

# WSEL Newsletter Summer 2026

608-262-2470

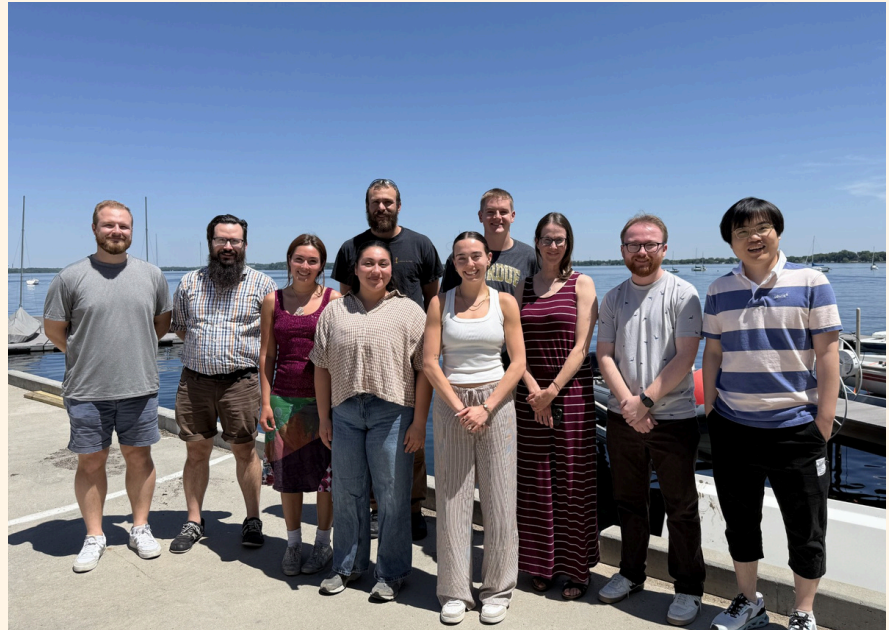
wsel.wisc.edu

wse@engr.wisc.edu

## Resources & Event Links



- [23 Must-do Activities for Summer in Madison](#)
- Submit your pet to be featured on our [pet wall](#)
- Sign up for [brown bag lunch](#)
- WSEL Staff [Job Descriptions](#)
- [UW Grad Student Life](#)
- [UW Events Calendar](#)



## Facility Updates

- Congratulations to Sara and Jared on their Marriage, which was celebrated on May 16th!
- The Lakeshore Path Limnology Bypass Project is nearing completion. The project will continue to affect areas near WSEL, please be careful and
- watch for construction!
- Wishing Ann a farewell on her grad journey!
- We are excited to welcome our 2 newest Wet Laboratory Assistants, Audrey and Alyane!
- Check out the updated [WSEL New Student Timeline document](#)



Left: Sara, Right: Ann



## WSEL Spotlight: Highlighting Collaboration



We want to  
recognize  
your work!

[Submit Here](#)



### Shining a Light on Shengdong Liu

Ph.D. Candidate

#### Fun Fact

I love bringing my camera to conferences and taking free portraits for fellow presenters and peers, and I also love nature photography

#### Currently

I'm working on developing affordable sensors for environmental monitoring, with a focus on neonicotinoid pesticides used in agriculture. By collecting irrigation and ditch water samples from Wisconsin's Central Sands, I explored rapid pesticide detection using surface-enhanced Raman spectroscopy (SERS). Our method achieved detection limits as low as 0.2 ppb, with measurement times under 5 minutes and a cost of less than \$5 per sample.



## Kaitlyn Gruber

### Fun Fact

Kaitlyn Gruber loves to touch grass; with hobbies including camping, hiking, biking, and playing volleyball!

### Currently

Kaitlyn defending her PhD in Chemistry on June 5th! She's a standout PFAS chemist in the Remucal group. While her presence will be dearly missed, we wish her the best in her new job with the Minnesota Department of Health!

## John Gorman

### Fun Fact

I have an (ongoing) 1460 day streak of completing the NYT Crossword Puzzle

### Currently

This summer, I am diving into the wild world of Density Functional Theory (DFT) to better understand the mechanisms that drive analyte sorption onto gold nanoparticles. In short, I am calculating the binding energy of 2-, 3-, and 4-Chlorophenols in different protonation states (neutral, radical, and anionic) to see why certain compounds bind to gold, others don't, some do but slowly, some bind quickly but rapidly polymerize and decrease the signals we see in SERS analysis. Not only that, I am investigating the exact mechanism of the binding - is it a covalent bond forming? Physisorption? Some kind of radical pairing? Etc. By doing so, we can get a better idea of how to take low affinity analytes, like 2,4-D, and modify them to better allow for SERS analysis of environmental samples.



## WSEL COOKBOOK



We'd love to try your recipes!  
Upload them using the QR code!

Open to all faculty housed in the WSEL