

OFFICE OF ENERGY RESEARCH

Notice 96-02

DEPARTMENT OF ENERGY

OFFICE OF ENERGY RESEARCH

Energy Research Financial Assistance Program Notice 96-02; Enhanced Research Capabilities at DOE User Facilities

AGENCY: U.S. Department of Energy (DOE)

ACTION: Notice inviting grant applications

SUMMARY: The Office of Basic Energy Sciences (BES) of the Office of Energy Research (ER), U.S. Department of Energy, hereby announces its interest in receiving grant applications for new capabilities or for upgrading existing research capabilities for innovative fundamental research at DOE-supported synchrotron light sources and neutron sources, and the Combustion Research Facility. Such instrumentation should employ state-of-the-art technology so that the photon and neutron beams are utilized more effectively. Applications for the development of new capabilities, as well as upgrading of existing capabilities are encouraged.

DATES: Potential applicants are strongly encouraged to submit a brief preapplication. All preapplications, referencing Program Notice 96-02, should be received by DOE by 4:30 P.M. E.S.T., December 29, 1995. A response discussing the potential program relevance of a formal application generally will be communicated to the applicant within 30 days of receipt. The deadline for receipt of formal applications is 4:30 P.M., E.S.T., February 8, 1996, in order to be accepted for merit review and to permit timely consideration for award in fiscal year 1996.

ADDRESSES: All preapplications, referencing Program Notice 96-02, should be sent to Dr. William T. Oosterhuis, Office of Basic Energy Sciences, Division of Materials Sciences, ER-13, U.S. Department of Energy, 19901 Germantown Road, Germantown, Maryland 20874-1290.

After receiving notification from DOE concerning successful preapplications, applicants may prepare formal applications and send them to: U.S. Department of Energy, Office of Energy Research, Grants and Contracts Division, ER-64, 19901 Germantown Road, Germantown, Maryland 20874-1290, Attn: Program Notice 96-02. The above address for formal applications also must be used when submitting formal applications by U.S. Postal Service Express Mail, any commercial mail delivery service, or when handcarried by the applicant.

FOR FURTHER INFORMATION CONTACT: Dr. William T. Oosterhuis, Office of Basic Energy Sciences, Division of Materials Sciences, ER-13, U.S. Department of Energy, 19901 Germantown Road, Germantown, Maryland 20874-1290. Telephone: (301) 903-3426.

SUPPLEMENTARY INFORMATION: As part of the President's Science Facilities Utilization Enhancement to make more efficient use of the National User Facilities listed below, the instrumentation (such as optics, detectors, and data collection electronics) needed to increase the experimental throughput at these powerful sources has to be at the state-of-the-art. At some user facilities, there is a distinct need to upgrade the instrumentation to increase the resolution, to detect more photons or neutrons per unit time, and increase the quality of the data so that more and better experiments can be carried out. At other user facilities, there is a need to put more beamlines on the experimental floor to make more experiments possible while the facility is operating. The National User Facilities supported by the Office of Basic Energy Sciences are the National Synchrotron Light Source (NSLS), High Flux Beam Reactor (HFBR), Combustion Research Facility (CRF), High Flux Isotope Reactor (HFIR), Intense Pulsed Neutron Source (IPNS), Stanford Synchrotron Radiation Laboratory (SSRL), Advanced Light Source (ALS), Advanced Photon Source (APS), and Los Alamos Neutron Scattering Center (LANSCE). These facilities have the capabilities of extreme flux, or brightness, to make certain experiments possible which would otherwise be impossible. The interest is in exploiting these capabilities to the maximum extent possible.

The Department's intention for this program is to support fundamental research which will include the upgrade and/or development of new instrumentation to optimize the use of these National User Facilities operated by the Department. The ability to conduct innovative fundamental research should be emphasized in each application. Applicants are encouraged to collaborate with industry and to incorporate cost sharing and consortia wherever feasible. The extent of the collaboration and cost sharing will be factors, along with the principal criterion of the scientific merit of the application, in the selection process by the Department.

Grant applications are encouraged from all disciplines (including solid state physics, materials chemistry, metals and ceramics, chemical sciences, structural biology, geosciences, and environmental sciences) for energy-relevant research which make use of the DOE-supported user facilities. Instrumentation appropriate for consideration would include, but not be limited to, the following: beamline optics and transport guides, monochromators of much greater resolution, more efficient detectors to reduce the background noise, electronics and data processing equipment to enable investigators to carry out new or more difficult experiments and/or more experiments in the same amount of time.

The brief preapplication, in accordance with 10 CFR 600.10(d)(2), should consist of two to three pages of narrative describing the research objectives and methods of accomplishment. The preapplications will be reviewed relative to the scope and research needs of the DOE's fundamental research programs at these facilities. Telephone and FAX numbers are required parts of the preapplication, and electronic mail addresses are desirable.

It is anticipated that approximately \$5,000,000 will be available for grant awards during FY 1996 which will enable innovative fundamental research through major enhancements in

instrumentation or capabilities at these user facilities, contingent upon the availability of appropriated funds. The number of awards and the range of funding will depend on the number of applications received and selected for award. Information about the development, submission, and the selection process, and other policies and procedures may be found in 10 CFR Part 605, and in the Application Guide for the Office of Energy Research Financial Assistance Program. The Application Guide is available from the U.S. Department of Energy, Materials Sciences Division, Office of Energy Research, ER-13, 19901 Germantown Road, Germantown, Maryland 20874-1290. Telephone requests may be made by calling (301) 903-3426. Electronic access to ER's Financial Assistance Guide is possible via the Internet using the following E-mail address: <http://www.er.doe.gov/>

The Catalog of Federal Domestic Assistance Number for this program is 81.049, and the solicitation control number is ERFAP 10 CFR Part 605.

Issued in Washington, DC on November 16, 1995.

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Office of Resource Management
Office of Energy Research

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