# NATIONAL SCIENCE FOUNDATION

4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230

April 11, 2012



# Dear Colleague:

We are initiating a national search for the National Science Foundation's Assistant Director for Engineering (ENG), and seek your assistance in the identification of candidates. Dr. Thomas Peterson has served in this position since January 2009.

The Assistant Director, ENG, manages a Directorate comprising five divisions: Chemical, Bioengineering, Environmental and Transport Systems; Civil, Mechanical and Manufacturing Innovation; Electrical, Communications and Cyber Systems; Engineering Education and Centers; Industrial Innovation and Partnerships. The Assistant Director also oversees the Office of Emerging Frontiers in Research and Innovation. Enclosed is an information sheet that summarizes the Directorate's activities and the responsibilities of the position, together with the criteria that will be used in the search. Employment may be on a temporary or permanent basis in the Federal Service or by temporary assignment under provisions of the Intergovernmental Personnel Act.

We are very pleased to announce that Professor Joseph J. Helble, Dean and Professor of Engineering, Thayer School of Engineering, Dartmouth College has agreed to head the Search Advisory Committee. Both we and the Committee seek your help in identifying candidates with the following qualifications: outstanding leadership; a deep sense of scholarship; a grasp of the issues facing the engineering community in the areas of education and research; proficiency in the administration of large-scale facilities and centers; and the ability to serve effectively as a key member of the NSF senior management team. We are especially interested in identifying women, members of minority groups, and persons with disabilities for consideration. Recommendations of individuals from any sector -academic, industry, or government -- are welcome.

Please send your recommendations, including any supporting information which you might be able to provide, to the AD/ENG Screening Committee via e-mail (engsrch@listserv.nsf.gov) or at the following address: National Science Foundation, Office of the Director, Suite 1205, 4201 Wilson Boulevard, Arlington, VA 22230. We would appreciate receiving your recommendations by June 1, 2012.

Your assistance in this very important task is appreciated.

Subra Suresh Director

Subre Surer Com B. Marrett Cora B. Marrett **Deputy Director** 

**Enclosures** 

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# Search Committee Review Criteria for Assistant Director for Engineering (AD/ENG), NSF

### We are seeking demonstrated evidence of:

## Strategic Vision

- Working knowledge of the major current intellectual challenges and opportunities in the mathematical and physical sciences.
- Ability to think strategically and formulate integrated plans for research and education activities in the mathematical and physical sciences disciplines, especially at the interfaces of, and boundaries with, other disciplines.
- Ability to bring about strategic change, both within and outside the organization, to meet organizational goals. Includes the ability to establish an organizational vision and to implement it in a continuously changing environment.

# Leadership, Direction, Representation

- Ability to lead people toward meeting the organization's vision, mission, and goals. Includes the ability to provide an
  inclusive workplace that fosters the development of others, facilitates cooperation and teamwork, and supports
  constructive resolution of conflicts. Ability to provide innovative and transformative leadership of people, reflective of
  NSF's organizational values.
- Ability to serve effectively as a member of NSF's senior management team, helping to develop consensus both within the ENG directorate and across the agency on policy and plans.
- Ability to plan, prioritize, and coordinate interagency and international research and education programs and to forge government-industry-university partnerships.
- Ability to manage an organization consisting of approximately 150 scientific and administrative professionals; ability to manage human, financial, and information resources strategically.
- Ability to communicate NSF policy and strategic plans to the external community, including the public, Congress, industry, and colleagues in other disciplines.
- Ability to meet organizational goals and customer expectations. Includes the ability to make decisions that produce high-quality results by applying technical knowledge, analyzing problems, and calculating risks.

#### Commitment

- Commitment to transforming the frontiers, innovating for society, and performing as a model organization goals of the NSF Strategic Plan and to the strategies for achieving these goals through developing intellectual capital, integrating research and education, and promoting partnerships and an ability to conceptualize the role of the mathematical and physical sciences disciplines in achieving those goals.
- Commitment to the appointment and development of a highly qualified staff that reflect the diversity of our nation and to the equitable representation of underrepresented groups and institutions on advisory committees, in workshops, and proposal review panels.
- Commitment to equitable representation of underrepresented groups in the national enterprise.

#### Credibility within Research and Education Community

- Substantial research contributions and experience in academic, government and/or private national research and
  education endeavors as evidenced in publications, innovative leadership in research administration and/or professional
  leadership awards.
- Ability to build coalitions internally and with other Federal agencies, State and local governments, nonprofit and private sector organizations, foreign governments, or international organizations to achieve common goals.
- Demonstrated commitment to scholarship and significant scientific contributions to one or more of the mathematical and physical sciences.
- Broad understanding of universities and other institutions where research and education in the mathematical and physical sciences is conducted.
- Familiarity with the existing U.S. and international infrastructure that supports research and education.

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# The National Science Foundation Directorate for Engineering

The **National Science Foundation** (NSF) is an independent agency of the United States Government. Its vision is to enable the nation's future through its strategic goals of transforming the frontiers, innovating for society, and performing as a model organization. The Foundation seeks to realize these goals using five core values: vision, dedication to excellence, learning and growing, broad inclusiveness, and accountability to the research community and the taxpayer. NSF invests in supporting research that will advance the frontiers of knowledge and establish the nation as a leader in transformational science; cultivating a world-class, broadly inclusive science and engineering workforce and scientifically literate citizenry; building the nation's research capacity with critical investments in advanced instruments, tools and facilities; and cultivating a capable and responsive organization that promotes excellence in science and engineering research and education.

The **Directorate for Engineering** (ENG) is one of seven NSF directorates. The focus of the Directorate for Engineering is to strengthen the capability of engineering (its knowledge bases and systems, its institutions, and its human and physical resources) to strengthen the national capacity to perform and innovate. Increased innovation contributes to our national prosperity, security, and welfare. The Directorate's goals and strategies mirror those of the Foundation. The Directorate includes the Divisions of Chemical, Bioengineering, Environmental and Transport Systems; Civil, Mechanical and Manufacturing Innovation; Electrical, Communications and Cyber Systems; Engineering Education and Centers; Industrial Innovation and Partnerships; and the Office of Emerging Frontiers in Research and Innovation. The Directorate staff of approximately 150 employees administers a budget of approximately \$800 million annually.

The **Assistant Director for Engineering** (AD/ENG) serves as a key member of NSF's senior management and policy team and provides leadership and direction to the Engineering Directorate programs and initiatives. The incumbent is responsible for planning and implementing programs, priorities, and policy within the framework of statutory and National Science Board authority. NSF seeks a candidate with outstanding leadership abilities; a deep sense of scholarship; a grasp of the issues facing the engineering community in the areas of education and research; proficiency in the administration of large-scale facilities and centers; and a commitment to the goals and strategies of the National Science Foundation.