A unique laboratory is opened at the Sayano-Shushenskoye branch of SibFU

Two laboratories have been opened after renovation at the Sayano-Shushenskoye branch of Siberian Federal University. One of the labs has no analogues in educational institutions of the world. Repair and modernization of the laboratories were carried out with the support of PJSC RusHydro. SibFU employees and students, as well as engineers of the Sayano-Shushenskaya HPP, which is a branch of PJSC RusHydro, were involved in the facilities construction.



The Educational and Production Laboratory of Hydraulics and Hydromechanics has unique stands and an operating hydraulic unit. Experts note that there are no analogues of this laboratory not only in Russian educational institutions but also abroad. For example, the hydroelectric unit installed in the lab is an accurate, 10 times smaller, copy of the hydroelectric unit of the Sayano-Shushenskaya HPP.

According to Andrey Tolmachev, director of the branch, a lab with such equipment will allow conducting laboratory work and engineering surveys, and will also significantly increase the base for scientific research.

laboratory will create conditions for the development of the scientific potential of young specialists and the implementation of design and engineering work in the field of hydropower engineering. Soil Dam stand and Types of Weirs stand allows to learn about the operation of hydropower complexes, their composition and mechanisms, and to a large extent get a concept of future work in this area," the head of the branch emphasized.

The second training and production laboratory – quality control of construction work and materials – has the entire set of equipment required to determine the parameters of building materials used in the construction and repair of hydroelectric power plants and related hydraulic structures.

"Students of the Sayano-Shushenskoye branch of SibFU are so lucky: this is a unique laboratory! There is no such thing anywhere in Russia and, perhaps, you will not find such a thing even in the world," said Mikhail Khardikov, head of the energy business of En+ Group. "Today is a renaissance of the speciality of hydropower engineering. We all say that green energy is the future, although, in fact, hydroelectric power plants are the future of green energy."

Andrey Veselkov, representative of the Norilsk-Taimyr energy company, chief engineer of the Kureiskaya HPP, also appreciated the rather high potential of the laboratories of the Sayano-Shushenskoye branch. During his visit to the branch, he and his colleagues inspected all laboratories and noted their modern technological equipment, which is important in the practical training of future specialists for the energy industry.

Modernization work in the laboratories has not been completed yet. Further development is

now being actively discussed in the branch: in the near future, the impeller of the first hydroelectric unit of Mainskaya HPP will be reinstalled in the educational and production laboratory of hydraulics and hydromechanics.

Press Service SibFU, 30 december 2021

© Siberian federal university. Website editorial staff: +7 (391) 246-98-60, info@sfu-kras.ru.

Web page address: https://news.sfu-kras.ru/node/25738