

## **PART ONE**

### **General questions and Discussion**

1. Are there significant changes in the situation of PhD candidates in your country as compared to last year? And in the situation of junior researchers? Please specify if your association considers those changes an improvement or deterioration.

As far as Armenia is a developing country the changes occurs slowly. Taking into account this fact I may say that the only significant change is that the government discusses to increase the stipendium of PhD students and doctors, which is most probably going to be solved in current year. Amount given to PhD candidates will increase from 30% to 50%. Besides NAS, RA has signed agreement with NAS, RF that gives opportunity to PhD students to study in Moscow's universities.

2. What main improvement would your association like to see in the situation of PhD candidates? And in the situation of post-docs and other junior researchers?

First big progress for our PhD students and PostDocs will be the integration to the total pan European network of scientific project cooperation. It will add the positive value to their scientific background and will help them to become communicable.

3. In general, what are the hottest topics (in Higher Education and Research & Development) under discussion in your country, in particular affecting young researchers? Specify at least two of these.

In general, the hottest topics (in Higher Education and Research & Development) being under discussion in our country are the followings:

- Armenian studies
- informative and conducting technologies (bio- and nano- technology)
- new sources of power and creating of new materials.

4. Which actions or activities has your national association been involved in this year? What are your association's future planned activities?

As I mentioned before our organization is young, it is functioning since April 2004, and we have prepared few programs such as summer school training programs for 2005.

For further we are planning prepare a program devoted to creation of a really functioning network which will connect all PhD students and Young PostDocs in Armenia, helping them to act together in interchanging programs and to take active part in the scientific life of Europe.

5. How does your national association define its area of activities? Following which procedure does your association get to establish its official positions (if any)?

6. Did your national association ever make a PhD survey or plans to make one? On which topics? Do you think these surveys would profit from data of other countries being included? How do you imagine Eurodoc contributing to that?

7. Which are the ideas your association would like to put forward for EURODOC policy in 2005?

To make a new huge network of Young scientists and PhD students in this process. To use the new ideas of young scientists and PhD students in creation of new cooperation programs.

8. How would the application of the "Bologna Process rules", like comparability of structures, ECTS systems, Diploma Supplement, affect the Doctoral Level in your country [<http://www.bologna-bergen2005.no/>] ?

Armenia is not a member of Bologna process yet. The Minister of Education has indicated that Armenia will apply for membership in the nearest future.

9. What is the position of your national association on the insertion of the Doctoral level as the 3rd cycle of the Bologna Process? What are your expectations or fears, if any, related to this?

10. Is the Lisbon Strategy [[http://europa.eu.int/comm/lisbon\\_strategy/index\\_en.html](http://europa.eu.int/comm/lisbon_strategy/index_en.html)] affecting the 2005 Eurodoc Conference policy of your country as what regards the recruitment of young researchers?

Armenia has ratified the Lisbon Recognition Convention on 7th of January 2005 (1). For this short period of time there were no any changes in policy regards the recruitment of young researchers.

## **Labour Conditions**

11. What are in your country the advantages and disadvantages of the PhD candidates' status (student/employee/mixed status/external)?

The PhD candidates have mixed status. They have students status with advantages (stipendium, loans) while the disadvantage is that there are no any discounts for students, only internal students receive stipendium and external students does not receive Also almost all PhD candidates have the rights of workers but the salary received from the government is very low.

12. What status does your association prefer for PhD candidates and why?

Our association would prefer the mixed status for PhD candidates because the work during study will give more opportunities for PhD candidates in their future career.

## Supervision and Training

13. Referring to the Eurodoc supervision and training Charter (to be found as Appendix 2 at [:http://www.eurodoc.net/workgroups/supervision/Eurodocsuptrain.pdf](http://www.eurodoc.net/workgroups/supervision/Eurodocsuptrain.pdf)) : is there any concern or action in your country at present to implement standards that would accommodate the standards outlined here? If this is not the case do you see a need to implement a charter of your own or another suitable document?

14. How are doctoral examinations conducted in your country (number of examiners and other people involved, length and format of examination, any specific guidelines on criteria you are given on how PhDs are passed/failed...)? Do examinations vary in style or length in different subject areas or institutions? Are your theses an official publication?

The Examination process for PhD degree is very prolonged and full of steps (it is the same procedure that was used in USSR during 50 years started from 1940s). It is two step examination procedures with collection of fictitious documents and so on. The candidates should pass the qualifying examinations for the candidate degree, which includes three subjects (philosophy, foreign language and the major/specialty).

The examination group consists of members from Science Council, which is elected by the Supreme Certifying Commission of the Republic of Armenia for the 4-year period for each discipline. Also every 4 year the Supreme Certifying Commission edits the guideline for rules of PhD obtaining procedure. After passing the pre examination procedure in the Science Council, which may allow PhD student to apply or not for the PhD degree, the student have to gather the documentations and to apply for PhD degree to the same Science Council, which will assign the final date of Examination. After passing the examination, the Science Council has to vote for granting the applicant PhD degree. If more than 50% of members voted for the applicant, then he can apply with the official documents from Science Council to Supreme Certifying Council for PhD degree. The Supreme Certifying Council within two months will examine the application and will make the final decision to grant or not the PhD degree to the applicant. The thesis is an official publication.

15. What are the different routes you have to a doctoral qualification (for example this may be full time research, part of a teaching fellowship or be a longer doctorate with taught elements)? Also give details of any doctorates ("professional doctorates" or "taught doctorates") other than the research doctorate (PhD), such as EngD -doctor of engineering- or PsychD -doctor of psychology- : specify their length, entry requirements and any difference in level they may have.

The routes for a doctoral qualification are different and depends on University and subject of research work. If the thesis work is closely conected with the expeditions or analysis then for the

doctoral qualification will be full time research. The PhD students of Yerevan State University for a doctoral qualification have a longer doctorate with taught elements and the PhD students of Yerevan Pedagogical University the doctoral qualification part of a teaching fellowship.

In Armenia it is not yet established the process of distinguishing between professional doctorates" and "taught doctorates". All of them are considered as research doctorate (PhD).

16. Are you aware of any means by which standards on research degrees in your country are monitored? For example, is there an outside agency that will audit institutions on their performance, or are there forums to evaluate performance? Please give any details you have on the above that will measure quality assurance in your institution.

Undoubtely there is a System which controlls and monitors the procedure. The first is the Ministry of Science of the Republic of Armenia; the second is the Supreme Certifying Commission. On the other hand the Universities and The National Academy of Sciences may also have their own policy but as a rule they have to coordinate with above mentioned structures.

### **International mobility**

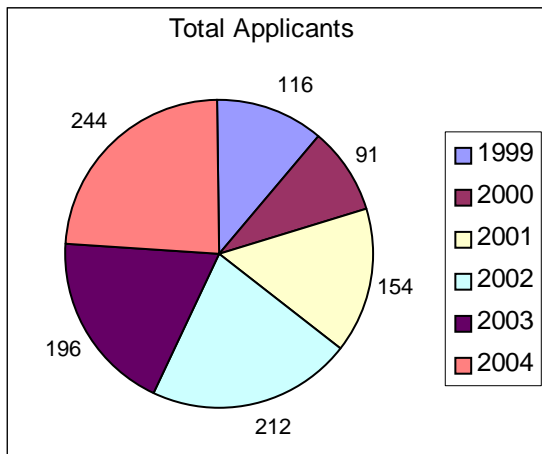
17. Which are the main opportunities (institutional agreements and exchange programs) for the mobility of researchers offered in your country? Which of them are the most popular?

Several International organizations and National Organizations from different states of Europe and America have their representatives in Armenia and they successfully cooperate with local Science Institutions for the exchange programs like IREX, DAAD, INTAS, NFSAT, TWAS, NATO, UNESCO and etc. Besides NAS RA has a special group for dissemination of programs in the form of state agreements with several countries (Hungary, India, CIS states, etc).

18. What is the awareness of young researchers about the possibilities of the various exchange programs? How could this be improved?

In general it is quite available for the students to get the grant programs of International Organizations. Year by year the awareness of young researchers about the taking opportunities of the various exchange programs in Armenia is raising.

For instance if you have a look at the statistical data of DAAD (German Academic Exchange Service) program you could notice that the number of applicants has been increased during 2004 (gr.1).



(gr. 1)

19. Which grants and scholarships are offered to enhance mobility of national researchers to go abroad? (list in order of their popularity)

All above mentioned programs are offered to enhance mobility of national researchers to go abroad.

20. Which grants and scholarships are offered to enhance mobility of foreign researchers to come to your country? (list in order of their popularity) Can foreign students and/or students from EU member states get a grant for PhD programs in your country?

In general the programs as DAAD, INTAS and TWAS offer grants and scholarships to enhance mobility of foreign researchers to come to Armenia. Many researchers try to collaborate with Armenian researchers but as it is known we don't have students from any EU state doing his/her PhD here. For instance, there is a PhD student from India who does his PhD in the institute of Biochemistry who came by TWAS exchange program, as well as a student from Japan doing his PhD study at the institute of Physiology.

21. Do you have any examples of institutionalized "joint degree programs" for European or international PhDs? (if any, indicate number of programs, their locations and concerned academic disciplines as well as number of participants and their origin/destination country) What are the requirements to get this label (whatever it is called)?

As it is known the institutionalized "joint degree programs" for EU or international PhDs are DAAD and INTAS, NFSAT programs.

## **Professional Future**

22. Are you aware that the European Commission is about to release a European Researchers' Charter and a Code of Conduct for the recruitment of researchers? Does your association have any opinion on these documents?

Undoubtedly these document would be of great importance for European Researchers.

23. Which way can these European recommendations be better promoted and implemented at the national and institutional level?

The European recommendations would be better promoted if they are more available and widely spread as a relevant information not only for European researchers but also for researchers from all over the world, it will help to reduce the gap between developed and less developed countries.

24. Does your association have any opinion on intriguing issues like the duration of contracts, the assessment of the scientific production, the different career paths and their comparability in academia and industry (or other)?

The prospects of working on the contracts should be more stable and flexible depending on duration of contracts.

## **Gender Equality**

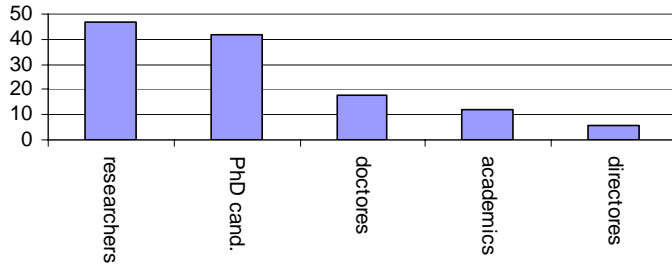
25. Are there any initiatives in your country that you estimate to have been at least partially successful in reducing gender imbalances existing at the PhD level or at later academic stages? If yes, please give details. If not, please identify the probable reasons for this and indicate what the most important steps would be towards a program that really has a practical impact.

26. Are there notable differences in the gender distribution between comparable positions in academia and other sectors? What are the reasons for this? What is the tendency?

The analysis of statistical data from the department of Natural Sciences NAS, RA (chemical, biological and medico-biological sciences) shows that there is no problem for women to get education and to be researcher in Armenia.

In compliance with these data the percentage of women–researchers is 47% and the percentage of women candidates is 42% (gr.2). The problem appears upon rising up the career ladder, for instance the percentage of women-doctors in science is 18%, the percent of women-academics is 12% and the percent of women-directors of institutes is 6% (2).

**Career ladder**



(gr.2)

**PART TWO: FIGURES**

1. How many institutions in your country offer PhD degrees? Specify the different types of institutions with PhD awarding powers (research only institutions / universities / colleges / other), and their ratio.

All of the Armenian State Universities (except of State University of Gavar) have their graduate courses. NAS RA offers PhD degree as well. Need to mention that among non State Universities only University of H. Acharyan provides PhD studies.

2. What is an approximate total number of PhD candidates in your country? What has been the trend in the past five years?

Currently in Armenia there are 625 PhD students, 224 of which were accepted during the last year. This parameter has not been added since year 2003 and most probably it will be kept for year 2005.

3. What is the average age of students entering doctoral programs in your country? What is/are the entry qualifications for getting into a PhD program (Bachelor's/Honors /Master's degree)?

The average age of students entering doctoral programs in Armenia is 25 years old. The Researcher's Degree or Doctor's Degree (PhD) is granted to those who hold a master's Degree or a Specialist's Diploma upon completion and attestation of three years' postgraduate studies.

4. How many candidates defended their PhD last year? What has been the trend in the past five years? What is the average age of the PhD candidates at the time of completion of their doctorate?

In NAS RA 75 PhD candidates were granted PhD degree last year. It is a very high figure and almost by 30-40% more than last 5 years, the average age of the PhD candidates is about 28 years old at the time of completion of their doctorate degree.

5. What is the nominal length of PhD programs? What is the average time from start to finish? What is the average active time spent to complete the PhD program? Are there official part-time modes for PhD programs?

The normal length of PhD program is about 3-4 years. Normally almost 40% to 50% out of all PhD students start and finish their study during 3 years but the average duration for completion the degree is 4years.

There are no established official part-time modes for PhD programs in our country yet. It is a matter of great controversy.

6. What is the percentage of PhD candidates who complete their PhD? Among those, what is the proportion of those who complete it within the allotted time period?

The percentage of PhD candidates who complete their PhD is normally 65-70 % out of them 40% complete their PhD within the allotted time.

7. What is the percentage of PhD candidates who withdraw? Are there interim qualifications for those who do not complete their doctorates (Mphil degree or other)?

30-35% of PhD candidates withdraw their PhD and there is no interim qualification for them in Armenia.

8. Are PhD candidates registered as such in any place (e.g. at a university or a ministry)?

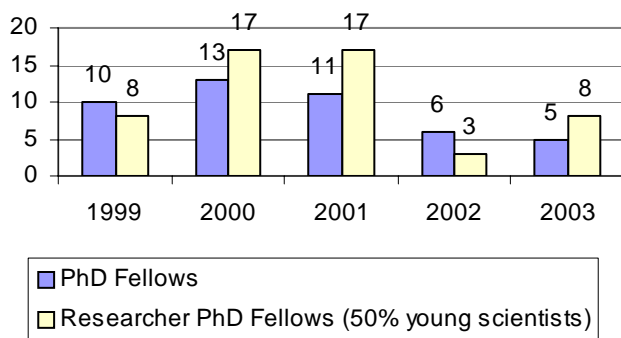
The PhD candidates are registered in the Universities or in the Institutes of National Academy of Sciences of RA, where they are doing their PhD studies.

9. Are PhD candidates considered students? Do they have to pay fees? How much is it? Does this apply equally to foreigners (EU/ non-EU)?

There are limited number of PhD candidates who pay for their post-graduate education in NAS, RA it is about 600 US\$ per annum. There exists another financial policy for foreign students, and they used to pay more than citizens of the Republic of Armenia.

10. What is the proportion of PhD candidates who get funding for their research activity? Specify the different types of funding and their ratio.

As it was mentioned above there are several funds in Armenia financing research activity of young scientists in Armenia. For instance every year 30-40 PhD candidates get funding for their research activity and 10-15 PhD candidates get travel grants from NFSAT office. For DAAD office there are statistical data from 1999-2003 (gr.3).



(gr. 3)

11. What is the average stipend/salary or bursary of the PhD candidates with funding (please give references for comparison: national minimum salary, average salary, salary of people with the same skills)?

Usually the average salary at a PhD candidates get to do research in Armenia varies from 50-200\$. NFSAT office provides almost 100\$ which is 85\$ higher than scholarship that provides national budget. DAAD provides funding for PhD candidates to do their research activity in Germany and it is 900-1000 euro per month. The national minimum salary is 13000 drams which is almost 25\$ and the average salary is 13000-15 000 drams which is 25-30\$.

12. What is the proportion of PhD candidates having workers rights and duties? Specify the rights and duties provided to these PhD candidates (social, unemployment benefit, taxes etc.).

Almost all PhD candidates have the rights and duties of workers in Armenia.

13. What is the proportion of PhD candidates that practice teaching during their PhD program? Are they paid separately for their teaching duties?

About 30% of PhD candidates practice teaching during their PhD program. Usually they are PhD candidates of Yerevan State University and Yerevan Pedagogical University. The teaching process is paid according to the teaching hours.

14. What is the amount of time spent on this activity?

There is no specified amount of time spent on the teaching activity for the PhD candidates.

15. What proportion of PhD candidates are involved in collaboration between academia and industry during their PhD?

Very low percentage of PhD candidates involved in collaboration between Academy and Industry during their PhD studies as the industry of Armenia is not on the appropriate level.

16. What are the numbers of incoming and outgoing PhD candidates in your country every year? What are the numbers of incoming and outgoing junior researchers (postdoctoral level)?

There are no any statistical data to answer the question about the number of incoming and outgoing PhD candidates in Armenia every year. But it is obvious that due to the reduction of state budget financing of scientific programs the level of emigration of young scientists has increased. (2)

17. What is the proportion of PhD candidates who remain working in academia after they defended their PhD?

The problem of young scientists' employment in Armenia is very urgent and the proportion of PhD candidates who remain working in Academia after they defended their PhD degree is very low (30%-40%). Nowadays the average age of doctors is 59-60 years old and the average age of 90% professors is more than 65 years old.

18. What proportion of young researchers go to R&D departments in companies? How many of them are involved in programs provided by the government to support the employment of young researchers in the private sector (if any)?

Information about R&D departments mostly is not available.

19. What is the average salary of young doctors in academic and private sector?

The average salary of young doctors in academic sector is 18000 drams which is only 40\$ and in the private sector it is almost 50000-60000 which is only 100\$-150\$.

20. How many members (local organization or individual) does your national organization have? Specify if they are local organizations (how many of them) or individuals (how many of them). At how many of the PhD awarding institutions do you have members?

The "Ecosocium" NGO has 15 members. All members are individual persons from different departments of Yerevan State University and different institutes of National Academy of Sciences of RA.

Referees.

1. [www.bologna-bergen2005.no/ Docs/03-PNY/041025-26\\_PNY-Armenia.pdf](http://www.bologna-bergen2005.no/Docs/03-PNY/041025-26_PNY-Armenia.pdf)

2. Hovhannesian E.A. "Actual interest of problems of gender and youth during realization of reform in academical system" Biological Journal of Armenia 3-4, 2001.

3. National Academy of Sciences of Republic of Armenia

4. "Armenpress" News Agency