



# National Science Foundation

## *Rotational Vacancy*

**DIRECTORATE FOR ENGINEERING  
DIVISION OF DESIGN, MANUFACTURE, AND INDUSTRIAL INNOVATION  
ARLINGTON, VA 22230**

**ANNOUNCEMENT NO:** E20050029A-Rotators      **OPEN:** 01/03/2005      **CLOSE:** 02/28/2005

**\*ANNOUNCEMENT HAS BEEN AMENDED TO EXTEND THE CLOSING DATE TO 02/28/2005.**

**POSITIONS WILL BE FILLED ON A ONE OR TWO YEAR VISITING SCIENTIST APPOINTMENT, INTERGOVERNMENTAL PERSONNEL ACT (IPA) ASSIGNMENT BASIS, OR FEDERAL TEMPORARY APPOINTMENT.**

The National Science Foundation is seeking candidates for two positions as Program Directors in the Division of Design, Manufacture, and Industrial Innovation (DMII), Directorate for Engineering, Arlington, VA.

DMII supports basic research that can lead to innovations and improved competitiveness of the manufacturing and service sectors, thus increasing their rate of innovation and responsiveness to changing national needs. Specifically, the Division supports fundamental academic research in design, manufacturing and engineered service systems, including programs in Engineering Design, Operations Research, Manufacturing Enterprise Systems, Service Enterprise Engineering, Manufacturing Machines and Equipment, Materials Processing and Manufacturing, and Nanomanufacturing. DMII also has a leading role in the crosscutting Grant Opportunities for Academic Liaison with Industry program and shares responsibility for the program in Innovation and Organizational Change. More information about DMII and its programs can be found on their website at <http://www.eng.nsf.gov/dmii>

The ***Materials Processing and Manufacturing Program*** advances the fundamental knowledge base that is needed for the realization of desired product attributes (such as form or function) through innovations in the systematic integration of processing material performance relationships. It supports analytical, computational and experimental research that leads to the generation of such fundamental knowledge. Research in materials processing that addresses optimum resource use through the application of environmentally benign manufacturing principles or leads to innovations in sensing systems for manufacturing process control are in the domain of the program.

Qualifications required: ***Applicants must possess a Ph.D. or equivalent experience in engineering or related discipline. In addition, six or more years of successful research, research administration, and/or managerial experience pertinent to the program is required. Disciplinary expertise and strong collaborative integration skills within the broad context of manufacturing is desired.***

The ***Service Enterprise Engineering (SEE) Program*** advances basic research on design, planning and control of operations and processes associated with the delivery of services. Services associated with certain engineered infrastructures such as electricity, telecommunications, transportation, and others, such as delivery of health care services, may also be the subject of SEE research, provided that the focus remains on the delivery of such services, especially through improved reliability and security. Contributions should improve the performance of service operations, but also extend the range of analytical and computational techniques addressed to these systems. Novel models offering new policy insights are also welcome. In addition, measurement and conceptualization of service processes as engineered systems may themselves represent a contribution in some applications.

The **Operations Research (OR) Program** advances basic research that advances the science (structures and properties) of models and algorithms arising in the study of operations of large-scale systems. While traditional applications of OR methodology have come from the domain of design, manufacturing, and service enterprises, new OR methodology that addresses emerging applications is also encouraged. While the emphasis is on research improving basic analytical and computational techniques, the relevance of the work on meaningful engineering and scientific applications must be demonstrated.

Qualifications required: ***Applicants must possess a Ph.D. or equivalent experience in engineering, operations research or related area. In addition, six or more years of successful research, research administration, and/or managerial experience pertinent to the program is required. Disciplinary expertise and strong collaborative integration skills within the broad context of manufacturing or service enterprises is desired.***

These positions will be filled on a one or two year Visiting Scientist Appointment, under the terms of the Intergovernmental Personnel Act (IPA) or as a Federal Temporary Appointment. Temporary and Visiting Scientist appointments will be made under the Excepted Authority of the NSF Act with a current salary range of \$88,369 to \$137,713, depending on qualifications and experience. For Visiting Scientist appointments, individuals are in a non-pay leave status from the home institution and are appointed to NSF's payroll as a Federal employee. NSF withholds FICA and provides reimbursement for fringe benefits. For Federal temporary appointments of more than one year, the usual civil service benefits (retirement, health and life insurance) are applicable. For IPA assignments, the individual remains an employee on the payroll of his or her home institution and the institution continues to administer pay and benefits. NSF reimburses the institution for NSF's negotiated share of the costs. Individuals eligible for an IPA assignment include employees of State and local government agencies, institutions of higher education, Indian tribal governments, federally funded research and development centers and qualified nonprofit organizations. For more information regarding Visiting Scientist appointments or IPA assignments, visit our website at <http://www.nsf.gov/jobs>.

**DUTIES AND RESPONSIBILITIES:** As Program Director, directs in the implementation, review, funding, post-award management, and evaluation of the program and contributes to the intellectual integration with other programs supported by the Division. Designs and implements the proposal review and evaluation process for relevant proposals. Selects well qualified individuals to provide objective reviews on proposals either as individuals or as members of a panel. Conducts final review of proposals and evaluations, and recommends acceptance or declination. Manages and monitors on-going grants, contracts, interagency and cooperative agreements to ensure fulfillment of commitments to NSF. Evaluates progress of awards through review and evaluation of reports and publications submitted by awardees and/or meetings at NSF and during site visits. Contributes to the responsibility for establishing goals and objectives, initiating new program thrusts and phasing out old projects. Recommends new or revised policies and plans in scientific, fiscal, and administrative matters to improve the activities and management of the Program.

**HOW TO APPLY:** Applications may be transmitted electronically to [rotator@nsf.gov](mailto:rotator@nsf.gov). Individuals may also submit a resume or any application of your choice to the National Science Foundation, Division of Human Resource Management, 4201 Wilson Blvd., Arlington, VA 22230, Attn: E20050029A-Rotators. In addition, you are encouraged to submit a narrative statement that addresses your background and/or experience related to the Program you are applying for. You are asked to complete and submit the attached Applicant Survey form. Submission of this form is voluntary and will not affect your application for employment (the information is used for statistical purposes). Telephone inquiries may be referred to the Executive and Visiting Personnel Branch, at (703) 292-8755. Hearing impaired individuals may call TDD (703) 292-8044.

The National Science Foundation provides reasonable accommodations to applicants with disabilities on a case-by-case basis. If you need a reasonable accommodation for any part of the application and hiring process, please notify the point of contact listed on this vacancy announcement.

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HIGHLY QUALIFIED STAFF THAT REFLECTS THE DIVERSITY OF OUR NATION**

NATIONAL SCIENCE FOUNDATION  
APPLICANT SURVEY

OMB No. 3145-0096  
Expiration: 7/31/2005

Vacancy Ann. #: \_\_\_\_\_ Position Status (temporary/permanent): \_\_\_\_\_

Position Title/Series/Grade: \_\_\_\_\_

INSTRUCTIONS

Your completion of this form will be appreciated. Submission of this Information is voluntary and it will have no effect on the processing of your application. The data collected will be used only for statistical purposes to ensure that agency personnel practices meet the requirements of Federal law. Pursuant to 5 CFR 1320.5(b), an agency may not conduct or sponsor, and a person is not required to respond to an information collection unless it displays a valid OMB control number. The OMB control number for this collection is 3145-0096. NSF estimates that each respondent should take about 3 minutes to complete this survey, including time to read the instructions. You may have comments regarding this burden estimate or any other aspect of this survey, including suggestions for reducing this burden. If so, please send them to NSF Reports Clearance Officer, Division of Administrative Services, NSF, 4201 Wilson Blvd., Arlington, VA. 22230.

PRIVACY ACT INFORMATION

GENERAL - This information is provided pursuant to Public Law 93-579 (Privacy Act of 1974), December 31, 1974, for individuals completing Federal records and forms that solicit personal information.

AUTHORITY - Section 7201 of title 5 of the U.S. Code and Section 2000e-16 of title 42 of the U.S. Code.

PURPOSE AND ROUTINE USES

The information is used for research and for a Federal Equal Opportunity Recruitment Program (FEORP) to help insure that agency personnel practices meet the requirements of Federal law. Address questions concerning this form and its uses to the Privacy Act Officer, National Science Foundation, Arlington, VA 22230.

1. Today's Date: \_\_\_\_\_ 2. Year of Birth: \_\_\_\_\_

3. How did you learn about the particular position for which you are applying? (Circle appropriate number.)

- 01 - Newspaper (specify) \_\_\_\_\_
- 02 - Contact with NSF Personnel Office (Agency Bulletin Board or other Announcement)
- 03 - NSF-initiated personal contact
- 04 - Science Magazine, or other professional journal or magazine (specify) \_\_\_\_\_
- 05 - Affirmative Action Register
- 06 - Attendance at conference, meeting or job fair (specify) \_\_\_\_\_
- 07 - NSF recruitment at school or college
- 08 - Colleague referral
- 09 - NSF Bulletin
- 10 - Federal, State or local job information center
- 11 - State vocational rehabilitation agency or Veterans Administration
- 12 - State employment office
- 13 - School or college counselor or other official
- 14 - Private job Information service
- 15 - Private employment service
- 16 - Friend or relative working at NSF
- 17 - Friend or relative not working at NSF
- 18 - NSF website
- 19 - Internet or other website
- 20 - Other (specify) \_\_\_\_\_

4. Select the ethnic category with which you most closely identify:

- A. **Hispanic or Latino.** A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
- B. **Not Hispanic or Latino.**

5. Select one or more racial category with which you most closely identify:

- A. **American Indian or Alaska Native.** A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
- B. **Asian.** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- C. **Black or African American.** A person having origins in any of the black racial groups of Africa.
- D. **Native Hawaiian or Other Pacific Islander.** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- E. **White.** A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

6. Sex (Circle the appropriate letter.) F - Female M - Male

7. Please provide information on your disability status by circling the appropriate category below:

- 1. I do not have a disability; 2. Hearing impairment; 3. Vision impairment; 4. Missing extremities; 5. Partial paralysis;
- 6. Complete paralysis; 7. Convulsive disorder; 8. Mental retardation; 9. Mental or emotional illness; 10. Severe distortion of limbs and/or spine; 11. I have a disability but it is not listed.

FOR AGENCY USE

Agency Code: \_\_\_\_\_

AN EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER