NATIONAL ACADEMY OF SCIENCES OF TAJIKISTAN

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR SAFETY & SECURITY AGENCY



№1, 2023

ABOUT US



"THE STATE REGULATORY AUTHORITY IN THE FIELD OF ENSURING RADIATION SAFETY - THE CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR SAFETY AND SECURITY AGENCY IS UNDER THE NATIONAL ACADEMY OF SCIENCES OF TAJIKISTAN, FURTHER CALLED REGULATORY AUTHORITY, WHICH CARRIES OUT INTEGRATED STATE POLICY ...".

On 1 November 2001, the Republic of Tajikistan (further – RT) became member of the IAEA and there was a necessity to establish an agency responsible for radiation safety regulation.

Based on Governmental Decision No. 3594 (16.1-2) as of 18 September 2002, initially, the Atomic Energy Agency was established under the Presidium of the National Academy of Sciences of Tajikistan and later based on that structure, it was transformed into the Nuclear and Radiation Safety Agency under the National Academy of Sciences of Tajikistan (further – NRSA NAST) as a separate independent authority (Decree of Presidium of the National Academy of Sciences of Tajikistan No. 112, as of 25.12.2002) under the Academy of Sciences.

In 2003, according to the Law of the RT "On radiation safety", the Government of the RT has assigned the Chemical, Biological, Radiological and Nuclear Safety and Security Agency under the National Academy of Sciences of Tajikistan (further – CBRN SSA NAST) as State regulatory authority on ensuring radiation safety in the country. According to the Article 6 of the above mentioned law, the CBRN SSA NAST as State regulatory authority carries out single state policy and coordinates the activity of relevant authorities in the country.

According to the Decree of the Presidium of the National Academy of Sciences of Tajikistan No. 117, dated November 5, 2021, the name of the Nuclear and Radiation Safety Agency of the National Academy of Sciences of Tajikistan (ANRS) have been changed to the Chemical, Biological, Radiological and Nuclear Safety and Security Agency of the National Academy of Sciences of Tajikistan (further – CBRN SSA NAST).

THE MAIN AREAS OF CBRN SSA'S ACTIVITIES INCLUDE:

CBRN SSA establishes requirements for the application of the radiation protection principles for all exposure situations and shall establish or adopt regulations and guides for protection and safety, which means:

- for planned exposure situations, each party with responsibilities for protection and safety shall ensure, when relevant requirements apply to that party, that no practice is undertaken unless it is justified;
- for emergency exposure situations and existing exposure situations, each party with responsibilities for protection and safety shall ensure, when relevant requirements apply to that party, that protective actions or remedial actions are justified and are undertaken in such a way as to achieve the objectives set out in a protection strategy;
- for all exposure situations, each party with responsibilities for protection and safety shall ensure, when relevant requirements apply to that party, that protection and safety is optimized;
- for planned exposure situations other than for medical exposure, each party with responsibilities for protection and safety shall ensure that, when relevant requirements apply to that party, specified dose limits are not exceeded;
- the application of the requirements for the system of protection and safety shall be commensurate with the radiation risks associated with the exposure situation.

The CBRN SSA NAST establishes a regulatory system for protection and safety that includes:

- Notification and authorization;
- Review and assessment of facilities and activities;
- Inspection of facilities and activities;
- Enforcement of regulatory requirements;
- The regulatory functions relevant to emergency and existing exposure situations;
- Provision of information to, and consultation with, parties affected by its decisions and, as appropriate, the public and other stakeholders.

The CBRN SSA NAST shall adopt a graded approach to the implementation of the protection and safety system in a such manner, that the application of regulatory requirements is commensurate with the radiation risks associated with the exposure situation.

The CBRN SSA shall ensure the application of the requirements for education, training, qualification and competence in the protection and safety of all persons engaged in activities relevant to protection and safety.

The CBRN SSA NAST shall ensure that mechanisms are in place for the timely dissemination of information to relevant parties, such as suppliers and users of sources, lessons learned for protection and safety from regulatory and operating experience, and from incidents and accidents and related findings. The mechanisms established shall be used, as appropriate, to provide relevant information to other relevant organizations at the national and international level.

The CBRN SSA NAST, in conjunction with other relevant authorities, shall specify requirements for acceptance and performance, by regulation or by the application of published standards, for any manufactured or constructed source, device, equipment or facility that, when in use, has implications for protection and safety.

The CBRN SSA NAST shall make provision for establishing, maintaining and retrieving adequate records in regards to facilities and activities. These records shall include:

- registers of sealed sources and radiation generators;
- records of doses from occupational exposure;
- records related to the safety of facilities and activities;
- records that might be necessary for the shutdown and decommissioning or closure of facilities;
- records of events, including non-routine releases of radioactive material to the environment;
- inventories of radioactive waste and of spent fuel.

The CBRN SSA NAST shall establish mechanisms for communication and discussion that involve professional and constructive interactions with relevant parties for all protection and safety-related issues.

The CBRN SSA NAST, in consultation with the health authority, shall ensure that provisions are in place for ensuring protection and safety in the handling of deceased persons or human remains that are known to contain sealed or unsealed radioactive sources, either as a result of radiological procedures for medical treatment of patients or as a consequence of an emergency.

The CBRN SSA NAST shall establish, implement, assess and strive to continually improve a management system that is aligned with the goals of the regulatory body and that contributes to the achievement of those goals.

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1. AGENCY EVENTS

OPENING OF THE BRANCH OF THE CHEMICAL, BIOLOGICAL, RADIATION AND NUCLEAR SAFETY AGENCY OF THE NATIONAL ACADEMY OF SCIENCES OF TAJIKISTAN IN SUGHD REGION



On August 9, 2022, the President of Tajikistan, his excellency Emomali Rahmon put into the operation the Northern Branch office of the Chemical, Biological, Radiological, and Nuclear Safety and Security Agency (CBRN SSA) of the National Academy of Sciences.



The Northern Branch Office was designed and built by civil engineers of the Main Construction Department of the National Academy of Sciences of Tajikistan. The new building includes offices for 20 employees, a reception area for visitors, three meeting rooms, and modern laboratories. Its construction significantly enhances Tajikistan's ability to perform comprehensive regulatory functions in the region and to provide timely response to CBRN incidents

The U.S. National Nuclear Security Administration (NNSA) Office of Global Material Security and the Norwegian Radiation and Nuclear Safety Authority contributed half of the funding for construction under the auspices of the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction. Art Atkins, NNSA Director of the Office of Global Material Security noted, "Tajikistan is a leader in the control and security of highly radioactive material in the region. This cooperative p roject demonstrates a joint commitment to strengthening security of radioactive material."



The President of Tajikistan, his excellency Emomali Rahmon toured the new building and stressed that this institution of the National Academy of Sciences of Tajikistan plays an important role as a regulatory state body in nuclear and radiation safety and security, and coordinator of chemical and biological safety and security.



CBRN SSA Director Ilhom Mirsaidzoda said, "Tajikistan highly appreciates the contributions made by its international partners, the U.S. NNSA Office of Global Material Security and the Norwegian Radiation and Nuclear Safety Authority in completing this construction. CBRN SSA's Northern Branch will play a leading role in state regulation of nuclear and radiation safety and security, and activities related to chemical and biological safety and security in the region."



CONSULTATIVE SEMINAR ON ORGANIZING WORK WITH THE POPULATION AND STAKEHOLDERS IN SOLVING THE PROBLEMS OF REMEDIATION OF RADIOACTIVE WASTE SITES

On May 20-21, 2022, in Dushanbe city, a consultative seminar on organizing work with the population and stakeholders in solving the problem of remediation of radioactive waste repositories in the Sughd region within the framework of the implementation of the National Concept of the RT on "Remediation of tailing dumps of uranium ore processing waste for 2014-2024" was held.



Representatives of the executive authorities of a number of districts and cities of the Sughd region, specialists of the Security Agency of the Commonwealth of Independent States and representatives of the OSCE Program Office in Dushanbe took part in the seminar.

During the meeting, the issues related to informing the population and stakeholders about radioactive waste repositories, radiation safety, monitoring, as well as ways to solve the problems of sanitizing repositories of the Sughd region were discussed. The socio-economic problems of the uranium mining industry areas and proposals for improving people's living conditions were also discussed.





It should be noted that the JSC Central Design and Technology Institute (JSC "CDTI", an enterprise of the Rosatom Fuel Company "TVEL") was declared as the winner in the tender for the preparation of working documents and implementation of work in the "Taboshar" district of the Sughd region of the RT. It is expected to launch the work this year as part of the implementation of the "Inter-State Targeted Programme on Remediation of Member State Territories Affected by Uranium Mining".

Therefore, issues related to informing the population and stakeholders and entrepreneurs about health promotion are of particular importance.



Conducting of such seminars helps the executive authorities of the districts and cities of the Sughd region to better understand this area and provide information to the population and other stakeholders.

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This successful meeting was held by the specialists of the CBRN SSA NAST, with the support of the OSCE Program Office in Dushanbe within the framework of the project "Involvement of stakeholders in solving problems related to

uranium waste in Central Asia, phase II". It is expected that in 2023, the work on health improvement will be launched in the "Dehmoy" area of Bobojon Gafurov district of the Sughd region.

MEETING WITH REPRESENTATIVES OF THE POPULATION AND STAKEHOLDERS IN THE GHAZIAN COMMUNITY OF THE EXECUTIVE BODY OF BOBOJON GHAFUROV DISTRICT OF THE SUGHD REGION ON INFORMING THE PUBLIC ABOUT THE HEALTH ISSUES OF RADIOACTIVE WASTE SITES



Within the framework of the implementation of the National Concept on "Remediation of radioactive waste tailings", a meeting with representatives of the community and stakeholders was held in the building of the Ghazian community of the executive body of Bobojon Ghafurov district of the Sughd region on March 4-5, 2022. During the meeting, the current situation of the "Dehmoy" radioactive landfill, which is located in the territory of the Ghazian community, was discussed, and the participants were introduced to the planned remediation projects.

It was noted that the involvement of the population and stakeholders during the implementation of remediation works is one of the most important activities for the remediation of polluted areas.

The head of the community supported the educational activities among the population. It was requested that information leaflets should be prepared and distributed among the population ree of charge.

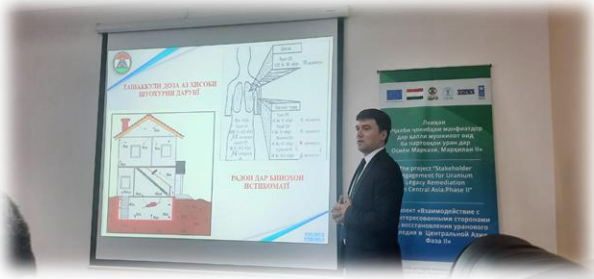


The meeting was held by the specialists of the CBRN SSA NAST, with the support of the OSCE Program Office in Dushanbe in the framework of the project "Involvement of stakeholders in solving problems related to uranium waste in Central Asia, phase II". It is expected that in 2023, works on health improvement will begin in the "Dehmoy" area of Bobojon Ghafurov district of the Sughd region.

A TRAINING COURSE FOR PRESS OFFICERS OF THE EXECUTIVE BODIES OF SOME DISTRICTS AND CITIES OF THE SUGHD REGION ON INFORMING THE PUBLIC ABOUT SANITARY AND HYGIENIC PROBLEMS OF RADIOACTIVE WASTE DISPOSAL SITES



In the framework of the implementation of the National Concept on "Remediation of Radioactive Waste Tailings", on February 21-23, 2022, a training course for press employees of the executive bodies of some districts and cities of the Sughd region on informing the population about radioactive waste sites was held at the Training Center of the National Bank of Tajikistan, in Guliston city, Sughd Region.



The participants of the course were informed about the features of providing information on radioactive waste remediation projects, as well as understanding radiation safety issues.

The training course was conducted by specialists of the Security Agency of the CIS and AMIT with the support of the OSCE Program Office in Dushanbe, within the framework of the project "Involvement of stakeholders in solving problems related to uranium waste in Central Asia, phase II" (maybe - Stakeholder engagement for uranium legacy remediation in Central Asia. Phase II).



It is expected that in 2023, the work on health improvement in "Taboshar" district of Istiqlol city, Sughd region, will begin and the press secretaries will inform the population and stakeholders about the progress of this project.

SELECTION OF APPLICANTS FOR VACANT POSITIONS IN THE CBRN SSA NAST

The CBRN SSA NAST announced a competition for the following positions on December 27, 2021:

- deputy director for science and education (doctor, candidate of science);

- scientific secretary (doctor, candidate of science);

- Director of the Branch of the CBRN SSA NAST;

- head of the scientific-research department (doctor, candidate of science);



- head of the department of licensing, control and attention to chemical, biological, radiological and nuclear accidents (doctor, candidate of science);

- head of the public and international relations department (doctor, candidate of science);

- head of the occupational radiation control service sector (candidate of science);

- head of the radiation control service sector for patients and the population;

- head of the education and training service sector;

- head of the special services sector.

It should be noted that on February 7, 2022, the Head of the Council of Scientists of the Agency, Mr. Ilhom Mirsaidzoda, made a speech in regards to the selection of applicants for the above-mentioned positions and noted that the necessary documents were submitted for filling the positions.

After that, each applicant has briefly presented his/her scientific achievements, as well as the perspective of working in this position. A reporting commission was established to carry out voting procedures for applicants.



After that, each applicant has briefly presented his/her scientific achievements, as well as the perspective of working in this position. A reporting commission was established to carry out voting procedures for applicants.

After the establishment of the reporting commission, the members of the Council put the candidates to a secret vote. Based on the results of the secret voting, the applicants were selected for the positions mentioned above.

At the end, Mr. Ilhom Mirsaidzoda congratulated all the selected candidates on their positions and gave them specific instructions and assignments regarding the retraining of personnel as well as the training of young personnel.

Mr. Ilhom Mirsaidzoda also noted that employees should faithfully and with high human responsibility put the interests of the nation and the state above other interests and serve for the benefit of the state and the nation with pure hands and hearts.

2. SCIENTIFIC-RESEARCH WORK

The CBRN SSA NAST is the main national structure in the field of radiation safety and implements the state policy of the RT in this field, as well as regulates the use of ionising sources of radiation. The number of employees is 60 (12 of them are at the branch of the CBRN SSA in Boston), 5 are doctors of science, 14 are candidates of science.

During the reporting period, the CBRN SSA NAST carried out its activities according to the regular plan of the NAST on organizational issues and instructions and orders, as well as the orders of the Government of the RT, the Ministry of Foreign Affairs of the RT and the Directorate of the NAST.

During the reporting period, more than 500 tasks of the Government of the RT and the Directorate of the NAST were fulfilled, and responses to the requests of ministries and agencies were obtained.

The CBRN SSA NAST is the national coordinator for cooperation with the International Atomic Energy Agency (further – IAEA), as well as the national coordinator for the implementation of the National Action Plan of the RT on the implementation of Resolution 1540 of the UN Security Council, national coordinator for the implementation of the Convention on the Prohibition of the the Development, Production, Stockpiling and Use of Chemical Weapons and their Destruction and the national coordinator of the implementation of the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological), Toxin Weapons and their Destruction.

THE MAIN RESULTS OF THE SCIENTIFICRESEARCH IN 2022

In the scientific topic "Physical and chemical bases of separation of uranium concentrates from minerals and waste", new scientific research works were studied through differential thermal analysis of uranium-bearing minerals of the deposits of Tajikistan: "Western Tajikistan", "Central Tajikistan" and "Northern Tajikistan-2". Transformation of minerals in these minerals were also evaluated.

Labsys Evo-1600 derivatograph from Setaram Company was used for the work. LabSys Evo is a modern derivatograph (synchronous temperature analyzer). It combines simultaneous thermogravimetry and differential scanning calorimetry (TTG-TTD/KDS) and has high sensitivity and accurate analysis. Differential thermal analysis (DTD) of uranium ore samples from the "Central Tajikistan" mine is presented in Figure 1. The following minerals were identified from thermal curves: kaolinite, quartz, mica, and dolomite.

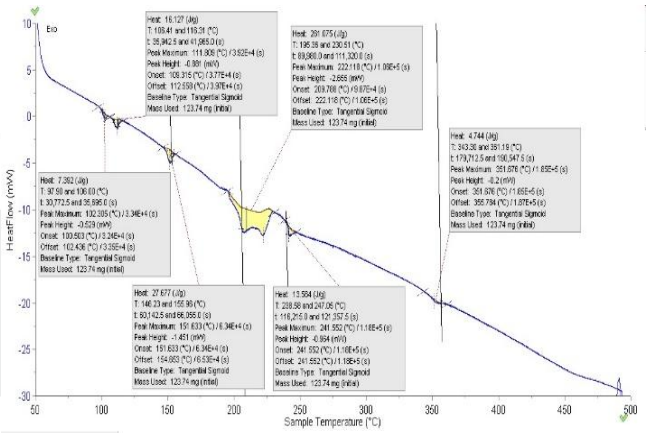


Fig**. 1: Temperature curves of mine samples of "Central Tajikistan"**

In this thermogram of the uranium minerals of the North Tajikistan-2 mine, we observe the endothermic phenomenon at 450-550°C, which is also related to the transformation of kaolinite.

In the uranium minerals of "Western Tajikistan" and "Northern Tajikistan-2" deposits, α- and β-transition of quartz is not observed, and TTD also shows the absence of carbonate compounds.

In addition, acid processing of uranium-bearing minerals and secondary processing of uranium industry wastes were studied. A study on mineral decomposition using sulfuric acid was carried out, in which the particle size of crushed minerals, the appropriate concentration of acid, the duration of the process, the use of oxidants and other parameters of the technological process were selected.

In addition, during the reporting period, separation of uranium and thorium compounds by calorimetric method was studied. For research, we used C600 Calvet calorimetry from "Setaram" company. LabsysEvo is a state-of-the-art calorimetry that includes 3D sensitive thermal sensors.

The sensor surrounding the sample uses 12 rings consisting of 12 high-temperature thermocouples with a thermocouple, the maximum furnace temperature is 600°C with water-cooling, and the furnace heating/cooling rate is from 0.01°C/min. up to 2.0°C/min.

An 8 ml stainless steel container with a hermetically sealed cap is used. Boxes are used in pairs – one for sample and one for comparison. The boxes are resistant to a pressure of 100 Bar.

The figure below shows the results of calorimetric studies of thorium (IV) nitrate.

As can be seen from Figure 10, the results of the calorimetric studies are practically consistent with the results of the tensimetric studies of thorium nitrate.

Scientific works on the topic "Radioecological research in radionuclide objects" are ongoing. Dealing with uranium heritage is accompanied by environmental impacts. The intensity of the impact mostly depends on the amount of waste, the degree of their location and dispersion in the environment. The question is how dangerous this effect is for the environment and human health.

On December 23, 2021, the Law of the RT "On the Use of Atomic Energy" (No. 1845) was adopted in a new version. According to it, a number of by-laws have been prepared, which were prepared by the staff of the CBRN SSA NAST within this period.

For this, the employees are familiarized with the documents of IAEA and the legislation of other countries in the field of licensing the use of radioactive sources, radioactive waste, the use of nuclear energy and the remediation of contaminated areas in the results of uranium production: Safety Basics SF-1, General Safety Requirements: Part 1. Governmental, Legal and Regulatory Framework for Safety, Part 2. Leadership and Management for Safety, Part 3. Radiation protection and the Safety of Radiation Sources, Part 4. Safety Assesments for facilities and Activities, Part 5. Predisposal Management of Radioactive Waste, and Safety Standards Series No. WS-G-1.2; Environmental and Source Monitoring for purposes of Radiation Protection Safety Guide No. RS-G-1.8; Notification and Authorization for the Use of Radiation Sources. GS-G-1.5, Guidelines for licensing and inspection: dealing with radioactive waste, etc.

In accordance with the Law of the RT "On the Use of Atomic Energy", as well as the Order of the Deputy Prime Minister of the RT, as of January 18, 2022, in connection with the implementation of clauses 2, 3, 4, 5, 6, 8 and 9 of the Article 6 of the Law of the RT "On the Use of Atomic Energy", drafts of the following normative legal acts were developed, which are currently at the stage of coordination with relevant ministries and agencies:

• Draft Decree of the Government of the RT "On the approval of the state regulatory procedure in the field of nuclear and radiation safety";

• Draft Resolution of the Government of the RT "On approval of the Rules for nuclear and radiation safety examination and nuclear safety";

• Draft Decree of the Government of the RT "On approval of the Rules for the selection of sites for the stationing of nuclear devices and long-term storage points";

• Draft Resolution of the Government of the RT "On approval of the National Response Plan to nuclear and radiation accidents";

• Draft Resolution of the Government of the RT "On approval of the Procedure for the organization of the State System of accounting for and control of nuclear materials and sources of ionizing radiation";

• Draft Resolution of the Government of the RT "On approval of the internal procedure of cooperation of the state organization during the inspection by the IAEA in the territory of the RT";

• Draft Resolution of the Government of the RT "On approval of the Procedure for submitting reports and declarations to the IAEA regarding nuclear materials and nuclear facilities located in the territory of the RT in accordance with international legal documents recognized by Tajikistan".

The developed normative documents reflect the following problems:

- ensuring the safety of the population and environment in the areas affected by the uranium processing facility legacy sites;

- creation of conditions for sustainable development of areas where nuclear facilities are located;

- development of technical insrastructure and human resources capacity of operators and regulatory authority affectively perfrom the tasks;

Within the reporting period, the draft Decree of the Government of the RT "On the procedure of state regulatory control in the field of nuclear and radiation safety" was prepared and agreed with relevant ministries and agencies. This draft was adopted on October 25, 2022 under No. 509.

Also, by the employees of the Branch of the CBRN SSA NAST, the analysis of the radiation background, chemical composition and specific activity of construction materials (crushed stone and marble, gravel and sand when allocating a plot of land for the construction of their production enterprises and industrial enterprises engaged in the production of these types of construction materials) was carried out using modern equipment within their territory.

During the reporting period, radiation monitoring of the "Adrasmon" Reservoir was carried out in order to assess the potential danger to the health of the population and the environment.

Based on the obtained results, local limited points with the importance of high environmental capacity were revealed. This situation is associated with the movement of radioactive materials from the reservoir through rainwater.

The flow of floods after heavy rains from the surface of the reserve destroys its cover on the surfaces and leads to environmental pollution.

It has been determined that in the damaged areas of the "Adrasmon" Radioactive Waste Repository, the ambient dose of gamma radiation is up to 3.7 μSv/hour. In the village of Adrasmon, the ambient dose of gamma radiation ranges from 0.1 to 0.3 μSv/h. The situation is aggravated by the fact that the residents of the houses near the reserve use the polluted area for agricultural products and livestock grazing, as well as construction materials for the construction of houses. Such situation has a negative impact on the radiation situation of the region.

The assessment of the external radiation exposure of medical workers showed that the highest dose was received by the categories of medical workers who belong to group "A", workers involved in angiography. At the same time, there was no increase in the maximum permissible radiation dose.

It has been established that the average dose of individual exposure of employees of various professions in radionuclide diagnostics is on average 0.88 mSv per specialist per year and ranges from 0.29 to 2.16 mSv. That is, they are above the average medical indicators, but below the maximum permissible limit.

3. NATIONAL AND INTERNATIONAL COOPERATION

STATE SCIENTIFIC INSTITUTION "GLACIER STUDY CENTER" OF NAST, IN COOPERATION WITH THE IAEA, CONDUCTS NEW METHODS OF RESEARCH AND STUDY OF GLACIERS

On October 28, 2022, a meeting was held between the Section head of the Division for

Europe, IAEA Department of Technical Cooperation , Mrs. Sandra Marie Steyskal and the representative of the CBRN SSA NAST, Mr. Olimjon Azizov, as well as the employees of the water quality, isotopes and sanitation department of the State Scientific Institution "Glacier Study Center" at the premises of this State Scientific Institution in order to establish cooperation in the field of isotopic study of glaciers and snow cover.



At the beginning of the meeting, the Director of this institution, Professor Abdulhamid Qayumov, spoke about the achievements of the center in the field of carrying out fundamental scientific research and noted that since the beginning of its activity, the center has carried out more than 50 studies on the issues of studying glaciers, observing and monitoring the state of glaciers, their reduction, as well as determination of the isotopic and hydrological composition of glacial water, glacial lakes and ponds, and achieved significant results.

It should be noted that isotopes of natural origin are indicators for determining the real condition of glaciers, their competitiveness in relation to the climate change process, the specific position of glaciers in the water supply of rivers and subglacial lakes, as well as the role of glaciers in the increase of surface and underground water, and at the same time it is used for determining the age of rivers.

It should be noted that with the support of the IAEA, within the framework of beneficial cooperation, laser equipment "Pikaro" was installed in the laboratory of water quality, isotopes and sanitation department of the center. This device allows the isotopic study of glaciers and snow cover to be carried out further in innovative ways.

In order to better conduct such research and organization of the laboratory, the President of the NAST, academician Farhod Rahimi, allocated two working rooms for the further operation of the laboratory of water quality, isotopes and sanitation department of the state scientific institution "Glacier Study Center", which aims to support it, first of all, the support of the policy of the Government of the RT regarding the study and protection of glaciers.

It should be noted that thanks to the constructive actions of the President of the RT , His Excellency Emomali Rahmon on the issue of effective use of water resources and the study of glaciers, it was possible for this center to establish beneficial cooperation relations with international organizations and institutions and development partners and to continuously expand its significant activity in the field of promotion and strengthening of the glaciological science in the republic.

Thus, in order to organize a research laboratory of glaciers, snow cover and install the "Pikaro" analytical device in this institution, the employees of the water quality, isotopes and sanitation department were sent for training to the University of Innsbruck (Institute of Geology) in Austria for a period of one month (from 22.08.2022 to 20.09.2022) according to the Fellowship program. The training was financially supported by the IAEA and was organized under the leadership of Dr. Yury Dublyansky. The members of study visit studied the methods of isotope research of glaciers.



During the training, the employees of the center obtained complete information on practical sampling of ice and water to determine their further isotopic composition, training in the "Picarro" isotope analyzer laboratory, as well as on the installation components of the "Picarro" analytical equipment. The results of the experiment will further provide an opportunity to carry out isotopic studies of glaciers and snow cover with the mentioned device.

It should be said that such a laboratory is extremely rare at the world level, and its establishment in the center is a kind of innovation and at the same time leads to the advancement of the science of glaciology, as well as new ways of conducting glacier research.

THE CEREMONY OF HANDING OVER THE EQUIPMENT TO THE INSTITUTE OF VETERINARY MEDICINE OF THE ACADEMY OF AGRICULTURAL SCIENCES OF TAJIKISTAN AS PART OF THE IMPLEMENTATION OF THE IAEA PROJECT

On October 28, 2022, at the Institute of Veterinary Medicine of the Academy of Agricultural Sciences of Tajikistan (further IVM AAST), the ceremony of handing over the equipment was held within the IAEA project TAD/5/006 "Use of nuclear and molecular technologies for diagnosis and control of transboundary animal diseases".



The Director of the CBRN SSA NAST, Mr. Ilhom Mirsaidzoda, as the coordinator of the implementation of IAEA programs in the RT, and the Director of the IVM AAST, Mr. Rajabmurod Atovullozoda, took part in this handover ceremony .



The mentioned project has been implemented at the IVM AAST since 2019. During this period, with financial support of the project, the laboratories of the institute were equipped with the most modern equipment and accessories, such as biological boxes, centrifuges, thermostats, low-temperature refrigerators (-40, -80), shakers, readers, etc..



As part of the implementation of this project, the IVM has equipped a modern laboratory in accordance with international standards, and at the same time, a solar power system has been installed, which provides the opportunity to use diagnostic equipment at the expense of natural energy.



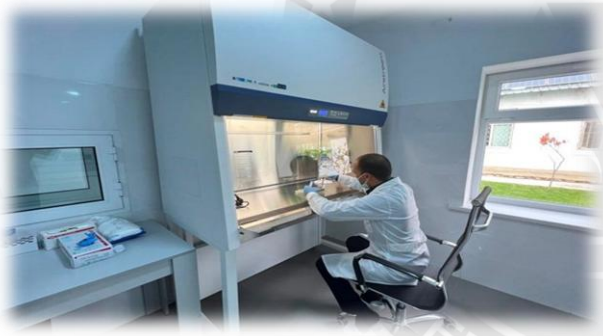
The laboratory consists of rooms for testing infectious diseases and zoonoses using traditional and modern methods (ELISA, real time RT-PCR),ooms for isolation of bacteria and viruses.



Within the framework of the project, 5 young specialists of the IVM underwent internship in North Macedonia and 1 person underwent intermship in Austria. After improving the skills and learning the new science of veterinary medicine, they have conducted examination in the process of working at the IVM, using new equipment and technologies, infectious diseases of animals, including zoonoses.



One of the results of the implementation of the project is the adaptation of the laboratories of the IVM to international standards, including the ISO17025 standard, which makes the intellectual and technical capacity of the scientific institution in line with modern leading research institutes.



It is clear that the available equipment is effective for monitoring infectious diseases, especially zoonoses, as well as controlling the epizootic situation among domestic and wild animals.



It is certain that under the educational and wise policy of the President of the RT, the great leader of the nation, His Excellency Emomali Rahmon, the scientists of the IVM AAST will continue to implement joint scientific-technical projects in cooperation with the CBRN SSA NAST. Domestic and foreign research institutes make a strong connection between innovations and achievements of veterinary medicine science and production, making a valuable contribution to the implementation of the strategic goal of the Government of the RT – ensuring food safety.

CEREMONY OF HANDING OVER THE EQUIPMENT TO THE BORDER TROOPS OF THE STATE NATIONAL SECURITY COMMITTEE OF THE REPUBLIC OF TAJIKISTAN



On October 7, 2022, an official ceremony of handing over the equipment to the Border Troops of the State Committee on National Security of the RT (BT SCNS RT) was held within the framework of the National action plan of the RT on the implementation of UN Security Council Resolution 1540.

Ms. Christine Bent and Mr. Kevin Roshdieh, Nuclear Smuggling Detection and Deterrence Office (U.S. Department of Energy), First Deputy Chairperson, Commander of the BT SCNS RT, Colonel-General, Rajabali Rahmonali and the Director of the CBRN SSA NAST, mr. Ilhom Mirsaidzoda, have participated in this ceremony.



The Border Troops of the SCNS RT was provided with night vision devices, specialized clothing and thermal imaging cameras to strengthen measures on the border with Afghanistan.



This technical assistance was provided within the framework of the Nuclear Smuggling Detection and Deterrence Office (U.S. Department of Energy) Project to secure “Green Borders”, which aims to strengthen the infrastructure of the Border Troops of the SCNS RT along the border with Afghanistan. The U.S. Department of Energy closely collaborates with the Government of Tajikistan since 2013 to combat the smuggling of nuclear and radiological materials.



The project includes the transfer of special clothing, equipment for conducting operations in mountainous areas, special protective mine clearance forms, night vision devices, binoculars, monoculars, transceivers (radio stations), special military vehicles, vehicles, minibuses, in which sensitive equipment is installed to support anti-smuggling operations, and detection and prevention of illicit trafficking of nuclear and radioactive weapons as well.

COMMISSIONING CEREMONY OF MODERN NUCLEAR AND RADIATION DETECTORS AT THE CUSTOMS CHECKPOINT "FOTEHOBOD"



On October 6, 2022, at the “Fotehobod” customs checkpoint, the commissioning ceremony of installed modern nuclear and radiation detectors took place, aimed at prevention of terrorism utilizing the weapons of mass destruction. The event held within the framework of the National action plan of the RT the implementation of UN Security Council Resolution 1540, which was approved by Government Decree No. 54 as of February 9, 2016.



The Chairperson of the Customs Service, Mr. Khurshed Karimzoda, the Director of the CBRN SSA NAST, Mr. Ilhom Mirsaidzoda, and the Principal Deputy Administrator of the National Nuclear Security Administration at the U.S. Department of Energy, Mr. Frank A. Rose participated at this ceremony.

It should be pointed out that within the framework of this project, similar equipment was installed at the customs checkpoint of "Dusti", "Panji Poyon", "Guliston", "Sarazm" and "Dushanbe International Airport". In addition, the work is underway at the Khujand International Airport to complete the installation of nuclear and radiation detectors.

The project also includes the provision of hand-held equipment to prevent the illicit trafficking of nuclear and radioactive materials and the

training of Customs officers on the use of this equipment.



In the following years, the installation of similar equipment at other customs checkpoints and airports is planned. Additionally, the provision of special transport and equipment along the border with Afghanistan and other green borders is scheduled to be launched.

MEETING OF DIRECTOR OF THE CBRN SSA NAST WITH REPRESENTATIVES OF THE IAEA DEPARTMENT OF TECHNICAL COOPERATION



On September 28, 2022, on the margins of 66th annual session of the IAEA General Conference, a meeting has been conducted between Mr. Ilhom Mirsaidzoda, Director of the CBRN SSA NAST with representatives of the IAEA Department of Technical Cooperation.

During the meeting, issues of action plan implementation on realization of existing and new national and regional projects within the framework of cooperation between the RT and the IAEA were discussed. The progress and issues of outstanding items of the action plan, as well as plans for future, were discussed as well.

The progress of implementation of the IAEA national projects, which is being implemented in the oncology centers of Dushanbe and Khujand cities, and preparation for project implementation in the Oncology Center of Kulob city were also discussed.



Mr. Ilhom Mirsaidzoda, Director of the CBRN SSA NAST, expressed his gratitude to the IAEA Department of Technical Cooperation for the implementation of current and future projects in Tajikistan, and noted that a number of measures are also planned by the Government of the country to improve the infrastructure of the above-mentioned Oncology centers.

Following the meeting, the next steps were identified for the effective implementation of current and future projects in Tajikistan.

MEETING OF REPRESENTATIVES OF THE CBRN SSA NAST WITH THE IAEA SAFEGUARDS DEPARTMENT REPRESENTATIVES



On September 27, 2022, on the margins of 66th annual session of the IAEA General Conference, a meeting was held between Mr. Ilhom Mirsaidzoda, Director of the CBRN SSA NAST, Farhod Khamidov, Head of Licensing, Inspection and Response to the CBRN Emergency Department of the CBRN SSA NAST and head and staff of the IAEA Safeguards Department.

The issues of inspections of organizations that use nuclear materials in their activities by

inspectors of the CBRN SSA NAST and reports submission by the RT within the framework of obligations under the Treaty on the Non-Proliferation of Nuclear Weapons (further – NPT) and the Additional Protocol ratified by the RT were discussed.



The issues of timely submission of electronic reports to the State Declaration Portal were also discussed. Providing reports has become much easier and faster with the launch of abovementioned portal.



The need for conducting of regional training courses and meetings was emphasized, and special attention was paid to the issues of staff training.

Special role of INSEP Program of US Department of Energy in training of inspectors of the CBRN SSA NAST was emphasized and special gratitude was expressed to the above-mentioned program. In addition, IAEA inspectors were invited to the courses that the CBRN SSA NAST will conduct in the future jointly with INSEP program of U.S. Department of Energy.

66TH IAEA GENERAL CONFERENCE



Representatives from the IAEA's 175 Member States have participated at the 66th IAEA General Conference hosted at the Agency's headquarters in Vienna, Austria, from 26 to 30 September 2022.

"Our work assisting Member States in addressing some of their most pressing development challenges continues," IAEA Director General, Rafael Mariano Grossi, said during his opening speech at the IAEA General Conference. He detailed the IAEA's work in areas from climate change and food security to plastic pollution and zoonotic diseases and reported on the Agency's work and achievements in the past year.

During the week, delegates will discuss a range of topics, from the 2021 Annual Report and the 2023 budget to strengthening activities related to nuclear science, technology and applications, as well as the Agency's nuclear safety and security activities and strengthening the effectiveness and improving the efficiency of Agency safeguards. They will also discuss specifically nuclear safety, security and safeguards in Ukraine and safeguards in the Middle East and in the Democratic People's Republic of Korea.



General Conference sessions in the Plenary Hall, including the statements of officials and delegates, will be livestreamed for the public. Documents provided to delegates are available here.

SIDE EVENTS AND VISITS

Throughout the week, both the IAEA and its Member States will host about 80 side events, some of which will be livestreamed and open to the public. The events will highlight different aspects of the IAEA's work, from ongoing initiatives related to health and nuclear energy to available e-learning resources and the modernization of the Agency's laboratories at Seibersdorf.

During a side event on Monday named "Revealing Secrets Using Nuclear Techniques", experts participating in an ongoing regional project in Europe will demonstrate how they are applying nuclear technology to verify the authenticity and provenance of cultural heritage artefacts, foods and medicines.

Another event will provide the latest status and future direction of the Zoonotic Disease Integrated Action (ZODIAC). The IAEA launched ZODIAC in 2020 to support countries in the early detection, prevention and control of zoonotic diseases. To date, more than 1000 participants from over 95 countries have been trained through ZODIAC's virtual interregional training courses.

The IAEA presented its Platform on Small Modular Reactors (SMRs) and their Applications at last year's General Conference. This year, a side event will present the progress and achievements of the Platform after one year, including the recently launched SMR Portal, the IAEA's strategic objectives in supporting global SMR deployment and an interregional project on SMRs and microreactors.

The IAEA introduced a new generation of seals this year. Seals are one of the tools that IAEA safeguards inspectors use to verify that nuclear material is used only for peaceful purposes. During a side event, the new seal will take the spotlight, and participants will learn how almost 28 000 IAEA seals are applied to nuclear material, facility critical equipment or IAEA safeguards equipment at nuclear facilities around the world.

To mark the success of the Agency's Programme on Nuclear Security at Major Public Events (MPEs) over the past 18 years, case studies, as well as planned developments in the MPE programme, will be presented during a side event. Countries which received or will receive IAEA assistance for the implementation of nuclear security measures in major public events in 2022 will share their experiences.

Other side events include sessions on the COMPASS initiative, External Events Notification System, Spent Fuel and Radioactive Waste Information System (SRIS), recruitment at the IAEA (virtually open to the public), the contribution of the IAEA laboratories in Seibersdorf to science diplomacy, 20th anniversary of the Cooperative Agreement for Arab States in Asia for Research, Development and Training related to Nuclear Science and Technology (ARASIA), Nuclear Technology for Controlling Plastic Pollution (NUTEC Plastics) and more. See the full list of events.

There will also be guided visits for delegates and the media to the IAEA's Incident and Emergency Centre, Radiation Safety Technical Services Laboratory, Isotope Hydrology Laboratory and the Safeguards Equipment Laboratories. Delegates will have an opportunity to tour the IAEA's Nuclear Applications Laboratories in Seibersdorf, located 35 km south of Vienna. Advanced registration is required for some tours. See the full list of guided and virtual visits.

SCIENTIFIC FORUM ON CANCER CARE

In conjunction with the General Conference, the IAEA will host its annual Scientific Forum from 27 to 28 September with this year's theme: "Rays of Hope: Cancer Care for All". The IAEA initiative "Rays of Hope" seeks to help countries increase access to cancer care either by establishing or expanding their capabilities in this area.



The Forum, which is divided into five sessions, will present the role of radiation technologies for the diagnosis of cancer and the treatment of patients. Speakers will discuss how to enhance quality, safety and sustainability in cancer care, bolster regional cancer institutions and networks, and develop regional cancer centres to provide high-quality care and training. Innovation in education and research to meet the growing global need for cancer care, as well as enhancing access to medical uses of radiation safely and securely, will also be discussed.

Several high-level speakers from government, industry and international organizations will make presentations during the two-day event. Mr Grossi will open the Forum and join a high-level panel discussion during the last session to highlight the importance of partnerships and collaborations in promoting access to cancer care through “Rays of Hope” initiative.

Mr. Ilhom Mirsaidzoda, Director of the CBRN SSA NAST, Mr. Faridun Nazarov, Scientific Secretary, and Mr. Farkhod Khamidov, Head of the Department of Licensing, Inspection and Response to CBRN Accidents of the CBRN SSA NAST.

The Forum will be livestreamed here, and the programme is available here.

INTERDEPARTMENTAL CONSULTATION MEETING BETWEEN RUSSIA AND TAJIKISTAN ON BIOLOGICAL SECURITY ISSUES

On August 16, 2022, a consultation meeting between Russia and Tajikistan on biological security issues was held in Dushanbe city.

In this meeting, the RT was represented by the following ministries/agencies: Ministry of Foreign Affairs, the Ministry of Health and Social Protection of the Population, the National Veterinary Diagnostic Center, the Food Safety Committee, the IVM and the Institute of Biological Safety of the Academy of Agricultural Sciences of Tajikistan, the CBRN SSA NAST.



Russian Federation was represented by the following ministries/agencies: Ministry of Foreign Affairs of the Russian Federation, the Ministry of Industry and Trade, Rospotrebnadzor (Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing), the Ministry of Health of Russia, the Federal State-Financed Insitution “Federal Centre for Animal Health” FGBI "ARRIAH", the Federal Medical-Biological Agency and the Russian Embassy in Tajikistan.

During the meeting, issues of the bilateral intergovernmental memorandum on ensuring biological security and further cooperation were discussed. The exchange of assessments of threats to biological security in the space of the CIS countries took place.

Also, during the meeting between Russia and Tajikistan, the issues of further cooperation in the field of biological security and its coordination were discussed, both in a bilateral format and on special multilateral platforms, primarily within the framework of the Convention on the Prohibition of the Development, Production and Stockpiling of. Bacteriological (Biological) and Toxin Weapons, the CIS and the SCO.

VISIT OF AN IAEA EXPERT TO THE STATE SCIENTIFIC INSTITUTION "GLACIER STUDY CENTER" OF THE NAST



From May 9 to 13, 2022, an expert from the IAEA, Ms. Yulia Vystavnaya visited the State Scientific Institution “Glacier Study Center” of the NAST to implement the national project TAD7004 “Establishing National Capacity for Glacier and Snow Assessment under Changing Climate Conditions”. The aim of the project is to conduct the isotopic researches of glaciers and snow cover. Upon completion of the project, the reliable data on state of glaciers and water resources in Tajikistan will be obtained, which will allow to evaluate the degradation process of glaciers and the flow of melt water. This assessment will be very helpful for future planning and effective management of water resources of the RT.

Within the framework of visit, a meeting was organized with academician Farhod Rakhimi, President of the NAST, Mr. Ilhom Mirsaidzoda, Director of the CBRN SSA NAST, and other

representatives of institutions and centers of NAST. It was noted that goals and objectives of the project are consistent with priorities of the Government of Tajikistan and current program goals of the “Glacier Study Center” of the NAST.

Also, a three-day training seminar on the topic “Prospects for the isotopic study of glaciers and snow cover in Tajikistan” was held at State Scientific Institution “Glacier Study Center”, which was attended by specialists and employees of the center and representatives of the CBRN SSA NAST.



The main purpose of the seminar was to provide participants with practical information on naturally occurring isotopes as indicators to determine the status of glaciers and snow cover, whether they are at risk and susceptible to changing climatic conditions.

During the seminar, the representative of the IAEA in her report spoke about activities of the IAEA, noting that the main mission of the organization is to use the atom for peaceful purposes, including science and technology. It was also noted that the IAEA has an Isotope Hydrology Section, which is responsible for development and implementation of the Water Resources Programme.



It was pointed out that, through a technical cooperation program, the IAEA is working closely with Member States to improve the availability and sustainability of freshwater resources through integrated scientific assessments of water resources.

In conclusion, the Director of the “Glacier Study Center”, Professor Abdulkhamid Kayumov thanked participants of seminar, including Ms. Yulia Vystavnaya, representative of the IAEA, and the CBRN SSA NAST for cooperation, and noted that this project is an excellent basis for the implementation of initiative of the International Decade for Action "Water for sustainable development" for 2018-2028, which also opens up new horizons in the science of glaciology and hydrology in the face of climate change.

The activities of this project are coordinated by the CBRN SSA NAST.

A MEETING WITH THE REPRESENTATIVES OF THE MINISTRIES AND AGENCIES TO PREPARE AND SUBMIT THE PROJECTS OF THE TC IAEA FOR CYCLE 2024-2025

On April 13, 2022, a meeting was held with the representatives of the ministries and agencies to prepare and submit the projects of the Technical Cooperation Program of the IAEA for cycle 2024-2025.



The meeting was attended by representatives of the Ministry of industry and new technologies of the RT, the Committee of Emergency Situations and Civil Defense under the Government of the RT, the State Institution "Republican Cancer Scientific Center" of the Ministry of Health and Social Development of the RT, the State Institution "Institute of Gastroenterology" of the Ministry of Health and Social Development of the RT, Sanitary-Epidemiological Service of the RT, the National Radioactive Waste Storage and Disposal Centre (Republican Point of Burial for Radioactive Waste), the Veterinary Institute of the Academy of Agricultural Sciences of Tajikistan, Tajik National

University and other stakeholders ministries and agencies.



At the meeting, representatives of the CBRN SSA NAST informed about the results of the implementation of current projects and discussed further plans for submitting new projects for 2024-2025.

Representatives of ministries and agencies thanked the CBRN SSA NAST for their continuous support in the implementation of IAEA projects in Tajikistan. During the meeting, the participants exchanged experiences on the effective implementation of projects and the prevention of the gaps.



Representatives of the CBRN SSA NAST demonstrated how to properly fill in the form for submission of projects through the IAEA's TC programs for the cycle of 2024-2025. At the end of the meeting, a short video was shown on the support of the Technical Cooperation Program to IAEA Member States.

AN OFFICIAL CEREMONY WAS HELD TO TRANSFER EQUIPMENT TO THE BORDER TROOPS OF THE SCNS RT

On April 8, 2022, an official ceremony was held to transfer equipment to the Border Troops of the SCNS RT as part of the implementation of the National Action Plan of the RT on UN Security Council Resolution 1540.



Mr. Kevin Roshdieh, representative of the National Nuclear Security Administration of U.S. Department of Energy (US DoE/NNSA), Mr. Ilhom Mirsaidzoda, the Director of the CBRN SSA NAST, and the First Deputy Chairperson of the SCNS RT, Commander of the Border Troops of the RT, Colonel-General Radzhabali Rahmonali, to turn over surveillance, inspection and tactical equipment for use by employees of the Border Troops under the SCNS RT to enhance security at the border with Afghanistan.



This technical assistance was provided as part of the US DoE/NNSA Office of Nuclear Smuggling Detection and Deterrence's "Green border security" project, which aims to strengthen the infrastructure of the Border Troops of the SCNS RT along the border with Afghanistan.



The U.S. Department of Energy has worked closely with the Government of the RT since 2013 to combat the smuggling of nuclear and radiological materials. The project includes

special uniforms, equipment for conducting operations in mountainous areas, special protective uniforms for demining, night vision devices, binoculars, monoculars, transceivers (radio stations), special military vehicles, and motor vehicles, mini vans in which sensitive equipment is installed to support counter-smuggling operations and to detect and interdict illegal trafficking of nuclear and radioactive materials.

THE STATE COMMITTEE FOR NATIONAL SECURITY OF TAJIKISTAN RECEIVED SPECIAL EQUIPMENT FOR DETECTION OF NUCLEAR AND RADIOACTIVE MATERIALS.



On February 18, an official ceremony of handing over the equipment to the SCNS RT as part of implementation of National Action Plan of the RT on UN Security Council Resolution 1540 has been conducted.



Mr. Ilhom Mirsaidzoda, the Director of the CBRN SSA NAST, handed over a special vehicle equipped with sensitive detectors for detection of nuclear and radioactive materials for use by employees of the SCNS RT on behalf of the U.S. Department of Energy.

This technical assistance was provided as part of the “Green border security” project, which aims to strengthen the law enforcement infrastructure of the RT along the border with Afghanistan.



The project will provide coveralls, body armor, equipment for operations in mountainous areas, a special protective uniform for demining, night vision devices, binoculars, monoculars, transceivers (radio stations), special military vehicles, cars and minibuses, in which sensitive equipment is installed to detect illegal traffic of nuclear and radioactive materials.

PROVISION OF EQUIPMENT FOR RADIATION SAFETY MONITORING



The Committee of Emergency Situations and Civil Defense of the RT (further – CoES) and the CBRN SSA NAST recently signed a Memorandum on cooperation in the field of radiation monitoring.

The memorandum enhance collaboration in the field of radiation monitoring and obtaining the data transmission on the radiation situation in the

country within the framework of the IAEA Project TAD9008.

In order to establish a radiation monitoring system, the IAEA, through the national coordinator – the CBRN SSA NAST, provided necessary equipment to the CoES to the total value of 169 400 EUR.

The transferred equipment includes SpectroTRACER radiation monitoring systems manufactured by Bertin GmbH (Germany) and planned to be installed in Dushanbe, Khorog, Khujand, Bokhtar and Kulob cities for continuous monitoring of the radiation situation in the country.

The system is intended to maintain the radiation monitoring under the Project, and shall be used for certain tasks for protection of population, and the Crisis Management Center and the Republican Chemistry and Radiometric Laboratory of the CoES.

OFFICIAL CEREMONY OF HANDING OVER THE EQUIPMENT TO THE BORDER TROOPS OF THE SCNS RT ON BEHALF OF THE U.S. DEPARTMENT OF ENERGY



On February 7, 2022, an official ceremony was held to handover equipment to the Border troops of the SCNS RT as part of the implementation of the National Action Plan of the RT on UN Security Council Resolution 1540.



Mr. Ilhom Mirsaidzoda, the Director of the CBRN SSA NAST handed over the transceivers (radio stations) for use by employees, as well as for installation on vehicles of the Border Troops of the SCNS RT on behalf of the U.S. Department of Energy.



This technical assistance was provided as part of the U.S. Department of Energy Office of

Nuclear Smuggling Detection and Deterrence's "Green border security" project, which aims to strengthen the infrastructure of the Border Troops of the SCNS RT along the border with Afghanistan.



The U.S. Department of Energy has worked closely with the Government of the RT since 2013 to combat the smuggling of nuclear and radiological materials.



The project includes special uniform, equipment for conducting operations in mountainous areas, special protective uniform for demining, night vision devices, binoculars, monoculars, transceivers (radio stations), special military vehicles, and motor vehicles, mini vans

with sensitive equipment to support counter-smuggling operations and to detect and interdict illegal trafficking of nuclear and radioactive materials.



4.NATIONAL CHAPTER "WOMEN INNUCLEAR OF TAJIKISTAN"

III INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE



On August 24-26, 2022, III International Scientific and Practical Conference "The Role of Women-Scientists in Science, Innovation and Technology Development" has been held in Guliston city (Sughd region, Tajikistan) which was attended by more than 100 participants.

Conference organizers:
- the CBRN SSA NAST;
- National Chapter WiN Tajikistan under the CBRN SSA;
- International Scientific and Technical Center (ISTC).



Reports were made by women scientists, professors, graduate students, undergraduates, PhD students, who represented various universities, institutes and government institutions of the RT, including representatives of research institutes of the NAST, National Center for Food Safety Diagnostics, Institute of Biosafety Problems and Biotechnology of the Tajik Academy of Agricultural Sciences, Russian-Tajik (Slavonic) University, Branch of Moscow State University named after M.V. Lomonosov in Dushanbe, Tajik State Medical University, Institute of Economics and Demography of the National Academy of Science, State Institution of Republican Oncological Research Center of the Ministry of Health and Social Protection of Population of the RT, Khujand State University, Institute of Philosophy, Political Science and Law named after A. Bahoviddinov and others.



The conference was also attended by scientists from such international organizations as: IAEA, Middlebury Institute for International Studies,



California, USA; Win Global; WiN Russia; WiN Kazakhstan; WiN Kyrgyzstan; WiN Uzbekistan; Scientific Institute "All-Russian Research Institute of Medicinal and Aromatic Plants" (Moscow, Russian Federation), Center for the Development of Professional Qualifications of Medical Workers of the Ministry of Health of the Republic of Uzbekistan; Department of Radiation and Nuclear Safety of State Committee for Industrial Safety of the Republic of Uzbekistan; Ministry of Health of the Republic of Kazakhstan; Moscow State University M.V. Lomonosov; Quaid-e-Azam University (Islamabad, Pakistan); U.S. Department of Energy, etc.

The work of the conference was divided into four sessions:



1. Issues of nuclear, radiological and biological safety, IAEA safeguards and the role of women in science;
2. Natural sciences and ecology;
3. Actual issues of linguistics, pedagogy and law;
4. Medicine.

At the beginning of the conference, a collection of conference materials was published, in which more than 65 author's works are presented.

CONDUCTING THE COMPETITION "TABLE OF NATIONAL DISHES"



On March 17, 2022, at the Regional Training Center of WMD Non-Proliferation and Export Control for Countries of Central Asia, Caucasus and Afghanistan, the WiN Tajikistan organized competition "Dishes of National Cuisine" among PhD master students of NAST, which was devoted to 2nd anniversary of foundation of the WiN Tajikistan.



The purpose of the event was to inform students about activities of WiN Tajikistan, as well as the celebration of international holiday “Navruz”. WiN Tajikistan provided an opportunity for students to show their skills and abilities in cooking national dishes.



The opening of the event began with welcoming words from the President of WiN Tajikistan, Ms. Zarina Sayfieva, and the Head of Department of Master's, Postgraduate and Doctoral Studies, PhD of NAST, Ms. Menu Mamadyusufova.

The contest host, Ms. Zumrat Gaibullaeva, a member of WiN Tajikistan, explained the competition conditions and wished everyone good luck.

The guest of honor of the event was Shirin Kurbonova, Deputy Chairperson of the Executive Committee of "Khiradmandon" of People's Democratic Party of Tajikistan in NAST. She congratulated all participants with Navruz holiday and emphasized the importance of continuing national traditions.



After the congratulatory words of organizers and guests, the presentation of each team began. Each team consisted of five people and had one "Malikai Navruz".

Five members of the jury gave an unbiased assessment on a five-point scale.

Each team prepared a video presentation and designed "dastarkhans" with various natural gifts of rich Tajik land, as well as various national dishes, pastries, sweets and the main attribute of Navruz, sprouted green wheat – a symbol of coming spring.

The votes were counted openly with the participation of team captains.

The results of competition were announced by Mr. Ilhom Mirsaidzoda, the Director of the CBRN SSA NAST. Three prize-winning places received memorable gifts and diplomas and the rest participants received certificates of participation. The participants of competition who took 1st place, as well as all captains, were invited to take part in III International Scientific and Practical Conference: "The Role Of Women-Scientists in Science Development, Innovation and Technology", which will be held in August in Guliston (Kairokkum).



SECOND ANNIVERSARY OF THE WIN TAJIKISTAN



On March 4, 2022, a meeting was held to celebrate the second anniversary of the WiN Tajikistan. More than 60 participants, including those from foreign countries who joined the meeting online, attended the event.

Mr. Ilhom Mirsaidzoda, the Director of the CBRN SSA NAST, in his welcoming speech congratulated the participants with second anniversary of WiN Tajikistan and Mother's Day. He emphasized the important place of women in our life, science, and social activity and wished further development to WiN Tajikistan and achievement of all goals. Then the floor was given to WiN representatives of foreign countries. They, in their turn, congratulated all participants with this momentous day and wished to WiN Tajikistan the further prosperity and establishment of the Regional WiN Chapter.



Nodira Khakimova, the President of the WiN Tajikistan, introduced the participants with agenda of the meeting, which included a detailed report on the work performed in 2021 and the election of a new President.

The Report presentation included mention of the II International Scientific Conference "The Role of Women-Scientists in Science, Innovation and Technology Development", which was conducted on August 16-20, 2021, in Guliston city, Tajikistan. She also mentioned the charity events held by the WiN Tajikistan, informational lectures for secondary school students and cultural events.

According to the meeting's agenda, elections of a new President of WiN Tajikistan and two Vice-Presidents were discussed.

The new President of the WiN Tajikistan became Sayfieva Zarina, Head of education and training services section, Director of the Regional training centre on WMD non-proliferation and Export control for Countries of Central Asia, Caucasus and Afghanistan of the CBRN SSA NAST. The new Vice-Presidents were selected the following people: Ms. Mijgona Sharofova (Doctor of Medical Sciences),

Head of the Biotechnology Laboratory of the Center for Innovative Development of Science and New Technologies of NAST and part-time Director of the “Avicenna” Institute of Medicine and Pharmacology and Ms. Dilorom Kayumova (PhD.), leading researcher of the "Water Quality, Isotopes and Sanitary" Laboratory in the State Scientific Institution of "Glacier Study Center” of the NAST.