



## **2009 Early Careers Support Program (ECSP) Program Announcement**

**State Committee of Science of the Ministry of Education and Science  
of the Republic of Armenia (SCS MES RA),  
National Foundation of Science and Advanced Technologies (NFSAT),  
U.S. Civilian Research & Development Foundation (CRDF)**

### **I. Introduction**

---

On a competitive basis, the State Committee of Science of the Ministry of Education and Science of the Republic of Armenia (SCS MES RA), the National Foundation of Science and Advanced Technologies (NFSAT), and the U.S. Civilian Research & Development Foundation (CRDF) will provide awards to meritorious proposals from applicants in the fields of physical, natural, and technical sciences under the 2009 Early Careers Support Program (ECSP):

**Category A:** up to 1.5 million AMD (\$4,000) each for Armenian graduate students (pursuing the Kandidat degree) for one year of support. At least 20 awards will be available for eligible applicants who are full-time graduate students in Armenian non-profit universities or research institutions, or

**Category B:** up to 7.0 million AMD (\$18,000) each for the teams of young Armenian researchers (up to 3 researchers including principal investigator) for a two-year period. The age of participants is limited, up to 35 years old. The principal investigator (team leader) should have a scientific degree and 3 years of scientific or scientific-pedagogical experience, and at least 3 publications within 3 years of the date the application is submitted. At least 11 awards will be available for eligible applicants who have received their Kandidat of Science (Ph.D.) degree within 5 years of application submission.

The goal of these programs is to support early-career Armenian scientists to excel in research. The programs will increase:

- a) the ability of Armenian researchers to concentrate on full-time research
- b) the researchers' ability to perform high-quality research in basic and applied sciences
- c) opportunities for Armenian scientists become more integrated with the international scientific community by participating in international conferences and meetings.

All funding decisions will be based on independent, peer-reviewed assessments of each project and will be determined by the scientific merit of the applications.

The deadline for proposal submission is **October 30, 2009** at 18:00 (Yerevan time). Proposals should be submitted to MES RA SCS, NFSAT, and CRDF. The results for this competition are expected to be announced on **December 21, 2009**.

All decisions of SCS MES RA, NFSAT and CRDF are final.

## **II. Program Guidelines**

---

SCS MES RA, CRDF, and NFSAT plan to support at least 20 awards for Armenian graduate students in *Category A*. Under this competition, selected applicants can receive up to 1.5 mln. AMD (US \$4,000) for one year (11 months for stipends). The awards will be available for eligible applicants who are graduate students in Armenian non-profit universities or research institutions.

SCS MES RA, CRDF and NFSAT also plan to support at least 11 awards in *Category B* to recent recipients of Ph.D or Kandidat of Science degrees. Under this category the selected team of young researchers (up to 3 researchers including principal investigator) can receive up to 7.0 mln. AMD (US \$18,000) for a two year period (11 months for IFS's and stipends each year). The awards will be available for eligible applicants who are in Armenian non-profit universities or research institutions.

SCS MES RA, NFSAT and CRDF strongly encourage awardees to participate in international scientific conferences and meetings during the grant period.

## **III. Eligibility**

---

Each proposal must meet all of the following eligibility criteria:

1. The applicant must be a citizen or a permanent resident of Armenia and must reside in Armenia during the course of the grant.
2. Neither SCS MES RA, NFSAT, nor CRDF employees (nor their board, advisory, or science council members) is eligible to apply. In addition, immediate family members of NFSAT or CRDF employees (or of their board, advisory, or science council members) may not apply. Immediate family members of SCS MES RA may apply, but their family members within SCS MES RA must not participate in any way in the peer review or decision process for the competition. In addition, for those applicants who have family members working in the SCS MES RA, reviews and panel rankings from the SCS MES RA will not be considered in making funding recommendations (only reviews and panel rankings from CRDF and NFSAT will be considered).
3. Each applicant must be a researcher in an Armenian non-profit research organization such as a university or research institutions.
4. All projects must be oriented toward civilian, non-military objectives and must be carried out in a civilian research environment.
5. Projects may include both basic and applied science and engineering activities, including technological development that is a part of the innovation process leading to commercial products.
6. An individual cannot be a principal investigator in one application and be a team member in a different application.
7. Each proposal will be evaluated independently and therefore should neither be a part of, nor dependent on the success of, other proposals submitted to this (or any other) program.
8. Each application must include separate letters of statement and guarantee that must bear the original signatures of:
  - a) Principal Investigator: stating that he/she does not have any income from full-time employment with an institution other than a non-profit academic or research institution.

- b) Authorized person of a non-profit research organization and scientific supervisor(s) of the applicant: indicating the support of the institution for the proposed research project.

#### **IV. Priorities**

---

Among proposals of equal technical merit, SCS MES RA, NFSAT, and CRDF will give priority to those proposals that contain one or more of the following:

- Innovative new research methods for solving scientific tasks and problems, especially innovations that are shown to be new for Armenia;
- Research topics aimed at solving actual scientific-technological problems or strengthen the civilian research environment in Armenia;
- Research topics with a high likelihood of resulting in publication in a prominent international scientific journal and presentation at international scientific conferences and meetings;
- Female applicants;
- Applicants from eligible institutions from outside of Yerevan;
- Applicants who, up to the time of their application, have not been involved in any grant awarded by NFSAT, CRDF, or any other international funding agency.

#### **V. Proposal Submission Instructions.**

---

All proposals should be submitted to **all** three institutions, SCS MES RA, NFSAT and CRDF, according to the three methods outlined below. Any proposal that is not submitted in the manner described below may be deemed ineligible. Complete applications must be submitted no later than 18:00 Yerevan time on October 30, 2009.

- 1) NFSAT: All applicants must submit their proposals to NFSAT's address indicated below. The application package should include:
  - One original hardcopy and one electronic copy in Armenian.
  - One original hardcopy and one electronic copy in English.
  - The applicant must submit the original hardcopies of his/her statement and a letter of guarantee along with the hard copies of the proposal.
  - The electronic copies of the proposal must be in Microsoft Word or PDF format. All electronic copies of proposals must be submitted as ONE electronic file.
  - Proposals in .zip format that contain multiple documents will not be accepted.
  - NFSAT will not accept fax submissions.
  - All applications should be typed with 1.5-spacing, standard 12-point fonts ("Sylfaen" for Armenian and "Times New Roman" for English), with margins of 2.5 cm (one inch) at the sides and on the top and bottom, with all pages, including forms, numbered consecutively in the upper right corner.

National Foundation of Science and Advanced Technologies (NFSAT)  
(Hard-copy submission)  
26, Azatutyan Ave.  
0014 Yerevan  
Republic of Armenia  
e-mail submission: [ecsp-09@nfsat.am](mailto:ecsp-09@nfsat.am)

For questions about the proposal submission process, or for further information about this program, please contact NFSAT office:

NFSAT contact person:

Mr. Aleksandr S. Khachunts,  
Program Director  
Tel: 28-81-92  
[khas@nfsat.am](mailto:khas@nfsat.am)

- 2) CRDF: Completed applications to CRDF should be sent by 18:00 Yerevan time on October 30, 2009 in the following manner:
  - One electronic copy in English, sent to [Armenia@crdf.org](mailto:Armenia@crdf.org)
  - The electronic copies of the proposal must be in Microsoft Word or PDF format. All electronic copies of proposals must be submitted as ONE electronic file.
  - Proposals in .zip format that contain multiple documents will not be accepted.
  - CRDF will not accept fax submissions.
  - All applications should be typed with 1.5-spacing, standard 12-point fonts (“Times New Roman”), with margins of 2.5 cm (one inch) at the sides and on the top and bottom, with all pages, including forms, numbered consecutively in the upper right corner.
  
- 3) SCS MES RA: Completed applications to SCS MES RA should be sent by 18:00 Yerevan time on October 30, 2009 in the following manner:
  - One electronic copy in English, sent to [info@scs.am](mailto:info@scs.am)
  - The electronic copies of the proposal must be in Microsoft Word or PDF format. All electronic copies of proposals must be submitted as ONE electronic file.
  - Proposals in .zip format that contain multiple documents will not be accepted.
  - SCS MES RA will not accept fax submissions.
  - All applications should be typed with 1.5-spacing, standard 12-point fonts (“Times New Roman”), with margins of 2.5 cm (one inch) at the sides and on the top and bottom, with all pages, including forms, numbered consecutively in the upper right corner.

For questions about the proposal submission process, or for further information about this program, please contact SCS MES RA office:

SCS MES RA contact person:

Ms. Greta Tonyan,  
Head of the Division for Supporting  
Scientific Research  
Tel: 21-01-40-113  
[info@scs.am](mailto:info@scs.am)

Please Note:

- All proposals must be complete when submitted. Any proposal not containing all required elements as indicated in this program announcement may be ruled ineligible.
- No modifications may be made to any proposal once it has been received.
- If circumstances have changed so significantly since the time of proposal submission that the project can no longer be carried out as proposed, the applicant must notify NFSAT, CRDF, and SCS MES RA in writing and indicate that they are withdrawing the proposal from the competition. If NFSAT, CRDF, and SCS MES RA learn of such

significant changes in circumstances, they may, based on their mutual agreement, declare a proposal ineligible.

- Both NFSAT, CRDF, and SCS MES RA reserve the right to request additional information from applicants if necessary.
- All applicants will be notified by e-mail of the eligibility-screening outcome within one month of the application submission deadline. Applicants will be notified that their proposal is eligible for technical review.

NFSAT plans to organize consultations for interested potential applicants every Friday during the period between program announcement and application deadline. On October 16, Friday at 16:00pm the NFSAT will organize a seminar for potential applicants to describe all critical points in proposal writing. During this seminar, participants will receive training on how to write a technical proposal, how to follow proposal guidelines and methods to develop budget.

## **I. Application Guidelines**

---

Each proposal must include all of the elements listed below. Only applications that include this information will be considered.

**IMPORTANT NOTICE:** No proposal may exceed 20 pages in total length, including all forms.

Any proposal exceeding 20 pages in total length will be disqualified.

1. **Cover Sheet (Form A).** The cover sheet should include basic information about the proposal, Applicant, Armenian Institution Director and Applicant's official scientific Supervisor.
2. **Abstract.** In one concise paragraph, summarize all aspects of the project, with special attention to its objectives, methods, and potential results.
3. **Project Narrative (5-7 pages maximum, including any graphs, diagrams, photos or references cited):**
  - Description of scientific research to be undertaken during the grant period: its importance, its relevance to the applicant's present research, its expected results and its possible contribution to solving actual scientific-technological problems;
  - The approach, objectives, milestones, and measurements of success that will be used;
  - The anticipated results of the project and how they relate to MES RA SCS, NFSAT and CRDF evaluation criteria listed below in Section VIII;
  - Equipment & Materials to be utilized in the project, with special attention to justifying requests for any equipment & materials for which the support is requested;
  - Applicant's and Advisor's (if applicable) Curriculum Vitae. The proposal must contain two curriculum vitae of one to two pages, one each for the applicant and his/her advisor. Each CV should give the name, title, educational background, current and previous institutional affiliations with dates, areas of expertise, and a list of relevant publications in each of the following categories: peer-reviewed research journal articles in English, peer-reviewed research journal articles in a language other than English, total number of conference abstracts published in conference proceedings. It is understood that the applicant may not have publications in any or all of these categories.
4. **Budget (Form B).** A budget must be submitted using the information provided in Form B of this announcement. Form B must be filled out completely. Applicants should submit one budget Form B for the entire award period.

5. **Budget Narrative.** A separate sheet explaining all budget items must follow the budget forms. This sheet should be clearly marked “Budget Narrative.” It is particularly important for all expenses related to travel and the purchase of materials and services to be itemized and justified. Applicants should refer to the “Allowable Costs” in Section XI for information about what should be described in the Budget Narrative.
6. **Statement from the Applicant.** This statement should be signed by the applicant and briefly confirm that the applicant is a full-time student involved in the research work under his/her graduate activity and if awarded, is willing to forgo any additional income for the duration of the project.
7. **Institutional letter of guarantee.** This letter, signed by the authorized person of a non-profit research organization and scientific supervisor(s) of the applicant, should guarantee that the applicant is fully involved in the research work under his/her post-graduate activity at their organization and that the organization supports the proposed research project.

## **VII. Timetable**

---

- The deadline for the proposals to be submitted to MES RA SCA, NFSAT, and CRDF is 18:00, Yerevan time, on **October 30, 2009**.
- The screening results and information about eligibility of proposals are expected to be communicated to applicants on **November 10, 2009**.
- The competition results are expected to be announced by **December 21, 2009**.
- The awards’ start date is expected to be **January 1, 2010**.

## **VIII. Review of Proposals**

---

SCS MES RA, NFSAT and CRDF will screen the proposals submitted for eligibility and completeness. SCS MES RA, NFSAT and CRDF will each send the eligible proposals to independent experts for written review based on the criteria outlined above. SCS MES RA, NFSAT and CRDF reserve the right to contact the applicant or his/her scientific supervisor for additional information as needed.

SCS MES RA, NFSAT and CRDF will jointly select the proposals chosen for awards.

### **The Evaluation criteria:**

The following criteria will be used for evaluating the applications:

1. **Personnel Capacity:** The expertise of the applicant and team members in carrying out the proposed research.
2. **Research Plan:** The technical soundness of the proposed approach, the clarity and rationale for the stated goals of the project, the adequacy of technical resources available to accomplish the work, the soundness of the plan to fully achieve the project within the time allotted.
3. **Research Merit and Impact:** The likelihood that the project will advance knowledge in one or more fields of science or engineering; the likelihood that the proposed research will have a substantive, positive benefit to society in general and to Armenia in particular and the nature of such benefit.
4. **Professional Benefit:** Relevance of the proposed work to the applicant’s career goals and areas of specialization and interest. Potential for proposed work to facilitate the applicant’s career goals and development. The likelihood that the work may lead to

collaborations, future successful funding, the successful completion of a dissertation (where applicable), and results published in an international, peer-reviewed journal.

## **IX. Intellectual Property**

---

SCS MES RA, NFSAT and CRDF make no claim to intellectual property developed under any award. NFSAT's primary interest is that intellectual property rights are equitably allocated between the applicant, his/her scientific supervisor and organization.

## **X. Confidentiality**

---

SCS MES RA, NFSAT and CRDF will treat all proposals as confidential material and will require all panelists and reviewers to respect the confidentiality of proposals. For more information contact SCS MES RA or visit the awardees section on this website under "Policies and Procedures": <http://www.crdf.org/policies/>

## **XI. Allowable Costs**

---

MES RA SCS, NFSAT and CRDF will not consider any proposal requesting more than 1.5 mln. AMD (US \$4,000)<sup>1</sup> for *Category A* submissions or more than 7.0 mln. AMD (US\$18,000)<sup>2</sup> for *Category B* submissions. In case of receiving an award, a project budget may be subject to revision. The following costs are permitted:

**Category A:** This category allows for payment to graduate students for full-time work on the research performed in the framework of the proposed project: IFS (stipend) in this program is given only for 100% level of effort (not part time work) on the project. A month for full-time personnel (100% level of effort) will consist of 22 days, with 8 hours of work for each day. The total amount of individual financial support may not exceed 50% of the funds awarded. At least 50% of the award must be allocated for research expenses, conference attendance costs, and a maximum of 5% may be allocated for Institutional Support.

**Category B:** This category allows payment for full-time research work in the framework of the project and each applicant may budget up to 60% for IFS and stipend. The maximum allowable institutional support per year is 5% of the total award amount. The principal investigator can include the support of 1-2 full-time post-graduate students in their budget.

**B: Equipment and Materials.** Support for research equipment, including computers and telecommunication devices, subscriptions to scientific journals and telecommunication services, reagents and other materials to be used in the research. Any item of the requested equipment valued at more than 200,000 AMD (approximately US \$500) must be specifically described and justified in the Budget Narrative.

a) **Travel.** Travel funds may be used for domestic travel within Armenia and to support travel to international scientific meetings. The purpose and cost of all travel should be justified in the Budget Narrative. The following cost guidelines should be used in preparing the budget:

(i) **International Transportation.** Lowest-cost applicable round-trip airfare from Armenia. Travel must be by U.S. carriers by all segments for which they are available, and is mandatory for transoceanic flights. For more information, see the

---

<sup>1</sup> This amount is subject to change due to currency fluctuations.

<sup>2</sup> The amount is subject to change due to currency fluctuations.

“Fly America Policy”:

[http://www.crdf.org/policies/policies\\_show.htm?doc\\_id=291723](http://www.crdf.org/policies/policies_show.htm?doc_id=291723)

(ii) **International Living Allowances.** For travel of two weeks or less, living allowances should follow U.S. government per-diem guidelines. Applicants should refer to a website listing current U.S. Government per-diem rates, such as <http://www.govexec.com/travel> or <http://www.gsa.gov/Portal/gsa/ep/home.do?tabId=0>. For research visits of more than two weeks, applicants may request US \$2,000 per month or the prorated equivalent. These allowances cover all costs, including health insurance, which is required. The cumulative international travel time may not exceed two months per 12-month period of an award.

b) **Secondary Collaboration.** Funds may be budgeted for project-related costs incurred by other institutions in Armenia. Secondary collaboration is defined as the delegation of any portion of a NFSAT project to a secondary institution other than the institution of the applicant. Secondary collaboration may be in the form of sub-contracted work, which will be strictly related to the needs of the project. All personnel and facilities involved in secondary collaboration must be specifically listed and described in the proposal. A separate budget justification must be included for each secondary collaboration in the Budget Narrative.

## **XII. Special Instructions**

---

Since this program is made possible through the funds provided to the CRDF from the U.S. Government for the promotion of Armenian science and technology development, NFSAT complies with all U.S. laws and regulations as well:

### **A. Special Instructions for Proposals Involving Human Subjects Research:**

For information about proposals involving human subjects please visit:

[http://www.crdf.org/policies/policies\\_show.htm?doc\\_id=305889](http://www.crdf.org/policies/policies_show.htm?doc_id=305889)

### **B. Anti-Kickback Policy and Other Special Terms**

Please refer to the following weblinks for more information:

[http://www.crdf.org/policies/policies\\_show.htm?doc\\_id=296470](http://www.crdf.org/policies/policies_show.htm?doc_id=296470)

## **XIII. Background**

---

### **A. Background on NFSAT**

The National Foundation of Science and Advanced Technologies is a non-profit, voluntary, self-financing organization established in 1997 according to the legislation of the Republic of Armenia.

The goals of the NFSAT are to:

A) Promote scientific research and technological development in various fields that conform with international standards, as well as to develop the scientific and engineering potential in the Republic of Armenia;

B) Provide direct funds (grants) for scientific research and development projects on a competitive basis.

Further information on NFSAT may be found on-line at <http://www.nfsat.am>.

## **B. Background on CRDF**

The U.S. Civilian Research & Development Foundation (CRDF) is a non-profit organization originally founded to support cooperative research between U.S. scientists and engineers and their counterparts in the former Soviet Union (FSU). The mission of CRDF is to fund civilian basic and applied research conducted in the countries of the FSU and to promote defense conversion and development of market economies in the region. Further information on CRDF may be found on-line at <http://www.crdf.org>.

All activities funded by NFSAT and CRDF must be oriented toward non-defense objectives and must be carried out in a civilian environment.

This competition is made possible through funds provided to CRDF from the U.S. Government for the promotion of Armenian science and technology development.

<b>Checklist of the Application Contents</b>
<b>1. <input type="checkbox"/> Cover Sheet (Form A)</b>
<b>2. <input type="checkbox"/> Budget (Form B)</b>
<b>3. <input type="checkbox"/> Curriculum Vitae of the applicant and team members (if applicable)</b>
<b>4. <input type="checkbox"/> Project Narrative</b>
<b>5. <input type="checkbox"/> Statement from the Applicant</b>
<b>6. <input type="checkbox"/> Institutional letter of guarantee</b>
<b>7. <input type="checkbox"/> Documentation on Human Subjects Research (if applicable)</b>



## 2009 Early Careers Support Program (ECSP)

### FORM A: COVER SHEET

#### GENERAL PROJECT INFORMATION

Total Amount Requested from NFSAT ( <i>Select One</i> )  Category A (\$ 4,000 maximum) <input type="checkbox"/> Category B (\$18,000 maximum) <input type="checkbox"/>		General Scientific Area	
Title of the project			
Brief description of the project (not to exceed twenty-five words)			

#### INFORMATION ON THE APPLICANT

Full Name (Last, First, Patronymic)			
Date of Birth (Day/Month/ Year)		Passport #	
Sex (Male or Female)		Social Card #	
Contact Telephone #		Fax #	
E-Mail Address		Web Page Address	
University of previous enrollment			
Field of Last Degree awarded		Year Awarded	
Year of Admission (post-graduate courses)		Field of Courses	
<i>HAVE YOU RECEIVED A GRANT FROM NFSAT OR OTHER FUNDING AGENCIES ?</i>	<i>YES</i> <input type="checkbox"/>	<i>NO</i> <input type="checkbox"/>	
<i>If "Yes," please indicate the program and grant number.</i>			
<i>DO YOU HAVE FAMILY MEMBER(S) WORKING AT NFSAT OR SCS MES RA?</i>	<i>YES</i> <input type="checkbox"/>	<i>NO</i> <input type="checkbox"/>	
<i>If "Yes," please write name of family member and relationship.</i>			

**INFORMATION ON THE APPLICANT'S INSTITUTE AND SUPERVISOR(for the Category A, only)**

Institution Name			
Institution Complete mailing address			
Institution Director (Full Name, Title)			
Director's Contact Data (Phone, Fax, e-mail address)			
Scientific Supervisor (Full Name)			
Supervisor's Contact Data (Phone, Fax, e-mail address)			
Sex (Male or Female)		Highest Degree Earned	
Field of Degree		Year Awarded	
<i>HAVE YOU RECEIVED A GRANT UNDER A PREVIOUS NFSAT PROGRAM?</i>		YES <input type="checkbox"/>	NO <input type="checkbox"/>
<i>If "Yes," please indicate the program and grant number.</i>			

**SIGNATURES\***- *Required only for hardcopies submitted to NFSAT*

Applicant's Signature		Date	
Scientific Supervisor's Signature		Date	
Institution Director's Signature and Institution Seal		Date	

**\* By signing this application, we certify that we meet all the eligibility requirements in this announcement, and that all the information provided is accurate to the best of our knowledge.**

## FORM B: PROJECT BUDGET

*Applicants should refer to Section XI, "Allowable Costs", in order to complete Budget Form B.*

Individual Financial Support (full-time)			Requested
Full Name <i>(First, Family, Patronymic)</i>	Monthly Rate	Number of Months	-----
<b>TOTAL INDIVIDUAL FINANCIAL SUPPORT</b>			
<b>Equipments and Materials</b> <i>(Please list. All items over US \$500 must be justified in the Budget Narrative. If more space is needed, please list on a separate page.)</i>			-----
1.			
2.			
3.			
4.			
5.			
<b>TOTAL MATERIALS AND SERVICES</b>			
<b>Travel</b> <i>(Please describe in Budget Narrative.)</i>			-----
Domestic Transportation			
Domestic Per Diem			
International Transportation			
International Living Allowance/Per Diem			
Other Travel Expenses (e.g. visa fees, conference registration fees, etc.)			
<b>TOTAL TRAVEL</b>			
<b>Secondary Collaboration</b> <i>(All secondary collaborating institutions must be identified and secondary collaborators described in detail in the Budget Narrative.)</i>			
Secondary Collaboration: Individual Financial Support			
Name	Daily Rate	# Days per Month (22 max.)	# Months
<b>Secondary Collaboration: Materials and Services</b> <i>(Please list. All items over US\$300 must be justified in the Budget Narrative. If more space is needed, please list on separate page.)</i>			
1.			
2.			
<b>TOTAL SECONDARY COLLABORATION EXPENSES</b>			
<b>Other</b> <i>(Please describe in Budget Narrative.)</i>			
<b>TOTAL REQUESTED FROM NFSAT</b>			
<b>If Applicable: TOTAL CONTRIBUTIONS FROM OTHER SOURCES</b> <i>(Please describe in Budget Narrative)</i>			

RECEIVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

NFSAT staff signature