

WAYS OF PRESERVATIONS NUCLEAR KNOWLEDGE IN TAJIKISTAN

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It is known that attitude to nuclear knowledge considerably changes in the world. While developed countries, and particularly European Community countries, pay essential attention to fundamental investigations and begin to show the tendency to gradual turning of nuclear power engineering, many of developing countries have contrary and reverse situation.

The Republic of Tajikistan is not a nuclear country, but she uses achievements of nuclear science and technology in a number of manufacture branches. That is why the important problems for us are training of staff and preservation of nuclear knowledge. During the Soviet period we did not have such problems as in that time well-educated specialists were trained regularly and by plan. Particularly, Chair of Nuclear Physics of the Tajik State National University (TSNU) was actively engaged in training.

Chair of Nuclear Physics of TSNU was established in 1961. Sometimes scientific themes and training directions were changed. The reasons of changes were:

- need of national economy in experts of particular speciality (nuclear spectroscopy, physics of cosmic rays, experts on nuclear physical methods of element analysis, geophysics, radiologists, etc);
- need for new research managers and new heads of chair.

Starting from 70th of the last century the Chair was engaged in training of experts in different fields of nuclear physics jointly and in close cooperation with Laboratory of High Energies, Laboratory of neutron Physics, Laboratory of Nuclear Reactions, and Laboratory of Theoretical Physics of the Joint Institute of Nuclear Researches (JINR), Dubna, Moscow.

After disintegration of the Soviet Union and rupture of scientific connections with Russia's scientific centers on the one hand, and low financing and absence of own scientific and technological base on the other hand caused considerable decrease of training quality of nuclear physics specialists.

Starting since 2002 we began to re-profile directions of specialists' training in the Chair of Nuclear Physics of TSNU from fundamental field to applied field. Applied field includes training of medical physicists, radiation ecology, dosimetry, radiation protection physics.

Training of these specialists (physicists) is carried out according to classical program of universities, i.e. from 1st to 3rd years they study general subjects, higher mathematics and

general physics, and from second semester of 3rd year students chose speciality in different chairs and study special courses.

Chair of Nuclear Physics of TSNU presently trains specialists in medical physics, dosimetry, and radiation protection physics. Today our country has urgent need in these specialists as during the Soviet Union these specialists were trained in Center. All of them were visitants and after USSR disintegration they left Tajikistan.

Today we train specialists in the Chair of Nuclear Physics of TSNU and train our specialists in the regional and interregional training courses, seminars and scientific visits, organized by the International Atomic Energy Agency (IAEA)

Only in 2003 more than 30 our oncologists, radiotherapists, radiologists, dosimeters, and etc were trained in training courses, fellowships, and scientific visits.

Many of these specialists train their colleagues in their home establishments. Though training of nuclear physics specialists in the field of radiation protection makes its first steps, but taking into account availability of high qualified teachers (doctors and professors), which were trained during the Soviet period, and IAEA assistance in this direction give us hope that in nearest future we shall train the necessary amount of specialists for different fields of national economy of Tajikistan.

Fundamental investigations on nuclear physics are being carried out in Physical Technical Institute of the Academy of Sciences of the Republic of Tajikistan (AS RT).

The INIS Center was established at the Nuclear and Radiation Safety Agency of AS RT with support and assistance of IAEA.

We concluded a number of interstate, interacademic, and interuniversity agreements and treaties with foreign countries, academies and universities in the field of education, science and personnel training.

All the above-mentioned allow us to preserve knowledge in Tajikistan, particularly, in the field of nuclear physics, science and technology.

List of the Used Literature:

1. General Conference resolution GC(46)RES/11B on “Nuclear Knowledge” (2002) and also SEC/NOT 1900(2002)
2. GC(46)RES/11 (Strengthening of the Agency’s Activities Related to Nuclear Science, Technology and Applications), Part B: Nuclear Knowledge (2002)
3. GC(47)RES/10 (Strengthening of the Agency’s Activities Related to Nuclear Science, Technology and Applications), Part B: Nuclear Knowledge (2003)