

**Office of Science**  
**Notice 01-27**

*Advanced Detector Research Program*

**Department of Energy**  
**Office of Science**

**Office of Science Financial Assistance Program Notice 01-27: Advanced Detector Research Program**

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

**ACTION:** Notice inviting grant applications

**SUMMARY:** The Division of High Energy Physics of the Office of Science (SC), U.S. Department of Energy (DOE), hereby announces its interest in receiving grant applications for support under its Advanced Detector Research Program. Applications should be from investigators who are currently involved in experimental high energy physics, and should be submitted through a U.S. academic institution. The purpose of this program is to support the development of the new detector technologies needed to perform future high energy physics experiments.

**DATES:** To permit timely consideration for award in fiscal year 2002, formal applications submitted in response to this notice should be received before October 30, 2001.

Applicants are requested to submit a letter of intent by September 25, 2001, which includes the title of the proposal, the name of the principal investigator(s), the requested funding and a one-page abstract. Failure to submit a letter of intent will not negatively prejudice a responsive formal application submitted in a timely manner. Electronic submission of letters of intent is both acceptable and preferred.

**ADDRESSES:** Completed formal applications referencing Program Notice 01-27 should be forwarded to: U.S. Department of Energy, Office of Science, Grants and Contracts Division, SC-64, 19901 Germantown Road, Germantown, Maryland 20874-1290, ATTN: Program Notice 01-27. The above address must also be used when submitting applications by U.S. Postal Service Express Mail, any other commercial mail delivery service, or when hand carried by the applicant. An original and seven copies of the application must be submitted. Due to the anticipated number of reviewers, it would be helpful for each applicant to submit an additional four copies of

the application. In addition, for this notice, project descriptions must be 25 pages or less, including tables and figures, but excluding attachments. The application must also contain an abstract or project summary, letters of intent from all non-funded collaborators, and short curriculum vitae of all senior personnel.

Letters of intent referencing Program Notice 01-27, should be forwarded to: U.S. Department of Energy, Office of Science, Division of High Energy Physics, SC-221, 19901 Germantown Road, Germantown, MD 20874-1290, ATTN: Michael Procario. Letters of intent can also be submitted via E-mail at the following E-mail address: [michael.procario@science.doe.gov](mailto:michael.procario@science.doe.gov)

**FOR FURTHER INFORMATION CONTACT:** Dr. Michael Procario, Division of High Energy Physics, SC-221 (GTN), U.S. Department of Energy, 19901 Germantown Road, Germantown, Maryland 20874-1290. Telephone: (301) 903-2890. E-Mail: [michael.procario@science.doe.gov](mailto:michael.procario@science.doe.gov)

**SUPPLEMENTARY INFORMATION:** Future high energy physics experiments will require higher performance detectors to exploit the higher beam energies and intensities of new or upgraded accelerators. Higher performance detectors are also needed to probe for new physical processes in both accelerator and non-accelerator based experiments. Proposed detector research should be driven by the anticipated needs of experiments to be built within the foreseeable future, as well as upgrades to current experiments. Interesting technologies would include, but not be limited to charged particle track detectors, calorimeters or particle identification detectors that are less sensitive to radiation, have higher resolution, are lower in cost, or can be read out faster than currently available detectors.

It is anticipated that in fiscal year 2002, approximately \$500,000 will be awarded in total, subject to availability of appropriated funds. The number of awards will be determined by the number of excellent applications and the total funds available for this program. Multiple year funding of grant awards is possible, with funding provided on an annual basis subject to availability of funds. Cost sharing is encouraged but not required. It is expected that the final development or fabrication of detectors for specific experiments will not be funded by this program.

Applicants are welcome to collaborate with researchers in other institutions, such as universities, industry, non-profit organizations, federal laboratories and Federally Funded Research and Development Centers (FFRDCs), including DOE National Laboratories, such as Fermi National Accelerator Laboratory. In the case of collaborative applications submitted from different institutions that are directed at a single research activity, each application must have a different scope of work and a qualified principal investigator who is responsible for the research effort being

performed at his or her institution. There must be a single technical description of the proposed work, and separate face pages and budget pages for each institution. The scope of work at each institution must be clearly specified. While collaborations with researchers at FFRDCs are encouraged, no funds will be provided to those organizations under this notice. The procedure for submitting a collaborative application can be accessed via the web at <http://www.science.doe.gov/production/grants/Colab.html>.

This section provides specific details regarding collaborating institutions and states, "The lead organization must submit their own grant application plus the other collaborator's applications to DOE in one package with a cover letter, which describes the role to be played by each organization, the managerial arrangements, and the advantages of the multi-organizational effort."

Applications will be subjected to scientific merit review (peer review) and will be evaluated against the following criteria, which are listed in descending order of importance as set forth in 10 CFR Part 605.10 (d):

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; and
4. Reasonableness and appropriateness of the proposed budget.

In considering item 1, particular attention will be paid to:

- \* the importance of the physics that motivates developing the proposed detector,
- \* whether the proposed research is generic detector research that will benefit more than one experiment,
- \* the magnitude of the potential impact versus the risk of failure.

General information about development and submission of applications, eligibility, limitations, evaluations and selection processes, and other policies and procedures are contained in the Application Guide for the Office of Science Financial Assistance Program and 10 CFR Part 605. Electronic access to the application guide and required forms is available on the World Wide Web at:

<http://www.sc.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 of Science  
for Resource Management

Published in the Federal Register July 3, 2001, Volume 66, Number 128, Pages 35231-35232.