



NATIONAL SCIENCE FOUNDATION  
4201 WILSON BOULEVARD  
ARLINGTON, VA 22230

Title: Division of Electrical and Communication Systems (ECS), Electronics, Photonics and Device Technologies,  
(EPDT) Program Director  
Employment Opportunities--Dear Colleague Letter

Date: July 16, 2004

Dear Colleague:

The Division of Electrical and Communication Systems (ECS) announce a nationwide search for a Program Director for the Electronics, Photonics, and Device Technologies Program at the National Science Foundation (NSF). ***The desired starting date for the position is November 1, 2004.***

The ECS division addresses fundamental research and education issues underlying both component technologies and systems integration principles that involve signal processing, control and communications at the macro, micro and nanoscales. Please visit our web site at <http://www.eng.nsf.gov/ecs/>.

The ECS division supports research on micro/nanoelectronics, spin, molecular, organic, optical, bio and quantum electronics, MEMS/NEMS, sensors, integrated systems for sensing and control, systems on a chip, cyber engineering, electric power systems, complex adaptive systems, neural networks and pattern recognition for data mining, and enablers for high speed, ultra high capacity optical and wireless networks, high frequency integrated electronics, microwave and millimeterwave devices, electromagnetic modeling and simulation. The ECS Division is committed to the education of engineers at the undergraduate and graduate levels, increasing the participation of members of underrepresented groups and participating in outreach programs at the K-12 level. The division actively participates in NSF-wide initiatives such as REU, RET, IGERT and MSP, to address 21<sup>st</sup> century workforce development concerns (details may be found at <http://www.nsf.gov/>). The division's FY2004 budget is \$75.4M managed by the Division Director, a Senior Engineering Advisor and eight Program Directors.

The ***Electronics, Photonics, and Device Technologies Program*** seeks to improve the fundamental understanding of devices and components based on principles of electronics, magnetics, photonics, electromagnetics, electro-optics, electromechanics, and related physical phenomena, and to enable the design of integrated microsystems which define new capabilities and applications.

NSF Program Directors bear the primary responsibility for carrying out the Agency's overall mission: to support innovative and merit-reviewed activities in basic research and education that contribute to the nation's technical strength, security, and welfare. Program Directors should have a breadth of technical knowledge and vision, good communications skills, and an ability to work well with others. Ability to assess risk and potential outcomes at the frontiers of research topics of interest to the division, and good contacts with the research community is needed. Active participation in NSF's commitment to the broad impacts of discovery and innovation in promoting teaching, training and learning; integration of research and education; representation of underrepresented groups; enhancement of the research/education infrastructure, such as facilities, instrumentation, networks and partnerships; and the broad dissemination of research and educational advances for the benefit of society is required of all NSF Program Directors.

Qualification requirements include a Ph.D. or equivalent professional experience in engineering, plus six or more years of successful research, research administration and/or substantial managerial experience in academe, industry, or government. Also required is a broad experience in wireless information technology networks, wireless sensors, microwave and millimeterwave devices, smart antennas, RF MEMS, mixed signal processing, and EM simulation and modeling. The appointee is 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. Periodic assignments to leadership of interdivisional, inter-directorate and interagency programs may be made. Women and underrepresented minority candidates are strongly encouraged to apply.

The Program Director position recruited under this announcement may be filled under the following appointment option:

- **Intergovernmental Personnel Act (IPA) Assignment.** Individuals eligible for an IPA assignment with a Federal agency include employees of State and local government agencies or institutions of higher education, Indian tribal governments, and other eligible organizations in instances where such assignments would be of mutual benefit to the organizations involved. Initial assignments under IPA provisions may be made for a period up to two years, with a possible extension for up to an additional year. The individual remains an employee of the home institution and NSF provides funding toward the assignee's salary and benefits. Initial IPA assignments are made for a one-year period and may be extended by mutual agreement.

Should you or your colleagues be interested in this position, please contact the Search Coordinator, Dr. Filbert J. Bartoli ([fbartoli@nsf.gov](mailto:fbartoli@nsf.gov)) and forward a curriculum vitae to him by September 30, 2004. Applications will be reviewed immediately after this date, and the position will remain open until filled. The applicants who applied under the previous "Dear Colleague Letter" for this position need not apply again. Their applications will be considered under this new "Dear Colleague Letter."

For additional information on NSF's rotational programs, please see "Programs for Scientists, Engineers and Educators" on the NSF website at <http://www.nsf.gov/jobs>.

Applications and questions concerning Program Director positions should be directed to:

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