

[Office of Energy Research](#)

Notice 97-15

***Partnerships for Academic-Industrial Research (PAIR)
in support of Energy-Relevant Fundamental Research***

**Department of Energy
Office of Energy Research**

Energy Research Financial Assistance Program Notice 97-15; Partnerships for Academic-Industrial Research (PAIR) in support of Energy-Relevant Fundamental Research

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

ACTION: Notice inviting grant applications

SUMMARY: The Office of Basic Energy Sciences (BES), Office of Energy Research (ER), U. S. Department of Energy (DOE) hereby announces its interest in receiving grant applications for performance of basic research to support important, long-term national objectives in energy relevant research. The purpose of this program is to promote research activities involving academic researchers, their students, and industrial researchers.

DATES: Potential applicants are strongly encouraged to submit a brief preapplication. All preapplications, referencing Program Notice 97-15, should be received by DOE by 4:30 P.M., November 5, 1997. 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., January 14, 1998, in order to be accepted for merit review and to permit timely consideration for award in Fiscal Year 1998.

ADDRESSES: All preapplications, referencing Program Notice 97-15, should be sent to Dr. Paul H. Maupin, Division of Chemical Sciences, ER-14, Office of Energy Research, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 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 97-15. The above address must also be used when submitting applications by U.S. Postal Service Express, any commercial mail delivery service, or when hand carried by the applicant.

FOR FURTHER INFORMATION CONTACT: For questions concerning research topics in specific technical areas, contact the following individuals in the appropriate division of interest:

Dr. Paul H. Maupin, Chemical Sciences Division, ER-14, Office of Energy Research, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290, telephone: (301) 903-4355, e-mail: paul.maupin@oer.doe.gov

Dr. Gregory L. Dilworth, Division of Energy Biosciences, ER-17, Office of Energy Research, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290, telephone: (301) 903-2873, email: greg.dilworth@oer.doe.gov

Dr. Robert Price, (Engineering), Engineering and Geosciences Division, ER-15, Office of Energy Research, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290, telephone: (301) 903-3565, email: bob.price@oer.doe.gov

Dr. Wolfgang Wawersik, (Geosciences), Engineering and Geosciences Division, ER-15, Office of Energy Research, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290, telephone: (301) 903-5829, email: wolfgang.wawersik@oer.doe.gov

Dr. Timothy Fitzsimmons, Materials Sciences Division, ER-13, Office of Energy Research, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290, telephone: (301) 903-9830, email: tim.fitzsimmons@oer.doe.gov

Investigators may also wish to obtain information about a related funding opportunity entitled: "Energy and Waste Minimization Research Supportive of Technology Vision 2020: The Chemical Industry". Contact: Office of Industrial Technologies, EE-20, U. S. Department of Energy, 1000 Independence Ave. SW, Washington, DC, 20585, web site: www.oit.doe.gov/IOF/chemicals/

SUPPLEMENTARY INFORMATION: DOE encourages submission of applications to conduct high-quality basic research on fundamental issues important to the efficient, economical, safe, and environmentally responsible production and use of energy that will involve interactions of the academic basic research community with the industrial research community. Because the transition from discovery to development and deployment is not a linear process and because both basic and applied researchers contribute to problem definition, discovery, and understanding, this program seeks to promote, encourage, and facilitate partnerships between researchers in the academic and industrial sectors. In particular, emphasis is placed on stimulating interactions between a principal investigator in an institution of higher learning with a counterpart in industry with significant involvement of students.

Applications received by ER under its normal competitive application mechanisms may also be deemed appropriate for consideration under this announcement and may be funded under this program.

Information Regarding Applications for Assistance: The ER encourages the submission of applications that will foster substantive partnerships between researchers in academia and researchers in appropriate and relevant industries in order to:

1. Strengthen interactions between those engaged in long-term, curiosity driven research and those involved in focused research.
2. Provide increased awareness in both sectors of the problems of focused research and the problems and opportunities afforded by long-term pre-competitive research.
3. Provide opportunities for joint problem definition.
4. Provide opportunities for students and postdoctoral fellows to work in an industrial setting.
5. Address and solve important, outstanding fundamental problems associated with the efficient, economical, safe, and environmentally responsible production and use of energy.

In addition to the usual description of the proposed work, the application must include the following information and meet the following requirements:

1. There must be evidence of a working relationship between the academic and industrial research partners.
2. The fundamental scientific problem must be clearly expressed.
3. The field of inquiry must fall within the scope of the research activities currently supported by BES. (For information on the scope of these activities, including references to publications of workshops and conferences sponsored by BES or its subsidiary divisions, refer to <http://www.er.doe.gov/production/bes/bes.html>.) The appropriate BES division should be specified on the cover page of the application.
4. Individual value to both the academic and the industrial research partners must be stated and explained. There should be clear objectives, not necessarily the same, for each participant.
5. The proposed interactions between the academic and the industrial research partners should be described. The nature of this interaction may take many forms, but it is expected to include reciprocal visits. In addition, the application must include support for graduate and/or post graduate students who will spend at least four weeks a year in the industrial setting. Graduate student activities should fall within the scope of requirements needed to fulfill an advanced degree.
6. Cost sharing is not expected; however, the industrial partner will be expected to pay incremental costs associated with student and faculty visits on site.
7. It should be the intention of the principal investigator to publish the results of the supported research in the peer-reviewed, archival scientific literature.

It is anticipated that approximately \$1,500,000 will be available in FY 1998 for research that encourages and facilitates interactive efforts between the academic and industrial communities. Multiple-year funding of grant awards is expected subject to satisfactory progress in the research

and the availability of funds. For the grant to receive continuation funds at the end of each year, there must be evidence of substantial interactions between the university and the industrial research partners. Awards are expected to range from \$50,000 annually to \$150,000 annually with terms from one to three years. The number of awards and range of funding will depend on the number of applications received and selected for award.

To minimize undue effort on the part of applicants and reviewers, interested parties are invited and encouraged to submit preapplications. The preapplications will be reviewed relative to the scope and research needs of the DOE's Basic Energy Sciences Program. The brief preapplication should consist of two to three pages of narrative describing the research objectives and methods of accomplishment. Telephone and FAX numbers are required parts of the preapplication, and electronic mail addresses are desirable. ER's preapplication guidelines can be found on the ER Grants and Contracts Web Site at: <http://www.er.doe.gov/production/grants/preapp.html>

Applications will be subjected to formal merit review and will be evaluated against the following criteria, which are listed in order of importance as set forth in 10 CFR Part 605:

1. Scientific and/or technical merit of the project.
2. Appropriateness of the proposed method or approach.
3. Competency of applicant's personnel and adequacy of proposed resources.
4. Reasonableness and appropriateness of the proposed budget.

The evaluation will include program policy factors such as the relevance of the proposed research to the terms of the announcement and the agency's programmatic needs. General information about development and submission of applications, eligibility, limitations, evaluations and selection process, and other policies and procedures may be found in the Application Guide for the Office of Energy Research Financial Assistance Program and 10 CFR Part 605. Electronic access to the Application Guide is possible via the Internet using the following Web site address: <http://www.er.doe.gov/production/grants/grants.html>

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

John Rodney Clark
Associate Director
for Resource Management
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