# Partnerships for Research and Education in Materials (PREM)

# **PROGRAM SOLICITATION**

NSF 09-518

# REPLACES DOCUMENT(S):

NSF 05-615



## **National Science Foundation**

Directorate for Mathematical & Physical Sciences Division of Materials Research

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

March 05, 2009

## **REVISION NOTES**

A revised version of the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) NSF 09-1 was issued on October 1 2008 and is effective for proposals submitted on or after January 5 2009. Please be advised that the guidelines contained in NSF 09-1 apply to proposals submitted in response to this funding opportunity. Proposers who opt to submit prior to January 5<sup>th</sup> 2009 must also follow the guidelines contained in NSF 09-1.

One of the most significant changes to the PAPPG is implementation of the mentoring provisions of the America COMPETES Act. Each proposal that requests funding to support postdoctoral researchers must include as a separate section within the 15-page project description a description of the mentoring activities that will be provided for such individuals. Proposals that do not include a separate section on mentoring activities within the Project Description will be returned without review (see the PAPP Guide Part I: *Grant Proposal Guide* Chapter II.C.2.d for further information).

# SUMMARY OF PROGRAM REQUIREMENTS

#### **General Information**

# Program Title:

Partnerships for Research and Education in Materials (PREM)

# Synopsis of Program:

The objective of PREM is to broaden participation and enhance diversity in materials research and education by stimulating the development of formal, long-term, multi-investigator, collaborative research and education partnerships between minority-serving colleges and universities, women's colleges, and colleges and universities dedicated to educating a majority of students with disabilities, groups that are underrepresented in science, technology, engineering, and mathematics (STEM) and the NSF Division of Materials Research (DMR)-supported centers and/or facilities.

#### Cognizant Program Officer(s):

- Rama Bansil, Program Director, 1080 N, telephone: (703) 292-8562, email: rbansil@nsf.gov
- Thomas P. Rieker, Program Director, 1065 N, telephone: (703) 292-4914, email: trieker@nsf.gov

#### Applicable Catalog of Federal Domestic Assistance (CFDA) Number(s):

• 47.049 --- Mathematical and Physical Sciences

# **Award Information**

Anticipated Type of Award: Continuing Grant

Estimated Number of Awards: 4 to 8

**Anticipated Funding Amount:** \$300,000 to \$700,000 per award. \$2,700,000 total for FY 09, contingent on the availability of funds. Awards are anticipated to be \$300,000 to \$700,000 per year for up to 5 years pending the availability of funds.

# **Eligibility Information**

#### Organization Limit:

Proposals may only be submitted by the following:

 US Institutions of higher education that primarily serve underrepresented groups in science, technology, engineering and mathematics (STEM), including minority-serving colleges and universities, women's colleges, and colleges and universities dedicated to educating a majority of students with disabilities. See the Additional Eligibility Information section of this program solicitation for a complete description of eligible academic institutions.

#### PI Limit:

The Principal Investigator must hold a faculty appointment at an eligible college or university as defined above. A co-PI must be identified at the DMR-supported Center and/or facility who will act as a liaison between the partner institutions.

## Limit on Number of Proposals per Organization: 2

Only two proposals may be submitted by any one organization as the lead organization.

#### Limit on Number of Proposals per PI:

None Specified

# **Proposal Preparation and Submission Instructions**

#### A. Proposal Preparation Instructions

· Letters of Intent: Not Applicable

• Preliminary Proposal Submission: Not Applicable

· Full Proposals:

Full Proposals submitted via FastLane: NSF Proposal and Award Policies and Procedures Guide, Part I: Grant
Proposal Guide (GPG) Guidelines apply. The complete text of the GPG is available electronically on the NSF
website at:

http://www.nsf.gov/publications/pub\_summ.jsp?ods\_key=gpg.

 Full Proposals submitted via Grants.gov: NSF Grants.gov Application Guide: A Guide for the Preparation and Submission of NSF Applications via Grants.gov Guidelines apply (Note: The NSF Grants.gov Application Guide is available on the Grants.gov website and on the NSF website at: http://www.nsf.gov/pubs/policydocs/grantsgovguide607.pdf)

# **B. Budgetary Information**

- Cost Sharing Requirements: Cost Sharing is not required under this solicitation.
- Indirect Cost (F&A) Limitations: Not Applicable
- Other Budgetary Limitations: Other budgetary limitations apply. Please see the full text of this solicitation for further information.

#### C. Due Dates

• Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

March 05 2009

# **Proposal Review Information Criteria**

**Merit Review Criteria:** National Science Board approved criteria. Additional merit review considerations apply. Please see the full text of this solicitation for further information.

# **Award Administration Information**

Award Conditions: Standard NSF award conditions apply.

Reporting Requirements: Additional reporting requirements apply. Please see the full text of this solicitation for further information.

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# I. INTRODUCTION

The National Science Foundation's mandate to ensure the vitality of the Nation's scientific and engineering enterprise includes concerns for the quality of and access to materials research and education for all Americans. Within this context, it is recognized that Institutions of Higher Education (IHE) that are dedicated to serving groups underrepresented in science, technology, engineering and mathematics (STEM) disciplines (minority-serving colleges and universities, women's colleges, and colleges and universities dedicated to educating a majority of students with disabilities, collectively referred to as "STEM underrepresented group-serving colleges and universities") and DMR-supported centers and/or facilities represent rich resources for broadening participation and access by underrepresented groups to careers in materials research and education.

The Partnerships for Research and Education in Materials (PREM) described in this solicitation are designed to improve and strengthen the education infrastructure in materials research, and to increase recruitment, retention, and degree attainment by members of groups underrepresented in materials research and education.

The PREM activity is intended to enhance the quantity and quality of materials research opportunities for students and faculty members at "STEM underrepresented group-serving colleges and universities". The activity will produce models for developing long-term materials research and education relationships between such colleges and universities and DMR-supported centers and/or facilities.

# II. PROGRAM DESCRIPTION

The objective of PREM is to broaden participation by underrepresented groups and enhance diversity in materials research and education by stimulating the development of formal, long-term, collaborative research and education relationships between "STEM underrepresented group-serving colleges and universities" (minority-serving colleges and universities, women's colleges, and colleges and universities dedicated to educating a majority of students with disabilities) and DMR-supported centers and facilities.

PREM awards are expected to result in significant increases in the number and quality of interactions between participants from the DMR-supported centers and facilities and faculty and students at "STEM underrepresented group-serving colleges and universities", and should result in increasing materials-related degrees for underrepresented groups, as well as in opportunities for networking and dissemination of new knowledge.

Support will be provided for activities that facilitate development of formal, long-term materials research and education relationships between minority-serving colleges and universities, women's colleges, and colleges and universities primarily dedicated to educating a majority of persons with disabilities and DMR-supported centers and/or facilities. NSF's commitment to broadening participation is embedded in its Strategic Plan. The report " A Framework for Action" outlines this approach (see <a href="http://www.nsf.gov/od/broadeningparticipation/bp.jsp.">http://www.nsf.gov/od/broadeningparticipation/bp.jsp.</a>)

Funded activities might include, but are not limited to, the development of collaborative and mutually beneficial materials research and education projects, support for graduate and undergraduate students and exchanges of faculty and students. High school students may also participate. Of special interest to DMR are activities based on research and education connections between the participants, and designed to increase recruitment, retention and degree attainment by members of underrepresented groups in materials research. Proposers are encouraged to contact NSF program staff listed in Section VIII to discuss the appropriateness of the planned activities, and check eligibility requirements.

## III. AWARD INFORMATION

NSF expects to make Standard or Continuing Grants. The estimated number of awards will be 4 to 8. Awards are anticipated to be effective in September 2009. The total anticipated funding amount in FY 2009 is approximately \$2,700,000. Awards are expected to be \$300,000 to \$700,000 per year for up to 5 years. Estimated program budget, number of awards and average award size/duration are subject to the availability of funds.

# IV. ELIGIBILITY INFORMATION

## Organization Limit:

Proposals may only be submitted by the following:

 US Institutions of higher education that primarily serve underrepresented groups in science, technology, engineering and mathematics (STEM), including minority-serving colleges and universities, women's colleges, and colleges and universities dedicated to educating a majority of students with disabilities. See the Additional Eligibility Information section of this program solicitation for a complete description of eligible academic institutions.

#### PI Limit:

The Principal Investigator must hold a faculty appointment at an eligible college or university as defined above. A co-PI must be identified at the DMR-supported Center and/or facility who will act as a liaison between the partner institutions.

#### Limit on Number of Proposals per Organization: 2

Only two proposals may be submitted by any one organization as the lead organization.

#### Limit on Number of Proposals per PI:

None Specified

## Additional Eligibility Info:

#### Eligible Academic Institutions

PREM proposals may be submitted by Institutions of Higher Education (IHEs) that primarily serve underrepresented groups in STEM as listed below. Each PREM proposal must be submitted in collaboration with one or more DMR-supported centers and /or facilities. The proposal may include a subaward to the DMR supported center and/or facility or be submitted as linked proposals.

Colleges and universities eligible to participate in this activity must be accredited and award degrees in materials-related disciplines and meet at least one of the following criteria:

- Alaska Native Serving Institutions (ANSI)- Accredited IHEs that award associate or bachelor level degrees that have a 20 percent or greater enrollment of Alaska Native undergraduate students.
- Hispanic Serving Institutions (HSI)- Accredited IHEs that award associate or bachelor level degrees that have a 25
  percent or greater full-time equivalent enrollment of Hispanic undergraduate students.
- 3. Historically Black Colleges and Universities (HBCU)- Identified in the Higher Education Act of 1965, as amended, as any accredited historically black college or university that was established prior to 1964, whose principal mission was, and is, the education of Black Americans.
- 4. Institutions Serving People with Disabilities- Accredited IHEs dedicated to serving a majority of students with disabilities, and whose primary mission is the education and advancement of people with disabilities as indicated by institutional policies, federally-funded projects to improve services for students with disabilities in STEM, or NSF-funded projects designed to facilitate the success of students with disabilities in STEM. Also see <a href="http://www.nsf.gov/od/oia/activities/ceose/reports/CEOSE-Mini-symposium-Report-Final.pdf">http://www.nsf.gov/od/oia/activities/ceose/reports/CEOSE-Mini-symposium-Report-Final.pdf</a>
- Minority Serving Institutions (MSI)- Accredited IHEs that award associate or bachelor level degrees that have an
  aggregate undergraduate enrollment of American Indian, Alaska Native, Black, Hispanic, and Pacific Islander
  exceeding 50 percent of total undergraduate enrollment.
- 6. Native Hawaiian Serving Institutions (NHSI)- Accredited IHEs that award associate or bachelor level degrees that have a 10 percent or greater enrollment of Native Hawaiian undergraduate students.
- 7. Tribal Colleges and Universities (TCU)- Accredited IHEs that are formally controlled, or have been formally sanctioned or chartered by the governing body of a federally recognized Native American tribe or tribes. Specifically, TCUs are those institutions cited in section 532 of the Equity in Educational Land-Grant Status Act of 1994 (7 U.S.C. 301 note), any other institution that qualifies for funding under the Tribally Controlled Community College Assistance Act of 1978 (25 U.S.C. 1801 et seq.), and Dine' College, authorized in the Navajo Community College Assistance Act of 1978, Public Law 95-471, title II (25 U.S.C. 640a note).
- Women's Colleges- Accredited IHEs whose primary mission is the education and advancement of women (degree-granting institutions participating in Title IV Federal financial aid programs). See U.S. Department of Education, National Center for Education Statistics, 2005 and 2005–06 Integrated Postsecondary Education Data System (IPEDS), Spring 2006 and Fall 2006. http://nces.ed.gov/programs/digest/d07/tables/dt07\_227.asp?referrer=lis

Note that 2-year Associate degree granting colleges are not eligible to submit a proposal under this solicitation, except where an established degree-granting partnership exists between a 2-year (Associate degree granting) and a 4-year institution.

#### Eligible Partners

Eligible partners include DMR-supported centers, facilities and groups. DMR-supported centers include Materials Research Science and Engineering Centers (MRSECs) and Nanoscale Science and Engineering Centers (NSECs) and Science and Technology Centers (STCs). Eligible facilities include DMR supported synchrotron, neutron, nanofabrication facilities and the National High Magnetic Field Laboratory. Note that not all NSF-funded NSECs and STCs are supported by DMR. Only materials research and education activities within the NSEC or STC or DMR-supported facility are eligible to be part of the proposed partnership. Information on DMR-supported centers can be found at

http://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=5295&org=DMR&from=home and that on DMR-supported facilities at

http://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=5359&org=DMR&from=home. Proposers who wish to partner with a DMR-funded group effort that is not a center or a facility should contact the program staff listed in section VIII of this solicitation to discuss the appropriateness of such partnership. Please have the NSF award number of the DMR supported partner ready when calling the program officers.

# V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

# A. Proposal Preparation Instructions

**Full Proposal Preparation Instructions:** Proposers may opt to submit proposals in response to this Program Solicitation via Grants.gov or via the NSF FastLane system.

- Full proposals submitted via FastLane: Proposals submitted in response to this program solicitation should be prepared and submitted in accordance with the general guidelines contained in the NSF Grant Proposal Guide (GPG). The complete text of the GPG is available electronically on the NSF website at:
   http://www.nsf.gov/publications/pub\_summ.jsp?ods\_key=gpg. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from pubs@nsf.gov. Proposers are reminded to identify this program solicitation number in the program solicitation block on the NSF Cover Sheet For Proposal to the National Science Foundation. Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.
- Full proposals submitted via Grants.gov: Proposals submitted in response to this program solicitation via Grants.gov should be prepared and submitted in accordance with the NSF Grants.gov Application Guide: A Guide for the Preparation and Submission of NSF Applications via Grants.gov. The complete text of the NSF Grants.gov Application Guide is available on the Grants.gov website and on the NSF website at: (http://www.nsf.gov/pubs/policydocs/grantsgovguide607.pdf). To obtain copies of the Application Guide and Application Forms Package, click on the Apply tab on the Grants.gov site, then click on the Apply Step 1: Download a Grant Application Package and Application Instructions link and enter the funding opportunity number, (the program solicitation number without the NSF prefix) and press the Download Package button. Paper copies of the Grants.gov Application Guide also may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from pubs@nsf.gov.

In determining which method to utilize in the electronic preparation and submission of the proposal, please note the following:

Collaborative Proposals. All collaborative proposals submitted as separate submissions from multiple organizations must be submitted via the NSF FastLane system. Chapter II, Section D.3 of the Grant Proposal Guide provides additional information on collaborative proposals.

In addition to following the general format contained in the GPG or NSF Grants.gov Application Guide, proposals submitted in response to this program solicitation must also adhere to the following special instructions.

The following items should be included and/or addressed in the Project Description section of the proposal (limit 20 pages):

- List of Participants. Provide a list of participating faculty from all academic institutions. List each faculty participant by full
  name, and his/her institutional and departmental affiliation. Also, enter each name in "Add/Delete Non Co-PI Senior
  Personnel" FastLane Form. Grants.gov users: Instructions for entering additional senior project participants are included in
  Section V.5. of the NSF Grants.gov Application Guide. (Note: All faculty participants should have a biographical sketch and
  a list of current and pending support included in the corresponding section of the proposal.)
- Vision Statement. Provide a clear and concise statement for the mission of the proposed partnership, its overall research / education / outreach goals and its potential impact in broadening participation.
- Results from Prior NSF Support. Current NSF funded PREMs must describe achievements under prior NSF support that
  pertain to the present proposal. Re-competing proposals must provide a "List of publications and patents from prior
  NSF support"; this list should be added at the end of the References Cited section of the Proposal and does not
  count towards page limits. Other proposals may use this section to describe their scientific achievements under prior
  NSF support. Collaborative research and related activities funded by other agencies also may be included here. Limit: 5
  pages.
- Project Description. Provide a concise description of the long-term research and education goals and intellectual focus of
  the partnership, and describe the planned research and education activities in sufficient detail to enable their scientific merit
  and significance to be assessed. Describe the role and intellectual contribution of each senior participant in the PREM and
  briefly outline the resources available or planned to accomplish the research goals. Use bold-face type for the name of
  each senior investigator wherever it occurs.
- Management Plan. Describe the plans for administration of the PREM, including the functions of key personnel and the role
  of any external advisory committee, and internal executive committee. Describe the plans for administering the collaborative

programs with the Partner organization. Include an organizational chart

- Evaluation. Describe how the research and education will be evaluated (internally and/or externally) and include a plan for self-assessment.
- Broader Impacts. Describe the potential impact of the project in broadening participation and building a diverse community
  of materials researchers. Describe the potential impact of the project on science and education. Describe how these
  results would be disseminated. Additional perspective on Broader Impacts can be found in the DMR Dear Colleague Letter
  on

http://www.nsf.gov/div/index.jsp?org=DMR .

Mentoring Plan for Postdoctoral Fellows. As required in the GPG, the proposal must include a mentoring plan for
postdoctoral researchers receiving funding from the project.

**Budget.** The budget should be thoughtfully prepared and the budget justification should explain clearly the connection between the requested funds and the proposed activities. Include subawards as appropriate.

Letter of Commitment from Partner. The PI of each participating DMR-supported center and/or facility must provide a detailed letter of commitment that outlines their intellectual role in the partnership, as well as their commitment and plans for broadening participation of underrepresented groups in STEM. Describe how their center and/or facility will participate in the PREM (limit 2 pages). Include the proposed collaborative research and education activities, a plan for student and faculty exchanges, and a plan for the continuation of the partnership in the event that DMR support to the center, group and/or facility ends before the PREM award does. The letter(s) should be included in the 'Supplementary Documents' section of the proposal.

# **B. Budgetary Information**

Cost Sharing: Cost sharing is not required under this solicitation.

## Other Budgetary Limitations:

The proposed budget can range from \$300,000 to \$700,000/year for up to a period of 5 years.

# C. Due Dates

• Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

March 05, 2009

# D. FastLane/Grants.gov Requirements

# • For Proposals Submitted Via FastLane:

Detailed technical instructions regarding the technical aspects of preparation and submission via FastLane are available at: <a href="https://www.fastlane.nsf.gov/a1/newstan.htm">https://www.fastlane.nsf.gov/a1/newstan.htm</a>. For FastLane user support, call the FastLane Help Desk at 1-800-673-6188 or e-mail fastlane@nsf.gov. The FastLane Help Desk answers general technical questions related to the use of the FastLane system. Specific questions related to this program solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this funding opportunity.

Submission of Electronically Signed Cover Sheets. The Authorized Organizational Representative (AOR) must electronically sign the proposal Cover Sheet to submit the required proposal certifications (see Chapter II, Section C of the Grant Proposal Guide for a listing of the certifications). The AOR must provide the required electronic certifications within five working days following the electronic submission of the proposal. Further instructions regarding this process are available on the FastLane Website at:

https://www.fastlane.nsf.gov/fastlane.isp.

#### · For Proposals Submitted Via Grants.gov:

Before using Grants.gov for the first time, each organization must register to create an institutional profile. Once registered, the applicant's organization can then apply for any federal grant on the Grants.gov website. The Grants.gov's Grant Community User Guide is a comprehensive reference document that provides technical information about Grants.gov. Proposers can download the User Guide as a Microsoft Word document or as a PDF document. The Grants.gov User Guide is available at:

http://www.grants.gov/CustomerSupport. In addition, the NSF Grants.gov Application Guide provides additional technical guidance regarding preparation of proposals via Grants.gov. For Grants.gov user support, contact the Grants.gov Contact Center at 1-800-518-4726 or by email: support@grants.gov. The Grants.gov Contact Center answers general technical questions related to the use of Grants.gov. Specific questions related to this program solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this solicitation.

**Submitting the Proposal:** Once all documents have been completed, the Authorized Organizational Representative (AOR) must submit the application to Grants.gov and verify the desired funding opportunity and agency to which the application is submitted. The AOR must then sign and submit the application to Grants.gov. The completed application will be transferred to the NSF FastLane system for further processing.

### VI. NSF PROPOSAL PROCESSING AND REVIEW PROCEDURES

Proposals received by NSF are assigned to the appropriate NSF program where they will be reviewed if they meet NSF proposal preparation requirements. All proposals are carefully reviewed by a scientist, engineer, or educator serving as an NSF Program

Officer, and usually by three to ten other persons outside NSF who are experts in the particular fields represented by the proposal. These reviewers are selected by Program Officers charged with the oversight of the review process. Proposers are invited to suggest names of persons they believe are especially well qualified to review the proposal and/or persons they would prefer not review the proposal. These suggestions may serve as one source in the reviewer selection process at the Program Officer's discretion. Submission of such names, however, is optional. Care is taken to ensure that reviewers have no conflicts of interest with the proposal.

#### A. NSF Merit Review Criteria

All NSF proposals are evaluated through use of the two National Science Board (NSB)-approved merit review criteria: intellectual merit and the broader impacts of the proposed effort. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

The two NSB-approved merit review criteria are listed below. The criteria include considerations that help define them. These considerations are suggestions and not all will apply to any given proposal. While proposers must address both merit review criteria, reviewers will be asked to address only those considerations that are relevant to the proposal being considered and for which the reviewer is qualified to make judgements.

# What is the intellectual merit of the proposed activity?

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of the prior work.) To what extent does the proposed activity suggest and explore creative, original, or potentially transformative concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

## What are the broader impacts of the proposed activity?

How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

Examples illustrating activities likely to demonstrate broader impacts are available electronically on the NSF website at: http://www.nsf.gov/pubs/gpg/broaderimpacts.pdf.

NSF staff also will give careful consideration to the following in making funding decisions:

## Integration of Research and Education

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learning perspectives.

# Integrating Diversity into NSF Programs, Projects, and Activities

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

#### Additional Review Criteria:

The PREM proposals will also be evaluated on the following:

- Are the goals and mission of the partnership clearly defined and achievable?
- Is the role of the DMR-supported center and/or facility clearly stated? Does the collaboration between the PREM
  and the DMR-supported center and/or facility have a strong intellectual connection? Are the plans for student and
  faculty exchanges clearly defined and achievable? What is the added value of the partnership to all Institutions
  involved?
- To what extent will this partnership lead to building a diverse workforce in materials research at all levels, from undergraduates to faculty?
- Is the management plan sound? Does the organization chart contain the appropriate participants?
- Is the plan for internal and/or external assessment of the impact, dissemination of results, and progress of the project reasonable?

# **B. Review and Selection Process**

Proposals submitted in response to this program solicitation will be reviewed by Ad hoc Review and/or Panel Review.

Reviewers will be asked to formulate a recommendation to either support or decline each proposal. The Program Officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation.

After scientific, technical and programmatic review and consideration of appropriate factors, the NSF Program Officer recommends to the cognizant Division Director whether the proposal should be declined or recommended for award. NSF is striving to be able to tell applicants whether their proposals have been declined or recommended for funding within six months. The time interval begins on the deadline or target date, or receipt date, whichever is later. The interval ends when the Division Director accepts the Program Officer's recommendation.

A summary rating and accompanying narrative will be completed and submitted by each reviewer. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the names of the reviewers, are sent to the Principal Investigator/Project Director by the Program Officer. In addition, the proposer will receive an explanation of the decision to award or decline funding.

In all cases, after programmatic approval has been obtained, the proposals recommended for funding will be forwarded to the Division of Grants and Agreements for review of business, financial, and policy implications and the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants and Agreements Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with a NSF Program Officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants and Agreements Officer does so at their own risk.

# VII. AWARD ADMINISTRATION INFORMATION

## A. Notification of the Award

Notification of the award is made to *the submitting organization* by a Grants Officer in the Division of Grants and Agreements. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator. (See Section VI.B. for additional information on the review process.)

# **B.** Award Conditions

An NSF award consists of: (1) the award letter, which includes any special provisions applicable to the award and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which NSF has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal referenced in the award letter; (4) the applicable award conditions, such as Grant General Conditions (GC-1); \* or Research Terms and Conditions of the NSF issuance that may be incorporated by reference in the award letter. Cooperative agreements also are administered in accordance with NSF Cooperative Agreement Financial and Administrative Terms and Conditions (CA-FATC) and the applicable Programmatic Terms and Conditions. NSF awards are electronically signed by an NSF Grants and Agreements Officer and transmitted electronically to the organization via e-mail.

\*These documents may be accessed electronically on NSF's Website at <a href="http://www.nsf.gov/awards/managing/award\_conditions.jsp?org=NSF">http://www.nsf.gov/awards/managing/award\_conditions.jsp?org=NSF</a>. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from pubs@nsf.gov.

More comprehensive information on NSF Award Conditions and other important information on the administration of NSF awards is contained in the NSF Award & Administration Guide (AAG) Chapter II, available electronically on the NSF Website at <a href="http://www.nsf.gov/publications/pub\_summ.jsp?ods\_key=aag">http://www.nsf.gov/publications/pub\_summ.jsp?ods\_key=aag</a>.

# C. Reporting Requirements

For all multi-year grants (including both standard and continuing grants), the Principal Investigator must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period. (Some programs or awards require more frequent project reports). Within 90 days after expiration of a grant, the PI also is required to submit a final project report.

Failure to provide the required annual or final project reports will delay NSF review and processing of any future funding increments as well as any pending proposals for that PI. PIs should examine the formats of the required reports in advance to assure availability of required data.

Pls are required to use NSF's electronic project-reporting system, available through FastLane, for preparation and submission of annual and final project reports. Such reports provide information on activities and findings, project participants (individual and organizational) publications; and, other specific products and contributions. Pls will not be required to re-enter information previously provided, either with a proposal or in earlier updates using the electronic system. Submission of the report via FastLane constitutes certification by the PI that the contents of the report are accurate and complete.

PREM-specific reporting guidelines will be provided by the cognizant Program Officer.

### VIII. AGENCY CONTACTS

General inquiries regarding this program should be made to:

- Rama Bansil, Program Director, 1080 N, telephone: (703) 292-8562, email: rbansil@nsf.gov
- Thomas P. Rieker, Program Director, 1065 N, telephone: (703) 292-4914, email: trieker@nsf.gov

For questions related to the use of FastLane, contact:

• FastLane Help Desk, telephone: 1-800-673-6188; e-mail: fastlane@nsf.gov.

For questions relating to Grants.gov contact:

Grants.gov Contact Center: If the Authorized Organizational Representatives (AOR) has not received a confirmation
message from Grants.gov within 48 hours of submission of application, please contact via telephone: 1-800-518-4726; e-mail: support@grants.gov.

#### IX. OTHER INFORMATION

The NSF Website provides the most comprehensive source of information on NSF Directorates (including contact information), programs and funding opportunities. Use of this Website by potential proposers is strongly encouraged. In addition, MyNSF (formerly the Custom News Service) is an information-delivery system designed to keep potential proposers and other interested parties apprised of new NSF funding opportunities and publications, important changes in proposal and award policies and procedures, and upcoming NSF Regional Grants Conferences. Subscribers are informed through e-mail or the user's Web browser each time new publications are issued that match their identified interests. MyNSF also is available on NSF's Website at <a href="http://www.nsf.gov/mynsf/">http://www.nsf.gov/mynsf/</a>.

Grants.gov provides an additional electronic capability to search for Federal government-wide grant opportunities. NSF funding opportunities may be accessed via this new mechanism. Further information on Grants.gov may be obtained at <a href="http://www.grants.gov">http://www.grants.gov</a>.

Information about current PREM awards and activities can be found on <a href="http://mrsec.org/prem/">http://mrsec.org/prem/</a>

## ABOUT THE NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) is an independent Federal agency created by the National Science Foundation Act of 1950, as amended (42 USC 1861-75). The Act states the purpose of the NSF is "to promote the progress of science; [and] to advance the national health, prosperity, and welfare by supporting research and education in all fields of science and engineering."

NSF funds research and education in most fields of science and engineering. It does this through grants and cooperative agreements to more than 2,000 colleges, universities, K-12 school systems, businesses, informal science organizations and other research organizations throughout the US. The Foundation accounts for about one-fourth of Federal support to academic institutions for basic research.

NSF receives approximately 40,000 proposals each year for research, education and training projects, of which approximately 11,000 are funded. In addition, the Foundation receives several thousand applications for graduate and postdoctoral fellowships. The agency operates no laboratories itself but does support National Research Centers, user facilities, certain oceanographic vessels and Antarctic research stations. The Foundation also supports cooperative research between universities and industry, US participation in international scientific and engineering efforts, and educational activities at every academic level.

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To get the latest information about program deadlines, to download copies of NSF publications, and to access abstracts of awards, visit the NSF Website at <a href="http://www.nsf.gov">http://www.nsf.gov</a>

• Location: 4201 Wilson Blvd. Arlington, VA 22230

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and project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to proposer institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies or other entities needing information regarding applicants or nominees as part of a joint application review process, or in order to coordinate programs or policy; and to another Federal agency, court, or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004), and NSF-51, "Reviewer/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

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Last Updated: 11/07/06 Text Only