## Department Aquatic Ecology

Brandenburg University of Technology Cottbus - Senftenberg

Responsible: Dr. Jacqueline Rücker

Bestimmung des trophischen Zustandes von Kleingewässern, die 2022 mit einem kalziumperoxidhaltigen Präparat (SchlixX) behandelt wurden

Тур	e:	Research Project
Kon	takt:	j.rücker@b-tu.de
Star	t:	From Winter 2023
Students:		1 - 2
Prer	equisites:	Knowledge in aquatic Ecology

## Study Project / Bachelor and Master Thesis Topic

Calcium peroxide-containing preparations (e.g. SchlixX) are used in lake therapy, but the method is not yet recognized. The aim of the SchlixX treatment is to stimulate the degradation of organic matter in the sediment and thus reduce sludge deposits. Within the framework of the ZIM cooperation project Schlamm-TEC, a contribution to a better understanding of the mechanisms of calcium peroxide action on sediments is to be made. The student is to analyze water samples from small bodies of water that were treated with SchlixX in the year before the start of the Schlamm-TEC project (2022).

## Tasks of the student(s):

From 2022, water samples are available from lakes that have been treated with SchlixX. There is always a monitoring of water quality status before the application of SchlixX and approx. 8 weeks after the treatment. From the frozen samples of these sampling campaigns, the student determines photometrically the concentrations of total phosphorus (TP), dissolved reactive phosphorus and ammonium.

The student compiles all available information and data on the approximately 5 treated lakes and tries to analyze the treatment effect. The critical data evaluation can be supplemented by data sets from other SchlixXtreated waters from other years.

## **BTU Cottbus-Senftenberg** Department of Aquatic Ecology Faculty of Environment and Natural Sciences

**Research Station Bad Saarow** Seestraße 45 15526 Bad Saarow