

DEPARTMENT OF COMMERCE**National Institute of Standards and Technology****[Docket No.: 030123017-3017-01]****RIN: 0693-ZA50****Small Grants Programs; Availability of Funds****AGENCY:** National Institute of Standards and Technology, Commerce.**ACTION:** Notice.

SUMMARY: The National Institute of Standards and Technology (NIST) announces that the following programs are soliciting applications for financial assistance for FY 2003: (1) The Precision Measurement Grants Program; (2) the 2003 Summer Undergraduate Research Fellowships (SURF) in the areas of Electronics and Electrical Engineering, Manufacturing Engineering, Chemical Science and Technology, Physics, Materials Science and Engineering, Building and Fire Research, and Information Technology; (3) the Electronics and Electrical Engineering Laboratory Grants Program; (4) the Manufacturing Engineering Laboratory Grants Program; (5) the Chemical Science and Technology Laboratory Grants Program; (6) the Physics Laboratory Grants Program; (7) the Materials Science and Engineering Laboratory Grants Program; (8) the Building Research Grants and Cooperative Agreements Program; and (9) the Fire Research Grants Program.

The Precision Measurement Grants Program is seeking proposals for significant, primarily experimental, research in the field of fundamental measurement or the determination of fundamental constants.

The programs "SURFing the Electronics and Electrical Engineering Laboratory," "SURFing the Manufacturing Engineering Laboratory," "SURFing the Chemical Science and Technology Laboratory," "SURFing the Physics Laboratory," "SURFing the Materials Science and Engineering Laboratory," "SURFing the Building and Fire Research Laboratory," and "SURFing the Information Technology Laboratory," will provide an opportunity for the NIST Electronics and Electrical Engineering Laboratory (EEEL), Manufacturing Engineering Laboratory (MEL), Chemical Science and Technology Laboratory (CSTL) Physics Laboratory (PL), Materials Science and Engineering Laboratory (MSEL), Building and Fire Research Laboratory (BFRL), and Information Technology Laboratory (ITL), and the

National Science Foundation (NSF) to join in a partnership to encourage outstanding undergraduate students to pursue careers in science and engineering.

The EEEL program will provide research opportunities with internationally known NIST scientists in the fields of semiconductors (including mainstream silicon, power devices, and compound semiconductors), fundamental electrical measurements, electronic instrumentation, electrical systems, and electronic information. The MEL program will provide research opportunities with internationally known NIST scientists in the fields of intelligent systems, manufacturing metrology, precision engineering, and manufacturing systems integration. The CSTL program will provide research opportunities with internationally known NIST scientists in the fields of chemical characterization of materials, process metrology, chemical and biochemical sensing, nanotechnology, healthcare measurements, environmental measurements, microelectronics, physical property data, chemical and biochemical data, bio-molecules and materials, DNA technologies, and international measurement standards. The PL program will involve students in world-class atomic, molecular, optical (AMO) and radiation physics research with internationally known physicists in the NIST Physics Laboratory. The MSEL program will provide research opportunities with internationally known NIST scientists in the fields of ceramics, solid state chemistry, metallurgy, polymers, neutron condensed matter science, and materials reliability. The BFRL program will provide research opportunities with internationally known NIST scientists in the fields of building materials (concrete, coating), structure (earthquake), building environment (indoor air quality, thermal machinery), and fire science and engineering. The ITL program will provide research opportunities with internationally known NIST scientists in the fields of networking, software quality, security, information access, convergent systems, mathematical science, and statistics. The NIST Program Directors will work with physics, chemistry, materials science, manufacturing engineering, intelligent systems, automated production, precision engineering, information technology, building materials, constructed structures, and other science-related department chairs and directors of multi-disciplinary

academic organizations to identify outstanding undergraduates (including graduating seniors) who would benefit from off-campus summer research in an honors academy environment.

The Electronics and Electrical Engineering Laboratory (EEEL) Grants Program provides grants and cooperative agreements for the development of fundamental electrical metrology and of metrology supporting industry and government agencies in the broad areas of semiconductors, electronic instrumentation, radio-frequency technology, optoelectronics, magnetics, video, electronic commerce as applied to electronic products and devices, the transmission and distribution of electrical power, national electrical standards (fundamental, generally quantum-based physical standards), and law enforcement standards.

The Manufacturing Engineering Laboratory (MEL) Grants Program will provide grants and cooperative agreements in the following fields of research: Dimensional Metrology for Manufacturing, Mechanical Metrology for Manufacturing, Intelligent Systems, and Information Systems Integration for Applications in Manufacturing.

The Chemical Science and Technology Laboratory (CSTL) Grants Program will provide grants and cooperative agreements in the following fields of measurement science research, focused on reference methods, reference materials and reference data: Biotechnology, Process Measurements, Surface and Microanalysis Science, Physical and Chemical Properties, and Analytical Chemistry.

The Physics Laboratory (PL) Grants Program will provide grants and cooperative agreements in the following fields of research: Electron and Optical Physics, Atomic Physics, Optical Technology, Ionizing Radiation, and Time and Frequency.

The Materials Science and Engineering Laboratory (MSEL) Grants Program will provide grants and cooperative agreements in the following fields of research: Ceramics, Metallurgy, Polymer Sciences, Neutron Scattering Research and Spectroscopy.

The Building Research Grants and Cooperative Agreements Program will provide grants and cooperative agreements in the following fields of research: Structures, Construction Metrology and Automation, Inorganic Materials, Polymeric Materials, Thermal Machinery, Mechanical Systems and Controls, Heat Transfer and Alternative Energy Systems, Computer Integrated Construction, Indoor Air Quality and Ventilation.