



Experimental Program to
Stimulate Competitive Research

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REQUEST FOR PROPOSALS
Issued: November 21, 2006
Deadline: 12 Noon, January 8, 2007

TO: UND/NDSU Research Community
FROM: Wayne Seames, ND DOE EPSCoR Program Director
RE: DOE EPSCoR SUSTAINABLE ENERGY SEED GRANTS INITIATIVE

An element of the mission of the DOE EPSCoR Infrastructure Improvement Program (IIP) is to assist in developing NDSU/UND research capability related to sustainable energy. The goal is to expand our current portfolio of researchers and projects in the SUNRISE research group. Accordingly, ND EPSCoR invites proposals from the UND and NDSU research communities including faculty, research associates, graduate students, and staff in research positions for seed proposals to initiate a research program in areas of sustainable energy, chemicals, and materials. For purposes of this proposal, these areas are defined as “the long-term utilization of a resource to produce an energy source/fuel, a chemical, or other commercially useful material” and includes abundant fossil fuels such as coal, shale oil, etc., renewable energy sources such as those obtained from plant matter, and other non-petroleum or natural gas-related sources such as solar and geothermal sources. Any topic in this general area will be considered. The following list of possible areas is provided to help you in generating ideas (it is not all inclusive). Other ideas can be found on web pages for each DOE organization:

- Science/technology for the development of chemicals, materials, or fuels from coal gasification/liquefaction technologies
- Determination of kinetic and thermodynamic data of relevance in the development of new sustainable chemicals, materials, or fuels
- Conversion of substances contained in wood bark and branches into useful pure chemicals and chemical materials
- Capture and/or concentration of solar energy into storable, more usable forms as a source of fuels, chemicals, or materials
- Methods to capture and store of hydrogen for safe transport and efficient end utilization
- Advanced materials to support novel energy systems
- Identification/development of efficient biological/agricultural sources of carbon-based fuels (excluding ethanol and crop oils)
- Social, economic, and/or policy implications related to the commercialization of sustainable energy-related technologies such as agri-fuel and agri-chemical facilities in the Upper Midwest

Proposals are due in either of the ND EPSCoR offices by 12:00 noon, Monday, January 8th, 2006. Awards will be announced on or about February 10th, 2007. The effective award dates are flexible with a starting date of May 15th, 2007 encouraged. However any start date up to August 15th, 2007 is acceptable. Project durations should be a maximum of 18 months from start to finish dates. The maximum requested funding level acceptable in these proposals is \$50,000. The number of awards will depend upon the value of the proposals selected. Proposals may be fully or partially funded at the discretion of the selection committee. Proposals will be reviewed by a combination of SUNRISE internal researchers and external peer reviewers. A committee of ND SUNRISE researchers will make recommendations for funding to the ND DOE EPSCoR Director who will make the final decision in consultation with the ND EPSCoR Co-Project Directors.

Primary evaluation criteria:

1. Scientific and technical merits of the proposed research.
2. Novelty of the specific research topic area compared to current areas of SUNRISE research expertise. The intent of this seed grant program is to develop new areas of capability for SUNRISE, not to make incremental increases in current capability.
3. Potential for submitting competitive collaborative research proposals to DOE. The proposal must identify at least one current SUNRISE researcher who would be included in the follow-up proposal (memo or email of support required) to DOE and a statement affirming that full receipt of these funds is contingent upon submittal of a proposal to DOE no later than six months after completion of the seed grant project.
4. Reasonableness of budget and schedule for the work proposed.

Check List Requirements:

1. ***Deliver the following directly to the UND (Twamley Hall 415) or NDSU (Research 1 - Suite 142) ND EPSCoR office:***
 - *Proposal Hard Copies:* Original + 7 (all copies stapled).
 - UND/ NDSU Proposal Transmittal Forms are not required.
 - *Proposal Electronic Copy:* Send complete proposal, as a single PDF file, to wayneseames@mail.und.nodak.edu
2. **Submit in the Following Order:**
 - ND EPSCoR Cover page – Available from ND EPSCoR website. (See below)
 - Executive Summary – Distinct from the project description. One page limit.
 - Project Description – No more than 10 double-spaced, one-sided pages, margins $\geq 1"$, \geq a 12-point font.
 - References cited (no page limit).
 - CV–DOE EPSCoR style (format available on ND EPSCoR web). Two page limit.
 - Current/pending support in DOE EPSCoR format (format available on web).
 - DOE EPSCoR style budget sheet available from ND EPSCoR web and narrative budget justification. PI salary cannot exceed one (1) summer month (fringes must be listed on the budget). Travel expenses cannot exceed \$2,250 except as noted below for collaboration with a DOE national laboratory. Indirect costs are not allowed. Equipment purchases are allowed.
 - Collaboration with DOE national laboratories is encouraged and additional travel funds (up to \$2000, letter of support from laboratory required) may be included in the budget for proposals that include scope that is performed at one of the DOE labs (contact Dr. Seames for information on how to initiate contact with one of the DOE laboratories).

ND DOE EPSCoR may refuse to review any proposal that does not comply with the checklist.