



3rd Annual Virtual Harmful Algal Bloom Research Symposium

January 5-6, 2023

Thursday, January 5, 2023	
SESSION ONE: Harmful Algal Bloom Monitoring and Forecasting	
8:30 – 8:40 AM CT	Welcome and Introduction
8:40 – 9:20 AM CT	Keynote Presentation: Harmful Algal Bloom Control Resources and Innovations <i>Heather Raymond, Water Quality Initiative Director, The Ohio State University's College of Food, Agriculture and Environmental Sciences</i>
9:20 – 9:50 AM CT	Using Satellite-Derived Water Quality Data from an Automated High-Performance Computing Environment to Identify Lakes Prone to Cyanobacteria blooms <i>Leif Olmanson, Research Scientist at the University of Minnesota</i>
9:50 – 10:20 AM CT	Remote sensing of water quality of Midwestern in-land waters <i>Shuo Chen, Ph.D. student in the Department of Agricultural & Biological Engineering at Purdue University</i>
10:20 – 10:40 AM CT	BREAK
10:40 – 11:10 AM CT	Multivariate Factors Assessment for Harmful Algae Bloom Formation <i>Meera Gopinath Sujatha, University of North Dakota</i>
11:10 – 11:40 AM CT	Chlorophyll-a Prediction as Index of Harmful Algal Blooms using a Deep Learning Model <i>Ibrahim Busari, Ph.D. student in the Department of Agricultural Sciences at Clemson University</i>
11:40 AM – 1:00 PM CT	MORNING BREAK
SESSION TWO: Harmful Algal Bloom Detection and Treatment	
1:00 – 1:05 PM CT	Opening Comments and Introduction
1:05 – 1:35 PM CT	Preventative and Early Intervention Applied Management Programs for Harmful Algal Blooms <i>West Bishop, Algae Scientist and Water Quality Research Manager at SePRO</i>
1:35 – 2:05 PM CT	A Review of Recent Studies of Microcystis Using FlowCam <i>Polly Barrowman and Savannah Judge, Yokogawa Fluid Imaging Technologies</i>
2:05 – 2:25 PM CT	BREAK
2:25 – 2:55 PM CT	Improving the Spatial and Temporal Monitoring of Harmful Algal Blooms in Midwest Lakes using a UAV Remote Sensing Approach <i>Daniel Swanepoel, Graduate Research Assistant at IHR – Hydroscience & Engineering at the University of Iowa</i>
2:55 – 3:00 PM CT	Closing comments
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SESSION THREE: Ecology and Human Health	



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8:30 – 8:40 AM CT	Opening Comments and Introduction
8:40 – 9:10 AM CT	Gaining Perspective on Harmful Algal Blooms in Rivers <i>Jennifer Murphy, Hydrologist at USGS Central Midwest Water Science Center</i>
9:10 – 9:40 AM CT	Health-Environment Risks: A Comparison of Fishing Community and Expert Perceptions of Cyanobacterial Blooms <i>Katie Fiorella, Assistant Professor in the Department of Public and Ecosystem Health at Cornell University</i>
9:40 – 10:10 AM CT	Harmful Cyanobacterial Blooms: A Public Health Issue <i>Jordan Murray, Wisconsin Water Resources Science-Policy Fellow at the Wisconsin Department of Health Services</i>
10:10 – 10:30 AM CT	BREAK
SESSION FOUR: Case Studies	
10:30 – 11:00 AM CT	Utilizing the SWAT Model & Machine Learning for Predicting Microcystin & Geosmin occurrence in Cheney Reservoir <i>Chen Liang, Ph.D. candidate in the Department of Geography and Atmospheric Sciences at the University of Kansas</i>
11:00 – 11:30 AM CT	The Great Lakes HABs Collaborative - Linking Science and Management to Reduce Blooms <i>Conner Roessler, Program Specialist at the Great Lakes Commission</i>
11:30 AM – 12:00 PM CT	Smart Lake Erie Watershed Initiative: Enhancing the Region's Real-Time Monitoring Capabilities <i>Ken Gibbons, Environmental Scientist at LimnoTech</i>
12:00 PM CT	Adjourn

The Algal Bloom Action Team is a collaboration of water professionals, researchers, and educators from the national network of Water Resources Research Institutes, the North Central Region Water Network, and Cooperative Extensions from the 12 states in the North Central Region of the United States. More information at northcentralwater.org/habs.



NORTH CENTRAL REGION
WATER NETWORK