Office of Science
Financial Assistance
Funding Opportunity Announcement
DE-PS02-09ER09-14

THIS IS A RECOVERY ACT ANNOUNCEMENT

RECOVERY ACT (ARRA)
R&D ON ALTERNATIVE ISOTOPE PRODUCTION TECHNIQUES

SUMMARY:

The Office of Nuclear Physics (NP), Office of Science (SC), U.S. Department of Energy (DOE), hereby announces its interest in receiving applications for the research and development on alternative methods to produce and separate stable and radioactive isotopes needed for a wide variety of research and applications. The proposed research and development should provide new and innovative technologies, or improvements to existing technologies, to foster the enhanced production of isotopes that will benefit research, and ultimately applications in medicine, homeland security, and industry.

APPLICATION DUE DATE:

Formal applications submitted in response to this Announcement must be received by May 15, 2009, 8:00 p.m. Eastern time, to permit timely consideration of awards. **You are encouraged to transmit your application well before the deadline. APPLICATIONS RECEIVED AFTER THE DEADLINE WILL NOT BE REVIEWED OR CONSIDERED FOR AWARD.**

ATTENTION - CHANGE IN SUBMISSION REQUIREMENT EFFECTIVE March 12, 2009

The Office of Science is now requiring all financial assistance applications be submitted through the Department of Energy e-Center (IIPS) http://doe-iips.pr.doe.gov/. Applicants will still need to visit the Grants.gov website http://www.grants.gov/ to download the required Application Package (forms), by clicking on "Apply for Grants" and searching for the Funding Opportunity Announcement.

For Instructions on the Use of IIPS visit this web page, IIPS Instructions. http://www.sc.doe.gov/grants/iips-Instructions.html.

Registration Requirements: There are several one-time actions you must complete in order to submit an application through Grants.gov (e.g., obtain a Dun and Bradstreet Data Universal

Numbering System (DUNS) number, register with the Central Contract Registry (CCR), register with the credential provider, and register with Grants.gov). See http://www.grants.gov/GetStarted. Use the Grants.gov Organization Registration Checklist at http://www.grants.gov/assets/OrganizationRegCheck.doc to guide you through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in the CCR registration process. Applicants, who are not registered with CCR and Grants.gov, should allow at least 21 days to complete these requirements. It is suggested that the process be started as soon as possible.

The technical contact/program manager for this program is: John Pantaleo

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SUPPLEMENTARY INFORMATION:

Projects under this FOA will be funded, in whole or in part, with funds appropriated by the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, (Recovery Act or Act). The Recovery Act's purposes are to stimulate the economy and to create and retain jobs. Accordingly, special consideration will be given to projects that promote and enhance the objectives of the Act, especially job creation, preservation and economic recovery, in an expeditious manner.

Be advised that special terms and conditions may apply to projects funded by the Act relating to:

- Reporting, tracking and segregation of incurred costs;
- Reporting on job creation and preservation;
- Publication of information on the Internet;
- Access to records by Inspectors General and the Government Accountability Office;
- Prohibition on use of funds for gambling establishments, aquariums, zoos, golf courses or swimming pools;
- Ensuring that iron, steel and manufactured goods are produced in the United States;
- Ensuring wage rates are comparable to those prevailing on projects of a similar character;
- Protecting whistleblowers and requiring prompt referral of evidence of a false claim to an appropriate inspector general; and
- Certification and Registration.

These special terms and conditions will be based on provisions included in Titles XV and XVI of the Act. The exact terms and conditions will be provided as soon as available.

The Office of Management and Budget (OMB) has issued Initial Implementing Guidance for the Recovery Act. See M-09-10, Initial Implementing Guidance for the American Recovery and Reinvestment Act of 2009. OMB will be issuing additional guidance concerning the Act in the near future. Applicants should consult the DOE website, www.energy.gov, the OMB website

http://www.whitehouse.gov/omb/, and the Recovery website, www.recovery.gov regularly to keep abreast of guidance and information as it evolves.

Recipients of funding appropriated by the Act shall comply with requirements of applicable Federal, State, and local laws, regulations, DOE policy and guidance, and instructions in this FOA, unless relief has been granted by DOE. Recipients shall flow down the requirements of applicable Federal, State and local laws, regulations DOE policy and guidance, and instructions in this FOA to subrecipients at any tier to the extent necessary to ensure the recipient's compliance with the requirements.

Be advised that Recovery Act funds can be used in conjunction with other funding as necessary to complete projects, but tracking and reporting must be separate to meet the reporting requirements of the Recovery Act and related OMB Guidance. Applicants for projects funded by sources other than the Recovery Act should plan to keep separate records for Recovery Act funds and to ensure those records comply with the requirements of the Act. Funding provided through the Recovery Act that is supplemental to an existing grant is one-time funding.

Applicants should begin planning activities for their first tier subawardees, including obtaining a DUNS number (or updating the existing DUNS record), and registering with the Central Contractor Registration (CCR). The extent to which subawardees will be required to register in the CCR will be determined by OMB at a later date.

ADDITIONAL SUPPLEMENTARY INFORMATION:

The Frontiers of Nuclear Science-a Long Range Plan, DOE/NSF Nuclear Science Advisory Committee (December 2007) http://www.sc.doe.gov/np/

Workshop on the Nation's Needs for Isotopes: Present and Future (DOE/SC-0107, August 2008) http://www.sc.doe.gov/np/

Charge letter to the Nuclear Science Advisory Committee concerning the National Isotope Production and Applications Program (August 2008) http://www.sc.doe.gov/np/nsac/nsac.html

Advancing Nuclear Medicine Through Innovation, National Academy of Sciences (2007) http://www.sc.doe.gov/np/.

Program Objective:

The mission of the Office of Nuclear Physics Isotope Development and Production for Research and Applications Program is to develop, produce and distribute stable and radioactive isotope products that are in short supply. Isotopes are high-priority commodities of strategic importance for the Nation and are essential for energy, medical and national security applications, and basic research; a goal of the program is to make critical isotopes more readily available to meet domestic U.S. needs. Community-sponsored studies and workshops have identified a number of stable and radioactive isotopes in short supply that are needed by the research and applied sciences communities. The reliable availability of isotopes for research is crucial for U.S.

scientists to stay engaged at the forefront of scientific advances and discoveries in isotope-using sciences.

The Program is steward of the Isotope Production Facility (IPF) at Los Alamos National Laboratory (LANL), the Brookhaven Linear Isotope Producer (BLIP) facility at BNL, and hot cell facilities for processing isotopes at ORNL, BNL and LANL. The Program also coordinates and supports isotope production at a suite of university, national laboratory, and commercial accelerator and reactor facilities throughout the Nation to promote a reliable supply of domestic isotopes.

Under the American Recovery and Reinvestment Act (ARRA) of 2009, the Office of Science provides support for initiatives for R&D on alternative isotope production techniques, which will be dedicated to the development of and production of stable and radioactive isotopes in short supply. To that end, the Office of Nuclear Physics solicits innovative research and development applications to significantly strengthen our capabilities to produce stable and radioactive isotopes. Research at universities, national laboratories or private companies should focus on the development of advanced, cost-effective and efficient technologies for producing, processing, recycling and distributing isotopes in short supply. The successful research programs should lead to breakthroughs that will facilitate an increased supply of isotopes and complement the existing portfolio of isotopes produced and distributed by the Isotope Development and Production for Research and Applications Program. Of interest also is the training of the next generation of nuclear scientists and engineers in areas related to isotope production. The following areas are among the many potential research and development topics of interest to this announcement:

- Development of alternative methods to produce reactor and accelerator isotopes crucial for research in medicine, materials, physics, chemistry, energy, environment, and national security.
- New and innovative approaches to produce or enhance the supply of alpha-emitting radionuclides that are critical to advance nuclear medicine applications.
- Research and development of new and innovative production methods for stable isotopes, including electromagnetic and non-electromagnetic separation methods.
- Innovative approaches to model and predict behavior and yields of targets undergoing irradiation in order to minimize target failures during routine isotope production.

Additional guidance for research priorities will be provided in the Nuclear Science Advisory Committee Isotopes (NSACI) report expected to be published by April 2009 (http://www.sc.doe.gov/np/nsac/nsac.html).

Applications requesting support for research and development in one or more areas should include a separate task for each area. For each task the application should address the goal of the effort; the method or approach to be taken; a cost-breakdown of the effort; the workforce to carry out the effort; the deliverable result of the work; and the performance, cost, schedule, impact and benefit for producing the isotope. Each task should describe a realistic schedule, which includes a minimum of one milestone per quarter. Facility upgrades required to accomplish the proposed tasks must be identified and detailed costs and schedule shall be provided. Applicants should note that they will be required to report formally on a monthly basis regarding R&D

expenditures and progress towards achieving the milestones and deliverables of the proposed effort. Institutional contributions to the effort should be clearly indicated.

PROGRAM FUNDING

It is anticipated that a total of up to $4,750,000 will be available from ARRA funds over a period of up to four years for multiple awards starting as early as Fiscal Year 2009. The number, duration and size of awards will depend on the number of applications selected for award, and the availability of ARRA funds. DOE is under no obligation to pay for any costs associated with preparation or submission of applications. DOE reserves the right to fund, in whole or in part, any, all, or none of the applications submitted.

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

Posted on the Office of Science Grants and Contracts Web Site
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