

Dear Colleague,

PROGRAM DIRECTOR VACANCIES IN ELECTRICAL & COMMUNICATION SYSTEMS

We are pleased to announce one opening for senior-level engineering researcher/educator to serve as Program Director for the ELECTRONICS, PHOTONICS, AND DEVICE TECHNOLOGIES (EPDT) Program in the Electrical and Communications Systems (ECS) Division of the Engineering Directorate at NSF. The Program Director position is a permanent assignment. The desired starting date for this position is September 1, 2002.

The ECS Division addresses fundamental research and education issues underlying both the component technologies and systems principles of complex engineering systems and applications. The EPDT Program Directors possess complementary technical interests and work as a team to manage the programs research activities.

The Program Director should have a breadth of technical knowledge, good communications skills, and an ability to work with others. An interest in working with the scientific community to enhance the effectiveness of research and educational programs is important. Technical expertise in this position is described below. It is expected that the candidate will have specific experience in some of the areas mentioned below, but will have a combination of interests in these areas to work in a team environment and to develop the synergy expected in the EPDT Program.

The EPDT Program emphasizes fundamental research and education endeavors in micro/nanoelectronic, photonic, and microelectromechanical devices and their integration into circuits and microsystems. New generations of integrated microsystems incorporate microchip technology with optical, mechanical, biological, and other components to achieve new functionality in communications, sensing and control. Optical telecommunications and interconnects and wireless technologies for networks and remote sensing are of special interests. The selected individual will work in a team environment within the EPDT Program, and will develop close interactions with the Control, Networks and Computational Intelligence (CNCI) Program in ECS. The Program Director will also provide an effective liaison with other programs in the Engineering Directorate and other Directorates in NSF.

The candidate for this position should have broad expertise in cutting-edge optical and photonic technologies. Of particular interest are areas of ultra-high capacity optical communications and networking, scalable integrated photonic circuits, nanophotonics, ultrafast technologies, organic optoelectronics, deep UV coherent optics for nanoscale metrology, and sensing and imaging systems. Specific research opportunities relating to this position include quantum well device physics and simulation, microcavities and quantum dot lasers, mid-IR lasers, integration of WDM components on a chip, fiber lasers and amplifiers, optical switching and modulation, ultrafast laser sources and applications, non-linear optics, terahertz technologies, deep-UV coherent sources and optics, and polymeric photonic devices.

The Program Director position at the National Science Foundation provides a challenging experience and an excellent opportunity to encourage and support engineering research and education. The individual will work with other Program Directors in formulating research strategies, developing cooperation among government, academia, and will provide leadership within NSF and the research community. The positions require a Ph.D. with a minimum of six years of academic, government, or industry experience. We are very interested in attracting qualified women and underrepresented minority candidates to this position.

We would appreciate any nominations that you may have for suitable candidates. Should you or your colleagues be interested in this position, please contact the search committee coordinator, Dr. Usha Varshney (uvarshne@nsf.gov), and forward a curriculum vita to her by **June 21, 2002**. Applications will be reviewed immediately after this date, though the position will remain open until filled. For questions or further information, please feel free to contact:

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