

## **Program Announcement LAB 98-08**

### **Environmental Management Science Program: Research Related to High Level Radioactive Waste**

Scientists from the National Laboratories are invited to submit preproposals and field work proposals (FWPs) for funding under the Environmental Management Science Program: Research Related to High Level Radioactive Waste (EMSP). Information on the purpose, scientific focus and background for this program can be found in the EMSP grant solicitation Notice 98-08, which is available at:  
[http://www.er.doe.gov/production/grants/fr98\\_08.html](http://www.er.doe.gov/production/grants/fr98_08.html).

The instructions and format described below should be followed. Reference announcement LAB98-08 on all submissions and inquiries about this program.

A brief preproposal may be submitted. The original and five copies must be received by January 27, 1998, to be considered. The preproposal should identify on the cover sheet the institution, PI name, address, telephone, fax and E-mail address for the principal investigator, title of the project, and the field of scientific research (using the list in the Application Categories section of the grant solicitation Notice 98-08). The preproposal should consist of up to three pages of narrative describing the research objectives and the plan for accomplishing them, and should also include a paragraph describing the research background of the principal investigator and key collaborators if any.

Preproposals will be evaluated relative to the scope and research needs of the DOE's Environmental Management Science Program by qualified DOE program managers from both ER and EM. Preproposals are strongly encouraged but not required prior to submission of a full proposal. Please note that notification of a successful preproposal is not an indication that an award will be made in response to the formal proposal.

#### **GUIDE FOR PREPARATION OF SCIENTIFIC/TECHNICAL PROPOSALS TO BE SUBMITTED BY NATIONAL LABORATORIES**

Proposals from national laboratories submitted to the Office of Energy Research (ER) as a result of this program announcement, will undergo scientific/technical merit review and review for relevance. The following guidelines for content and format are intended to facilitate an understanding of the requirements necessary for ER to conduct a merit review and for EM to conduct a relevance review of a proposal.

Please follow the guidelines on relevance carefully, as deviations could be cause for declination of a proposal without merit review.

### ***1. Evaluation Criteria***

Proposals will be subjected to formal merit review (peer review) and will be evaluated against the following criteria which are listed in descending order of importance:

- Scientific and/or technical merit of the project
- Appropriateness of the proposed method or approach
- Competency of the personnel and adequacy of the proposed resources
- Reasonableness and appropriateness of the proposed budget

The relevance review will include program policy factors such as the relevance of the proposed research to the terms of the announcement and programmatic needs.

### ***2. Summary of Proposal Contents***

- Field Work Proposal Cover Sheet (DOE ONLY)
- Face Page
- Proposal Classification Sheet (a plain sheet of paper with one selection from the list of scientific fields listed below)
- Table of Contents
- Project Abstract (no more than one page)
- Budget and Budget Explanation
- Budgets and Budget Explanation for each collaborative subproject, if any
- Project Narrative (recommended length is no more than 20 pages; multi-investigator collaborative projects may use more pages if necessary up to a total of 40 pages)

Goals

Significance of Project to the EMSP

Background

Research Plan

Preliminary Studies (if applicable)

Research Design and Methodologies

- Literature Cited
- Collaborative Arrangements (if applicable)
- Biographical Sketches (limit 2 pages per senior investigator)
- Description of Facilities and Resources

- Current and Pending Support for each senior investigator

### ***2.1 Number of Copies to Submit***

An original and seven copies of the formal proposal/FWP must be submitted.

### ***3. Detailed Contents of the Proposal***

Proposers are expected to use the following format. Proposals must be written in English, with all budgets in U.S. dollars.

#### ***3.1 Field Work Proposal Cover Sheet*** (DOE ONLY)

The Field Work Proposal (FWP) Cover Sheet is to be prepared and submitted consistent with policies of the investigator's laboratory and the local DOE Operations Office.

Laboratories may submit proposals directly to the ER Program office listed in the appendix of this guide (section 5.2). A copy should also be provided to the appropriate DOE operations office.

#### ***3.2 Face Page***

The face page is to include the following information.

Title of proposed project  
ER Program announcement title  
Name of laboratory  
Name of principal investigator (PI)  
Position title of PI  
Mailing address of PI  
Telephone of PI  
Fax number of PI  
Electronic mail address of PI  
Name of official signing for laboratory\*  
Title of official  
Fax number of official  
Telephone of official  
Electronic mail address of official  
Requested funding for each year; total request  
Use of human subjects in proposed project:

If activities involving human subjects are not planned at any time during the proposed project period, state "No"; otherwise state "Yes", provide the IRB Approval date and Assurance of Compliance Number and include all necessary information with the proposal should human subjects be involved.

Use of vertebrate animals in proposed project:

If activities involving vertebrate animals are not planned at any time during this project, state "No"; otherwise state "Yes" and provide the IACUC Approval date and Animal Welfare Assurance number from NIH and include all necessary information with the proposal.

Signature of PI, date of signature

Signature of official, date of signature\*

\*The signature certifies that personnel and facilities are available as stated in the proposal, if the project is funded.

### ***3.3 Proposal Classification (Scientific Field) Sheet***

In order to properly classify each preproposal and proposal for evaluation and review, the documents must indicate the applicant's preferred scientific research field, (please use only the designation on this list and please select only one field of scientific research) from the following list of Field of Scientific Research:

1. Actinide Chemistry
2. Analytical Chemistry and Instrumentation
3. Interfacial Chemistry
4. Separations Science
5. Computer and Mathematical Sciences
6. Engineering Sciences
7. Materials Science
8. Physics
9. Other

### ***3.4 Table of Contents***

Provide the initial page number for each of the sections of the proposal. Number pages consecutively at the bottom of each page throughout the proposal. Start each major section at the top of a new page. Do not use unnumbered pages and do not use suffices, such as 5a, 5b.

### ***3.5 Abstract***

Provide an abstract of no more than one page.

### ***3.6 Budget and Budget Explanation***

A detailed budget is required for the entire project period, which normally will be three years, and for each fiscal year. It is preferred that DOE's budget page, Form 4620.1 be used for providing budget information\*. Modifications of categories are permissible to comply with institutional practices, for example with regard to overhead costs.

A written justification of each budget item is to follow the budget pages. For personnel this should take the form of a one-sentence statement of the role of the person in the project. Provide a detailed justification of the need for each item of permanent equipment. Explain each of the other direct costs in sufficient detail for reviewers to be able to judge the appropriateness of the amount requested.

Further instructions regarding the budget are given in section 4 of this guide.

\* Form 4620.1 is available at web site:

<http://www.er.doe.gov/production/grants/forms.html>

### ***3.7 Budgets and Budget Explanation for Collaborative Subprojects***

Detailed budgets and budget explanations are required for each collaborative subproject. Additional guidance on budgets for collaborative subprojects is located in the Collaboration and Training section of the grant solicitation Notice 98-08.

### ***3.8 Project Narrative***

The narrative comprises the research plan for the project and should be outlined as follows:

- Goals
- Significance of Project to the EMSP
- Background
- Research Plan
  - Preliminary Studies (if applicable)
  - Research Design and Methodologies

### ***3.9 Literature Cited***

List all references cited in the narrative. Limit citations to current literature relevant to the proposed research. Information about each reference should be sufficient for it to be located by a reviewer of the proposal.

### ***3.10 Collaborative Arrangements (if applicable)***

If any portion of the project is to be done in collaboration with another institution, refer to the Collaboration and Training section of the grant solicitation Notice 98-08 for guidance.

### ***3.11 Biographical Sketches***

This information is required for senior personnel at the laboratory submitting the proposal and at all subcontracting institutions. The biographical sketch is limited to a maximum of two pages for each investigator.

### ***3.12 Description of Facilities and Resources***

Describe briefly the facilities to be used for the conduct of the proposed research. Indicate the performance sites and describe pertinent capabilities, including support facilities (such as machine shops) that will be used during the project. List the most important equipment items already available for the project and their pertinent capabilities. Include this information for each subcontracting institution, if any.

### ***3.13 Current and Pending Support for each Senior Investigator***

Current and Pending support is defined as all financial resources, whether Federal, non-Federal, commercial or institutional, available in direct support of an individual's research endeavors. Information on active and pending other support is required for all senior personnel, including investigators at collaborating institutions to be funded by a subcontract. For each item of other support give the organization or agency, inclusive dates of the project or proposed project, annual funding, and level of effort devoted to the project.

## ***4. Detailed Instructions for the Budget***

(DOE Form 4620.1 "Budget Page" may be used)

### ***4.1 Salaries and Wages***

List the names of the principal investigator and other key personnel and the estimated number of person-months for which DOE funding is requested. Proposers should list the number of postdoctoral associates and other professional positions included in the

proposal and indicate the number of full-time-equivalent (FTE) person-months and rate of pay (hourly, monthly or annually). For graduate and undergraduate students and all other personnel categories such as secretarial, clerical, technical, etc., show the total number of people needed in each job title and total salaries needed. Salaries requested must be consistent with the institution's regular practices. The budget explanation should define concisely the role of each position in the overall project.

#### ***4.2 Equipment***

DOE defines equipment as "an item of tangible personal property that has a useful life of more than two years and an acquisition cost of \$5000 or more." Special purpose equipment means equipment which is used only for research, scientific or other technical activities. Items of needed equipment should be individually listed by description and estimated cost, including tax, and adequately justified. Allowable items ordinarily will be limited to scientific equipment that is not already available for the conduct of the work. General purpose office equipment normally will not be considered eligible for support.

#### ***4.3 Domestic Travel***

The type and extent of travel and its relation to the research should be specified. Funds may be requested for attendance at meetings and conferences, other travel associated with the work and subsistence. In order to qualify for support, attendance at meetings or conferences must enhance the investigator's capability to perform the research, plan extensions of it, or disseminate its results. Consultant's travel costs also may be requested.

#### ***4.4 Foreign Travel***

Foreign travel is any travel outside Canada and the United States and its territories and possessions. Foreign travel may be approved only if it is directly related to project objectives.

#### ***4.5 Other Direct Costs***

The budget should itemize other anticipated direct costs not included under the headings above, including materials and supplies, publication costs, computer services, and consultant services (which are discussed below). Other examples are: aircraft rental, space rental at research establishments away from the institution, minor building alterations, service charges, and fabrication of equipment or systems not available off-the-shelf. Reference books and periodicals may be charged to the project only if they are specifically related to the research.

*a. Materials and Supplies*

The budget should indicate in general terms the type of required expendable materials and supplies with their estimated costs. The breakdown should be more detailed when the cost is substantial.

*b. Publication Costs/Page Charges*

The budget may request funds for the costs of preparing and publishing the results of research, including costs of reports, reprints page charges, or other journal costs (except costs for prior or early publication), and necessary illustrations.

*c. Consultant Services*

Anticipated consultant services should be justified and information furnished on each individual's expertise, primary organizational affiliation, daily compensation rate and number of days expected service. Consultant's travel costs should be listed separately under travel in the budget.

*d. Computer Services*

The cost of computer services, including computer-based retrieval of scientific and technical information, may be requested. A justification based on the established computer service rates should be included.

*e. Subcontracts*

Subcontracts should be listed so that they can be properly evaluated. There should be an anticipated cost and an explanation of that cost for each subcontract. The total amount of each subcontract should also appear as a budget item.

**4.6 Indirect Costs**

Explain the basis for each overhead and indirect cost. Include the current rates.

**5.0 Appendix:**

**5.1 Due Dates**

A brief preproposal may be submitted and must be received by January 27, 1998, to be considered.

Formal proposals/FWPs must be received no later than 4:30 p.m. E.D.T., April 16, 1998.

### ***5.2 Submission Site***

All preproposals, referencing Program Announcement LAB98-08, should be sent to Dr. Roland F. Hirsch, ER-73, Mail Stop F-240, Office of Biological and Environmental Research, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290. Preproposals will be accepted if submitted by U. S. Postal Service, including Express Mail, commercial mail delivery service, or hand delivery, but will not be accepted by fax, electronic mail, or other means.

Formal proposals/FWPs must be received at the same address.

### ***5.3 Energy Research and Environmental Management Program Contacts***

For further information contact: Dr. Roland F. Hirsch, ER-73, Mail Stop F-240, Office of Biological and Environmental Research, Office of Energy Research, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290, telephone: (301) 903-5349, fax: (301) 903-0567, E-mail: roland.hirsch@oer.doe.gov, or Mr. Mark Gilbertson, Office of Science and Risk Policy, Office of Science and Technology, Office of Environmental Management, 1000 Independence Avenue, SW, Washington, D.C. 20585, telephone: (202) 586-7150, E-mail: mark.gilbertson@em.doe.gov.