The efforts of states to achieve the Sustainable Development Goals require the training of highly qualified personnel. This task is being solved by the universities of the countries. Leading universities in Central Asia Tajik Technical University (TTU) named after academician M. Osimi and Kyrgyz State University of Construction, Transport and Architecture n.a. N. Isanov teach students in the specialty "Water supply and sanitation".

The design, construction and operation of water supply and sanitation systems that have an impact on the environment are closely related to SDGs: 6 “Clean water and sanitation”, 11 “Sustainable cities and communities”, 12 “Responsible consumption and production”.

According to the National Statistical Committee of the Kyrgyz Republic for 2020, 91.8% of the population of the republic have sustainable access to safe sources of drinking water. Water loss during transportation is 27%. At the same time, 70% of the population does not have sustainable access to sanitation [http://www.stat.kg/ru/publications/monitoring-pokazatelej-celej-ustojchivogo-razvitiya-v-kyrgyzskoj-respublike/]. In 2018, in the Republic of Tajikistan, leaks and unaccounted consumptions in water supply systems amounted to 35% [https://stat.ww.tj/publications/October2019/tpifzi_muhiti_zist__2019_nav.pdf]. Young civil engineers must find solutions to these challenges.

Academic exchange contributes to raising the level of education. Central Asian universities are developing collaboration within the framework of cooperation agreements with foreign universities.

Industrial University of Tyumen is one of the partner universities of Tajik Technical University and Kyrgyz State University of Construction, Transport and Architecture. Academic exchange continues despite the pandemic.

When studying the disciplines "Pumps and Pumping Stations", "Water Treatment of Natural Waters", the attention of the students of Tajik Technical University and Kyrgyz State University of Construction, Transport and Architecture was focused on the problems of energy and resource conservation in water supply and sewerage systems. The results of research and experience in the design and inspection of water supply and sewerage systems were used in the lectures.

The decrease in the energy intensity of the water supply and sewerage system is largely carried out through the introduction of a variable drive at pumping and blowing stations. The implementation of energy saving measures requires highly qualified specialists.

The implementation of SDGs 11 and 12 forces us to look for ways to involve the sludge of water treatment plants in production. In the Department of Water Supply and Sewerage (Industrial University of Tyumen), studies were carried out on the applicability of sludge from wastewater treatment plants as an additive to soil, raw material for the production of ceramic products (brick and haydite). A patent for an invention was obtained based on the results of research [RU 2 610 603].
Read more about scientific research:
2. Maksimova S, Kutrunova Z, Maksimov L & Voronov A Experience in the use of modern educational technologies in teaching professional disciplines of training direction “Civil Engineering” 2017 MATEC Web of Conferences 106 09020 DOI: 10.1051/matecconf/20171060 SPbWOSCE-2016 9020

Read more about educational activities:

http://ttu.tj/ru/2018/05/07/%D0%B4%D0%BE%D1%86%D0%B5%D0%BD%D1%82-%D1%82%D0%B8%D1%83-%D0%BC%D0%BE%D1%81%D0%B8%D0%BC%D0%BE%D0%B2-%D0%B0-%D0%BF%D1%80%D0%BE%D1%87%D0%B8%D1%82/

https://ksucta.kg/ru/component/content/article/101-%D0%BD%D0%BE%D0%B2%D0%BE%D1%81%D1%82%D0%B8/5048-%D0%B3%D0%BE%D1%81%D1%82%D0%B5%D0%B2%D0%B0%D1%8F-%D0%BB%D0%B5%D0%BA%D1%86%D0%B8%D1%8F-%D0%BF%D1%80%D0%BE%D1%84%D0%B5%D1%81%D0%BE%D1%80%D0%B0-%D1%82%D0%B8%D1%83.html

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