



# GLIER

**GREAT LAKES INSTITUTE FOR  
ENVIRONMENTAL RESEARCH**  
at the University of Windsor

**SEMINAR:** What is Really Going on During Algal Blooms Based on Studies in Three Gorges Reservoir

**BY:** Dr. Lei Zhang, Adjunct Associate Professor at the University of Windsor

**DATE:** Friday, August 11, 2023

**TIME:** 2:00 pm – 3:00 pm

**PLACE:** GLIER Davidson Conference Room 250, 2990 Riverside Drive West



## What is really going on during algal blooms - based on studies in Three Gorges Reservoir

Dr. Lei Zhang is an adjunct A/Prof of University of Windsor since 2018. As a director of a National Base for International Collaboration granted by the Ministry of S&T, China, her team is based in Southwest University, China focusing on researching eutrophication in the Three Gorges Reservoir, the largest reservoir so far on the earth. During this seminar, she will summarize the research stories achieved by her team since 2018 highlighting on the following topics:

--- The microbial loop during algal blooms: cyanobacteria and green algae start and terminate the blooms, and fungi and zooplankton passively play in between.

--- The influence of hydrology on algal blooms: the physical processes could lead to nutrient limitation even in hyper-eutrophic systems, and could be used in early warning and predicting the timing and size of algal blooms;

--- The residue of algal blooms: algal toxins, produced other than by microcystis, were exacerbated by external nutrients inputs, and could be the reason for the extinction of golden mussels in the local system;

--- What's more after blooms and entrophication: salinization.