

## Dr. Zhiyue (Philip) Wang, Assistant Professor

- Postdoctoral Associate, University of Minnesota, Twin Cities, 2019-2022
- M.S., Ph.D., Environmental Engineering and Science, Stanford University, 2013-2020
- B.S. (Honours), Chemistry, Nanyang Technological University, 2013



Friday, February 24, 2023 12:00 to 1:00 p.m.

Holmes Hall 244 - Bowers + Kubota Lecture Hall

Please RSVP by noon on February 23rd: https://forms.gle/897x9ucXy3dsphGT8

## **Engineering Tools for Environmental Applications**

My research focuses on environmental biotechnologies for nutrient removal and resource recovery from wastewater. Biotechnologies provide engineering solutions to environmental problems with convergent disciplines, involving complex biological and chemical reactions. Engineering tools including mathematical modeling, imaging, microsensors, and bioinformatics can disentangle these reactions, which allow advanced understanding and optimization of system design. This talk will demonstrate the application of engineering tools in emerging biotechnologies such as microbial encapsulation and recovery of nitrous oxide from wastewater. Our current research progress on developing novel engineering tools for future scientific discovery will also be shared.