

the certification form prescribed above applies;

2. Drug-Free Workplace: Grantees (as defined in 15 CFR Part 26; Section 605) are subject to 15 CFR Part 26, Subpart F, "Government-wide Requirements for Drug-Free Workplace (Grants)," and the related section of the certification form prescribed above applies;

3. Anti-Lobbying: Persons (as defined in 15 CFR Part 28, Section 105) are subject to the lobbying provisions of 31 U.S.C. 1352, "Limitation on Use of Appropriated Funds to Influence Certain Federal Contracting and Financial Transactions," and the lobbying section of the certification form prescribed above applies to applications/bids for grants, cooperative agreements, and contracts for more than \$100,000, and loans and loan guarantees for more than \$150,000, or the single family maximum mortgage limit for affected programs, whichever is greater.

4. Anti-Lobbying Disclosure: Any applicant institution that has paid or will pay for lobbying using any funds must submit an SF-LLL, "Disclosure of Lobbying Activities," as required in 15 CFR Part 28, Appendix B.

5. Lower-Tier Certifications: Recipients shall require applicant/bidder institutions for subgrants, contracts, subcontracts, or other lower tier covered transactions at any tier under the award to submit, if applicable, a completed Form CD-512, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transactions and Lobbying," and disclosure form, SF-LLL, "Disclosure of Lobbying Activities." Form CD-512 is intended for the use of recipients and should not be transmitted to NIST. SF-LLL submitted by any tier, recipient or subrecipient, should be submitted to NIST in accordance with the instructions contained in the award document.

Name Check Reviews

All for-profit and non-profit applicants will be subject to a name check review process. Name checks are intended to reveal if any individuals associated with the applicant have been convicted of or are presently facing, criminal charges such as fraud, theft, perjury, or other matters which significantly reflect on the applicant's management honesty or financial integrity.

Preward Activities

Applicants (or their institutions) who incur any costs prior to an award being made do so at their own risk of not being reimbursed by the Government.

Notwithstanding any verbal assurance that may have been provided, there is no liability on the part of NIST to cover pre-award costs.

No Obligation for Future Funding

If an application is accepted for funding, DoC has no obligation to provide any additional future funding in connection with the award. Renewal of an award to increase funding or extend the period of performance is at the total discretion of NIST.

Past Performance

Unsatisfactory performance under prior Federal awards may result in an application not being considered for funding.

False Statements

A false statement on an application is grounds for denial or termination of funds, and grounds for possible punishment by a fine or imprisonment as provided in 18 U.S.C. § 1001.

Delinquent Federal Debts

No award of Federal funds shall be made to an applicant who has an outstanding delinquent Federal debt until either:

1. The delinquent account is paid in full;
2. A negotiated repayment schedule is established and at least one payment is received; or
3. Other arrangements satisfactory to DoC are made.

Indirect Costs (IDC)

Indirect Costs will not be allowable charges against the award unless specifically included as a line item in the approved budget incorporated into the award.

If the applicant has not previously established an IDC rate with a Federal Agency, the negotiation and approval of a rate is subject to the procedures in the applicable cost principles and the DoC policy.

Regardless of any approved IDC rate applicable to the award, the maximum dollar amount of allocable IDC for which the DoC will reimburse the Recipient shall be the lesser of:

- (a) The Federal share of the total allocable IDC of the award based on the negotiated rate with the cognizant Federal agency as established by audit or negotiation; or
- (b) The line item of the Federal share of IDC contained in the approved budget of the award.

Purchase of American-Made Equipment and Products

Applicants are hereby notified that they are encouraged, to the greatest

practicable extent, to purchase American-made equipment and products with funding provided under this program.

Federal Policies and Procedures

Recipients and subrecipients under this program are subject to all Federal laws and Federal and Departmental regulations, policies, and procedures applicable to financial assistance awards.

Executive Order 12372

Applications under this program are not subject to Executive Order 12372, "Intergovernmental Review of Federal Programs". This program does not directly affect any state or local government.

Executive Order 12866

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

Dated: December 1, 1999.

Karen Brown,

Deputy Director, NIST.

[FR Doc. 99-31606 Filed 12-6-99; 8:45 am]

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DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

[Docket No. 990907248-9248-01]

RIN 0693-ZA32

Precision Measurement Grants et al.; Availability of Funds

(1) Precision Measurement Grants—Availability of Funds; (2) Physics Laboratory (Physics), 2000 Summer Undergraduate Research Fellowships (SURF); (3) Materials Science and Engineering Laboratory (MSEL), 2000 Summer Undergraduate Research Fellowships (SURF); (4) Manufacturing Engineering Laboratory (MEL), 2000 Summer Undergraduate Research Fellowships (SURF); (5) Materials Science and Engineering Laboratory (MSEL) Grants Program, Availability of Funds; (6) Fire Research Grants Program—Availability of Funds.

AGENCY: National Institute of Standards and Technology, Commerce.

ACTION: Notice.

SUMMARY: The purpose of this notice is to inform potential applicants that the following programs of the National Institute of Standards and Technology (NIST) are offering financial assistance as follows: (1) The Precision Measurement Grants Program; (2) the

2000 Summer Undergraduate Research Fellowships (SURF) in the areas of Atomic, Molecular and Optical (AMO) and Radiation Physics, in Materials Science and Engineering, and in Manufacturing Engineering; (3) the Materials Science and Engineering Grants Program; and (4) 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 Physics Laboratory," "SURFing the Materials Science and Engineering Laboratory," and "SURFing the Manufacturing Engineering Laboratory" will provide an opportunity for the Physics Laboratory (PL), the Materials Science and Engineering Laboratory (MSEL), the Manufacturing Engineering Laboratory (MEL), and the National Science Foundation (NSF) to join in a partnership to encourage outstanding undergraduate students to pursue careers in science and engineering. The PL program will function by exposing students to world class atomic, molecular, optical (AMO) and radiation physicists and facilities in the NIST Physics Laboratory, and by strengthening undergraduate AMO physics curricula by forming the basis for ongoing collaborations. The MSEL program will function by providing 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 MEL program will function by providing research opportunities with internationally known NIST scientists in the fields of intelligent systems, automated production, precision engineering, and manufacturing systems integration. The NIST Program Directors will work with physics, materials science, manufacturing engineering, intelligent systems, automated production, precision engineering, and other science-related department chairs and directors of multi-disciplinary centers of excellence to identify outstanding undergraduates (including graduating seniors) who would benefit from off-campus summer research in an honors academy environment. *The Materials Science and Engineering Laboratory (MSEL) Grants Program* is continuing its program for grants and cooperative agreements in the following fields of research: Ceramics, Metallurgy, Polymer Sciences, Neutron Scattering Research and Spectroscopy. *The Fire Research*

Grants Program is limited to innovative ideas in the fire research area generated by the proposal writer, who chooses the topic and approach, consistent with the program description/objectives of this notice.

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 the close of business February 1, 2000. The semi-finalists will be notified of their status by March 24, 2000, and will be requested to submit full proposals to NIST by close of business on May 12, 2000. Selection of the awards will be made by Friday, August 15, 2000.

The Physics, MSEL and MEL SURF Program proposals must be received no later than the close of business February 15, 2000.

The MSEL Grants Program proposals must be received no later than the close of business September 30, 2000. 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).

The Fire Research Grants Program proposals must be received no later than the close of business September 30, 2000.

ADDRESSES: *For the Precision Measurement Grants Program*, applicants are requested to direct technical questions and submit an abbreviated proposal (original and two (2) signed copies) with a description of their proposed work of no more than five (5) double spaced pages to: Dr. Barry N. Taylor, Chairman, NIST Precision Measurement Grants Committee, Bldg, 225, Rm. B161, National Institute of Standards and Technology, 100 Bureau Drive, Stop 8401, Gaithersburg, MD 20899-8401, Tel: (301) 975-4220, E-mail: barry.taylor@nist.gov, Website: <http://physics.nist.gov/ResOpp/grants/grants.html>

For the Physics, MSEL and MEL SURF Programs, applicant institutions must submit one signed original and two (2) copies of the proposal to:

For the Physics, MSEL and MEL SURF Programs: 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, Website: <http://www.surf.nist.gov>

Technical questions for the Physics, MSEL and MEL SURF Programs should be directed to the following contact persons: for the *Physics SURF Program*, Dr. Marc Desrosiers, Tel: (301) 975-5639, E-mail: marc.desrosiers@nist.gov; for the MSEL SURF Program, Dr. Terrell A. Vanderah, Tel: (301) 975-5785, E-mail: terrell.vanderah@nist.gov; and for the MEL SURF Program, Ms. Lisa Jean Fronczek, Tel: (301) 975-6633, E-mail: lfronczek@nist.gov.

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. Patty Salpino, National Institute of Standards and Technology, 100 Bureau Drive, Stop 8501, Building 223, Room A305, Gaithersburg, Maryland 20899-8501, Tel: (301) 975-5731, E-mail: patty.salpino@nist.gov

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. Sheilda Bryner, National Institute of Standards and Technology, 100 Bureau Drive, Stop 8630, Gaithersburg, Maryland 20899-8630, Tel: (301) 975-5851, E-mail: sheilda.bryner@nist.gov

FOR FURTHER INFORMATION CONTACT: All grants administration questions concerning these programs should be directed to the NIST Grants Office at (301) 975-6329.

SUPPLEMENTARY INFORMATION:

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

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. The authority for the *Physics, MSEL and MEL SURF Programs* is as follows: 15 U.S.C. 278g-1 authorizes NIST to expend up to 1 per centum of the funds appropriated for activities of NIST in any fiscal year, as the Director deems appropriate, for financial assistance awards in the form of cooperative agreements 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. The authority for the *MSEL Grants Program* is as follows: As authorized under 15 U.S.C. 272(b)(6) and (c)(16), the

MSEL conducts a basic and applied research program directly and through grants and cooperative agreements to eligible recipients. The authority for the *Fire Research Grants Program* is as follows: 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/Objectives

The program description/objectives for the *Precision Measurement Grants Program* are as follows: As part of its research program since 1970, NIST has awarded Precision Measurement Grants to U.S. 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 to encourage basic, measurement-related research in U.S. universities and colleges and to foster contacts between NIST scientists and those faculty members of U.S. academic institutions who are actively engaged in such work. The Precision Measurement Grants are also intended to make it possible for such faculty members 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.

In general, proposals for experimental research will be given preference over proposals for theoretical research because of the greater expense of experimental work. 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 aspiring researchers have in obtaining funds.

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

- (1) Eotvos experiment-cryogenic version, D.F. Bartlett, University of Colorado.

- (2) A test of local Lorentz invariance using polarized ^{21}Ne nuclei, T.E. Chupp, Harvard University.

- (3) A new method to search for an electric dipole moment of the electron, L.R. Hunter, Amherst College.

- (4) High-precision timing of millisecond pulsars, D.R. Stinebring, Princeton University.

- (5) Development of an atom interferometer gyroscope for tests of general relativity, M. Kasevich, Stanford University.

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

- (7) Measurement of the magnetically-induced QED birefringence of the vacuum, Siu Au Lee, Colorado State University.

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

The program description/objectives for the *Physics, MSEL and MEL SURF Programs* are as follows: To build a mutually beneficial relationship between the student, the institution of higher learning and NIST. This is the seventh year of the *Physics SURF Program* which is partially funded by the NSF Physics Division as a Research Experience for Undergraduates (REU) site. This is the third year of a proposed three year *MSEL SURF Program* funded by the NSF Division of Materials Research (DMR) as a Research Experience for Undergraduates (REU) site. This is the second year of proposed five year *MEL SURF Program* funded by the NSF Division of Engineering Education and Centers (EEC) as a Research Experience for Undergraduates (REU) site. Between ten and twenty percent of the associated student stipends, travel and housing has been provided in cost sharing by the participating institutions in previous years.

NIST is one of the nation's premiere research institutions for the physical sciences and, as the lead Federal agency for technology transfer, is providing a strong interface between government, industry and academia. On-site researchers at NIST come from a broad range of institutions. Owing to its unique mission to support the U.S. economy by working with industry, 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 Physics Laboratory, the Materials Science and Engineering Laboratory, and the Manufacturing Engineering

Laboratory to offer unique research and training opportunities for undergraduates, providing them a research-rich environment and exposure to state of the art equipment, to scientists at work, and to professional contacts that represent future employment possibilities.

Attending to the long term needs of many U.S. high-technology industries, NIST's Physics Laboratory 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 Materials Science and Engineering Laboratory 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 powder atomization chambers. 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 Manufacturing Engineering Laboratory conducts theoretical and experimental research in length, mass, force, vibration, acoustics, and ultrasonics, as well as intelligent machines, precision control of machine tools, 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 for 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 to the accurate measurement of an artifact's dimensions.

SURF students will work one-on-one with our Nation's top physical scientists both from NIST and from some of our Nation's leading, high tech industries. 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, materials science, engineering, mathematics, or computer science, and to consider research careers. *SURFing the Physics Laboratory*, *SURFing the Materials Science and Engineering Laboratory* and *SURFing the Manufacturing Engineering Laboratory* 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.

The program description/objectives for the *MSEL Grants Program* are as follows: 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. Ceramics Division, 852—The primary objective is to supplement division-activities in the area of ceramic processing, tribology, composites, machining, interfacial chemistry, and

microstructural analysis. The contact person for this division is: Dr. Ronald Munro and he may be reached at (301) 975-6127.

II. Polymers Division, 854—The primary objective is to support division programs in polymer blends, composites, electrical applications, as well as, dental and medical polymeric materials 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.

III. Metallurgy Division, 855 (Process Control)—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. Robert J. Schaefer and he may be reached at (301) 975-5961.

IV. Metallurgy Division, 855 (Intelligent Processing Systems)—The primary objective is to develop new and improved sensors, measurement techniques, and analytical models for metallurgical structures and processes in order to facilitate the development and adoption of intelligent processing systems for materials. The contact person for this division is: Dr. Robert J. Schaefer and he may be reached at (301) 975-5961.

V. 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. The contact person for this division is: Dr. John J. Rush and he may be reached at (301) 975-6231.

The program description/objectives for the *Fire Research Grants Program* are as follows:

A. *Fire Dynamics*: To develop understanding and predictive methods for dynamic fire phenomena to advance fire science and engineering practice. 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 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.

B. *Large Fire Research*: To develop understanding of the behavior,

prevention, and control of large fires through measurement, prediction and demonstration. This includes new understanding and technology related to: fire suppression and control, fire fighting operations, burning characteristics of assemblies, thermal and chemical emission, smoke transport processes; fire modeling; fire investigations; fire suppression agents; use of combustion for environmental cleanup; and field measurement of both structural and unconfined fires. To perform research the results of which are used in fire fighting, fire protection, fire investigation, and construction to reduce the impact of fire on people, property, and the environment.

C. *Fire Safety System*: To perform research and development and demonstrate the advanced fire safety systems that utilize deterministic fire modeling. These systems are intended to enhance the quality, reliability, and accuracy of data predictions available to quantify fire events with applications to buildings, fire protection systems, transportation systems and vehicles, training, fire fighting, fire investigations, and codes and standards. To perform research to advance the capabilities of fire models and their applications, including: developing methods to assess fire hazard and risk; creating advanced, usable models for the calculation of building fires and their effect on the environment and structure; integrating fire models with building control and fire alarm systems, developing advanced information systems for fire fighters; developing a protocol for determining the accuracy of algorithms and comprehensive models; developing data bases to facilitate use of fire models; and advancing the concepts of performance-based engineering.

D. *Advanced Fire Measurements*: To produce the scientific basis and robust measurement methods for characterizing fires and their effluents at full- and reduced-scales. This includes discrete point, volume-integrated, and time- and space-resolved measurements for such properties as temperature, smoke density, chemical species, and flow velocity. Laboratory and computational research are also performed to understand the underpinning fire phenomena to ensure the soundness of the developed measurement techniques.

E. *Materials Fire Research*: 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 polymer and composites; and delineating the modeling the enthalpy and mass transfer mechanisms of materials combustion.

F. Fire Sensing and Extinguishment: To develop understanding, metrology and predictive methods to enable high-performance fire sensing and extinguishment systems; and devising new approaches to minimize the impact of unwanted fires and the suppression process. This includes: performing research for the identification and *in-situ* measurement of the symptoms of pending and nascent fires and the consequences of suppression; devising or adapting monitors for these variables and the intelligence for timely interpretation of the data; developing methods to characterize the performance of new approaches to fire detection and suppression; determining mechanisms for deflagration and detonation suppression by advanced agents and principles for their optimal use; and modeling the extinguishment process.

Eligibility

For the *Precision Measurement Grants Program*, universities and colleges in the United States. For the *Physics*, *MSEL* and *MEL SURF Programs*, colleges and universities in the United States with degree programs in materials science, chemistry, engineering, computer science, mathematics, or physics. Participating students must be U.S. citizens or permanent U.S. residents. For the *MSEL Grants Program* and the *Fire Research Grants Program*, these programs will be open to academic institutions, non-federal agencies, independent and industrial laboratories, and research organizations. Immediate family members of NIST Building and Fire Research Laboratory (BFRL) staff are ineligible for support from the *Fire Research Grants Program*.

Funding Availability

For all Financial Assistance programs listed below, awards are contingent on the availability of funds. For the *Precision Measurement Grants Program*,

the annual budget is approximately \$300,000. If an applicant proposes a multi-year project, the scope of work must be clearly severable into annual increments of meaningful work that represent solid accomplishments if continuing funding is not made available to the applicant. Because of commitments for supporting multi-year programs, only a portion of the budget is available to initiate new programs or renew existing ones in any one year.

For the *Physics SURF Program*, the NIST Physics Laboratory will commit approximately \$50,000 to support these cooperative agreements. The NIST Physics Laboratory's REU Program is anticipating renewal of funding by the NSF at the level of \$70,000 per year. The anticipated direct costs for stipends, travel, housing, and conference attendance for twenty-five students is about \$150,000. The actual number of awards made under this announcement will depend on the level of cost sharing by academic partners.

For the *MSEL SURF Program*, the NIST Materials Science and Engineering Laboratory anticipates receiving funding as a NSF REU Program at the level of \$50,000 per year. For the *NEL SURF Program*, the NIST Manufacturing Engineering Laboratory anticipates receiving funding as a NSF REU Program at the level of \$52,000 per year. It is anticipated that the funding for both of these programs would provide for the costs of stipends, travel and housing, and the conference attendance of eight students for each program. The actual number of awards made under this announcement will depend on the level of cost sharing by academic partners.

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 usually 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. Renewal 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, continuing 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). In fiscal year 2000, the *MSEL Grants Program* anticipates funding of approximately \$750,000, including new awards and continuing projects.

For the *Fire Research Grants Program*, the annual budget is \$1.34 million. Because of commitments for the support of multi-year projects, only a portion of the budget is available to initiate new programs in any one year. Most grants and cooperative agreements are in the \$10,000 to \$100,000 per year range.

Proposal Review Process and Evaluation Criteria

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

The abbreviated proposals will be reviewed on the bases of the evaluation criteria below. The NIST Precision Measurement Grants Committee and the Outside Review Committee will then select approximately four to eight semifinalists and request that these candidates submit full proposals. The same committees will evaluate the detailed proposals based on the evaluation criteria. In recommending applications for funding, the program's selecting official will take into consideration the results of the evaluations, the needs of the NIST laboratories, and the committees' judgment as to which applications, when the slate is taken as a whole, are likely to best further the goals of the NIST Precision Measurements Grants Program. Two grantees for fiscal year 2000 will be selected. The final approval of selected applications and award of cooperative agreements will be made by the NIST Grants Officer based on compliance with program requirements and whether the recommended applicants appear competently managed, responsible, and committed to achieving project objectives. The decision of the Grants Officer is final.

The evaluation criteria to be used in evaluating the preapplication 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, or to better

understand an important, but already existing, measurement method or physical standard?

3. The feasibility of the research—Is it likely that significant progress can be made in a three year time period with the funds and personnel available?

4. The past accomplishments of the applicant—Is the quality of the research previously carried out by the prospective grantee such that there is a high probability that the proposed research will be successfully carried out?

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

For the *Physics, MSEL and MEL SURF Programs*, all proposals will be reviewed and ranked by a panel of three NIST scientists appointed by the Program Directors on the basis of the evaluation criteria. Proposals should include the following:

(A) Student Information:

(1) Official 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);

(2) A personal statement from each student and statement of commitment to participate in the 2000 SURF program, including a description of the student's prioritized research interests;

(3) A resume for each student; and

(4) Two letters of recommendation for each student.

(B) Information About the Applicant Institution:

(1) Description of the institution's education and research philosophy, faculty interests, on-campus research program(s) and opportunities, and overlapping research interests of NIST and the institution; and

(2) A statement addressing issues of academic credit and cost sharing.

For the *Physics, MSEL and MEL SURF Programs*, the evaluation criteria are: Evaluation of Student's Academic Ability and Commitment to Program Goals (70%): Includes, but is not limited to, evaluation of the following: Completed course work; expressed research interest; prior research experience; grade point average in courses relevant to program; career plans; honors and activities.

Evaluation of Applicant Institution's Commitment to Program Goals (30%): Includes, but is not limited to, evaluation of the following: Institution's focus on AMO physics, materials science, manufacturing research and all of its components, including but not limited to engineering, computer science, physics, and mathematics; overlap between research interests of the institution and NIST; emphasis on undergraduate hands-on research;

undergraduate participation in research conferences/programs; on-campus research facilities; past participation by students/institution in such programs; and commitment to educate women, minorities, and persons with disabilities. In the spirit of a true partnership, successful applicant institutions will be encouraged to contribute some partial support to the program. A suggested level of participation would be to directly cover student travel (one round trip by common carrier) or housing costs (approximately \$2000); stated intent to support the participating students at a research conference, and/or awarding of academic credit for the student research.

In recommending applications for funding, the program's selecting official will take into consideration the results of the panel's evaluations, including rank, the needs of the NIST laboratories, and the selecting official's judgment as to which applications, when the slate is taken as a whole, are likely to best further the goals of the SURF Program. The final approval of selected applications and award of cooperative agreements will be made by the NIST Grants Officer based on compliance with program requirements and whether the recommended applicants appear competently managed, responsible, and committed to achieving project objectives. The decision of the Grants Officer is final.

For the *MSEL Grants Program*, proposals will be reviewed in a two-step process. First, a panel of at least three 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. Second, the Division Chief or Center Director will make final award selections. In making final award selections, the Division Chief or Center Director will take into consideration the results of the panel's evaluations, including rank, the compatibility of the applicant's proposal with the program objectives of the particular division or center that the proposal addresses, and the Division Chief or Center Director's judgment as to which applications, when the slate is taken as a whole, are likely to best further the objectives of the MSEL Grants Program. These objectives are described above in the "Program Objectives" section. If an award is made to an applicant that does not receive the highest score in its category by technical reviewers, the Division Chief or Center Director shall justify the selection in writing. The final approval of selected applications and

award of cooperative agreements will be made by the NIST Grants Officer based on compliance with program requirements and whether the recommended applicants appear competently managed, responsible, and committed to achieving project objectives. The decision of The Grants Officer is final.

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 necessary facilities and other 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, except where much of the work is to be carried out at NIST, which would lower the weight of criterion 3.

For the *Fire Research Grants Program*, all proposals are assigned, as received on a rolling basis, to the appropriate group leader of the six programs listed above in the program description/objectives. Proposals are evaluated for technical merit based on the evaluation criteria 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. Both the technical value of the proposal and the relationship of the work proposed to the needs of the specific program are taken into consideration in the group leader's recommendation to the Division Chief. In making the final selections, the Division Chief will take into consideration the results of the evaluations, the scores of the reviewers, and the Division Chief's judgment as to which applications, when the slate is taken as a whole, are likely to best further the goals of the Fire Research Grants Program. The final approval of selected applications and award of cooperative agreements will be made by the NIST Grants Officer based on compliance with program requirements

and whether the recommended applicants appear competently managed, responsible, and committed to achieving project objectives. The decision of the Grants Officer is final. Applicants should allow up to 90 days processing time.

For the *Fire Research Grants Program*, the technical evaluation criteria includes the following:

- a. Technical quality of the research: 0–35 points.
- b. Potential impact of the results: 0–25 points.
- c. Staff and institution capability to do the work. 0–20 points.
- d. Match of budget to proposed work: 0–20 points.

Award Period

For the *Precision Measurement Grants Program*, NIST is now accepting applications for two new grants in the amount of \$50,000 per year to be awarded for the period October 1, 2000, through September 30, 2001 (fiscal year 2001). Each grant may be renewed for up to two additional years; however, future or continued funding will be at the discretion of NIST based on satisfactory performance, continuing relevance to program objectives, and the availability of funds.

For the *Physics, MSEL and MEL SURF Programs*, these programs are anticipated to run between May 22 through August 11, 2000; adjustments may be made to accommodate specific academic schedules (e.g., a limited number of 10-week cooperative agreements).

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. Renewal 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.

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 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. Renewal of an award to increase funding or extend the period of performance is at the total discretion of DoC. 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

Each of the above grants programs does not involve the payment of any matching funds, with the exception of the *Physics, MSEL and MEL SURF Programs*, which use cost-sharing as an evaluation criterion.

Application Kit

An application kit, containing all required application forms and certifications is available by contacting: for the *Precision Measurement Grants Program*, Ms. Michelle Hane, (301) 975-4397; for the *Physics, MSEL and MEL SURF Programs*, Ms. Anita Sweigert, (301) 975-4200, websites for each program's application kit may be accessed through the following website: <http://www.surf.nist.gov>; for the *MSEL Grants Program*, Ms. Patty Salpino, (301) 975-5731; and for the *Fire Research Grants Program*, Ms. Sheilda Bryner, (301) 975-5851. The application kit includes the following:

- SF 424 (Rev 7/97)—Application for Federal Assistance
- SFA 424A (Rev 7/97)—Budget Information—Non-Construction Programs
- SF 424B (Rev 7/97)—Assurances—Non-Construction Programs
- CD 511 (Rev 7/91)—Certification Regarding Debarment, Suspension, and Other Responsibility Matters; Drug-Free Workplace Requirements and Lobbying
- CD 512 (Rev 7/91)—Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transactions and Lobbying
- SF-LLL—Disclosure of Lobbying Activities
- CD-346—Applicant for Funding Assistance

Paperwork Reduction Act

The Standard Form 424 and other Standard Forms in the application kit are subject to the requirements of the Paperwork Reduction Act and have been approved by OMB under Control No. 0348-0043, 0348-0044, 0348-0040, and 0348-0046.

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.

Additional Requirements

Primary Application Certifications

All primary applicant institutions must submit a completed form CD-511, "Certification Regarding Debarment, Suspension and Other Responsibility Matters; Drug-Free Workplace Requirements and Lobbying," and the following explanations must be provided:

1. Nonprocurement Debarment and Suspension

Prospective participants (as defined at 15 CFR part 26, Section 105) are subject to 15 CFR part 26, "Nonprocurement Debarment and Suspension" and the related section of the certification form prescribed above applies.

2. Drug-Free Workplace

Grantees (as defines at 15 CFR part 26, Section 605) are subject to 15 CFR part 26, subpart F, "Government wide Requirements for Drug-Free Workplace (Grants)" and the related section of the certification form prescribed above applies.

3. Anti-Lobbying

Persons (as defined at 15 CFR part 28, Section 105) are subject to the lobbying provisions of 31 U.S.C. 1352, "Limitation on use of appropriated funds to influence certain Federal contracting and financial transactions," and the lobbying section of the certification form prescribed above applies to applications/bids for grants, cooperative agreements, and contracts for more than \$100,000, and loans and loan guarantees for more than \$150,000, or the single family maximum mortgage limit for affected programs, whichever is greater.

4. Anti-Lobbying Disclosure

Any applicant institution that has paid or will pay for lobbying using any funds must submit an SF-LLL, "Disclosure of Lobbying Activities," as required under 15 CFR part 28, appendix B.

5. Lower-Tier Certifications

Recipients shall require applicant/bidder institutions for subgrants, contracts, subcontracts, or other lower tier covered transactions at any tier under the award to submit, if applicable, a completed Form CD-512, "Certifications Regarding Debarment, Suspension, Ineligibility and Voluntary

Exclusion—Lower Tier Covered Transactions and Lobbying” and disclosure form, SF–LLL, “Disclosure of Lobbying Activities.” Form CD–512 is intended for the use of recipients and should not be transmitted to NIST. SF–LLL submitted by any tier recipient or subrecipient should be submitted to NIST in accordance with the instructions contained in the award document.

Name Check Reviews

All for-profit and non-profit applicants will be subject to a name check review process. Name checks are intended to reveal if any key individuals associated with the applicant have been convicted of or are presently facing, criminal charges such as fraud, theft, perjury, or other matters which significantly reflect on the applicant's management honesty or financial integrity. Form CD–346 must be completed for all personnel with key programmatic or fiduciary responsibilities.

Pre-award Activities

Applicants (or their institutions) who incur any costs prior to an award being made do so solely at their own risk of not being reimbursed by the Government. Notwithstanding any verbal assurance that may have been provided, there is no obligation on the part of NIST to cover pre-award costs.

No Obligation for Future Funding

If an application is accepted for funding, DOC has no obligation to provide any additional future funding in connection with that award. Renewal of an award to increase funding or extend the period of performance is at the total discretion of NIST.

Past Performance

Unsatisfactory performance under prior Federal awards may result in an application not being considered for funding.

False Statements

A false statement on an application is grounds for denial or termination of funds, and grounds for possible punishment by a fine or imprisonment as provided in 18 U.S.C. 1001.

Delinquent Federal Debts

No award of Federal funds shall be made to an applicant who has an outstanding delinquent Federal debt until either:

1. The delinquent account is paid in full,
2. A negotiated repayment schedule is established and at least on repayment is received, or

3. Other arrangements satisfactory to DoC are made.

Indirect Costs

Regardless of any approved indirect cost rate applicable to the award, the maximum dollar amount of allocable indirect costs for which the DoC will reimburse the Recipient shall be the lesser of:

(a) The Federal Share of the total allocable indirect costs of the award based on the negotiated rate with the cognizant Federal agency as established by audit or negotiation; or

(b) The line item amount for the Federal share of indirect costs contained in the approved budget of the award.

For the *Physics, MSEL and MEL SURF Programs*, no Federal funds will be authorized for Indirect Costs (IDC); however, an applicant may provide for IDC under his/her portion of Cost Sharing.

Purchase of American-Made Equipment and Products

Applicants are hereby notified that they are encouraged, to the greatest practicable extent, to purchase American-made equipment and products with funding provided under this program.

Federal Policies and Procedures

Recipients and subrecipients under each of the above grant programs shall be subject to all Federal laws and Federal and Departmental regulations, policies, and procedures applicable to financial assistance awards.

Each of the above grant programs does not directly affect any state or local government.

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

Executive Order Statement

This funding notice was determined to be “not significant” for purposes of Executive Order 12866.

Dated: December 1, 1999.

Karen H. Brown,

Deputy Director.

[FR Doc. 99–31607 Filed 12–6–99; 8:45 am]

BILLING CODE 3510–13–M

DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

Notice of Prospective Grant of Exclusive Patent License

AGENCY: National Institute of Standards and Technology, Commerce.

SUMMARY: This is a notice in accordance with 35 U.S.C. 209(c)(1) and 37 CFR 404.7(a)(1)(i) that the National Institute of Standards and Technology (“NIST”), U.S. Department of Commerce, is contemplating the grant of an exclusive license world-wide to NIST’s interest in the invention embodied in U.S. Patent Application 09/058,182, titled, “Microroughness-Blind Optical Scattering Instrument”, filed April 10, 1998; NIST Docket No. 97–014US to ADE Corporation, having a place of business at 80 Wilson Way, Westwood, MA. The grant of the license would be for all fields of use.

FOR FURTHER INFORMATION CONTACT: Dale D. Berkley, National Institute of Standards and Technology, Office of Technology Program, Building 820, Room 213, Gaithersburg, MD 20899.

SUPPLEMENTARY INFORMATION: The prospective exclusive license will be royalty-bearing and will comply with the terms and conditions of 35 U.S.C. 209 and 37 CFR 404.7. The prospective exclusive license may be granted unless, within sixty days from the date of this published Notice, NIST receives written evidence and argument which establish that the grant of the license would not be consistent with the requirements of 35 U.S.C. 209 and 37 CFR 404.7. The availability of the invention for licensing was published in the **Federal Register**, Vol. 63, No. 131 (July 9, 1998).

U.S. Patent application 09/058,182 is owned by the U.S. Government, as represented by the Secretary of Commerce. The present invention relates to a microroughness-blind optical scanner for detecting particulate contamination on bare silicon wagers focuses p-polarized light onto the surface of a sample. Scattered light is collected through independently rotatable polarizers by one or more collection systems uniformly distributed over a hemispherical shell centered over the sample. The polarizer associated with each collection system is rotated to cancel the corresponding Jones vector, thereby preventing detection of microroughness-scattered light, yielding higher sensitivity to particulate defects. The sample is supported on a positioning system permitting the beam to be scanned over the sample surface of interest.

Dated: December 1, 1999.

Karen H. Brown,

Deputy Director.

[FR Doc. 99–31682 Filed 12–6–99; 8:45 am]

BILLING CODE 3510–13–M