

## Cooperation

On the basis of the "Model regulation on production enterprises of departments and branches of higher and secondary education in academic institutions under the jurisdiction of the Academy of Sciences of the Republic of Uzbekistan", approved by order of the Ministry of Higher and Secondary Specialized Education, the department successfully works with the Research Institute of Seismic Resistance of Structures of the Academy of Sciences Republic of Uzbekistan, Research Institute "UzKMI". Mutual cooperation with manufacturing organizations such as Uzmeliomashlizing DLK, Meliomashlizing service LLC, Uzdavtechnazorat inspection and SUVMASH JSC.

Together with the Kazan State Agrarian University, the Lipetsk Agricultural Institute, the Research Institute of Agricultural Mechanization and Electrification of the Republic of Kazakhstan, the Siberian State Road Academy, scientific and technical work is being carried out at the department, teaching aids, guidelines, scientific and scientific and technical articles are being developed. This year, at the scientific and practical conference, held at the Kazan State Agrarian University, 5 articles by professors and teachers of the department were published. 4 articles were published in the journal "International Agroengineering" - a publication of the Research Institute of Agricultural Mechanization and Electrification of the Republic of Kazakhstan.

Scientific work is carried out in constant cooperation with the Italian Polytechnic University of Turin. The President of the Republic of Uzbekistan Sh.M. Mirziyoyev at a meeting with the heads of higher educational institutions and research institutes of our republic at the National University of Uzbekistan, as well as at a meeting held at the Tashkent Agricultural Engineering Plant, emphasized the integration of higher education, research institutes and manufacturing enterprises, critically assessed development issues. At the same time, the Decree of the President of the Republic of Uzbekistan dated July 31, 2019 No. PQ-4410 "On measures related to the accelerated development of agricultural engineering, state support for the provision of the agricultural sector with agricultural machinery" was adopted.

In order to ensure the implementation of these tasks, the NRU Tashkent Institute of Irrigation Engineers and Agricultural Mechanization developed a roadmap to further strengthen the knowledge of students in the field of water management at the Department of Mechanization of Irrigation Works of the University, intensive integration of practical and theoretical knowledge between the Department and JSC "SUVMASH", for example, on the initiative of the department, there was a grand opening of the enterprise branch of the department. The audience of the branch of the department is equipped with modern information technologies, where students acquire both theoretical and practical knowledge.

SUVMASH JSC is a specialized enterprise specializing in the production and repair of pumps and electric pump units. With the help of many years of experience of leading specialists, the international quality management system ISO 9001:2008 has been introduced into the enterprise, the company produces products with this quality certificate. For all products manufactured by the enterprise, certificates of conformity of the Uzstandard Agency were issued.

The enterprise is the only one in Central Asia that has a testing laboratory accredited by the Uzstandard agency, which ensures testing of all manufactured products. The products manufactured by the enterprise are also in great demand not only in Uzbekistan, but also in neighboring countries. Currently, the products manufactured at the enterprise are exported to the Russian Federation, the Republic of Turkmenistan, Tajikistan and Kyrgyzstan. Students of the National Research University "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers" of the bachelor's degree program "Mechanization of water management and melioration" have the opportunity to undergo internships on the basis of the enterprise and after graduation they will be employed at the enterprise.

In September 2019, a branch of the department of pre-university education "Mechanization of hydro-reclamation works" was opened at JSC "SUVMASH". In order to ensure the implementation of the Decree of

the President of the Republic of Uzbekistan dated July 31, 2019 No. PQ-4410 "On measures related to the accelerated development of agricultural engineering, state support for the provision of agricultural machinery for the agricultural sector of the industry" on the basis of the road map developed at the institute, the department of AMKODOR-AGROTECHMASH LLC » opened its branch in a joint venture. The auditorium of the branch of the department is equipped with modern information technologies, where students, along with obtaining theoretical knowledge, also participate in the process of assembling reclamation machines in the assembly shop of the enterprise. The main employers of graduates of the bachelor's degree "Mechanization of land reclamation and water management" are the State Unitary Enterprises, which are under the jurisdiction of the republican union "Uzsuvkurilishtaminot" of the Ministry of Water Resources of the Republic of Uzbekistan.

More than 80% of the 3rd year students of the bachelor's degree "Mechanization of water management and land reclamation" have an internship at these enterprises. Taking this into account, "Uzsuvkurilishtaminot" plans to open a branch on the basis of the State Unitary Enterprise "Uzmakhsussuvkurilish" (100182, Tashkent, Hussein Boygaro St., 17) under the jurisdiction of the Republican Union. At present, it is planned to allocate a classroom with all amenities on the territory of the enterprise for the branch of the department. In the branch of the department, students, along with the acquisition of theoretical knowledge, go to the facilities where construction and reclamation machines work, get acquainted with the principles of their work and areas of application. At the same time, students get acquainted with the activities of the production department of the enterprise, get acquainted with the volumes and types of work performed by the reclamation and construction and other types of equipment available at the enterprise. In 2022, professor of the department B.S. Mirzaev, head of the department, associate professor I. Khudaev, doctoral student D. Abdumuminova and Georgian professor O. Tedoradze . took part in the International scientific conference "Agricultural mechanization and technology in Europe and prospects". Date of the conference: May 27-28, 2022. At the conference in co-authorship. with Gochoshvili made an article "Diagnostics of residual stresses in deposited and washed coatings".

On the basis of the order of the rector of the university No. 461 dated October 17, 2022, the head of the department of the Institute "Melioration, water management and construction" named after A. Kostyakov at the Moscow Agricultural Academy named after K.A. Timiryazev, Professor V. Balabanov conducted online courses for students during the academic year 3 and 4 courses in the direction of study of MVKhIM. OFFLINE cyclic classes were organized from November 8, 2022 to February 8, 2023 on the basis of the order of the rector of the university No. 413 a / f dated November 12, 2022 by Professor Maurisio Rosso of the Polytechnic University of Italy.

International cooperations have been established with Peter the Great St. Petersburg Polytechnic University of the Russian Federation, Russian State Vocational Pedagogical University, Lipetsk State Technical University. In June 2023, associate professors of the department Khudaev I., Usmanov N., Atajanov A., Bekchanov F. and Norov B. participated in the work of the international summer school "Auezov Universitu Internatsional Sumer School-2023" organized in the "ONLINE" system by South Kazakhstan University named after M. Avezov in the direction "Smart innovative agriculture - efficient technologies and practices" with their reports on the topics: "Problems of building closed horizontal drainage in irrigated areas and cleaning drainage pipes" and "Introduction of water-saving technologies".