

## Clubs

The work of the student scientific society is carried out according to the plan drawn up at the beginning of the year. In order to work with excellent and talented students on a regular basis and to educate them in a targeted manner, the department identified undergraduate and graduate students who wanted to participate in research, interviewed them and appointed responsible leaders according to their interests. The department has a scientific circle "Hydropower equipment". There are 26 students and 7 masters in the scientific circles of the department. The curators interviewed each student individually and gave them research topics on the most pressing issues. Most of the topics were designated as master's and master's theses. Scientific work and research results of students engaged in TIJ, are discussed at the meetings of the department, recommendations are given for publication in scientific articles recognized as worthy. All professors and teachers of the department are attached to the students who are part of the circle, a plan for the work of the circle, a schedule of classes are developed. According to the training schedule, club members will conduct classes on Fridays of the week from 15:00 to 16:00 in classroom 305, building B.

The circle is planned to consider the following topics.

1. Free-flow micro hydroelectric power plants: designs, problems, prospects.
2. The use of hydroelectric power plants in order to clean the water area of the entrance head of the 1st tier of the spillway structure of the Tupalanskaya HPP from sediment sediments.
3. Technology for diagnostics of hydropower equipment.
4. The phenomenon of cavitation in a hydraulic turbine.
5. Methodology for calculating the hydraulic resistance of the pumping station in the channels of the machines.
6. Methods of operation of borehole pumping stations.
7. Determination of the protochnoy cavitation pump pressure.
8. Checking the reliability and durability of water fire extinguishers at hydroelectric power plants.
9. Investigation of the work of a vacuum interrupter in pumping stations of siphon water intakes.
10. Improvement of the design of the debris-retaining grate installed at the pumping station and the mechanism for its cleaning.

The responsible leader of the circle is the assistant Norulov B, tel: +998 (94) 622-09-18