

National Foundation of Science and Advanced Technologies

PROGRAM ANNOUNCEMENT

Instrumentation for Scientific Infrastructure Program-III Modernization and Maintenance Subprogram

I. Introduction

The National Foundation of Science and Advanced Technologies (NFSAT) announces a competition to provide grants up to US\$30,000 each to improve already existing major scientific equipment in Armenia.

The main goal of this program is to strengthen the capacity of Armenian research institutions by enabling them to upgrade, repair, or improve existing major scientific equipment. NFSAT also anticipates that this activity will increase the potential of Armenian scientists to carry out their research at the international level and make them more attractive to international collaborators.

The main criteria for the competition will be the significance of the equipment for which the maintenance and modernization are being requested to the scientific directions of the applicant institute and its impact on the Armenian scientific and educational community and on the Armenian economy.

“Major equipment” will be defined primarily by the original cost of the equipment. In order to be eligible for this program, the original cost of the major equipment must be at least US\$50,000. Examples of major equipment include, but are not limited to: spectrometers, chromatographs, x-ray diffractometers, microscopes, etc.

The maximum award amount is US\$30,000 over a one year period. Examples of items that NFSAT will support include the following:

- Equipment repair for normal wear and tear of equipment or general upgrades;
- Repair of equipment damaged due to environmental causes, such as flood, earthquake, war or similar causes beyond the applicants' reasonable control;
- Purchase of supplies for equipment use;
- Purchase of new devices that will modernize the equipment;
- Travel to domestic or international conferences related to the activities of the host institution;
- Stipends for junior scientists or students who will actively use the equipment. Please refer to section 4.D.A. for the definition of a junior scientist;
- Specialized training for new methods and operation of equipment. This includes support for travel by manufacturer representatives to the institution, as well as travel by institution representatives to management or technical training courses.

NFSAT will not fund equipment repair due to negligence or improper use of the equipment.

Depending on the number of meritorious proposals received, NFSAT will provide up to three grants totaling approximately US\$70,000. **All NFSAT decisions are final.**

The “Modernization and Maintenance” subprogram is carried out under NFSAT’s larger “Basic Research in Universities and Integration of Science and the Economy of Armenia” award provided by the U.S. Civilian Research and Development Foundation (CRDF). Funding for the “Modernization and Maintenance” subprogram is provided by the U.S. Department of State.

NFSAT is an independent nonprofit foundation that was established in 1997. NFSAT promotes scientific research and technological development in Armenia through competitive grants, training, and technical resources.

CRDF is a nonprofit organization authorized by the U.S. Congress and established in 1995 by the National Science Foundation. This unique public-private partnership promotes scientific and technical collaboration between the United States and other countries, primarily the countries of the former Soviet Union (FSU), through grants, technical resources, and training.

Proposals must be submitted to NFSAT no later than Monday, May 3, 2004, 18:00 Yerevan time.

Applicants will be notified of the results on approximately Friday, July 2, 2004.

II. Eligibility Requirements

- Project Directors must be Armenian citizens, currently residing and working in Armenia.
- No individual may appear as a Project Director on more than one project.
- Proposals must be from indigenous Armenian civilian research institutions.
- Each institution may only submit one proposal. Yerevan State University and State Engineering University of Armenia Departments will be considered different institutions for the purposes of this competition.
- The original cost of the major equipment must be at least US\$50,000. Major equipment includes, but is not limited to: spectrometers, chromatographs, x-ray diffractometers, microscopes, etc. If you have questions about what constitutes major equipment, please contact NFSAT.
- Applicants are not required to be previous CRDF or NFSAT grantees in order to apply.
- Previous grantees under the CRDF Regional Experimental Support Centers (RESC) Program are not eligible to apply for the "Modernization and Maintenance" subprogram. RESC grantees in Armenia are encouraged to apply to the CRDF RESC Mini-Grant Program. For more information about the RESC Mini-Grant Program, please consult the CRDF website at www.crdp.org or contact CRDF staff at resc@crdf.org.

III. Priorities

NFSAT will give the highest priority to proposals that:

- Involve former weapons researchers;
- Include junior scientists and students;
- Include institutes from outside the Yerevan area;
- Facilitate linkages with foreign collaborators;
- Demonstrate a co-funding commitment from the host institution;
- Demonstrate that the updated or repaired equipment will directly benefit other institutes besides the host institution.

IV. Proposal Submission

- Project Directors must submit their proposals to NFSAT in person or by mail. Proposals submitted by fax and e-mail will not be accepted.
- All proposals must be submitted to NFSAT by Monday, May 3, 2004. Proposals not received by this date will be ineligible for this competition.
- All proposals must be complete at the time of submission. Any proposal not containing all required information as outlined in section D will be ruled ineligible.
- NFSAT will send applicants written confirmation of the eligibility and completeness of their proposals after screening by NFSAT staff.
- Three hard copies in Armenian must be submitted to NFSAT.
- Hard copies must be accompanied by a diskette that contains Armenian and English versions of the proposal in MS Word format.
- No modifications may be made to any item once it has been received by NFSAT.
- If circumstances change so significantly after proposal submission that the project can no longer be carried out as proposed, the Project Director should notify NFSAT in writing and indicate that the proposal is being withdrawn from the competition.

V. Proposal Contents

Each proposal must contain the following elements prescribed below. Only proposals that meet the following requirements will be considered.

- All proposals should be typed using Arial or Times New Roman 10 pt. font size, single-spaced with 2 cm margins on the sides, top and bottom.
 - All pages should be numbered consecutively in the upper right corner.
 - Proposals may not exceed twelve (12) pages.
1. **Coversheet (Form A)**. Must include the original signatures of the Project Director and the Institution Director. The signature of the Institution Director must be sealed.
 2. **Project Director's CV**. Must include the full name, date and place of birth, contact address, information on the applicant's education, prior and current employment, honors received, research interests, long-term professional goals and a list of at least five publications from the last five years (maximum 2 pages).

3. **Narrative.** A narrative of no more than five (5) pages which must include:
- A brief description of the goal(s) and expected results of upgrading or repairing the equipment.
 - If requesting funds for equipment repair, an explanation of how the equipment was damaged and a management plan for the care and maintenance of the equipment once it is repaired.
 - A description of how the project might involve or benefit students and/or junior scientists.
 - A description of how the project might involve former weapons researchers in civilian activities, as classified by Appendix I.
 - A description of how the modernized or repaired equipment will benefit the Armenian scientific community and the Armenian economy.
 - A description of how the equipment will help the institution implement existing linkages and establish new linkages with foreign collaborators.
 - A description of other organizations that would use the equipment and how the equipment would benefit these other organizations.
 - A description of any travel activity and how it will increase the utilization of the equipment or increase linkages with foreign collaborators.
4. **Budget. (Form B):** The budget must detail all estimated expenses. Please note which expenses are being requested from NFSAT and which expenses are being covered from another source of funding. NFSAT strongly encourages cash or in-kind contributions on all of its programs. **The maximum requested from NFSAT may not exceed US\$30,000 over a one-year period.** Please observe the following guidelines:
- Stipends for Junior Scientists and Students:** A junior scientist is an investigator who has received his/her PhD, Candidate or equivalent degree within 6 years of the application deadline, or who anticipates receiving the degree by the date of award activation. A qualifying student may be an undergraduate or graduate student. The stipend requested may not exceed US\$100 per month for a 12-month period.
 - Institutional Support:** Institutional support for the host institution must be 10% of the total expenses requested from NFSAT.
 - Travel:** Travel funds may include domestic and international travel of invited experts of the manufacturer. Project participants may travel to participate in conferences, to meet with collaborators, or to attend training or management courses. The purpose and cost of all travel should be justified in the Narrative and the Budget Narrative. Travel may not exceed three weeks in duration. No more than 15% of the total amount requested from NFSAT may be allotted for travel. The following cost guidelines should be used in preparing the budget:
 - International Transportation:** Lowest-cost applicable round-trip airfare. Travel must be on U.S. carrier on all segments for which they are available, and is mandatory on transoceanic flights per the provisions of the U.S. Government Fly America Act.
 - International living Allowances:** For visits of two weeks or less, living allowances should follow U.S. government per-diem guidelines. Please refer to the following websites for detailed per diem rates:
<http://www.govexec.com/travel>
<http://policyworks.gov/org/main/mt/homepage/mtt/perdiem/perd04d.html>
 - Health Insurance:** Health insurance is required for all travel, and should be included as an expense item in the travel budget.
 - Visa Fees:** Not to exceed \$US100.
 - Budget Narrative:** Include a brief description of all expenses requested in the budget, as well as an explanation of any cash or in-kind contributions. All requested equipment over US\$1,000 must be justified in the budget narrative (maximum 2 pages).
 - Justification of Equipment:** Please describe the existing equipment that needs modernization, upgrade or repair and provide full information on the manufacturer/supplier and the country of origin for each requested item. A description of all shipping expenses should also be included (maximum 2 pages).
 - Co-Funding Commitment:** If matching funds are available for this activity, please include a copy of signed, dated letter of commitment from the co-funding party, stating the project title and the amount of funds available from that source for the project.

Sample Commitment Letter for Co-Funding:

[Date]

Mr. Harutyun Karapetyan

Chairman of NFSAT

National Foundation of Science and Advanced Technologies

#26, Azatutyan Ave.

375014, Yerevan, Republic of Armenia

Dear Mr. H. Karapetyan:

This letter represents a commitment by **[co-funding institution]** to provide **[\$XX]** for the project entitled **[proposal title]** submitted to the NFSAT "Modernization and Maintenance" subprogram.

Sincerely,

[Title]

VI. Proposal Review

- All proposals will be screened for eligibility and completeness upon receipt. Proposals that do not meet the program guidelines will not be forwarded for scientific review and consequently, will not be eligible for the competition.
- NFSAT will conduct site visits at all applying institutions. The results of the site visits will be taken into consideration when making a final decision.
- NFSAT will select expert reviewers to evaluate the proposals. The expert reviewers will use the evaluation criteria listed below to evaluate the proposals. If expert reviewers find it necessary, they may also request site visits through NFSAT.
- If an institution submitting a proposal has a conflict of interest with the NFSAT Scientific Board, NFSAT will have technical experts outside Armenia review the proposal.

Evaluation Criteria:

Intrinsic Scientific Merit: The scientific importance of the existing equipment and the impact that the proposed modernization of the equipment will have on the scientific community and the economy in Armenia. The necessity and potential impact of any proposed travel on building foreign and domestic linkages. The potential benefits of the equipment for other institutions in Armenia.

Technical Expertise: The likelihood that the requested technical resources will be adequate in achieving the expected results of the proposed modernization.

Innovation: The likelihood that the proposed changes will lead to a significant enhancement of the operating capabilities of the equipment.

Junior Scientists and Students: The likelihood that the proposed changes will lead to more involvement from junior scientists and students.

VII. Confidentiality

NFSAT will treat all proposals as confidential material and will require all reviewers to respect the confidentiality of proposals. However, proposal authors are advised that successful proposals will be treated as being in the public domain. Therefore, at the author's discretion, specific information in the proposal that is business-confidential and not intended for public dissemination should be highlighted in bold and italic font and should be marked as "Business Confidential" at the bottom of the applicable page of the proposal. Such passages will be withheld from public distribution if the proposal is successful. Proposals that do not result in awards are not subject to public dissemination.

VIII. Special Instructions for Proposals Involving Human Subjects Research

NFSAT's policy on funding proposals involving human subjects research requires both the applicant and his or her institution to certify that:

- It has obtained Institutional Review Board (IRB) or Institutional Ethics Committee (IEC) approval of the research (or a determination that written approval is not required, e.g., exempt research) from an IRB/IEC registered with the U.S. Department of Health and Human Services' Office of Human Research Protections (OHRP);
- It has obtained the required approval(s) (or a determination that written approval is not required) from the applicable governmental office(s) for the research, including but not limited to the filing of the required applications related to investigational new drugs or investigational devices;
- It has a Federalwide Assurance (FWA) on file with OHRP, and it will comply with the FWA throughout the term of the Project Agreement. The FWA represents a public commitment to comply with the human subjects protections standards of the Belmont Report and the Common Rule;
- It will conduct the research in accordance with the National Science Foundation (NSF) regulation entitled, "Protection of Human Subjects" [45 CFR § 690 et seq.];

If the proposal involves human research subjects, the Project Director must provide the following additional documentation:

- 1) Copies of Institutional Review Board (IRB) or Institutional Ethics Committee (IEC) approval of the project or a formal written determination that said approval is not required, e.g. exempt research. The IRB/IEC must be registered with the U.S. Department of Health and Human Services' Office of Human Research Protections.
- 2) Copies of required approval(s) (or determination that said approval is not required) from the applicable governmental bodies for the research, including but not limited to the filing of required applications related to investigational new drugs or investigational devices.
- 3) Confirmation that the institution has a Federalwide Assurance (FWA) on file with the U.S. Office for Human Research Protections (<http://ohrp.osophs.dhhs.gov/>) and certification that it will comply with the FWA throughout the term of any resulting CRDF award. If an FWA has not been obtained, please so note in the proposal. Please be advised that, in the event the proposal is selected for an award, an FWA must be applied for and received by the institution prior to the issuance of any project agreement by the NFSAT.

These materials, indicating an approval or an exemption of the project to use human subjects, must be submitted along with the hard copies of the proposal materials as described in Section C. Applicants will be required to submit these materials as separate documents in addition to the proposal file. Failure to submit this additional information may result in the proposal being declared ineligible or in substantial processing delays.

Prior to the issuance of any award agreement by NFSAT, the Project Director and his/her institution must provide certification that all project participants involved in the project have undertaken appropriate training in human subjects protections consistent with the requirements of the regulations cited above.

IX. Information

For all questions about the proposal submission process, or for information about this program, please contact NFSAT.

NFSAT
26, Azatutyan Ave
Yerevan 375014, Republic of Armenia
Tel: (374 1) 28-81-92
Program Manager: Boris Polikhatko
E-mail: pboris@nfsat.am

CHECKLIST OF DOCUMENTS TO BE SUBMITTED

N	DOCUMENT	PRESENCE	COMMENTS
1	COVER SHEET (Form A)	<input type="checkbox"/>	
2	PROJECT DIRECTOR CURRICULUM VITAE	<input type="checkbox"/>	
3	NARRATIVE	<input type="checkbox"/>	
4	BUDGET (Form B)	<input type="checkbox"/>	
5	BUDGET NARRATIVE	<input type="checkbox"/>	
6	JUSTIFICATION OF EQUIPMENT	<input type="checkbox"/>	
7	CO-FUNDING COMMITMENT LETTERS OF SUPPORT (Optional)	<input type="checkbox"/>	

Form A

COVER SHEET FOR "MODERNIZATION AND MAINTENANCE" SUBPROGRAM APPLICATION

ISI ACTIVITY

PROJECT TITLE _____
MANUFACTURER OF ORIGINAL EQUIPMENT _____ YEAR _____
NAME OF EQUIPMENT _____
MODERNIZATION/UPGRADE (if any) _____
REPAIR (if any) _____
TRAINING (if any) _____
VENDOR NAME and CONTACT DATA _____
BRIEF DESCRIPTION of SCIENTIFIC FIELD _____

PROJECT DIRECTOR – *the project director is the primary person responsible for the project*

NAME: Last _____ First _____ Patronymic _____
SEX: _____ DATE of BIRTH (date/month/year) _____
HIGHEST DEGREE EARNED _____ Field _____ Year _____
OFFICE Phone _____ Fax _____ E-mail _____
PROFESSIONAL TITLE/POSITION _____
PROFESSIONAL AFFILIATION _____
COMPLETE MAILING ADDRESS _____

DO YOU HAVE ANY EXPERIENCE IN WEAPONS-RELATED SUBJECTS? YES NO
If "Yes," please provide the appropriate weapons code from **Appendix 1** describing this individual's experience in the area to the right and provide a **brief description** of the weapons-related experience in the space below. Weapons Researcher Code: _____
Description of weapons research: _____

signature* _____ date _____

HOST INSTITUTION

FULL NAME _____
DESCRIPTION of SCIENTIFIC FIELD _____
FULL ADDRESS _____
CONTACT DATA: Phone: _____ Fax: _____ E-mail: _____

IV. INSTITUTION DIRECTOR

NAME: Last _____ First _____ Patronymic _____
DATE of BIRTH (date/month/year) _____
HIGHEST DEGREE EARNED _____ Field _____ Year _____
OFFICE Phone _____ Fax _____ E-mail _____
PROFESSIONAL TITLE/POSITION _____
PROFESSIONAL AFFILIATION _____
COMPLETE MAILING ADDRESS _____

signature and seal of organization* _____ date _____
(only one application may be submitted from each institution)

*** By signing this application, I certify that I meet all the eligibility requirements in this announcement and that I will honor all conditions of the program.**

Form B
BUDGET FORM FOR “MODERNIZATION AND MAINTENANCE” SUBPROGRAM APPLICATION

Stipend Support for Junior Scientists or Students			Amount requested from NFSAT	Amount contributed by Host Institution	Additional Co-funding amount (if any)	TOTAL
Name	Amount per month	# of months				
TOTAL INDIVIDUAL FINANCIAL SUPPORT:						
Equipment, delivery to Armenia, maintenance, supplies, materials, repair and training costs (please list) <i>(Items over US\$1,000 must be justified in Budget Narrative)</i>						
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.	<i>If more space is needed, please list additional items on separate page.</i>					
TOTAL MATERIALS AND SERVICES:						
Travel <i>(please describe in Budget Narrative)</i>						
Domestic Transportation						
Domestic Per Diem						
International Transportation						
International Living Allowance/Per Diem						
Health Insurance						
Visa Fees						
TOTAL TRAVEL:						
SUB-TOTAL:						
Institutional Support <i>(10% of Sub-Total)</i>						
TOTAL PROJECT COSTS:						

RECEIVED BY: _____
 NFSAT staff signature

DATE: _____

APPENDIX 1
FORMER FSU WEAPONS RESEARCHER CODE LIST

Former Weapons Researcher – defined as project participants who are currently or were formerly actively engaged in research at a current or former weapons laboratory or institution. Five categories of former weapons researchers are provided below (Categories B, C, and D are classified as Weapons of Mass Destruction researchers):

CATEGORY A: MISSILE TECHNOLOGY EXPERTS	
CODE	DESCRIPTION
A1	Design, construction and performance of air, space, surface and underwater - launched missiles. Materials and technologies for these missiles. Production of engines, fuels, composites, integrated elements, radio-electronic equipment, different testing devices for missiles.
A2	Techniques for guidance and control of missiles from launching to impact. Includes optical guidance, television guidance, wire guidance, present and terminal guidance, internal guidance, command guidance, and homing guidance.
A3	Missile handling and launching, including transportation, storage, and preparation for launching. Air, space, surface and underwater launching and support equipment and technologies; Checkout equipment and procedures. Guided missile ranges.
A4	Techniques and systems for tracking missiles as defensive measures. Can be from surface installations or air and space-borne platforms.
CATEGORY B: CHEMICAL WEAPONS EXPERTS	
B1	Design and performance of missile warheads and rockets for delivery of chemical weapons.
B2	Materials, facilities and performance processes needed for the production of chemical weapon agents and their key precursors.
B3	Dissemination of chemical weapon agents.
B4	Basic knowledge on CW design and their effect on human system.
CATEGORY C: BIOLOGICAL WEAPONS EXPERTS	
C1	Design and performance of missile warheads and rockets for delivery of biological weapons.
C2	Biopolymer production related to biological warhead capabilities.
C3	Dissemination of biological weapon agents.
C4	Basic knowledge on BW design and their effect on human system.
CATEGORY D: NUCLEAR WEAPONS EXPERTS	
D1	Basic knowledge of Nuclear Weapons design, construction, characteristics and the effect on human system,
D2	Design, construction and performance of missile warheads for delivery of nuclear weapons.
D3	Design, construction and performance of the equipment and Components for Uranium and Plutonium separation.
D4	Design, construction and performance of the equipment connected with Heavy Water Production.
D5	Design, construction and performance of the equipment for Development of Detonators.
D6	Design, construction and performance of Explosive Substances and Related Equipment.
D7	Design, construction and performance of the equipment and Components for Nuclear Testing.
D8	Design, construction, performance and operation of production-type nuclear reactors for fissile and tritium-content materials production (breeding).
D9	Design, construction, performance of nuclear reactors and units for submarine and for military space program.
CATEGORY E: OTHER	
E1	Design, construction, and performance of powerful laser facilities for military applications.
E2	Design, construction and performance of accelerator facilities for military applications in space programs
E3	Others