



National Science Foundation

Rotational Vacancy

**DIRECTORATE FOR ENGINEERING
DIVISION OF CIVIL AND MECHANICAL SYSTEMS
ARLINGTON, VA 22230**

ANNOUNCEMENT NO: E20050115-Rotators

OPEN: 8/01/05

CLOSE: 9/01/05

POSITION WILL BE FILLED ON A ONE OR TWO YEAR VISITING SCIENTIST APPOINTMENT OR FEDERAL TEMPORARY APPOINTMENT.

INDIVIDUALS WISHING TO APPLY FOR A PERMANENT POSITION SEE VACANCY NUMBER E20050114.

The National Science Foundation is seeking a qualified candidate for the position of Program Director for the Information Technology and Infrastructure Systems Program in the Division of Civil and Mechanical Systems, Directorate for Engineering, Arlington, VA. The desired starting date for this appointment is January 2006.

The Civil and Mechanical Systems (CMS) Division funds research that contributes to the knowledge base and intellectual growth in the areas of infrastructure construction and management, geo technology, structures, dynamics, control and mechatronics, engineering mechanics and materials, and sensors and smart structures technology, as well as the reduction of risks induced by earthquakes and other natural and technological hazards. The Division encourages cross-disciplinary partnerships at the intersections of traditional disciplines, to promote discoveries using technologies such as sensors, actuators and adaptive systems, nanotechnology, information technology, and simulation to enable revolutionary advances in our nation's civil and mechanical systems. The CMS Division is organized into three program clusters: Engineered Materials and Mechanics Cluster, Intelligent Civil and Mechanical Systems Cluster, and Infrastructure Systems and Hazard Mitigation Cluster. Further information about CMS is available at http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13352&org=CMS

The Information Technology and Infrastructure Systems program within the Intelligent Civil and Mechanical Systems Cluster creates scientific and engineering knowledge for the intelligent renewal of civil infrastructure systems, such as transportation, water supply, sanitation, power generation, and the built environment, by promoting broad application of advanced information technologies to condition assessment, deterioration, and asset management sciences. It also creates scientific and engineering knowledge for the intelligent design, construction, maintenance, operation and decommissioning of the built environment.

Important areas of inquiry are: intra-and inter-dependencies in infrastructure systems, health monitoring of infrastructure elements and systems, hydrogen fuel vehicles and transportation systems, infrastructure for hydrogen fuel storage and distribution, civil infrastructure protection, intelligent transportation systems, crash causation and crash avoidance measures in ground transportation, mobility in ground transportation through reduction or crash-caused delays and increases in the amount of vehicle throughput, fully automated and integrated project management processes across all life-cycle phases of the built environment, lean construction, engineering and management of job-site field operations through advanced information technologies.

This position will be filled on a one or two year Visiting Scientist Appointment or as a Federal Temporary Appointment. Federal 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 more information regarding Visiting Scientist appointments visit our website at http://www.nsf.gov/about/career_ops/rotators/vsee.jsp

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, and 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.

QUALIFICATIONS REQUIRED: Applicants must possess a Ph.D. or equivalent experience in civil engineering, construction engineering, construction management, transportation engineering, infrastructure asset management, or allied disciplines. In addition, six or more years of active research in the field, research administration and/or substantial managerial experience in academe, industry, or government is required. Also important are knowledge of the construction, transportation, and infrastructure research communities, and effective communication skills (written and oral) and several years of successful independent research of the kind normally expected of the academic rank of associate professor or higher. All appointees are expected to function effectively both within specific programs, as well as in a team mode, contributing to and coordinating with organizations in the Directorate, across the Foundation, and with other Federal and State government agencies and private-sector organizations.

HOW TO APPLY: Applications may be transmitted electronically to 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: E20050086-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. Technical questions may be referred to Dr. Jesus M. de la Garza, Program Director at 703-292-7791; jgarza@nsf.gov and Dr. Ken Chong Interim Division Director at 703-292-8360; kchong@nsf.gov. 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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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) _____ | 10 - Federal, State or local job information center |
| 02 - Contact with NSF Personnel Office
(Agency Bulletin Board or other Announcement) | 11 - State vocational rehabilitation agency or
Veterans Administration |
| 03 - NSF-initiated personal contact | 12 - State employment office |
| 04 - Science Magazine, or other professional journal or magazine
(specify) _____ | 13 - School or college counselor or other official |
| 05 - Affirmative Action Register | 14 - Private job Information service |
| 06 - Attendance at conference, meeting or job fair
(specify) _____ | 15 - Private employment service |
| 07 - NSF recruitment at school or college | 16 - Friend or relative working at NSF |
| 08 - Colleague referral | 17 - Friend or relative not working at NSF |
| 09 - NSF Bulletin | 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.

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FOR AGENCY USE

Agency Code: _____

AN EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER