

Lake Issyk-Kul Environmental Laboratory (LILA)

Initiative: Zwischen Europa und Orient - Mittelasien/Kaukasus im Fokus der Wissenschaft

Ausschreibung: Ausschreibung: Strukturell orientierte Maßnahmen

Bewilligung: 06.12.2022

Laufzeit: 1 Jahre

The project is aimed at establishing a jointly maintained Kyrgyz-German environmental research and education laboratory at the shore of one of the largest alpine clear-water lakes, i.e. Issyk-Kul, as a base for: (i) continuous monitoring of the water quality and main ecological parameters of Issyk-Kul, (ii) education and training of under- and postgraduates in environmental research, (iii) performing international research on climate change, high-altitude hydrology, limnology, and ecology of alpine aquatic systems, (iv) providing a urgently needed research station as a platform for future national and international research projects. In the long-term perspective, the laboratory is thought as a permanently functioning research and education center serving for: knowledge exchange on environmental sciences between Germany and the countries of Central Asia; providing an ecological expertise and dissemination of information on anthropogenic impact (growing tourism, agriculture and gold mining) and climate-driven variability of Lake Issyk-Kul and the surrounding alpine region of Tian-Shan; creating a link between scientists and local government agencies aimed to ensure coordinated elaboration and implementation of adaptation measures and environmental strategies to better guide future development in the shore and watershed areas of the lake; incorporation of Lake Issyk-Kul into the Global Lake Environmental Observation Network (GLEON) and other environmental databases and initiatives as the key representative of ultra-oligotrophic Central Asian alpine lakes. The Kyrgyz project partner will provide the building, the necessary infrastructure, and the logistic support for the laboratory, as well as involve local students in the research and educational program on Lake Issyk-Kul. The German partner will provide equipment and methodology, and will train the local researchers and students to perform long-term environmental monitoring.

Projektbeteiligte

Dr. Georgiy Kirillin

Leibniz-Institut für Gewässerökologie
und Binnenfischerei im Forschungsverbund
Berlin e.v.
Ökohydrologie
Berlin

Prof. Dr. Hans-Peter Grossart

Leibniz-Institut für Gewässerökologie
und Binnenfischerei im Forschungsverbund
Berlin e.v.
Abt. Experimentelle Limnologie (in Brandenburg)
Stechlin (Neuglobsow)

Prof. Dr. Salmor Alymkulov

Kyrgyz State Technical University (KSTU)
Informatics and Computing
Bischkek
Kirgisistan

Prof. Dr. Kubanichbek Jumaliev

International Medical University
Bischkek
Kirgisistan