



World of MEPHI

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Special Issue**

MEPHI FIRST FOREIGN BRANCH OPENED IN TASHKENT!

Tashkent has hosted the opening of the first foreign branch of the National Research Nuclear University MEPhI. The event was attended by the Prime Minister of the Republic of Uzbekistan Abdulla Aripov, Director General of the Rosatom State Corporation Alexey Likhachev, representatives of the Academy of Sciences of the Republic of Uzbekistan, the rector of MEPhI Mikhail Strikhanov, scientists and other distinguished guests.

EDUCATION EXPORT

MEPHI FIRST FOREIGN BRANCH OPENED IN REPUBLIC OF UZBEKISTAN



Speaking at the opening ceremony of the MEPHI branch, Prime Minister of Uzbekistan Abdullah Aripov noted that the implementation of such an important project had taken place with the direct participation of the President Shavkat Mirziyoyev, who had personally chosen that site for the construction of a modern campus a year ago.

«Implementation of a high-tech project – construction of the first nuclear power plant in Uzbekistan, requires specialists with modern knowledge. I am confident that the branch will train highly qualified engineering and technical personnel at the level of international educational standards, capable to solve the most important scientific, technological and production tasks in the interests of nuclear industry,» Aripov said.

According to the head of the Uzbekistan government, today the branch of MEPHI is at the beginning of a long way. The Uzbek side intends to develop and support the activities of the University, to introduce best practices and modern technologies in the educational process.

The head of Rosatom Alexey Likhachev noted that the opening of MEPHI branch in Tashkent was one of the most significant events of the year, which was of fundamental importance for Uzbekistan. «For us it is a matter of honor, for us it is a great pride, for us it is a great challenge! This is the first official foreign branch of MEPHI, and it is very symbolic that it is being opened in Uzbekistan,» the head of Rosatom said.

According to him, the construction of a nuclear power plant is a project for decades, and taking into account the possibility to modernize the complex – even for a century. «Thus, we ensure the cooperation of our industries, our nations for a century. And this is also a huge challenge and a great responsibility,» Likhachev stressed.

«Uzbekistan returns a pre-existing nuclear competence. The country is joining a large family of nuclear scientists all over the world, implementing such a large and important nuclear project. But in addition to staffing the newly created industry, opening of the MEPHI branch is of great importance for science as a whole. Various

disciplines will be developed on the basis of the University – the creation of new materials, 3D-modeling and other areas. This will affect the entire economy of Uzbekistan,» Likhachev said.

In turn, the head «Uzatom» Jurabek Mirz Mahmudov expressed

confidence that a branch opened to the moment of the NPP launch, that is, by 2028, would have time to provide the industry with the staff. From the first days after graduation MEPHI graduates will be employed in the directorate, which will be engaged in the design, construction and commissioning of the plant.

Welcoming the students, the rector of MEPHI Mikhail Strikhanov said that the University imposed «high requirements, we expect to keep the high standard set by the founding fathers of the atomic project».

According to the rector, «It is amazing that Uzbekistan's leadership has an interest at providing high-quality education that creates intellectual and industrial elite, and in this regard, at opening Russian universities branches».

«We were also impressed by the fantastically short timelines of construction and high quality of work,» the rector said.

He stressed that «the

first stage was completed – we recruited students, built a good building and opened a branch. Now the second stage is to recruit a full staff of lecturers and conduct the educational process at the world level.» The rector expressed gratitude to the Ministry of Education, Rosatom and Rosobrnadzor for effective assistance in the process of opening a foreign branch of the University.

In 2018, Russia and Uzbekistan have signed an intergovernmental agreement on the construction of a nuclear power plant based on the Russian project. It will be built by Rosatom with the assistance of Uzbekistan's colleagues. The first nuclear power unit of the Republic will be commissioned by the end of 2028.

The Tashkent branch of MEPHI will train highly qualified engineering and technical personnel for the nuclear industry of Uzbekistan.



PROSPECTS

UNITY OF COUNTRIES AND GENERATIONS

The temporary five-story building of MEPHI branch was constructed near the Institute of Nuclear Physics, Academy of Sciences of Uzbekistan in recordingly short time, namely in just one year. Its educational space is organized according to international standards: there are laboratories with the latest equipment, interactive classrooms, libraries, coworking zone.

"This is all for you," said President of the Academy of Sciences of the Republic of Uzbekistan Behzod Yuldashev, welcoming freshmen. In addition, he drew attention to the need for learning foreign languages. "The acquire knowledge will become the basis for a new generation of people. Today, one of the most powerful cognitive tools is language. Uzbek, Russian and English should become your mother tongue", Yuldashev emphasized.

Classes will be conducted not only by teachers from Uzbekistan, but also by their colleagues from Moscow. Further training courses are planned in Tashkent and MEPHI in Moscow, as well as a joint discussion of training programs and

methods. During first academic year, specialists from Moscow will help colleagues to organize the educational process. Special focus will be on learning Russian language.

Natalia Eremenko, Associate Professor of the MEPHI Department of Russian as a Foreign, emphasized:

"Cooperation between our countries is at the highest level. At the opening ceremony, we saw that the leadership of the Republic of Uzbekistan speaks excellent Russian. And, of course, students are required to have a good knowledge of the language. It was repeatedly mentioned at the highest level. For cooperation between Uzbekistan and Russia, the Russian language is necessary. Moreover, it is not only about the spoken language, but also about the skills of competent writing, as well as the use in the scientific field. Therefore, teaching the Russian language is one of our most important responsibilities here. In the first weeks we are setting up the educational process, in the future we are going to work closely with local teachers".

During the USSR period, Russia helped to grow national elite of Uzbekistan.



In 1957, the Institute of Nuclear Physics was founded in the suburbs of Tashkent. Houses for employees were built around it. Until the 1990s, the «nuclear» Ulugbek settlement developed. Everything changed dramatically with the collapse of the Soviet Union. The long-term scientific and economic ties of the institute were disrupted, and its activity began to decline. Today, INP employees and the people of the town identify their hopes for a better future with the development of relations between Russia and Uzbekistan and the opening of MEPHI branch.

Avas Khugaev, head of the laboratory of the INP, Academy of Sciences of the

Republic of Uzbekistan, returned to the Institute after graduating from Rostov State University. This academic year he began teaching at MEPHI branch.

"Science cannot go forward with no connection between three generations," says Avas Vasilyevich. "There must be a transfer of traditions: the older generation keeps these traditions, the middle generation develops them, creates something new, and the younger generation studies and develops science further. MEPHI branch is located next to the largest scientific center of Uzbekistan. On the territory of the INP there are a research reactor, a cyclotron,

a gamma installation, a dosimetry service — everything is nearby. It is always possible to consult experts, ask them the necessary information. For our part, we are pleased to join the scientific and educational traditions of MEPHI and to develop them in Uzbekistan. Science is international. Between Uzbekistan and Russia there are long-standing deep scientific relationship and traditions. Many INP employees are graduated from Russian universities. We hope that the opening of branch of such a strong nuclear physics university in our country will contribute to further strengthening scientific ties".

THE BEST APPLICANTS OF UZBEKISTAN GET INTO MEPHI

This summer was especially hot for applicants and teachers: the admission campaign continued for several months, applicants came from all over Uzbekistan.

Total number of applicants was 667 for 100 state-financed places, which is more than 6 people per place.

— Young people passed special entrance exams, which our university has the right to conduct, — said Yuri Maslov, acting director of MEPHI branch in Tashkent. — We conducted three entrance exams: mathematics, physics and the Russian language. Minimum threshold was 40 points out of 100. An applicant, who got less than 40 points, was not allowed to the second-stage test and could not participate in the competition. In general, applicants done very well: the average score in mathematics is 57, in physics — 63. Moreover, four people in physics scored 100 points

out of 100, ten people scored more than 90 points.

The MEPHI branch is located near Institute of Nuclear Physics (INP) of the

ploma paper research on the basis INP.

The branch has 11 laboratories, a dormitory, a sports complex, and a library.



Republic of Uzbekistan. It is assumed that students will have a practice and di-

Education programs in each field of study were developed at MEPHI

in cooperation with the main customer — the UzAtom Agency.

— The programs are designed so that our future graduates obtain an engineering education with the maximum coverage of knowledge and have the opportunity to find jobs in promising industries easily as much as possible. We will train specialists not only for UzAtom enterprises, but also for the Institute of Nuclear Physics of the Republic of Uzbekistan. We plan that some of them will be engaged in scientific activities in the field of fundamental physics", Maslov emphasized.

MEPHI branch provides the four following undergraduate educational programs: nuclear energy and thermal physics; nuclear physics and technology; thermal power generation and heat power engineering; electric power generation and electrical engineering. At each of the four educational programs are studying 25 people.

Graduates of the Tashkent branch

IN TOUCH

MY LUCKY TICKET TO THE FUTURE!

In 2018 first student' group from Uzbekistan started to study at MEPHI on undergraduate and graduate programs in the field of nuclear physics and technology.

After a year of studying students shared their impressions and gave parting words to Tashkent branch freshmen.

Shikhnazar Amongeldiev, student of MEPHI:



"Studying at MEPHI is very productive and interesting time. All teachers are highly qualified and love their job. Nevertheless, adapting to studying with such high intensity was not easy

Of course, for successful study it is important to know the Russian language well. But even if you have not a good language skill, you will quickly get used to it, because people around you are always ready to help. For me, the main problems related to the understanding of scientific terms, but today it is already in the past. During the studying, I improved my Russian and English language skills.

After graduation, I want to work in the UzAtom Agency and develop my country. The MEPHI di-

ploma is highly regarded all over the world and, undoubtedly, will give me additional chances for a great career. I would recommend future students to be well prepared for the start, to be not afraid of difficulties and work hard on themselves".

Nasiba Nurzhanova, student of MEPHI:

"I always want to connect my life with a technical specialty that would be needed by my homeland. Once I learned that Uzbekistan is going to develop the nuclear industry. I decided to get an education in this area. I knew that MEPHI is a leader in the world in training personnel for the nuclear industry; I did not have to choose for a long time.

Studying at MEPHI is not easy, but it is worth it. MEPHI is famous for its highly qualified specialists and teachers. I am proud that I am studying with world-famous scientists. I did not have a language barrier; I am fluent in Russian. The most difficult for me was the laboratory work and preparation for the session. On other hand, I learned a lot about time-management.

Future students of the Tashkent branch are very lucky because they will study at one of the best universities in the world in their homeland. I would advise them to appreciate this and take



advantage of every opportunity that the university offers. I am sure that the MEPHI diploma is a lucky ticket to the future".

Vohid Kudratov, graduate student, MEPHI:



"At MEPHI, from the first days of study, we plunged into the scientific atmosphere and learned to appreciate every minute. We set ourselves a very high bar so that it would not be difficult in the future. Practice make perfect. The profession that we have chosen is responsible, dignified and prestigious. I am pleased with the level of teaching.

In addition to training subjects, I mastered the Python programming language and programs that are used for neutron-physical calculations. After graduation, I would like to work on the new nuclear power plant and contribute to the development of my homeland. I know that MEPHI graduates have a successful career. Well, I would like to advise MEPHI students in Uzbekistan to set themselves high bar from the first days of studying, but do not forget about the rest".

WE ARE PROUD TO BE STUDENTS OF MEPHI



On the opening day of the Tashkent branch, MEPHI Rector Mikhail Strikhanov presented student ID cards to freshmen. During the ceremony, first-year students hardly restrained their excitement — the first persons of the country congratulated them and called them "a hope of the nuclear industry of Uzbekistan".

Freshman Nafosat Mashrapova and her family have moved to Uzbekistan from Voronezh this year.

"Our relatives live in Uzbekistan, and we decided to move to our homeland to be closer to them," she said. - I am lucky because MEPHI counted the results of the Russian exam! A few years ago, my class went on an excursion to the

Novovoronezh NPP. The working atmosphere at the station impress me. It was very curious to see what was behind the doors of the laboratories. Since then, I have been interested in nuclear energy as a field of study. We are the first students of new educational programs for Uzbekistan. It is honorable! "

Many people came to the ceremony with their families. For example, the Dushaevs family came from the small town of Gulistan: parents, brother and little sister were happy as the freshman Sirodzhiddin.

For a student, Asilbek Muminov, opening a branch is a double joy.

"I made a choice in favor of a technical specialty two

years ago," said Asilbek. "I chose MEPHI and began to prepare to exams. Later I found out that new branch of MEPHI would open at home — in Uzbekistan. What is a great pleasure! I study at a prestigious university with grant funding. In that way, I have an opportunity to become one of the first employees in the field of nuclear energy that will help Uzbekistan move to new generation capacity. I study «Nuclear Energy and Thermophysics» and I hope to become a good specialist in the field of construction, operation and safety of nuclear power plants».