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## UT's new Drinking Water Research Lab allows cities to test safety of public water supply

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By WTOL Staff CONNECT

TOLEDO, OH (WTOL) - A new Drinking Water Research Laboratory at The University of Toledo will allow local municipalities to quickly and easily test the safety of the public water supply.

A \$500,000 grant from the State of Ohio Community Capital Program provided the state-of-the-art technology and renovations for the laboratory in the UT College of Engineering.

"Water treatment plants in Ohio face new challenges from a host of emerging algal toxins, as well as contaminants from other emerging micropollutants, such as pharmaceutical products or microplastics in their source waters," said Dr. Youngwoo Seo, associate professor in UT's chemical engineering department. "By engaging with the lab, the municipalities can get early warning signs of new and emerging algal toxins, as well as quantification of existing toxins during cases of concern."

The lab's liquid chromatography mass spectrometer system and new flow cytometer will be used to detect various cyanotoxins, such as microcystin from the toxic algal blooms in Lake Erie.

The lab is focused exclusively on drinking water research, eliminating concerns of cross contamination from other samples to allow very low detection limits for improved testing accuracy.

"Many water utilities have difficulties in continuously analyzing samples due to high costs and limited time. They will now have access to the lab on a regular basis for monitoring contaminants in treated water, as well as samples from different points in the treatment process. A water utility could, for example, send water samples every week during the algal bloom to track the concentration of toxins in source water and treated water so that they can make informed decisions on the type of treatment," said Dr. Joseph Lawrence, UT research professor.

A ribbon-cutting ceremony to celebrate the opening of the lab will be held in North Engineering Room 1600 on Tuesday at 10 a.m.

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