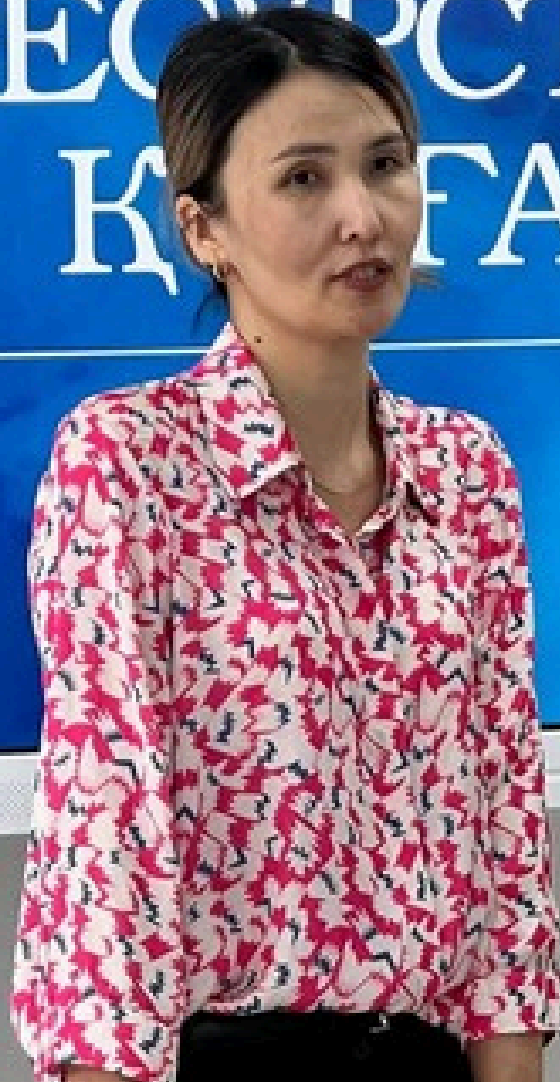


KHALEL DOSMUKHAMEDOV ATYRAU UNIVERSITY





СУ РЕСУРСТАРЫН ҚАҒАУ



Atyrau University named after H. Dosmukhamedova contributes to the achievement of the UN Sustainable Development Goal No. 6 "Clean water and sanitation" through scientific research, environmental education and practical initiatives aimed at preserving the region's water resources. Special attention is paid to the issues of sustainable water resources management, protection of ecosystems of the Caspian Sea and the Ural River, access to high-quality drinking water and development of sanitary infrastructure.



WHAT DOES THIS MEAN FOR ATYRAU UNIVERSITY NAMED AFTER H. DOSMUKHAMEDOV

Located in the Caspian region, the University considers water security issues as one of the key areas of its educational and scientific activities. The University's research covers the issues of water supply, sanitation, environmental monitoring, conservation of aquatic ecosystems and sustainable use of water resources in the context of climate change and anthropogenic stress.





Researches



The University's significant contribution to the achievement of SDG 6 is related to research in the field of water resources, sanitation and environmental safety. Currently, the scientific project GF AR2390925 is being implemented, dedicated to achieving the Sustainable Development Goals of ensuring safe access to water, sanitation and sewerage using artificial intelligence and machine learning methods.

In 2024-2025, university researchers, together with international partners, conducted a comprehensive assessment of access to drinking water and sanitation in rural areas of Atyrau region. Based on the results of the study, recommendations were developed to improve the water infrastructure and improve the quality of water supply in the region. A special place is occupied by the research of the Caspian Sea and the Ural River. University scientists are studying changes in water levels, the state of biodiversity, the impact of industrial activity on aquatic ecosystems, as well as issues of preserving the natural resources of the Caspian region.



Education and environmental awareness

The University promotes the formation of a culture of rational water use through educational programs and environmental initiatives. Lectures, environmental hours, forums and round tables on water security, water resources protection and sustainable development are regularly held for students.

As part of the Taza Kazakhstan campaign, environmental events were organized to save water, preserve the ecosystems of the Caspian Sea and the Ural River, as well as the rational use of natural resources. Students receive practical knowledge from specialists of the Zhaiyk-Caspian Basin Inspectorate, the Akzhayk State Nature Reserve and leading ecologists of the region.





Scientific and industry cooperation



The University actively cooperates with government agencies, environmental organizations and enterprises of the fisheries industry. Issues of conservation of aquatic biological resources, sustainable fisheries, development of aquaculture and environmental monitoring of water bodies are discussed within the framework of international forums, scientific seminars and industry meetings. This approach allows the university not only to train specialists in the field of ecology and water resources, but also to participate in solving urgent environmental problems in the region.

FUTURE STEPS TOWARDS ACHIEVING SDG 6

Atyrau University named after H. Dosmukhamedova will continue to develop scientific research, educational programs, and partnership initiatives aimed at conserving water resources and ensuring sustainable management of the region's aquatic ecosystems.

Among the priority areas of development

- are the expansion of research in the field of water supply, sanitation and water quality monitoring using modern digital technologies and artificial intelligence methods.;
- further study of the ecological status of the Caspian Sea and the Ural River, as well as factors affecting the conservation of their ecosystems;
- development of cooperation with government agencies, scientific organizations and international partners in the field of water resources protection;
- Increasing student participation in research, environmental forums, and projects on water security and sustainable development;
- support of scientific initiatives on conservation of biodiversity of the Caspian region and rational use of water resources;
- improving the environmental literacy of young people and promoting a culture of responsible water use.

The implementation of these areas will allow the university to strengthen its contribution to ensuring access to clean water, preserving aquatic ecosystems and achieving the UN Sustainable Development Goal No. 6 "Clean water and sanitation".

