32,286
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The primary objective is to apply different, but complementary approaches to more fully quantify spatial and causal linkages between land-use activities and the source(s), transport, and storage of sediment within a highly instrumented, representative catchment (the Mkabela located in South Africa) over short to decadal time scales. Project outcomes with help address the broader issue of Non Point Source pollutant management.

Other	William Moulton	NKU Arboretum Expansion at J. P. Callahan Hall	Campbell County Conservation District	01/21/2009	3/1/09 - 3/31/10	\$2,915
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This funding, targeted for the NKU Callahan Hall location, will expand the native plant collection of the University's Arboretum.

Department	Principal Investigator	Project Title	Funding Agency	Submission Date	Project Duration	Amount Requested
Physics and Geology	Seyed Allameh	Acquisition of an ion beam material removal and deposition system for education and undergraduate research at NKU	National Science Foundation	01/23/2009	8/1/09 - 7/31/12	\$236,830

This proposal requests NSF to fund an ion-beam material removal (etching) and material deposition (thin films and small structures synthesis) system. This system helps develop undergraduate lab experiments for courses such as introduction to Nanotechnology as well English Materials. It also provides an opportunity for our science major students to engage in undergraduate research as well as complete developmental senior design projects.

Physics and Geology	Scott Nutter	CREST: Cosmic Ray Electron Synchrotron Telescope III	National Aeronautics and Space Administration (NASA) The Pennsylvania State University	01/12/2009	12/10/07 - 12/9/10	\$16,057
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This collaboration will participate in the design and fabrication of the CREST veto paddles, continue detector and atmospheric shower simulation efforts.

Physics and Geology	Scott Nutter	CREAM: Cosmic Ray Energetics And Mass III	National Aeronautics and Space Administration (NASA) The Pennsylvania State University	01/12/2009	12/1/07 - 11/30/10	\$16,490
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These funds will allow NKU to participate in the design, fabrication, testing, and integration of plastic scintillator-based detectors.

Political Science & Criminal Justice	Julie Raines	A Study of Foreign Availability of the Chemicals in the United States Supply Chain	National Institute for Hometown Security	01/30/2009	6/1/09 - 5/31/12	\$384,630
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This project seeks to evaluate capability gaps identified by DHS's Office of Infrastructure Protection with respect to chemicals produced in foreign countries that enter the U.S. supply chain. Ultimately, this project will develop a database of chemicals supplied to the U.S. by foreign manufacturers and determine the degree of erosion of the domestic production of critical chemicals to foreign supply as identified by the National Infrastructure Simulation and Analysis Center (NISAC), the American Chemistry Council and the Department of Commerce.

Department	Principal Investigator	Project Title	Funding Agency	Submission Date	Project Duration	Amount Requested
Teacher Education and School Leadership	Sara Runge	Northern Kentucky Writing Project - 2009/2010	U.S. Department of Education	01/06/2009	6/1/09 - 6/30/10	\$46,000

Continued funding for the 2009/2010 Northern Kentucky Writing Project. This Federal National Writing Project funding, combined with funding from Kentucky, will support area teachers to improve their writing skills.

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**Total Number of Proposals: 13**

**Total Funds Requested: \$817,610**