

**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.

The Fire Research Grants Program will provide funding for innovative ideas in the fire research area generated by the proposal writer, who chooses the topic and approach, consistent with the program description and objectives of this notice.

#### SUPPLEMENTARY INFORMATION:

##### Precision Measurement Grants Program

**Dates:** Applicants for the Precision Measurement Grants Program must submit an abbreviated proposal for preliminary screening. Based on the merit of the abbreviated proposal, applicants will be advised whether a full proposal should be submitted. The abbreviated proposals must be received at the address listed below no later than 5 p.m. eastern standard time on March 24, 2003. Proposals received after this deadline will be returned with no further consideration. Finalists will be selected by approximately May 9, 2003, and will be requested to submit full proposals to NIST by close of business on June 20, 2003. NIST expects to issue awards on or before September 30, 2003.

**Addresses:** For the Precision Measurement Grants Program, applicants are requested to direct technical questions and submit an abbreviated proposal (original and two signed copies), with a description of their proposed work of no more than five double spaced pages to: Dr. Peter J. Mohr, Manager, NIST Precision Measurement Grants Program, National Institute of Standards and Technology, Bldg. 225, Rm. B161, 100 Bureau Drive, Stop 8401, Gaithersburg, MD 20899-8401. Tel: (301) 975-3217. E-mail: [mohr@nist.gov](mailto:mohr@nist.gov). Web site: <http://physics.nist.gov/pmg>.

Although applicants are not required to submit more than three copies of the proposal, the normal review process for the Precision Measurement Grants Program utilizes 10 copies. Applicants are encouraged to submit sufficient proposal copies for the full review process if they wish all reviewers to receive color, unusually sized (not 8.5" x 11"), or otherwise unusual materials submitted as part of the proposal. Only three copies of the Federally required forms are needed.

**Authority:** The authority for the Precision Measurement Grants Program is as follows: As authorized by 15 U.S.C. 272 (b) and (c), NIST conducts directly, and supports through grants and cooperative agreements, a basic and applied research program in the general area of fundamental measurement and the determination of fundamental constants of nature.

**Program Description and Objectives:** The program description and objectives for the Precision Measurement Grants

Program are as follows: as part of its research program, since 1970 NIST has awarded Precision Measurement Grants primarily to universities and colleges so that faculty may conduct significant, primarily experimental research in the field of fundamental measurement or the determination of fundamental constants. NIST sponsors these grants and cooperative agreements primarily to encourage basic, measurement-related research in universities and colleges and other research laboratories and to foster contacts between NIST scientists and those faculty members of academic institutions and other researchers who are actively engaged in such work. The Precision Measurement Grants are also intended to make it possible for researchers to pursue new, fundamental measurement ideas for which other sources of support may be difficult to find. There is some latitude in research topics that will be considered under the Precision Measurement Grants Program. The key requirement is that the proposed project support NIST's ongoing work in the field of basic measurement science, which includes:

1. Experimental and theoretical studies of fundamental physical phenomena which test the basic laws of physics or which may lead to new or improved fundamental measurement methods and standards.

2. The determination of important fundamental physical constants.

Although proposals for either experimental or theoretical research will be considered, the former will be given preference because of the more immediate applicability of experimental work to metrology. Proposals from workers at the assistant and associate professor level who have some record of accomplishment are especially encouraged in view of the comparative difficulty researchers have in obtaining funds at the early stages of their careers.

Typical projects which have been funded through the NIST Precision Measurement Grants Program include:

- (1) Precision optical spectroscopy of positronium, S. Chu, Stanford University.

- (2) Spectroscopy of francium: towards a precise parity nonconservation measurement in a laser trap, L. A. Orozco, State University of New York at Stony Brook.

- (3) Measurement of Newton's constant G using a new method, J.H. Gundlach, University of Washington.

- (4) Measurement of the polarization of the cosmic microwave background, S.T. Staggs, Princeton University.

- (5) Combining the quantum Hall and AC Josephson effects for electric current

metrology, E.A. Gwinn, University of California, Santa Barbara.

- (6) A test of CPT symmetry using a new K-3He self-compensating magnetometer, M.V. Romalis, University of Washington.

**Eligibility:** Eligible applicants are institutions of higher education, other non-profits, commercial organizations, international organizations, State, local and Indian tribal governments and Federal agencies with appropriate legal authority.

**Award Period and Funding**

**Availability:** Applicants should propose multi-year projects for up to three years at no more than \$50,000 per year. NIST anticipates spending \$100,000 this year for two new grants at \$50,000 each for the first year of the research projects. NIST may award all, none or some of these new awards. Second and third year funding will be at the discretion of NIST, based on satisfactory performance, continuing relevance to program objectives, and the availability of funds.

**Proposal Review Process:** For the Precision Measurement Grants Program, to simplify the proposal writing and evaluation process, the following selection procedure will be used:

Applicants will initially submit abbreviated proposals, containing a description of the proposed project, including sufficient information to address the evaluation criteria, with a total length of no more than five double spaced pages, to the mailing address given above in the *Addresses* section. These proposals will be screened to determine whether they address the requirements outlined in this notice. Proposals that do not meet those requirements will not be considered further. Eight independent, objective individuals, at least half of whom are NIST employees, and who are knowledgeable about the scientific areas that the program addresses will conduct a technical review of each proposal, based on the evaluation criteria described in the Evaluation Criteria section for this program. The proposals will then be ranked based on the average of the reviewers' rankings. If non-Federal reviewers are used, the reviewers may discuss the proposals with each other, but ranks will be determined on an individual basis, not as a consensus.

The Precision Measurement Grants Program manager, the selecting official, will then select approximately four to eight finalists. In selecting finalists, the selecting official will take into consideration the results of the reviewers' evaluations, including rank,

and relevance to the program objectives described above.

Finalists will then be asked to submit full proposals containing a description of the proposed project, including sufficient information to address the evaluation criteria, with a length of no more than ten (10) double spaced pages in addition to the federally mandated forms and certifications, to the mailing address given above in the **ADDRESSES** section. The same independent reviewers will then evaluate the detailed proposals based on the same evaluation criteria, and the proposals will be ranked as previously described. In selecting proposals that will be recommended for funding, the selecting official will take into consideration the results of the reviewers' evaluations, including rank, and relevance to the program objectives described in the Program Description and Objectives section for this program.

The final approval of selected applications and award of grants or cooperative agreements will be made by the NIST Grants Officer based on compliance with application requirements as published in this notice, compliance with applicable legal and regulatory requirements, compliance with Federal policies that best further the objectives of the Department of Commerce, and whether the recommended applicants appear to be responsible.

Applicants may be asked to modify objectives, work plans, or budgets and provide supplemental information required by the agency prior to award.

The decision of the Grants Officer is final.

**Evaluation Criteria:** The evaluation criteria to be used in evaluating the abbreviated application proposals and full proposals are:

1. *The importance of the proposed research*—Does it have the potential of answering some currently pressing question or of opening up a whole new area of activity?

2. *The relationship of the proposed research to NIST's ongoing work*—Will it support one of NIST's current efforts to develop a new or improved fundamental measurement method or physical standard, test the basic laws of physics, or provide an improved value for a fundamental constant?

3. *The feasibility of the research and the potential impact of the grant*—Is it likely that significant progress can be made in a three year time period with the funds and personnel available and that the funding will enable work that would otherwise not be done with existing or potential funding?

4. *The qualifications of the applicant*—Does the educational and employment background and the quality of the research, based on recent publications, of the applicant indicate that there is a high probability that the proposed research will be carried out successfully?

Each of these factors is given equal weight in the evaluation process.

**Matching Requirements:** The Precision Measurement Grants Program does not require any matching funds.

**Application Kit:** For the Precision Measurement Grants Program, an application kit, containing all required application forms and certifications will be provided to the finalists by Ms. Bonnie Whipp, (301) 975-4750.

**EEEL, MEL, CSTL, PL, MSEL, BFRL, and ITL SURF Programs**

**Dates:** All SURF Program proposals must be received no later than the close of business March 24, 2003.

**Addresses:** For all SURF Programs, applicant institutions must submit one signed original and two copies of the proposal to: Attn.: Ms. Anita Sweigert, Administrative Coordinator, National Institute of Standards and Technology, 100 Bureau Drive, Stop 8400, Gaithersburg, MD 20899-8400. Tel: (301) 975-4200. E-mail: [anita.sweigert@nist.gov](mailto:anita.sweigert@nist.gov). Web site: <http://www.surf.nist.gov/surf2.htm>.

Technical questions for the programs should be directed to the following contact persons: For the EEEL SURF Program, Dr. David Newell, Tel: (301) 975-4228, E-mail:

[david.newell@nist.gov](mailto:david.newell@nist.gov); for the MEL SURF Program, Ms. Lisa Jean Fronczek, Tel: (301) 975-6633, E-mail:

[lfronczek@nist.gov](mailto:lfronczek@nist.gov); for the CSTL SURF Program, Dr. Albert Lee, Tel: (301) 975-2857, E-mail: [albert.lee@nist.gov](mailto:albert.lee@nist.gov) or Jeanice Brown Thomas, Tel: (301) 975-3120, E-mail:

[jeanice.brownthomas@nist.gov](mailto:jeanice.brownthomas@nist.gov); for the PL SURF Program, Dr. Marc Desrosiers, Tel: (301) 975-5639, E-mail:

[marc.desrosiers@nist.gov](mailto:marc.desrosiers@nist.gov); for the MSEL SURF Program, Dr. Terrell A. Vanderah, Tel: (301) 975-5785, E-mail:

[terrell.vanderah@nist.gov](mailto:terrell.vanderah@nist.gov); for the BFRL SURF Program, Dr. Chris White, Tel: (301) 975-6016, E-mail:

[cwhite@nist.gov](mailto:cwhite@nist.gov), or Dr. Chiara Ferraris, Tel: (301) 975-6711, E-mail:

[chiara.ferraris@nist.gov](mailto:chiara.ferraris@nist.gov); and for the ITL SURF Program, Dr. Larry Reeker, Tel: (301) 975-5147, E-mail:

[larry.reeker@nist.gov](mailto:larry.reeker@nist.gov).

**Authority:** The authority for the SURF Programs is as follows: 15 U.S.C. 278g-1 authorizes NIST to fund financial assistance awards to students at institutions of higher learning within the United States. These

students must show promise as present or future contributors to the missions of NIST. Cooperative agreements are awarded to assure continued growth and progress of science and engineering in the United States, including the encouragement of women and minority students to continue their professional development.

**Program Description and Objectives:** The objective of the SURF Programs is to build a mutually beneficial relationship between the student, the institution of higher learning, and NIST.

The program description for the SURF Programs is as follows: NIST is one of the nation's premiere research institutions for the physical and engineering sciences and, as the lead Federal agency for technology transfer, it provides a strong interface between government, industry and academia. NIST embodies a special science culture, developed from a large and well-equipped research staff that enthusiastically blends programs that address the immediate needs of industry with longer-term research that anticipates future needs. This occurs in few other places and enables the EEEL, MEL, CSTL, PL, MSEL, BFRL, and ITL to offer unique research and training opportunities for undergraduates, providing them a research-rich environment and exposure to state of the art equipment.

NIST's EEEL strives to be the world's best source of fundamental and industrial-reference measurement methods and physical standards for electrotechnology. To be a world-class resource for semiconductor measurements, data, models, and standards focused on enhancing U.S. technological competitiveness in the world market, research is conducted in semiconductor materials, processing, devices, and integrated circuits to provide, through both experimental and theoretical work, the necessary basis for understanding measurement-related requirements in semiconductor technology. To provide the world's most technically advanced and fundamentally sound basis for all electrical measurements in the United States, the EEEL's research projects include maintaining and disseminating the national electrical standards, developing the measurement methods and services needed to support electrical materials, components, instruments, and systems used for the generation, transmission, and application of conducted electrical power, and related activities in support of the electronics industry including research on video technology and electronic product data exchange.

NIST's MEL conducts theoretical and experimental research in length, mass, force, vibration, acoustics, and ultrasonics, as well as intelligent machines, precision control of machine tools, and information technology for the integration of all elements of a product's life cycle. Much of this applied research is devoted to overcoming barriers to the next technological revolution, in which manufacturing facilities are spread across the globe. MEL's research and development leads to standards, test methods and data that are crucial to industry's success in exploiting advanced manufacturing technology. Critical components of manufacturing at any level are measurement and measurement-related standards, not just of products, but increasingly of information about products and processes. Thus, MEL programs enhance both physical and information-based measurements and standards. Research projects can be theoretical or experimental, and will range in focus from intelligent machine control, characterizing a manufacturing process or improving product data exchange in manufacturing and related industries such as healthcare, to the accurate measurement of an artifact's dimensions.

NIST's CSTL strives to be a world-class research laboratory that is recognized by the nation as the primary source for the chemical, biochemical, and chemical engineering measurements, data, models, and reference standards that are required to enhance U.S. industrial competitiveness in the world market. CSTL is the primary reference laboratory for chemical measurements, entrusted with developing, maintaining, advancing, and enabling the chemical measurement system for the United States of America, thereby enhancing industry's productivity and competitiveness, establishing comparability of measurements to facilitate equity of global trade, and improving public health, safety, and environmental quality. CSTL's activities include: Transportation, Biomaterials, Biotechnology, Chemical and Allied Products, Energy Systems, Environmental Technology and Systems, Health and Medical Products and Services, Industrial and Analytical Instruments and Services, Forensics, Microelectronics, Food and Nutritional Products, International Measurement Standards, Data and Informatics, and emerging Technologies (Nanotechnology, Molecular

Electronics, Microfluidics, Combinatorial Chemistry).

Attending to the long-term needs of many U.S. high-technology industries, NIST's PL conducts basic research in the areas of quantum, electron, optical, atomic, molecular, and radiation physics. To achieve these goals, PL staff develop and utilize highly specialized equipment, such as polarized electron microscopes, scanning tunneling microscopes, lasers, and x-ray and synchrotron radiation sources. Research projects can be theoretical or experimental and will range in focus from computer modeling of fundamental processes through trapping atoms and choreographing molecular collisions, to standards for radiation therapy.

NIST's MSEL conducts basic research in the electronic, magnetic, optical, superconducting, mechanical, thermal, chemical, and structural properties of metals, ceramics, polymers, and composites. Much of this applied research is devoted to overcoming barriers to the next technological revolution, in which individual atoms and molecules will serve as the fundamental building blocks of devices. Preparation of unique materials by atomic level tailoring of multi-layers, perfect single crystals, and nanocomposites are just some of the future technologies being developed and explored in NIST's MSEL. To achieve these goals, staff develop and utilize highly specialized equipment, such as high resolution electron microscopes, atomic force microscopes, neutron scattering instruments, x-ray diffraction sources, lasers, magnetometers, plasma furnaces, melt spinners, molecular beam epitaxy systems, and thermal spray systems. Research projects can be theoretical or experimental and will range in focus from the structural, chemical, and morphological characterization of advanced materials made in the NIST laboratories to the accurate measurement of the unique properties possessed by these special materials.

NIST's BFRL provides technical leadership and participates in developing the measurement and standards infrastructure related to materials critical to U.S. industry, academia, government, and the public. Building and Fire Research programs at NIST cover a full range of materials issues from design to processing to performance. Separate research initiatives address concrete, coating, earthquake resistance of structures, fire science and engineering, the theory and modeling of materials, and materials reliability. Through laboratory-

organized consortia and one-on-one collaborations, BFRL's scientists and engineers work closely with industrial researchers, manufacturers of high-technology products, and the major users of advanced materials.

NIST's ITL responds to industry and user needs for objective, neutral tests for information technology. These are enabling tools that help companies produce the next generation of products and services, and that help industries and individuals use these complex products and services. ITL works with industry, research and government organizations to develop and demonstrate tests, test methods, reference data, proof of concept implementations and other infrastructural technologies. Program activities include: high performance computing and communications systems; emerging network technologies; access to, exchange, and retrieval of complex information; computational and statistical methods; information security; and testing tools and methods to improve the quality of software.

SURF students will have the opportunity to work one-on-one with our nation's top scientists and engineers. It is anticipated that successful SURF students will move from a position of reliance on guidance from their research advisors to one of research independence during the twelve-week period. One goal of this partnership is to provide opportunities for our nation's next generation of scientists and engineers to engage in world-class scientific research at NIST, especially in ground-breaking areas of emerging technologies. This carries with it the hope of motivating individuals to pursue a Ph.D. in physics, chemistry, materials science, engineering, mathematics, or computer science, and to consider research careers. The SURF Programs will help to forge partnerships with NSF and with post-secondary institutions that demonstrate strong, hands-on undergraduate science curricula, especially those with a demonstrated commitment to the education of women, minorities, and students with disabilities.

**Eligibility:** The EEEL, MEL, CSTL, PL, MSEL, BFRL, and ITL, SURF Programs are open to colleges and universities in the United States and its territories with degree granting programs in materials science, chemistry, engineering, computer science, mathematics, or physics. Participating students must be U.S. citizens or permanent U.S. residents.

**Funding Availability:** Funds budgeted for payment to students under these

programs are stipends, not salary. The SURF Programs will not authorize funds for indirect costs or fringe benefits.

For the EEEL SURF Program, the NIST EEEL anticipates receiving funding as a NSF REU Program at the level of \$73,000 per year. It is anticipated that the funding for the EEEL SURF Program will provide for the costs of stipends, travel and lodging, and the conference attendance for approximately eleven students.

For the MEL SURF Program, the NIST MEL anticipates receiving funding as a NSF REU Program at the level of \$52,000 per year. For the CSTL SURF Program, the NIST CSTL will pursue funding as a NSF REU Program at the level of \$40,000 per year and may contribute additional NIST CSTL funds to support additional students. For the BFRL SURF Program, the NIST BFRL anticipates receiving funding as a NSF REU Program at the level of \$50,000 per year. For the ITL SURF Program, the NIST ITL anticipates receiving funding as a NSF REU Program at the level of \$50,000 per year. It is anticipated that the funding for the MEL, CSTL, BFRL and ITL SURF Programs will provide for the costs of stipends, travel and lodging, and the conference attendance of eight students for each program.

For the PL SURF Program, the NIST PL will commit approximately \$50,000 to support these cooperative agreements. The NIST PL's REU Program is anticipating renewal of funding by the NSF at the level of \$85,000 per year. The anticipated direct costs for stipends, travel, lodging, and conference attendance for 22 students is about \$135,000.

For the MSEL SURF Program, the NIST MSEL anticipates receiving funding as a NSF REU Program at the level of \$70,000 per year. It is anticipated that this funding will provide for the costs of stipends, travel and lodging, and the conference attendance of 10 students.

The actual number of awards made under this announcement will depend on the actual costs. For all SURF Programs described in this notice, it is expected that individual awards to institutions will range from approximately \$3,000 to \$70,000. NIST is in the process of determining whether NIST will contract directly with apartment complexes for student housing, or whether funding for student housing will be included in cooperative agreements awarded as a result of this notice. Selected applicants will be informed prior to award whether housing will be provided via the cooperative agreement or provided separately by NIST.

*Proposal Review Process:* All SURF Program proposals are submitted to the Administrative Coordinator. Each proposal is examined for completeness and responsiveness. Substantially incomplete or non-responsive proposals will not be considered for funding, and the applicant will be notified. The Program will retain one copy of each non-responsive application for three years for record keeping purposes. The remaining copies will be destroyed. Proposals should include the following:

- (A) Student Information:
- (1) Student application information cover sheet;
  - (2) Academic transcript for each student nominated for participation (students must have a recommended G.P.A. of 3.0 or better, out of a possible 4.0);
  - (3) A personal statement from each student and statement of commitment to participate in the 2003 SURF program, including a description of the student's prioritized research interests;
  - (4) A resume for each student;
  - (5) Two letters of recommendation for each student;
  - (6) Verification of U.S. citizenship or permanent legal resident status for each student; and
  - (7) Verification of health coverage for each student.

(B) Information About the Applicant Institution:

- (1) Description of the institution's education and research programs; and
- (2) A summary list of the student(s) being nominated.

Institution proposals will be separated into student/institution packets. Each student/institution packet will be comprised of the required application forms, including a complete copy of the student information and a complete copy of the institution information. The student/institution packets will be directed to the SURF Program designated by the student as his/her first choice. Each SURF Program will have three independent, objective NIST employees who are knowledgeable in the scientific areas that the program addresses conduct a technical review of each student/institution packet based on the Evaluation Criteria for the SURF Programs described in this notice. Each technical reviewer will recommend that each student/institution packet be placed into one of three categories: Priority funding; fund if possible; and do not fund. Each student/institution packet will then be placed into one of the three categories by the Program's Director, who will take into consideration the reviewers' recommendations, the relevance of the student's course of study to the program

objectives of the NIST laboratory in which that SURF Program resides as described in the Program Description and Objectives section of this notice, the relevance of the student's statement of commitment to the goals of the SURF Program, and the availability of funding.

Student/institution packets placed in the priority funding category will be selected for funding in that SURF Program. Student/institution packets placed in the do not fund category will not be considered for funding.

Student/institution packets placed in the Fund if Possible Category will be considered for funding by the SURF Program designated by the student as his/her second choice. In making selections for funding, the Director of the student's second choice SURF Program will take into consideration the recommendations of the reviewers who conducted the technical reviews for the student's first choice SURF Program, the program objectives of the NIST laboratory in which the student's second choice SURF Program resides as described in the Program Description and Objectives section of this notice, the relevance of the student's statement of commitment to the goals of the SURF Program, and the availability of funding.

Students not selected for funding by their first or second choice SURF Program, and students who did not designate a second choice, will then be considered for funding from all SURF Programs that still have slots available. In making selections for funding, the SURF Program Directors will take into consideration the recommendations of the reviewers who conducted the technical reviews for the student's first choice SURF Program, the program objectives of the NIST laboratory in which their SURF Program resides as described in the Program Description and Objectives section of this notice, the relevance to the goals of the SURF Program, and the availability of funding.

Student/institution packets placed in the fund if possible category, but not selected through the process described above, will not be funded.

The final approval of selected applications and award of cooperative agreements will be made by the NIST Grants Officer based on compliance with application requirements as published in this notice, compliance with applicable legal and regulatory requirements, compliance with Federal policies that best further the objectives of the Department of Commerce, and whether the recommended applicants appear to be responsible. Applicants may be asked to modify objectives, work plans, or budgets and provide supplemental information required by

the agency prior to award. The decision of the Grants Officer is final.

**Evaluation Criteria:** For the SURF Programs, the evaluation criteria are:

Evaluation of student's academic ability and commitment to program goals: includes evaluation of the following: completed course work; expressed research interest; compatibility of the expressed research interest with SURF Program research areas; research skills; grade point average in courses relevant to the SURF Program; career goals; honors and activities.

Evaluation of applicant institution's commitment to program goals: includes evaluation of the following: the institution's academic department(s) relevant to the discipline(s) of the student(s).

Each of these factors is given equal weight in the evaluation process.

**Award Period:** The SURF Programs are anticipated to run from May 27 through August 15, 2003; adjustments may be made to accommodate specific academic schedules (e.g., a limited number of 9-week cooperative agreements).

**Matching Requirements:** The SURF Programs do not require any matching funds.

**Application Kit:** For the EEEL, MEL, CSTL, PL, MSEL, BFRL, and ITL SURF Programs, an application kit, containing all required forms and certifications, may be obtained by contacting Ms. Anita Sweigert, (301) 975-4200; websites for each program's application kit may be accessed through the following Web site: <http://www.surf.nist.gov/surf2.htm>.

### **Electronics and Electrical Engineering Laboratory (EEEL) Grants Program**

**Dates:** The Electronics and Electrical Engineering Laboratory Grants Program proposals must be received no later than the close of business September 30, 2003. Proposals received after June 30, 2003, will continue to be processed and considered for funding but may be funded in the next fiscal year, subject to the availability of funds.

**Addresses:** For the Electronics and Electrical Engineering Laboratory Grants Program, submit one signed original and two copies of the proposal package to: Electronics and Electrical Engineering Laboratory, Attn.: Sheila Bryner, National Institute of Standards and Technology, 100 Bureau Drive, Stop 8100, Gaithersburg, MD 20899-8100. Tel.:(301) 975-2220. Fax: (301) 975-4091.

**Authority:** As authorized by 15 U.S.C. 272(b) and (c), the NIST Electronics and Electrical Engineering Laboratory conducts a

basic and applied research program directly and through grants and cooperative agreements to eligible recipients.

**Program Description and Objectives:** The Electronics and Electrical Engineering Laboratory Grants Program solicits proposals in support of the broad program objectives identified below.

The Electronics and Electrical Engineering Laboratory Grants Program supports the formal mission of the Electronics and Electrical Engineering Laboratory, which is to strengthen the U.S. economy and improve the quality of life by providing measurement science and technology, and by advancing standards, primarily for the electronics and electrical industries.

More specifically, the Electronics and Electrical Engineering Laboratory Grants Program solicits proposals to support specific programs in the areas of metrology for semiconductors (including mainstream silicon, power devices, and compound semiconductors), superconductors (including cryoelectronics and bulk superconductors), electronic instrumentation, optoelectronics, magnetics (including bulk magnetic materials and magnetic data storage), video (including flat-panel displays), 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 (clothing, communication systems, emergency equipment, investigative aids, protective equipment, security systems, vehicles, speed-measuring equipment, weapons, and analytical techniques and standard reference materials used by the public safety community).

For details on these various activities, please see the Electronics and Electrical Engineering Laboratory Web site at <http://www.eeel.nist.gov>. Note that documents describing the current programs for the five participating technical divisions and two offices are available through the home page.

Technical contacts for these areas are:

#### **Semiconductors**

**Semiconductor Electronics Division—**Division Chief: Dr. David G. Seiler; (301) 975-2054; [david.seiler@nist.gov](mailto:david.seiler@nist.gov).

**Office of Microelectronics Programs—**Director: Dr. Stephen Knight; (301) 975-4400; [stephen.knight@nist.gov](mailto:stephen.knight@nist.gov).

#### **Superconductors (Bulk); Magnetics**

**Magnetic Technology Division—**Division Chief: Dr. Alan F. Clark; (303) 497-5477; [aclark@boulder.nist.gov](mailto:aclark@boulder.nist.gov).

**Superconductors (Cryoelectronics); National Electrical Standards (Josephson Array Development)**

**Electromagnetic Technology Division—**Division Chief: Dr. Richard E. Harris; (303) 497-3678; [richard.harris@boulder.nist.gov](mailto:richard.harris@boulder.nist.gov).

**Electronic Instrumentation; Video; Electronic Commerce; National Electrical Standards (Other Than Josephson Array Development)**

**Electricity Division—**Division Chief: Dr. James K. Olthoff; (301) 975-2400; [james.olthoff@nist.gov](mailto:james.olthoff@nist.gov).

#### **Optoelectronics**

**Optoelectronics Division; Office of Optoelectronics Programs—**Division Chief and Office Director: Dr. Gordon W. Day; (303) 497-5432; [gwday@boulder.nist.gov](mailto:gwday@boulder.nist.gov).

#### **Law enforcement**

**Office of Law Enforcement Standards—**Director: Dr. Kathleen Higgins; (301) 975-2757; [kathleen.higgins@nist.gov](mailto:kathleen.higgins@nist.gov).

**Eligibility:** The Electronics and Electrical Engineering Laboratory Grants Program is open to institutions of higher education; hospitals; non-profit organizations; commercial organizations; State, local, and Indian tribal governments; foreign governments; organizations under the jurisdiction of foreign governments; and international organizations.

**Funding Availability:** Over the past three years, the Electronics and Electrical Engineering laboratory funded a total of approximately \$1,500,000 in grants and cooperative agreements. The amount available each year fluctuates considerably based on programmatic needs. Individual awards are expected to range between \$5,000 and \$150,000.

**Proposal Review Process:** For the Electronics and Electrical Engineering Laboratory Grants Program, proposals will be distributed to the appropriate Division Chief or Office Director or designee based on technical area by one or more technical professionals familiar with the programs of the Electronics and Electrical Engineering Laboratory. The proposals will be reviewed in a two-step process. First, at least three independent, objective individuals knowledgeable about the particular scientific area described in the Program Description and Objectives section above that the proposal addresses will conduct a technical review of each

proposal, based on the evaluation criteria described below.

Reviews will be conducted on a quarterly basis, and all proposals received during the quarter will be ranked based on the reviewers' scores. Second, the Division Chief or Office Director will make application selections. In making application selections, the Division Chief or Office Director will take into consideration the results of the reviewers' evaluations, the compatibility of the applicant's proposal with the program objectives of the particular division or office that the proposal addresses, the availability of funding, and relevance to the objectives of the Electronics and Electrical Engineering Laboratory Grants Program, as described above. The final approval of selected applications and award of financial assistance will be made by the NIST Grants Officer based on compliance with application requirements as published in this notice, compliance with applicable legal and regulatory requirements, compliance with Federal policies that best further the objectives of the Department of Commerce, and whether the recommended applicants appear to be responsible. Applicants may be asked to modify objectives, work plans, or budgets and provide supplemental information required by the agency prior to award. The decision of the Grants Officer is final. Applicants should allow up to 90 days processing time.

**Evaluation Criteria:** For the Electronics and Electrical Engineering Laboratory Grants Program, the evaluation criteria and weights to be used by the technical reviewers in evaluating the proposals are as follows:

Proposal addresses specific program objectives as described in this notice (25%);

Proposal provides evidence of applicant's expertise in relevant technical area (20%);

Proposal offers innovative approach (20%);

Proposal provides realistic schedule with defined milestones (20%);

Proposal provides adequate rationale for budget (15%).

**Award Period:** For the Electronics and Electrical Engineering Laboratory Grants Program, proposals will be considered for research projects from one to three years. When a proposal for a multi-year award is approved, funding will generally be provided for only the first year of the program. If an application is selected for funding, NIST has no obligation to provide any additional funding in connection with that award. Continuation of an award to increase

funding or extend the period of performance is at the total discretion of NIST. Funding for each subsequent year of a multi-year proposal will be contingent upon satisfactory progress, continued relevance to the mission of the Electronics and Electrical Engineering Laboratory Grants Program, and the availability of funds. The multi-year awards must have scopes of work that can be easily separated into annual increments of meaningful work that represent solid accomplishments if prospective funding is not made available to the applicant, (*i.e.*, the scopes of work for each funding period must produce identifiable and meaningful results in and of themselves).

**Matching Requirements:** The Electronics and Electrical Engineering Laboratory Grants Program does not require any matching funds.

**Application Kit:** An application kit, containing all required application forms and certifications is available on the web at [http://www.eeel.nist.gov/eeel\\_grants/](http://www.eeel.nist.gov/eeel_grants/) or by contacting: Sheilda Bryner, (301) 975-2220, [sheilda.bryner@nist.gov](mailto:sheilda.bryner@nist.gov).

#### **Manufacturing Engineering Laboratory (MEL) Grants Program**

**Dates:** The MEL Grants Program proposals must be received no later than the close of business September 30, 2003. Proposals received after June 30, 2003, will continue to be processed and considered for funding but may be funded in the next fiscal year, subject to the availability of funds. Each applicant must submit one signed original and two copies of each proposal along with a Grant Application (Standard Form 424 REV. 7/97 and other required forms).

**Addresses:** For the MEL Grants Program, submit one signed original and two copies of the proposal, clearly marked to identify the field of research, to: Manufacturing Engineering Laboratory, Attn: Mrs. Barbara Horner, National Institute of Standards and Technology, 100 Bureau Drive, Stop 8200, Building 220, Room B322, Gaithersburg, Maryland 20899-8200. Tel: (301) 975-4345. E-mail: [barbara.horner@nist.gov](mailto:barbara.horner@nist.gov).

**Authority:** As authorized under 15 U.S.C. 272(b) and (c), the MEL conducts a basic and applied research program directly and through grants and cooperative agreements to eligible recipients.

**Program Description and Objectives:** All proposals submitted must be in accordance with the program objectives listed below. The appropriate Program Manager for each field of research may be contacted for clarification of the program objectives.

I. **Precision Engineering Division, 821**—The primary objective is to support laboratory programs in the areas of Engineering Metrology, Large-Scale Metrology, Nanometer-Scale Metrology, and Surface Metrology. The contact person for this division is: Dr. Dennis Swyt, and he may be reached at (301) 975-3463; [dennis.swyt@nist.gov](mailto:dennis.swyt@nist.gov).

II. **Manufacturing Metrology Division, 822**—The primary objective is to support laboratory programs in Mechanical Metrology; Advanced Optics Metrology; Predictive Process Engineering; and Smart Machine Tools. The contact person for this division is: Dr. E. Clayton Teague, and he may be reached at (301) 975-6600; [clayton.teague@nist.gov](mailto:clayton.teague@nist.gov).

III. **Intelligent Systems Division, 823**—The primary objective is to support laboratory programs in Intelligent Open Architecture Control of Manufacturing Systems, Intelligent Controls of Mobility Systems, and Intelligent Systems. The contact person for this division is: Mr. Albert Wavering, and he may be reached at (301) 975-3418; [albert.wavering@nist.gov](mailto:albert.wavering@nist.gov).

IV. **Manufacturing Systems Integration Division, 826**—The primary objective is to pursue semantics- and ontology-based systems integration technology and standards through support of laboratory programs in Manufacturing Enterprise Integration; Manufacturing Simulation and Visualization; Integrated Simulations for Homeland Defense and Emergency Response; Product Engineering; Healthcare Informatics; and Meso-Micro-Nano-Manufacturing. The contact person for this division is: Dr. Steven R. Ray, and he may be reached at (301) 975-3508; [steven.ray@nist.gov](mailto:steven.ray@nist.gov).

**Eligibility:** The MEL Grants Program is open to institutions of higher education; hospitals; non-profit organizations; commercial organizations; State, local, and Indian tribal governments; foreign governments; organizations under the jurisdiction of foreign governments; and international organizations.

**Funding Availability:** In fiscal year 2003, the MEL Grants Program anticipates funding of approximately \$750,000, including new awards and continuing projects. Individual awards are expected to range from approximately \$25,000 to \$300,000.

**Proposal Review Process:** Responsive proposals will be reviewed in a two-step process. First, at least three independent, objective individuals knowledgeable about the particular scientific area described in the section above that the proposal addresses will conduct a technical review of proposals,

based on the evaluation criteria described below. Reviews will be conducted no less than once per quarter, and all proposals since the last review session will be ranked based on the reviewers' scores. If non-Federal reviewers are used, the reviewers may discuss the proposals with each other, but ranks will be determined on an individual basis, not as a consensus. Second, the Division Chief or Laboratory Director will make application selections.

In making application selections, the Division Chief or Laboratory Director will take into consideration the results of the reviewers' evaluations, the compatibility of the applicant's proposal with the program objectives of the particular division that the proposal addresses, the availability of funds, and relevance to the objectives of the MEL Grants Program. These objectives are described above in the Program Objectives. The final approval of selected applications and award of financial assistance will be made by the NIST Grants Officer based on compliance with application requirements as published in this notice, compliance with applicable legal and regulatory requirements, compliance with Federal policies that best further the objectives of the Department of Commerce, and whether the recommended applicants appear to be responsible. Applicants may be asked to modify objectives, work plans, or budgets and provide supplemental information required by the agency prior to award. The decision of the Grants Officer is final.

**Evaluation Criteria:** For the MEL Grants Program, the evaluation criteria the technical reviewers will use in evaluating the proposals are as follows:

1. **Rationality.** Reviewers will consider the coherence of the applicant's approach and the extent to which the proposal effectively addresses scientific and technical issues.

2. **Technical Merit of Contribution.** Reviewers will consider the potential technical effectiveness of the proposal and the value it would contribute to the field of manufacturing engineering and metrology research.

3. **Qualifications of Technical Personnel.** Reviewers will consider the professional accomplishments, skills, and training of the proposed personnel to perform the work in the project.

4. **Resources Availability.** Reviewers will consider the extent to which the proposer has access to the necessary NIST or other facilities and overall support to accomplish project objectives.

Each of these factors will be given equal weight in the evaluation process.

**Award Period:** For the MEL Grants Program, proposals will be considered for research projects from one to three years. When a proposal for a multi-year award is approved, funding will generally be provided for only the first year of the program. If an application is selected for funding, NIST has no obligation to provide any additional funding in connection with that award. Continuation of an award to increase funding or extend the period of performance is at the total discretion of NIST. Funding for each subsequent year of a multi-year proposal will be contingent upon satisfactory progress, continued relevance to the mission of the MEL program, and the availability of funds. The multi-year awards must have scopes of work that can be easily separated into annual increments of meaningful work that represent solid accomplishments if prospective funding is not made available to the applicant, (*i.e.*, the scopes of work for each funding period must produce identifiable and meaningful results in and of themselves).

**Matching Requirements:** The MEL Grants Program does not require any matching funds.

**Application Kit:** An application kit, containing all required application forms and certifications is available by electronic mail to: Mrs. Barbara Horner, [barbara.horner@nist.gov](mailto:barbara.horner@nist.gov). Alternatively, Mrs. Horner can be contacted at (301) 975-4345.

### **Chemical Science and Technology Laboratory Grants Program**

**Dates:** The Chemical Science and Technology Laboratory Grants Program proposals must be received no later than the close of business September 30, 2003. Proposals received after June 30, 2003, will continue to be processed and considered for funding but may be funded in the next fiscal year, subject to the availability of funds.

**Addresses:** For the Chemical Science and Technology Laboratory Grant Program applicants are requested to submit one signed original and two copies of the proposal clearly marked to identify the field of research to: Attn: Dr. William F. Koch, National Institute of Standards and Technology, 100 Bureau Drive, Stop 8300, Gaithersburg, MD 20899-8300. Tel (301) 975-8301. E-Mail: [william.koch@nist.gov](mailto:william.koch@nist.gov).

**Authority:** As authorized under 15 U.S.C. 272 (b) and (c), the Chemical Science and Technology Laboratory conducts a basic and applied research program directly and through grants and cooperative agreements to eligible recipients.

**Program Description and Objectives:** All proposals submitted to the Chemical Science and Technology Laboratory Grants Program must be in accordance with the program objectives and programs listed below. Proposals submitted to the CSTL Grants Program must address a specific measurement issue relevant to one of the stated CSTL Programs, and must be directed to a specific Division. The appropriate Division Chief for each field of research may be contacted for clarification of the program objectives. Additional information about the Divisions and CSTL Programs may be obtained at the following Web site: <http://www.cstl.nist.gov/>.

CSTL is the United States' primary reference laboratory for chemical measurements, entrusted with developing, maintaining, advancing, and enabling the Nation's chemical measurement system, thereby enhancing industry's productivity and competitiveness, establishing comparability of measurements to facilitate equity of global trade, and improving public health, safety, and environmental quality. CSTL focuses its activities in measurement science research on reference methods, reference materials and reference data, and directs these efforts in support of the following specific Program areas aligned with industrial segments and National priorities:

1. Automotive and Aerospace;
2. Biomaterials;
3. Pharmaceuticals and Biomanufacturing;
4. Chemical and Allied Products;
5. Energy Systems;
6. Environmental Technologies and Services;
7. Food and Nutritional Products;
8. Forensics and Homeland Security;
9. Health and Medical Products and Services;
10. Industrial and Analytical Instruments and Services;
11. Microelectronics.

These Programs are structured to support CSTL's three objectives:

- Provide the national traceability and international comparability structure for measurements in chemistry, chemical engineering, and biotechnology.
- Assure that U.S. industry has access to accurate and reliable data and predictive models to determine the chemical and physical properties of materials and processes.
- Anticipate and address next-generation measurement needs of the Nation. CSTL conducts its research and is organized along disciplinary lines:
  - Biotechnology Division:** DNA chemistry, sequencing; Protein

structure, properties, and modeling; Biomaterials; Biocatalysis and bioprocessing measurements. The contact person for this division is: Dr. Vincent L. Vilker, and he may be reached at (301) 975-2629.

*Process Measurements Division:* Research, calibration services and provision of primary standards for temperature, pressure, vacuum, humidity, fluid flow, air speed, liquid density and volume, and gaseous leak-rate measurements; Sensor research. The contact person for this division is: Dr. James R. Whetstone, and he may be reached at (301) 975-2609.

*Surface and Microanalysis Science Division:* Nanoscale chemical characterization; Particle characterization and standards; Electronic and advanced materials characterization; Surface and interface chemistry; Advanced isotope metrology. The contact person for this division is: Dr. Richard R. Cavanagh, and he may be reached at (301) 975-2368.

*Physical and Chemical Properties Division:* Basic reference data; Data for process and product design; Properties of energy-related fluids; Fundamental studies of fluids; Cryogenic technologies; Computational chemistry. The contact person for this division is: Dr. Mickey Haynes, and he may be reached at (303) 497-3247.

*Analytical Chemistry Division:* Chemical measurements research and services in: Analytical sensing technologies; Classical analytical methods; Gas metrology; Laboratory automation technology; Nuclear analytical methods; Organic analytical methods; and Spectrochemical measurement methods. The contact person for this division is: Dr. Willie E. May, and he may be reached at (301) 975-3108.

*Eligibility:* The Chemical Science and Technology Laboratory Grants Program is open to institutions of higher education; hospitals; non-profit organizations; commercial organizations; State, local, and Indian tribal governments; foreign governments; organizations under the jurisdiction of foreign governments; and international organizations.

*Funding Availability:* In fiscal year 2003, the Chemical Science and Technology Laboratory anticipates funding of approximately \$1,000,000. Individual awards are expected to range from approximately \$5,000 to \$100,000.

No funds have been set aside specifically for support of the CSTL Grants Program. The availability of funds depends upon actual authorization of funds and other costs expected to be incurred by individual

divisions within the laboratory. Where funds are identified as available for grants, those funds will be awarded to highly ranked proposals as determined by the process described in this notice.

*Proposal Review Process:* For the Chemical Science and Technology Laboratory Grants Program, proposals will be reviewed in a three-step process. First, the Deputy Director of CSTL, or appropriate CSTL Division Chief, will determine the compatibility of the applicant's proposal with CSTL Program Areas, the alignment of the measurement issue that the proposal addresses with division activities, and the relevance to the objectives of the Chemical Science and Technology Laboratory Grants Program. These objectives are described in the "Program Objectives" section. If it is determined that the proposal is incomplete or non-responsive to the scope of the stated objectives, the proposal will not be reviewed for technical merit. If it is determined that all funds available for the CSTL Grants Program for the given year have been exhausted, the proposal will not be reviewed for technical merit. If a proposal is determined to be incomplete or non-responsive, or if it is determined that all available funds have been exhausted, the CSTL Grants Program will retain one copy of the proposal for three years for record keeping purposes. The remaining copies will be destroyed.

Second, at least three independent, objective individuals knowledgeable about the particular measurement science area described in the section above that the proposal addresses will conduct a technical review of each proposal, based on the evaluation criteria described below. Reviews will be conducted on a quarterly basis, and all responsive, complete proposals received and reviewed since the last quarter will be ranked based on the reviewers' scores. If non-Federal reviewers are used, the reviewers may discuss the proposals with each other, but ranks will be determined on an individual basis, not as a consensus.

Third, the Division Chief will make application selections, taking into consideration the results of the reviewers' evaluations, the availability of funds, and the relevance of the proposal to the programmatic priorities of the Division described in the Program Description and Objectives section above.

The final approval of selected applications and award of financial assistance will be made by the NIST Grants Officer based on compliance with application requirements as published in this notice, compliance

with applicable legal and regulatory requirements, compliance with Federal policies that best further the objectives of the Department of Commerce, and whether the recommended applicants appear to be responsible. Applicants may be asked to modify objectives, work plans, or budgets and provide supplemental information required by the agency prior to award. The decisions of the Grants Officer are final.

*Evaluation Criteria:* For the Chemical Science and Technology Laboratory Grants Program, the evaluation criteria the technical reviewers will use in evaluating the proposals are as follows:

1. *Rationality.* Reviewers will consider the coherence of the applicant's approach and the extent to which the proposal effectively addresses scientific and technical issues.

2. *Qualifications of Technical Personnel.* Reviewers will consider the professional accomplishments, skills, and training of the proposed personnel to perform the work in the project.

3. *Resources Availability.* Reviewers will consider the extent to which the proposer has access to the necessary facilities and overall support to accomplish project objectives.

4. *Technical Merit of Contribution.* Reviewers will consider the potential technical effectiveness of the proposal and the value it would contribute to the field of measurement science, especially as it pertains to reference methods, reference materials and reference data in Chemical Science and Technology.

Each of these factors will be given equal weight in the evaluation process.

*Award Period:* For the Chemical Science and Technology Laboratory Grant Program, proposals will be considered for research projects from one to three years. When a proposal for a multi-year award is approved, funding will generally be provided for only the first year of the program. If an application is selected for funding, NIST has no obligation to provide any additional funding in connection with that award. Continuation of an award to increase funding or extend the period of performance is at the total discretion of NIST. Funding for each subsequent year of a multi-year proposal will be contingent upon satisfactory progress, continued relevance to the mission of the Chemical Science and Technology Laboratory program, and the availability of funds. The multi-year awards must have scopes of work that can be easily separated into annual increments of meaningful work that represent solid accomplishments if prospective funding is not made available to the applicant, (i.e. the scopes of work for each funding period must produce identifiable and

meaningful results in and of themselves).

**Matching Requirements:** The Chemical Science and Technology Laboratory Grants Program does not require any matching funds.

**Contact:** For information on the Chemical Science and Technology Laboratory Grants Program, please contact Dr. William Koch, (301) 975-8301.

**Application Kit:** For the CSTL Grants Program, an application kit, containing all required application forms and certifications is available by contacting Mr. Neil Alderoty, (301) 975-8303.

### Physics Laboratory Grants Program

**Dates:** The Physics Laboratory Grants Program proposals must be received no later than the close of business September 30, 2003. Proposals received after June 30, 2003, will continue to be processed and considered for funding but may be funded in the next fiscal year, subject to the availability of funds.

**Addresses:** For the Physics Laboratory Grant Program applicants are requested to submit one signed original and two copies of the proposal clearly marked to identify the field of research to: Attn. Ms. Anita Sweigert, National Institute of Standards and Technology, 100 Bureau Drive, Stop 8400, Gaithersburg, MD 20899-8400. Tel (301) 975-4200. E-Mail: [anita.sweigert@nist.gov](mailto:anita.sweigert@nist.gov).

**Authority:** As authorized under 15 U.S.C. 272 (b) and (c), the Physics Laboratory conducts a basic and applied research program directly and through grants and cooperative agreements to eligible recipients.

**Program Description and Objectives:** All proposals submitted to the Physics Laboratory Grants Program must be in accordance with the program objectives listed below. The appropriate Program Manager for each field of research may be contacted for clarification of the program objectives.

**I. Electron and Optical Physics Division, 841—**The objective is to supplement division activities in characterization of nanometer-scale electronic and magnetic structures, characterization of EUV optical components to support semiconductor lithography and ultraviolet radiometric metrology, and to support ongoing activities in Bose-Einstein condensation and quantum information. The contact person for this division is: Dr. Charles W. Clark and he may be reached at (301) 975-3709.

**II. Atomic Physics Division, 842—**The primary objective is to support division programs aimed at determining basic atomic properties and developing new metrology techniques in atomic

spectroscopy, quantum processes, plasma radiation, laser cooling and trapping, and quantum metrology. The contact person for this division is: Dr. Wolfgang L. Wiese and he may be reached at (301) 975-3200.

**III. Optical Technology Division, 844—**The primary objective is to develop, improve and maintain national standards for radiation thermometry, spectroradiometry, photometry, and spectrophotometry as well as conduct basic theoretical and experimental research on the photophysical and photochemical properties of materials, in radiometric and spectroscopic techniques and instrumentation, and in the application of optical technologies. The contact person for this division is: Dr. Albert C. Parr and he may be reached at (301) 975-2316.

**IV. Ionizing Radiation Division, 846—**The primary objective is to provide primary standards, measurement methods, and technology to support the Division's work in meeting national needs in radiation interactions and dosimetry, neutron interactions and dosimetry, and radioactivity including both theoretical/experimental and applied research programs in Homeland Security and Health Care. The contact person for this division is: Dr. Bert M. Coursey and he may be reached at (301) 975-5584.

**V. Time and Frequency Division, 847—**The primary objective is to supplement division basic and applied research programs in the areas of phase noise measurements, network synchronization, ion storage, atomic standards and optical frequency measurements in support of future standards, dissemination services, and measurement methods. The contact person for this division is: Dr. Donald B. Sullivan and he may be reached at (303) 497-3772.

**Eligibility:** The Physics Laboratory Grants Program is open to institutions of higher education; hospitals; non-profit organizations; commercial organizations; state, local, and Indian tribal governments; foreign governments; organizations under the jurisdiction of foreign governments; and international organizations.

**Funding Availability:** In fiscal year 2003, the Physics Laboratory anticipates funding of approximately \$2,000,000, including new awards and continuing projects. Funding availability will be apportioned by quarter. Individual awards are expected to range from approximately \$5,000 to \$300,000.

**Proposal Review Process:** For the Physics Laboratory Grants Program, responsive proposals will be considered as follows: first, at least three

independent, objective individuals knowledgeable about the particular scientific area described in the section above that the proposal addresses will conduct a technical review of each proposal, based on the evaluation criteria described below. Reviews will be conducted on a monthly basis, and all proposals received during the month will be ranked based on the reviewers' scores. If non-Federal reviewers are used, reviewers may discuss the proposals with each other, but scores will be determined on an individual basis, not as a consensus.

Next, the Division Chief will make final application selections, taking into consideration the results of the reviewers' evaluations, including rank; the compilation of a slate that, when taken as a whole, is likely to best further the program goals described above; and the availability of funds.

The final approval of selected applications and award of financial assistance will be made by the NIST Grants Officer based on compliance with application requirements as published in this notice, compliance with applicable legal and regulatory requirements, compliance with Federal policies that best further the objectives of the Department of Commerce, and whether the recommended applicants appear to be responsible.

Applicants may be asked to modify objectives, work plans, or budgets and provide supplemental information required by the agency prior to award.

The decisions of the Grants Officer are final.

**Evaluation Criteria:** For the Physics Laboratory Grants Program, the evaluation criteria the technical reviewers will use in evaluating the proposals are as follows:

1. **Rationality.** Reviewers will consider the coherence of the applicant's approach and the extent to which the proposal effectively addresses scientific and technical issues.

2. **Qualifications of Technical Personnel.** Reviewers will consider the professional accomplishments, skills, and training of the proposed personnel to perform the work in the project.

3. **Resources Availability.** Reviewers will consider the extent to which the proposer has access to the necessary NIST or other facilities and overall support to accomplish project objectives.

4. **Technical Merit of Contribution.** Reviewers will consider the potential technical effectiveness of the proposal and the value it would contribute to the field of physics.

Each of these factors will be given equal weight in the evaluation process.

**Award Period:** For the Physics Laboratory Grant Program, proposals will be considered for research projects from one to three years. When a proposal for a multi-year project is approved, funding will generally be provided for only the first year of the program. If an application is selected for funding, NIST has no obligation to provide any additional funding in connection with that award. Continuation of an award to increase funding or extend the period of performance is at the total discretion of NIST. Funding for each subsequent year of a multi-year proposal will be contingent upon satisfactory progress, continued relevance to the mission of the Physics Laboratory program, and the availability of funds. The multi-year awards must have scopes of work that can be easily separated into annual increments of meaningful work that represent solid accomplishments if prospective funding is not made available to the applicant, *i.e.*, the scopes of work for each funding period must produce identifiable and meaningful results in and of themselves).

**Matching Requirements:** The Physics Laboratory Grants Program does not require any matching funds.

**Application Kit:** For the Physics Laboratory Grants Program, an application kit, containing all required application forms and certifications is available by contacting Ms. Anita Sweigert, (301) 975-4201.

### MSEL Grants Program

**Dates:** The MSEL Grants Program proposals must be received no later than the close of business September 30, 2003. Proposals received after June 30, 2003, will continue to be processed and considered for funding but may be funded in the next fiscal year, subject to the availability of funds. Each applicant must submit one signed original and two copies of each proposal along with a Grant Application, (Standard Form 424 REV. 7/97 and other required forms).

**Addresses:** For the MSEL Grants Program, submit one signed original and two copies of the proposal, clearly marked to identify the field of research, to: Materials Science and Engineering Laboratory, Attn.: Ms. Marlene Taylor, National Institute of Standards and Technology, 100 Bureau Drive, Stop 8501, Building 223, Room A305, Gaithersburg, Maryland 20899-8501. Tel: (301) 975-5653. E-mail: [marlene.taylor@nist.gov](mailto:marlene.taylor@nist.gov).

**Authority:** The authority for the MSEL Grants Program is as follows: as authorized under 15 U.S.C. 272 (b) and (c), the MSEL

conducts a basic and applied research program directly and through grants and cooperative agreements to eligible recipients.

**Program Description and Objectives:** All proposals submitted to the MSEL Grants Program must be in accordance with the program objectives listed below. The appropriate Program Manager for each field of research may be contacted for clarification of the program objectives.

I. **Laboratory Office, 850**—The primary objective is to supplement Materials Science and Engineering Laboratory activities of importance to materials science generally, including portions of Federal research and development programs performed in concert with other Federal agencies; and theoretical and computational materials science. The contact person for the Laboratory Office is: Dr. Stephen W. Freiman and he may be reached at (301) 975-5658 or by e-mail at [stephen.freiman@nist.gov](mailto:stephen.freiman@nist.gov).

II. **Ceramics Division, 852**—The primary objective is to supplement division activities in the area of combinatorial tools, nanotribology, nano- and micro-electronic materials, dielectric ceramics, interfacial chemistry, and microstructural analysis. The contact person for this division is: Dr. Ronald Munro and he may be reached at (301) 975-6127 or by e-mail at [ronald.munro@nist.gov](mailto:ronald.munro@nist.gov).

III. **Materials Reliability Division, 853**—The primary objective is to supplement division activities in the area of micro- and nano-scale property measurement. The contact person for this division is: Dr. Thomas Siewert and he may be reached at (303) 497-3523 or by e-mail at [siewert@boulder.nist.gov](mailto:siewert@boulder.nist.gov).

IV. **Polymers Division, 854**—The primary objective is to support division programs in electronics materials, biomaterials, combinatorial methods, nano-structured materials and processing characterization through participation in research on metrology, synthesis, processing and characterization of structure, mechanical, thermal and electrical properties. The contact person for this division is: Dr. Bruno Fanconi and he may be reached at (301) 975-6769 or by e-mail at [bruno.fanconi@nist.gov](mailto:bruno.fanconi@nist.gov).

V. **Metallurgy Division, 855**—The primary objective is to develop techniques to predict, measure and control transformations, phases, microstructure and kinetic processes as well as mechanical, physical and chemical properties in metals and their alloys. The contact person for this division is: Dr. Frank W. Gayle and he may be reached at (301) 975-6161 or by e-mail at [frank.gayle@nist.gov](mailto:frank.gayle@nist.gov).

VI. **NIST Center for Neutron Research, 856**—The primary objective is to develop high resolution cold and thermal neutron scattering research approaches and related physics, chemistry, macromolecular and materials applications. Awards to universities for participation by university students in the NIST/NSF Center for High Resolution Scattering are also funded under this program. The contact person for this division is: Dr. John J. Rush and he may be reached at (301) 975-6231 or by e-mail at [john.rush@nist.gov](mailto:john.rush@nist.gov).

**Eligibility:** The MSEL Grants Program is open to institutions of higher education; hospitals; non-profit organizations; commercial organizations; State, local, and Indian tribal governments; foreign governments; organizations under the jurisdiction of foreign governments; and international organizations.

**Funding Availability:** In fiscal year 2003, the MSEL Grants Program anticipates funding of approximately \$6,000,000, including new awards and continuing projects. Most grants and cooperative agreements are expected to be in the \$25,000 to \$100,000 per year range.

**Proposal Review Process:** For the MSEL Grants Program proposals will be reviewed in a two-step process. First, at least three independent, objective individuals knowledgeable about the particular scientific area described in the section above that the proposal addresses will conduct a technical review of proposals, as they are received on a rolling basis, based on the evaluation criteria. If non-Federal reviewers are used, the reviewers may discuss the proposals with each other, but ranks will be determined on an individual basis, not as a consensus. Second, the Division Chief or Center Director will make application selections. In making application selections, the Division Chief or Center Director will take into consideration the results of the reviewers' evaluations, the compatibility of the applicant's proposal with the program objectives of the particular division or center that the proposal addresses, the availability of funds, and relevance to the objectives of the MSEL Grants Program. These objectives are described above in the "Program Objectives" section. The final approval of selected applications and award of financial assistance will be made by the NIST Grants Officer based on compliance with application requirements as published in this notice, compliance with applicable legal and regulatory requirements, compliance with Federal policies that

best further the objectives of the Department of Commerce, and whether the recommended applicants appear to be responsible. Applicants may be asked to modify objectives, work plans, or budgets and provide supplemental information required by the agency prior to award. The decision of the Grants Officer is final.

*Evaluation Criteria:* For the MSEL Grants Program, the evaluation criteria the technical reviewers will use in evaluating the proposals are as follows:

1. *Rationality.* Reviewers will consider the coherence of the applicant's approach and the extent to which the proposal effectively addresses scientific and technical issues.

2. *Qualifications of Technical Personnel.* Reviewers will consider the professional accomplishments, skills, and training of the proposed personnel to perform the work in the project.

3. *Resources Availability.* Reviewers will consider the extent to which the proposer has access to the necessary NIST or other facilities and overall support to accomplish project objectives.

4. *Technical Merit of Contribution.* Reviewers will consider the potential technical effectiveness of the proposal and the value it would contribute to the field of materials science and engineering and neutron research.

Each of these factors will be given equal weight in the evaluation process.

*Award Period:* For the MSEL Grants Program, proposals will be considered for research projects from one to three years. When a proposal for a multi-year award is approved, funding will generally be provided for only the first year of the program. If an application is selected for funding, NIST has no obligation to provide any additional funding in connection with that award. Continuation of an award to increase funding or extend the period of performance is at the total discretion of NIST. Funding for each subsequent year of a multi-year proposal will be contingent upon satisfactory progress, continued relevance to the mission of the MSEL program, and the availability of funds. The multi-year awards must have scopes of work that can be easily separated into annual increments of meaningful work that represent solid accomplishments if prospective funding is not made available to the applicant, (i.e., the scopes of work for each funding period must produce identifiable and meaningful results in and of themselves).

*Matching Requirements:* The MSEL Grants Program does not require any matching funds.

*Application Kit:* For the MSEL Grants Program, an application kit, containing all required application forms and certifications is available by contacting Ms. Marlene Taylor, (301) 975-5653.

#### **Building Research Grants and Cooperative Agreements Program**

*Dates:* The Building Research Grants and Cooperative Agreements Program proposals must be received no later than the close of business September 30, 2003. Proposals received after June 30, 2003 will continue to be processed and considered for funding but may be funded in the next fiscal year, subject to the availability of funds.

*Addresses:* For the Building Research Grants and Cooperative Agreements Program, submit one signed original and two copies of the proposal package to: Building and Fire Research Laboratory, Attn.: Karen Perry, National Institute of Standards and Technology, 100 Bureau Drive, Stop 8602, Gaithersburg, MD 20899-8602. Tel.: (301) 975-5910. Fax: (301) 975-4032.

*Authority:* As authorized by 15 U.S.C. 272(b) and (c), the NIST Building and Fire Research Laboratory conducts a basic and applied research program directly and through grants and cooperative agreements to eligible recipients.

*Program Description and Objectives:* The Building Research Grants and Cooperative Agreements Program supports the formal mission of the Building and Fire Research Laboratory, which is to meet the measurement and standards needs of the Building and Fire communities. All proposals submitted must be in accordance with the program objectives listed below. The appropriate Program Manager for each field of research may be contacted for clarification of the program objectives.

1. *Materials and Construction Research Division, 861*—The primary objective is to support laboratory programs in the areas of Structures, Construction Metrology and Automation, Inorganic Materials, and Polymeric Materials (including safety, security, and sustainability of building and physical infrastructure, service-life performance of building materials, and construction cycle time). The contact person for this division is: Dr. Shyam Sunder, and he may be reached at (301) 975-6713.

2. *Building Environment Division, 863*—The primary objective is to support laboratory programs in the areas of Thermal Machinery, Mechanical Systems and Controls, Heat Transfer and Alternative Energy Systems, Computer Integrated Construction and Indoor Air Quality and Ventilation (including cybersecurity, critical

infrastructure protection of building management and control systems, and life-cycle information management in buildings). The contact person for this division is: Dr. George E. Kelly, and he may be reached at (301) 975-5850.

For details on these various activities, please see the Building and Fire Research Laboratory website at <http://www.bfsl.nist.gov>. Note that documents describing the current programs for the two technical divisions are available through the homepage.

*Eligibility:* The Building Research Grants and Cooperative Agreements Program is open to institutions of higher education; hospitals; non-profit organizations; commercial organizations; State, local, and Indian tribal governments; foreign governments; organizations under the jurisdiction of foreign governments; and international organizations.

*Funding Availability:* Over the past three years, the building divisions of the Building and Fire Research Laboratory funded a total of approximately \$1,000,000 in grants and cooperative agreements. The amount available each year fluctuates considerably based on programmatic needs. Individual awards are expected to range between \$5,000 and \$150,000.

*Proposal Review Process:* All applications received in response to this announcement will be reviewed to determine whether or not they are complete and responsive. Incomplete or non-responsive applications will not be reviewed for technical merit. The Program will retain one copy of each non-responsive application for three years for recordkeeping purposes. The remaining copies will be destroyed.

Responsive proposals will be forwarded to the appropriate Division Chief, who will assign them to appropriate reviewers. At least three independent, objective individuals knowledgeable about the particular scientific area described above that the proposal addresses will conduct a technical review of each proposal, based on the evaluation criteria described below. When non-Federal reviewers are used, reviewers may discuss the proposals with each other, but scores will be determined on an individual basis, not as a consensus. Reviews will be conducted no less than once per quarter, and all proposals since the last review session will be ranked based on the reviewers' scores.

Next, the Division Chief or Laboratory Director will make application selections. In making application selections, the Division Chief or Laboratory Director will take into consideration the results of the

evaluations, the scores of the reviewers, the availability of funds, and relevance to the objectives of the Building Systems Research Grants and Cooperative Agreements Program, as described in the Program Description and Objectives section for this program.

The final approval of selected applications and award of financial assistance will be made by the NIST Grants Officer based on compliance with application requirements as published in this notice, compliance with applicable legal and regulatory requirements, compliance with Federal policies that best further the objectives of the Department of Commerce, and whether the recommended applicants appear to be responsible. Applicants may be asked to modify objectives, work plans, or budgets and provide supplemental information required by the agency prior to award. The award decision of the Grants Officer is final. Applicants should allow up to 90 days processing time. The Program will retain one copy of each application that is not funded for three years for recordkeeping purposes. The remaining copies will be destroyed.

**Evaluation Criteria:** The Divisions will score proposals based on the following criteria and weights:

1. *Technical quality of the research.* Reviewers will assess the rationality, innovation and imagination of the proposal and the fit to NIST's in-house building research programs. (0–35 points)
2. *Potential impact of the results.* Reviewers will assess the potential impact and the technical application of the results to our in-house programs and the building industry. (0–25 points)
3. *Staff and institution capability to do the work.* Reviewers will evaluate the quality of the facilities and experience of the staff to assess the likelihood of achieving the objective of the proposal. (0–20 points)
4. *Match of budget to proposed work.* Reviewers will assess the budget against the proposed work to ascertain the reasonableness of the request. (0–20 points)

**Award Period:** For the Building Research Grants and Cooperative Agreements Program, proposals will be considered for research projects from one to three years. When a proposal for a multi-year award is approved, funding will generally be provided for only the first year of the program. If an application is selected for funding, NIST has no obligation to provide any additional funding in connection with that award. Continuation of an award to increase funding or extend the period of performance is at the total discretion of

NIST. Funding for each subsequent year of a multi-year proposal will be contingent upon satisfactory progress, continued relevance to the mission of the Building Research Grants and Cooperative Agreements Program, and the availability of funds. The multi-year awards must have scopes of work that can be easily separated into annual increments of meaningful work that represent solid accomplishments if prospective funding is not made available to the applicant, (*i.e.*, the scopes of work for each funding period must produce identifiable and meaningful results in and of themselves).

**Matching Requirements:** The Building Research Grants and Cooperative Agreements Program does not require any matching funds.

**Application Kit:** An application kit, containing all required application forms and certifications is available by contacting: Karen Perry, (301) 975–5910.

#### **Fire Research Grants Program**

**Dates:** The Fire Research Grants Program proposals must be received no later than the close of business September 30, 2003. Proposals received after April 30, 2003, will continue to be processed and considered for funding but may be funded in the next fiscal year, subject to the availability of funds.

**Addresses:** For the Fire Research Grants Program submit one signed original and two copies of the proposal to: Building and Fire Research Laboratory (BFRL), Attn.: Ms. Wanda Duffin, National Institute of Standards and Technology, 100 Bureau Drive, Stop 8660, Gaithersburg, Maryland 20899–8660. Tel: (301) 975–6863. E-mail: [wanda.duffin@nist.gov](mailto:wanda.duffin@nist.gov). Web site: <http://www.bfrl.nist.gov>.

**Authority:** As authorized by 15 U.S.C. 278f, the NIST Building and Fire Research Laboratory conducts directly and through grants and cooperative agreements, a basic and applied fire research program.

**Program Description and Objectives:** The program description and objectives for the Fire Research Grants Program are as follows:

**A. Analysis and Prediction:** The objectives are to develop understanding and predictive methods for dynamic fire phenomena to advance fire science and engineering practice and to perform research to understand the heat and mass transfer processes occurring in fires in order to improve predictions of the growth, spread, suppression, and emissions transport from fires of all scales. Experiments and metrology are developed and used to develop, support, and verify advanced computer

simulations of fire phenomena, fire hazards, fire protection, and fire fighting. The contact person for this group is: Dr. Anthony Hamins, and he may be reached at (301) 975–6598.

**B. Fire Metrology:** The objective is to apply measurement science in the development and quantification of new and existing measurement methods for studying fire growth, fire-induced flows, flame radiation, smoke formation and dynamics, species production, heat transfer, fire suppression, and fire detection. The contact person for this group is: Dr. George Mulholland, and he may be reached at (301) 975–6695.

**C. Fire Fighting Technology:** The objectives are to conduct research that enables advances in fire fighter safety, fire ground operations, and effectiveness of the fire service; develop and apply measurements, modeling, and technology, and improve the understanding of the behavior, prevention and control of fires to enhance: fire fighting operations and equipment, fire suppression, fire investigations, and disaster response; and provide input, including experimental data, fire modeling and test protocols, to advance the effectiveness of fire safety standards and codes. The contact person for this group is Mr. Nelson Bryner, and he may be reached at (301) 975–6868.

**D. Integrated Performance Assessment:** The objective is to produce tools utilizing enhanced data and prediction methods to quantify fire events for fire hazard and risk assessment; for fire fighting operations and training; for fire investigations; and for performance evaluations of fire protection systems in buildings, transportation systems, and vehicles in response to fire. Stakeholders include architects and design engineers; manufacturers of building materials, products, and furnishings; code developers, enforcers, and regulatory authorities; and those exposed to direct risk such as building owners, occupants, the fire service, and the general public. The contact person for this group is: Dr. Kathy Notarianni, and she can be reached at (301) 975–6883.

**E. Materials and Products:** The objective is to perform research enabling the confident development by industry of new, less-flammable materials and products. This capability is based on understanding fundamentally the mechanisms that control the ignition, flame spread and burning rate of materials, as well as and the chemical and physical characteristics that affect these aspects of flammability. This includes: Developing methods of measuring the response of a material to

fire conditions that enable assured prediction of the full-scale performance of the final product; developing computational molecular dynamics and other mechanistic approaches to understand flame retardant mechanisms and the effects of polymer chemical structure on flammability; characterizing the burning rates of charring and non-charring polymers and composites; and delineating and modeling the enthalpy and mass transfer mechanisms of materials combustion. The contact person for this group is Dr. Jeffrey Gilman, and he can be reached at (301) 975-6573.

**Eligibility:** The Fire Research Grants Program is open to institutions of higher education; hospitals; non-profit organizations; commercial organizations; State, local, and Indian tribal governments; foreign governments; organizations under the jurisdiction of foreign governments; and international organizations.

**Funding Availability:** For the Fire Research Grants Program, the annual budget is approximately \$1.3 million. Because of commitments for the support of multi-year projects and because proposals may have been deferred from the previous year's competition, only a portion of the budget is available to fund applications received in response to this notice. Most grants and cooperative agreements are in the \$10,000 to \$100,000 per year range, with a maximum requested duration of three years.

**Proposal Review Process:** Prospective proposers are encouraged to contact the above researchers to determine the extent of interest prior to preparation of a detailed proposal. Responsive proposals will be assigned, as received on a rolling basis, to the appropriate group leader of the five programs listed above in the program description and objectives. Proposals are evaluated for technical merit based on the evaluation criteria described below by at least three reviewers chosen from NIST professionals, technical experts from other interested government agencies, and experts from the fire research community at large. When non-Federal reviewers are used, reviewers may discuss the proposals with each other, but scores will be determined on an individual basis, not as a consensus. Group leaders will make funding recommendations to the Division Chief based on the technical evaluation score and the relationship of the work proposed to the objectives of the program.

In making application selections, the Division Chief will take into consideration the results of the

evaluations, the scores of the reviewers, the group leader's recommendation, the availability of funds, and relevance to the objectives of the Fire Research Grants Program, as described in the Program Description and Objectives section for this program. The final approval of selected applications and award of financial assistance will be made by the NIST Grants Officer based on compliance with application requirements as published in this notice, compliance with applicable legal and regulatory requirements, compliance with Federal policies that best further the objectives of the Department of Commerce, and whether the recommended applicants appear to be responsible. Applicants may be asked to modify objectives, work plans, or budgets and provide supplemental information required by the agency prior to award. The award decision of the Grants Officer is final. Applicants should allow up to 90 days processing time.

**Evaluation Criteria:** For the Fire Research Grants Program, the technical evaluation criteria are as follows:

a. *Technical quality of the research.* Reviewers will assess the rationality, innovation and imagination of the proposal and the fit to NIST's in-house fire research program. (0-35 points).

b. *Potential impact of the results.* Reviewers will assess the potential impact and the technical application of the results to our in-house programs and the fire safety community. (0-25 points)

c. *Staff and institution capability to do the work.* Reviewers will evaluate the quality of the facilities and experience of the staff to assess the likelihood of achieving the objective of the proposal. (0-20 points)

d. *Match of budget to proposed work.* Reviewers will assess the budget against the proposed work to ascertain the reasonableness of the request. (0-20 points)

**Award Period:** For the Fire Research Grants Program, proposals will be considered for research projects from one to three years. When a proposal for a multi-year project is approved, funding will initially be provided for only the first year of the program. If an application is selected for funding, DoC has no obligation to provide any additional future funding in connection with that award. Funding for each subsequent year of a multi-year proposal will be contingent on satisfactory progress, continuing relevance to the mission of the NIST Fire Research Program, and the availability of funds.

**Matching Requirements:** The Fire Research Grants Program does not require any matching funds.

**Application Kit:** For the Fire Research Grants Program, an application kit, containing all required application forms and certifications is available by contacting Ms. Wanda Duffin, (301) 975-6863, Web site: <http://www.bfrl.nist.gov>.

**Additional Information:** The Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements contained in the **Federal Register** notice of October 1, 2001 (66 FR 49917), as amended by the **Federal Register** notice published on October 30, 2002 (67 FR 66109), are applicable to this solicitation. In addition, the following information is applicable to all programs described above.

**Collaborations with NIST Employees:** All applications should include a description of any work proposed to be performed by an entity other than the applicant, and the cost of such work should ordinarily be included in the budget.

If an applicant proposes collaboration with NIST, the statement of work should include a statement of this intention, a description of the collaboration, and prominently identify the NIST employee(s) involved, if known. Any collaboration by a NIST employee must be approved by appropriate NIST management and is at the sole discretion of NIST. Prior to beginning the merit review process, NIST will verify the approval of the proposed collaboration. Any unapproved collaboration will be stricken from the proposal prior to the merit review.

**Use of NIST Intellectual Property:** If the applicant anticipates using any NIST-owned intellectual property, to carry out the work proposed, the applicant should identify such intellectual property. This information will be used to ensure that no NIST employee involved in the development of the intellectual property will participate in the review process for that competition. In addition, if the applicant intends to use NIST-owned intellectual property, the applicant must comply with all statutes and regulations governing the licensing of Federal government patents and inventions, described at 35 U.S.C. sec. 200-212, 37 CFR part 401, 15 CFR 14.36, and in section 20 of the Department of Commerce Pre-Award Notification Requirements, 66 FR 49917 (2001), as amended by the **Federal Register** notice published on October 30, 2002 (67 FR 66109). Questions about these requirements may be directed to the Counsel for NIST, 301-975-2803.

Any use of NIST-owned intellectual property by a proposer is at the sole discretion of NIST and will be negotiated on a case-by-case basis if a project is deemed meritorious. The applicant should indicate within the statement of work whether it already has a license to use such intellectual property or whether it intends to seek one.

If any inventions made in whole or in part by a NIST employee arise in the course of an award made pursuant to this notice, the United States government may retain its ownership rights in any such invention. Licensing or other disposition of NIST's rights in such inventions will be determined solely by NIST, and include the possibility of NIST putting the intellectual property into the public domain.

**Funding Availability:** For all Financial Assistance programs listed above, awards are contingent on the availability of funds.

**Catalog of Federal Domestic Assistance Name and Number:** Measurement and Engineering Research and Standards—11.609.

**For Further Information Contact:** All grants related administration questions concerning these programs should be directed to the NIST Grants and Agreements Management Division at (301) 975-6328.

Where websites are referenced within this notice, those without internet access may contact the appropriate Program official to obtain information.

**Initial Screening of all Applications:** All applications received in response to this announcement will be reviewed to determine whether or not they are complete and responsive to the scope of the stated objectives for each program. Incomplete or non-responsive applications will not be reviewed for technical merit. The Program will retain one copy of each non-responsive application for three years for record keeping purposes. The remaining copies will be destroyed.

**Fees and/or Profit:** It is not the intent of NIST to pay fee or profit for any of the financial assistance awards that may be issued pursuant to this announcement.

**Automated Standardized Application for Payment System (ASAP):** During FY 2002 and becoming mandatory in FY 2003, the Department of Commerce will begin using the Department of Treasury's ASAP. NIST began using the ASAP system in July 2001 and continues to establish new accounts in ASAP. Awards made pursuant to this announcement may contain the ASAP payment clause. In order to receive

payments for services under these awards, recipients will be required to register with the Department of Treasury and indicate whether or not they will use the on-line or voice response method of withdrawing funds from their ASAP established accounts. More information regarding ASAP can be found on-line at <http://www.fms.treas.gov/asap/index.html>.

**Paperwork Reduction Act:** The standard forms in the application kit involve a collection of information subject to the Paperwork Reduction Act. The use of Standard Forms 424, 424A, 424B, SF-LLL, and CD-346 have been approved by OMB under the respective Control Numbers 0348-0043, 0348-0044, 0348-0040, 0348-0046, and 0605-0001.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

**Research Projects Involving Human Subjects, Human Tissue, Data or Recordings Involving Human Subjects:** Any proposal that includes research involving human subjects, human tissue, data or recordings involving human subjects must meet the requirements of the Common Rule for the Protection of Human Subjects, codified for the Department of Commerce at 15 CFR part 27. In addition, any proposal that includes research on these topics must be in compliance with any statutory requirements imposed upon the Department of Health and Human Services (DHHS) and other federal agencies regarding these topics, all regulatory policies and guidance adopted by DHHS, FDA, and other Federal agencies on these topics, and all Presidential statements of policy on these topics.

On December 3, 2000, the U.S. Department of Health and Human Services (DHHS) introduced a new Federalwide Assurance of Protection of Human Subjects (FWA). The FWA covers all of an institution's Federally-supported human subjects research, and eliminates the need for other types of Assurance documents. The Office for Human Research Protections (OHRP) has suspended processing of multiple project assurance (MPA) renewals. All existing MPAs will remain in force until further notice. For information about FWAs, please see the OHRP Web site at <http://ohrp.osophs.dhhs.gov/irbasur.htm>.

In accordance with the DHHS change, NIST will continue to accept the submission of human subjects protocols that have been approved by Institutional Review Boards (IRBs) possessing a current, valid MPA from DHHS. NIST also will accept the submission of human subjects protocols that have been approved by IRBs possessing a current, valid FWA from DHHS. NIST will not issue a single project assurance (SPA) for any IRB reviewing any human subjects protocol proposed to NIST.

On August 9, 2001, the President announced his decision to allow Federal funds to be used for research on existing human embryonic stem cell lines as long as prior to his announcement (1) the derivation process (which commences with the removal of the inner cell mass from the blastocyst) had already been initiated and (2) the embryo from which the stem cell line was derived no longer had the possibility of development as a human being. NIST will follow guidance issued by the National Institutes of Health at <http://escr.nih.gov/> for funding such research.

**Research Projects Involving Vertebrate Animals:** Any proposal that includes research involving vertebrate animals must be in compliance with the National Research Council's "Guide for the Care and Use of Laboratory Animals" which can be obtained from National Academy Press, 2101 Constitution Avenue, NW., Washington, DC 20055. In addition, such proposals must meet the requirements of the Animal Welfare Act (7 U.S.C. 2131 *et seq.*), 9 CFR parts 1, 2, and 3, and if appropriate, 21 CFR part 58. These regulations do not apply to proposed research using pre-existing images of animals or to research plans that do not include live animals that are being cared for, euthanased, or used by the project participants to accomplish research goals, teaching, or testing. These regulations also do not apply to obtaining animal materials from commercial processors of animal products or to animal cell lines or tissues from tissue banks.

**Matching Funds:** Although many of the programs described in this notice do not require cost share, if it is determined that your proposal falls within the authority of 19 U.S.C. 2543-45 cost share will be required as follows:

Pursuant to 19 U.S.C. 2543-45, financial assistance shall not exceed 75 percent of such program or activity, when the primary purpose of such program or activity is—

(1) To increase the awareness of proposed and adopted standards-related activities;

(2) To facilitate international trade through the appropriate international and domestic standards-related activities;

(3) To provide adequate United States representation in international standards-related activities; and

(4) To encourage United States exports through increased awareness of foreign standards-related activities that may affect United States exports.

**Type of Funding Instrument:** The funding instrument will be a grant or cooperative agreement, depending on the nature of the proposed work. A grant will be used unless NIST is "substantially involved" in the project, in which case a cooperative agreement will be used. A common example of substantial involvement is collaboration between NIST scientists and recipient scientists or technicians. Please see the DoC Grants and Cooperative Agreements Interim Manual which may be found on the Internet at [http://www.osec.doc.gov/oebam/GCA\\_manual.htm](http://www.osec.doc.gov/oebam/GCA_manual.htm). NIST will make decisions regarding the use of a cooperative agreement on a case-by-case basis. Funding for contractual arrangements for services and products for delivery to NIST is not available under this announcement.

If a proposal submitted under this Notice is not properly funded by a grant or cooperative agreement, NIST will consider whether the proposal may be appropriately funded through procurement, interagency agreement, or another mechanism that does not involve a grant or cooperative agreement. NIST's review and consideration of that proposal will be consistent with the requirements applicable to that funding mechanism.

**Indirect Costs:** For the EEEL, MEL, CSTL, Physics, MSEL, BFRL, and ITL SURF Programs, no Federal funds will be authorized for Indirect Costs (IDC) nor fringe benefits; however, an applicant may provide for IDC and/or fringe benefits under his/her portion of Cost Sharing.

**Classification:** This funding notice was determined to be "not significant" for purposes of Executive Order 12866.

It has been determined that this notice does not contain policies with federalism implications as that term is defined in Executive Order 13132.

Applications under these programs are not subject to Executive Order 12372, "Intergovernmental Review of Federal Programs."

Because notice and comment are not required under 5 U.S.C. 553, or any other law, for notices relating to public property, loans, grants, benefits or contracts (5 U.S.C. 553(a)), a Regulatory

Flexibility Analysis is not required and has not been prepared for this notice, 5 U.S.C. 601 *et seq.*

Dated: February 13, 2003.

**Karen H. Brown,**

*Deputy Director, NIST.*

[FR Doc. 03-4129 Filed 2-19-03; 8:45 am]

**BILLING CODE 3510-13-U**

## DEPARTMENT OF DEFENSE

### Office of the Secretary

#### Proposed Collection; Comment Request

**AGENCY:** Office of the Director, Administration and Management.

**ACTION:** Notice.

In compliance with Section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995, the Office of the Director, Administration and Management announces the proposed public information collection and seeks public comment on the provisions thereof. Comments are invited on: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed information collection; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the information collection on respondents, including through the use of automated collection techniques or other forms of information technology.

**DATES:** Consideration will be given to all comments received by April 21, 2003.

**ADDRESSES:** Written comments and recommendations on the proposed information collection should be sent to The Office of the Director, Administration and Management/Quality Management Office, ATTN: Ms. Joyce Mussey, 1777 N. Kent St., Suite 14038, Arlington, VA 22209.

**FOR FURTHER INFORMATION CONTACT:** To request more information on this proposed information collection or to obtain a copy of the proposal and associated collection instruments, please write to the above address, or call Office of the Director, Administration and Management/Quality Management Office (703) 588-8142/8150.

**Title and OMB Number:** Interactive Customer Evaluation System; OMB Number 0704-420.

**Needs and Uses:** The Interactive Customer Evaluation System automates

and minimizes the use of the current manual paper comment cards and other customer satisfaction collection medium, which exist at various customer service locations throughout the Department of Defense.

**Affected Public:** Individuals or Households; Business or Other For-Profit.

**Annual Burden Hours:** 165.

**Number of Respondents:** 3300.

**Responses per Respondent:** 1.

**Average Burden per Response:** 3 minutes.

**Frequency:** On occasion.

#### SUPPLEMENTARY INFORMATION:

#### Summary of Information Collection

Members of the public who respond on the Interactive Customer Evaluation system are authorized customers and have been provided a service through DoD customer service organizations. They have the opportunity to give automated feedback to the service provider on the quality of their experience and their satisfaction level. They also have the opportunity to provide any comments that might be beneficial in improving the process and in turn the service to the customer. This is a management tool for improving customer services.

Dated: February 12, 2003.

**Patricia L. Toppings,**

*Alternate OSD Federal Register Liaison Officer, Department of Defense.*

[FR Doc. 03-4069 Filed 2-19-03; 8:45 am]

**BILLING CODE 5001-08-M**

## DEPARTMENT OF DEFENSE

### Office of the Secretary

#### Submission for OMB Review; Comment Request

**ACTION:** Notice.

The Department of Defense has submitted to OMB for clearance, the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).

**DATES:** Consideration will be given to all comments received by March 24, 2003.

**Title and OMB Number:** Evaluation of Reasons for Non-Acceptance of Department of Army Civilian Jobs Offers; OMB Number 0702—[To Be Determined].

**Type of Request:** New Collection.

**Number of Respondents:** 2,500.

**Responses per Respondent:** 1.

**Annual Responses:** 2,500.

**Average Burden per Response:** 7 minutes.