



COORDINATES OF CHANGE

September 17-18

Attendee Guide

Attendee Guide

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Important Information & Tips

- **SIGN INTO THE ZOOM ACCOUNT YOU REGISTERED UNDER BEFORE FOLLOWING THE LINK TO THE SYMPOISUM.**
- After registering, you should have received a confirmation email from Zoom on behalf of the OSBEELS. Follow the link within your confirmation email to join the virtual conference.
- Internet connection: power down any devices not in use, close any applications or browser windows not in use, make sure your device is plugged in for best audio and video quality.
- Visit <https://zoom.us/test> to test out your set up to ensure no network or technical issues exist.
- During the Symposium, the fastest way to contact us is to text
[Nick 971-701-1844](tel:971-701-1844) / [Ashlee 971-218-1222](tel:971-218-1222) / [Jenn 503-551-0323](tel:503-551-0323)

EVENT SUMMARY AND EXPECTATIONS

After months of preparation and planning, the 2026 Symposium is here! This guide was developed to provide you with all the necessary information and tips in one place as you prepare to join us for the 2-day virtual event. Within this digital guide you'll find:

- Basic event details
- Daily schedule
- Best practices for attending a virtual event
- Tutorials on the Zoom webinar platform

Breakdown of participants at the 2026 OSBEELS Symposium:

Host: OSBEELS, we will coordinate beginning and end of day periods, as well as transitions between presenters

Attendee: YOU, Registered individuals who will be tuning into the event

As an attendee, you will only be able to tune into the virtual conference and not be able to share video or audio.

Attendees are able to post questions and participate in polls during the conference and presentations.

Presenter/Panelist:

When presenting, "speakers/panelists" will have the ability to share their audio and video with attendees.

If at any point during the conference you are experiencing technical difficulties or have questions please reach out to the OSBEELS event staff who will be available throughout the day.

Details regarding the structure of the live, virtual presentation:

- Presenters have 90 minutes to present and answer questions.
- As attendees, you will only be able to tune-into the broadcast. You will not have audio or video capabilities.
- Attendees will be able to pose questions for the Q&A session, as well as "up-vote" favorited questions.
- Attendee will not have access to Chat.
- OSBEELS event staff will monitor audience questions and pull the top questions to share at the end with presenters during the Q&A session.

BEST PRACTICES

Many individuals may have previously participated on a teleconferencing meeting on the Zoom platform, and for some this may be their first time. We'd like to note there are small differences between the Zoom Meeting and the Zoom Webinar platforms. If interested we encourage attendees to visit the Zoom blog and learn about the experience they can expect as an "attendee" on the Zoom Webinar platform. Learn more here: <https://support.zoom.us/hc/en-us/articles/115004954946>

SIGN-IN TO THE ZOOM ACCOUNT YOU USED TO REGISTER PRIOR TO JOINING THE SYMPOSIUM.

When using equipment or working from a location not regularly used, test your internet and webinar connections in advance. If possible, establish video and audio connections prior to your virtual session to test quality.

Visit <https://zoom.us/test> to test out your set up to ensure no network or technical issues exist.

If connecting from a laptop or other portable device, plug in the power cord. Battery use can adversely affect video quality.

Please notify OSBEELS event staff ahead of the event if you and other registered attendees are watching from one feed so we may mark all who are viewing the virtual conference are marked as in attendance.

2026 OSBEELS Symposium
September 17-18 / 8:00 a.m. — 4:30 p.m.

WEBINAR INTERFACE

**When using the link provided by your OSBEELS host via email,
you will be directly added into the webinar.**

**SIGN-IN TO THE ZOOM ACCOUNT YOU REGISTERED WITH
BEFORE JOINING THE WEBINAR.**

Hi Eren Yaeger,

Thank you for registering for "My Webinar".

Please submit any questions to: kevin.hoang@zoom.us

Date Time: Sep 11, 2018 10:00 AM Pacific Time (US and Canada)

Join from a PC, Mac, iPad, iPhone or Android device:

Please click this URL to join: [https://success.zoom.us](https://success.zoom.us/jw/319833382?tk=QvnVju44sn4RvDesYH_a1KqAOLurYUwnlYSSs8gtpOk.DQEAAAAExBFJhZyTkd0ZUxYcFRfS2Q3UVMZ1VOMEdnAA)

[/w/319833382?tk=QvnVju44sn4RvDesYH_a1KqAOLurYUwnlYSSs8gtpOk.DQEAAAAExBFJhZyTkd0ZUxYcFRfS2Q3UVMZ1VOMEdnAA](https://success.zoom.us/jw/319833382?tk=QvnVju44sn4RvDesYH_a1KqAOLurYUwnlYSSs8gtpOk.DQEAAAAExBFJhZyTkd0ZUxYcFRfS2Q3UVMZ1VOMEdnAA)

Note: This link should not be shared with others; it is unique to you.

[Add to Calendar](#) [Add to Google Calendar](#) [Add to Yahoo Calendar](#)

Or iPhone one-tap :

US: +16468769923,,319833382# or +16699006833,,319833382#

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 646 876 9923 or +1 669 900 6833 or +1 877 369 0926 (Toll Free) or +1 877 853 5247 (Toll Free)

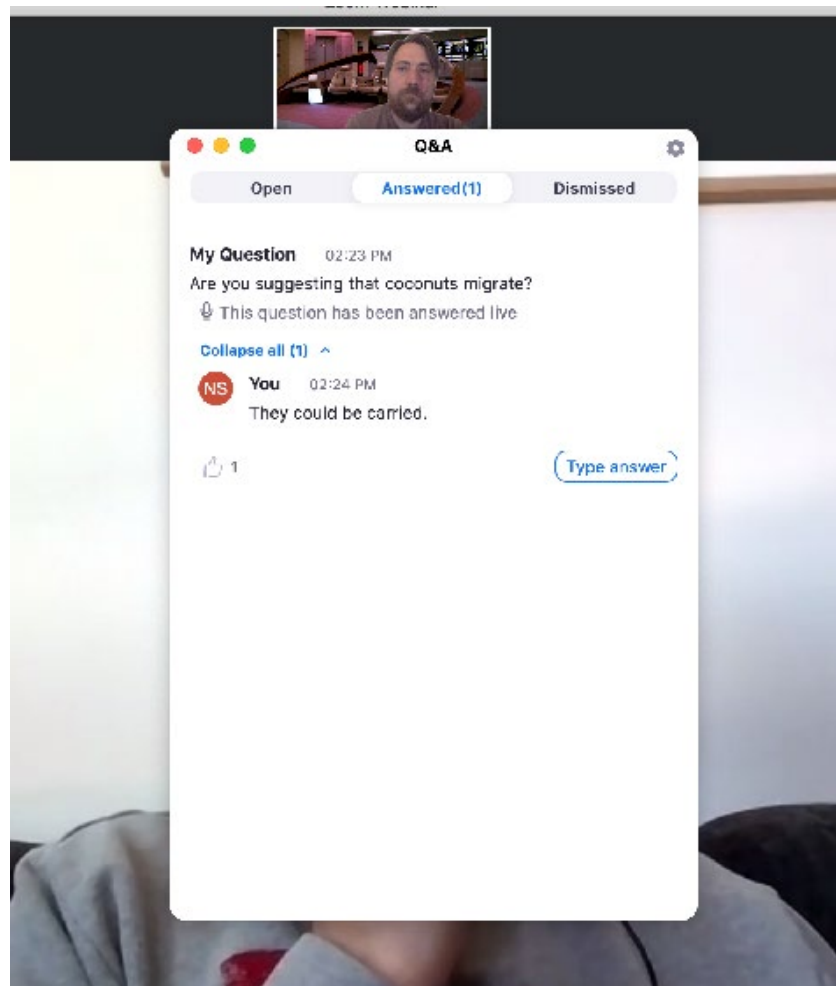
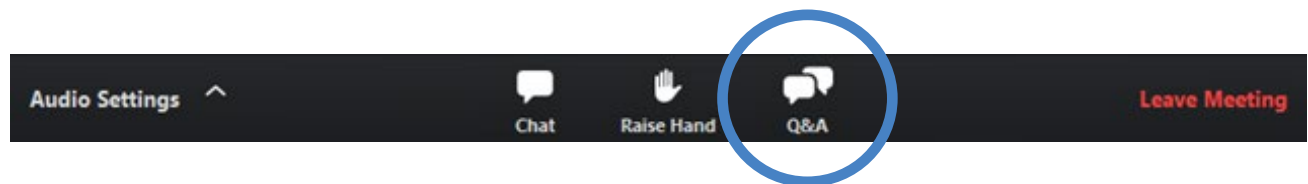
Webinar ID: 319 833 382

International numbers available: https://zoom.us/jw/319833382?tk=QvnVju44sn4RvDesYH_a1KqAOLurYUwnlYSSs8gtpOk.DQEAAAAExBFJhZyTkd0ZUxYcFRfS2Q3UVMZ1VOMEdnAA

2026 OSBEELS Symposium
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WEBINAR INTERFACE

Submit your questions with the Q&A option at the bottom.



WEBINAR INTERFACE

Ask questions
"Like" questions or answers

Q&A

You asked:

What happens when I raise my hand?

18:03

Molly Parker answered:

I can take you off of mute.

18:04

Please input your question

☐ Send Anonymously Send

Q&A

All questions (1) My questions

Lee 01:54 PM

Will there be a follow-up session?

The host said there will be a session next week

Cancel Send

Type your question here...

Q&A

All questions (2) My questions

Lee 01:54 PM

Will there be a follow-up session?

 1

Comment

Type your question here...

2026 OSBEELS Symposium
September 17-18 / 8:00 a.m. — 4:30 p.m.

SCHEDULE

	September 17	September 18
8:00am – 8:15am	Welcome & Intros Jenn Gilbert, Board Administrator & Renee Clough, Board President	OSBEELS Updates OSBEELS Staff
8:15am – 9:45am	Hood River-White Salmon Bridge Replacement Michael Shannon, PE – HNTB Corp.	Portland Filtration Plant David Peters, PE – PWB
9:45am – 10:00am	<i>Break</i>	
10:00am – 11:30am	Engineering Judgment and AI Chantell Cornett – Arizona Board	Measuring Glacial Melt Dr.Meagan Wingrove – OSU
11:30am – 12:00pm	Student Spotlight Session Fadzai Zivanai – PSU	PLSO / PEO
12:00pm – 1:00pm	<i>Lunch</i>	
1:00pm – 2:30pm	PacWave South Facility Dan Hellin – OSU	Surveying Ice-capped Peaks Eric Gilbertson, PhD – Seattle Univ.
2:30pm – 2:45pm	<i>Break</i>	
2:45pm – 4:15pm	Systems Engineering Susan Ronning, PE – ADCOMM	Team Building Micro-Lessons Brett Murphy, PLS
4:15pm – 4:30pm	<i>Closing Remarks</i>	

PRESENTATIONS

Replacing a century-old river crossing: The Hood River-White Salmon Bridge Replacement Program

Presenters: **Arthur Babitz**, **Kathryn Thomas**, and **Jon Yamashita**, PLS



Bios:

Arthur Babitz serves as a commissioner for Hood River County and the Hood River-White Salmon Bridge Authority. An electrical engineer by profession, Arthur currently works as a consultant and also volunteers as a photo archivist at the History Museum of Hood River County. He brings both technical expertise and a deep appreciation for the region's history to the bridge replacement effort, with a particular interest in the historical development of the existing 1924 bridge and its role in the regional economy.

Kathryn Thomas is Vice President of Business Development for ANAMAR Environmental Consulting and serves as an alternate commissioner on the Hood River-White Salmon Bridge Authority representing Hood River County. Her professional experience includes environmental permitting and planning for major infrastructure projects, primarily supporting the U.S. Army Corps of Engineers. Prior to her work in environmental consulting, Kathryn served as a Navy helicopter pilot and later founded a nonprofit organization. She brings expertise in project delivery, interagency coordination, and stakeholder collaboration to the bridge replacement program.

Jon Yamashita, PLS, is the Oregon/SW Washington Regional Director and Director of Land Surveying at Otak. His 34 years as a Professional Land Surveyor began on a USGS field crew running First Order Leveling across the Western U.S. He is licensed in twelve states: OR, WA, UT, CO, MT, ND, SD, ID, AZ, CA, NV, and NM. On the Hood River-White Salmon Bridge Replacement, Jon leads Otak's survey and right-of-way work as part of the owner's team, a scope that spans two states, a century of legacy boundary records, and a shoreline that no longer looks like the one the deeds describe.

Description:

The Hood River-White Salmon Bridge serves as a critical transportation link between Oregon and Washington, connecting communities, supporting regional commerce, and providing access across the Columbia River. This presentation will explore the history and evolution of the existing bridge, the need for replacement, and the progress being made to develop a modern crossing that will serve the region for generations to come. Presenters will discuss the bridge replacement program, key planning and engineering considerations, and the surveying and geomatics work that supports project development. Attendees will gain insight into the challenges and opportunities involved in replacing a century-old bridge while balancing transportation needs, community priorities, environmental considerations, and long-term regional mobility.

PRESENTATIONS

The Chainsaw Needs a Guard: Using AI in Licensed Practice Without Outsourcing Your Judgment

Presenter: **Chantell Cornett** – Ward Cornett & Associates



Bio:

Chantell J. Cornett is Principal at Ward Cornett & Associates, a forensic engineering and construction firm, with more than 25 years in construction and forensic practice. She serves as a Public Member of the Arizona State Board of Technical Registration, where she evaluates complaints against licensees, and authored "The chainsaw needs a guard: A public member's framework for AI in licensee work" in the June 2026 NCEES Licensure Exchange.

She gave her first invited talk on AI and ethical engineering in 2020, has since completed graduate AI coursework at Arizona State University, and will pursue a Master of Science in the subject after finishing her Ph.D. in structural engineering this fall 2026. She serves as Secretary of the PTI DC 10.5 Committee and Task Group Lead for the ASCE 11 Structural Condition Assessment Code, and contributes to consensus standards development through ASTM, ANSI, and ASSP.

Description:

Most licensees are somewhere between curious and cautious about AI, and the standard setting bodies have not made that any easier. This session is built for the full spread of the room. If you have not started, we cover what these tools actually are in plain terms, and where to begin. If you have started quietly and are not certain your firm would approve, we cover how to vet a tool and an account tier before either touches project material. And if your firm is already well down the road, with AI specialists drafting internal guardrails, we set those side by side with what NCEES, the state boards, and the standard setting bodies are actually saying, so you can see where your internal policy runs ahead of the regulation and where it may leave a licensee exposed. Internal guardrails tend to be written around data security and intellectual property. They are rarely written around who owns the judgment and whose seal goes on the output.

Learning objectives:

By the end of the session, attendees will be able to:

1. Identify four categories of engineering work where AI adds real value today, and the tier and account settings required before using it on project material
2. Recognize the failure modes that matter to a licensee: hallucination, black box output, missing jurisdictional and code context, and training data bias
3. Structure a prompt that returns a reviewable deliverable rather than an unverifiable answer
4. Reconcile a firm's internal AI guardrails against NCEES, state board, and standard setting body guidance, and identify where the internal policy leaves professional responsibility unaddressed
5. Apply a guardrails checklist and take six specific steps toward an AI use policy their firm can adopt

PRESENTATIONS

PacWave: Engineering, Permitting and Building an Open-Ocean Wave Energy Test Facility

Presenters: **Dan Hellin** – OSU & **Justin Klure** – Pacific Energy Ventures



Bios:

Dan Hellin is the Director of PacWave, based at Oregon State University. Developed largely with funding from the U.S. Department of Energy, PacWave supports the global marine energy industry by providing open-ocean test sites for wave energy converters and other innovative technology, advancing marine energy research and development, and studying environmental effects. Since joining PacWave in 2013, Dan has provided strategic leadership for the site's development and operations, helping to accelerate wave energy innovation through real-world testing, reliability demonstration, and commercialization support. He brings over 30 years of experience managing complex coastal and ocean projects, with expertise spanning marine energy, environmental assessment, marine spatial planning, policy development, and port and harbor management.

Justin Klure is the managing director of Pacific Energy Ventures (PEV) with over 25 years of experience working directly with industry, academia and government to commercialize new energy technologies and projects throughout the U.S. and internationally. Since 2012, Justin has been leading the development of PacWave South, the nation's first pre-permitted, grid connected test facility, located on the outer continental shelf (OCS) off the coast of Oregon. As the project manager for PacWave South, Justin is responsible for overall project management; leading the team that secured all the required licenses, leases, and permits; and has overseen various aspects of engineering, design and construction. PacWave South is owned and operated by Oregon State University and sponsored by the U.S. Department of Energy.

Description:

PacWave is the first pre-permitted, grid-connected, full-scale wave energy test facility in the continental United States. This presentation will trace the nearly two-decade journey from the initial concept and site-selection process through community engagement, eight years of federal and state permitting, engineering and construction, and the facility's transition to operations. Dan Hellin and Justin Klure will discuss some of the technical, regulatory, and stakeholder challenges encountered along the way, the engineering solutions that made PacWave possible, and how the facility will now support the testing and development of wave energy technologies and other ocean research.

PRESENTATIONS

Systems Thinking: Applying Systems Engineering to Work and Life!

Presenter: **Susan Ronning**, PE



Bio:

Ms. Susan E. Ronning, P.E., PMP, ASEP, is owner and principal engineer of ADCOMM Engineering, LLC, an engineering firm specializing in critical communications system design, testing, troubleshooting, and deployment. Ms. Ronning has 4 years' military and almost 30 years of systems engineering and project implementation experience in the critical communications industry supporting public safety, public works, school districts, power and water utilities, 9-1-1 centers, and critical control room environments. She is a registered professional engineer (electrical) in over a dozen states, an INCOSE-certified Associate Systems Engineer, a PMI-certified Project Management Professional, licensed Private Pilot, and licensed Amateur Radio Operator.

Ms. Ronning is the Chair for the International Council on Systems Engineering (INCOSE) Information Communications and Technology (ICT) Working Group where she contributes to the advancement of systems engineering within

the telecommunications industry. Ms. Ronning and her working group colleagues published, "Defining Critical Communications Networks: Modelling Networks as Systems," INCOSE INSIGHT Magazine, June 2020.

Ms. Ronning is a member of National Society of Professional Engineers (NSPE)'s Emerging Technologies Committee where she has been actively involved in the development of a newly formed certification "Systems Software Integrator (SSI)" through NICET. The SSI certification program is designed for professionals engaged in the integration of software into physical systems to ensure cyber-physical integrations must be executed with rigorous adherence to guiding principles and best practices that ensure reliable and secure systems for the purpose of ensuring life safety.

Description:

Systems Thinking is something that many people do without even knowing what it is - regardless of background, education or experience. Anything and everything can be considered a system, or a part of a System of Systems (SoS). This talk describes what is systems thinking, what is systems engineering, who is INCOSE, and how you can apply Systems Engineering to your own work and life experiences. Additionally, you'll learn about NSPE's new NICET SSI certification and their MOU with INCOSE.

PRESENTATIONS

Filtering for the Future: How Oregon's largest drinking water filtration facility will serve our communities

Presenters: **David Peters**, PE & **Michelle Cheek**, PE – City of Portland Water Bureau



Bios:

David Peters is an Engineering Manager with the Portland Water Bureau's Special Projects Group, where he oversees the planning, design, and construction of the Bull Run Treatment projects. He brings 38 years of experience in the water industry, including 30 years with the bureau. Over the past 26 years, David has specialized in drinking water treatment, asset management, and hydropower generation. For the last decade, his work has been solely dedicated to advancing the Bull Run Supply Treatment projects, a cornerstone effort in securing and enhancing Portland's long-term water quality and resilience. David holds a bachelor's degree in civil engineering from the University of Portland and is a licensed Professional Engineer in the state of Oregon.

Michelle Cheek is an Engineering Supervisor with the Portland Water Bureau's Special Projects Group, which oversees the planning, design, and construction of the Bull Run Treatment projects. Michelle has 27 years of experience in the water industry, the last 15 of which have been at Portland Water Bureau. Prior to joining the bureau, Michelle spent 12 years at Black & Veatch working primarily on water treatment facilities and infrastructure in the Pacific NW, Singapore, and Australia. She has a Masters Degree in Civil Engineering from Auburn University and is a licensed Professional Engineer in Oregon. She is also a past-Chair of the Pacific Northwest Section of AWWA.

Description:

This presentation provides a focused overview of the Portland Water Bureau's Bull Run Treatment Projects, beginning with the need for the new corrosion control and filtration treatment facilities. It then highlights the long-term benefits they will deliver to customers throughout the region. It offers historical context for the infrastructure projects, summarizes key elements of the planning and design process, and updates the current status of construction. The program also highlights several unique features and engineering innovations incorporated into the facilities, illustrating how they will strengthen water quality, reliability, and system resilience for generations to come.

PRESENTATIONS

Measuring Tidewater Glacial Melt

Presenter: [Dr. Meagan Wengrove](#) - OSU



Bio:

[Dr. Meagan Wengrove](#) is a coastal engineer and scientist who leads the Coastal Boundary Dynamics Research Group at Oregon State University. Our research focus is to understand the physics of natural and engineered coastal systems. Including creating engineering guidance for the use of natural and nature based features including coastal dunes and dynamic cobble revetments for coastal protection, quantifying mechanisms of sediment transport and their contribution to morphologic change, understanding the physics of ice-ocean boundary layer interaction and their contribution to melting of tidewater glaciers and icebergs, and exploring the technology of distributed fiber optic sensing as an ocean bottom sensing technology. Our research involves a mix of field, laboratory, and modeling experiments. The Coastal Boundary Dynamics Research Group is composed of a mix of PhD students, MS students, undergraduate assistances, and research associates and post-docs. Dr. Wengrove also enjoys teaching both

graduate and undergraduate classes at Oregon State focused on coastal dynamics, coastal engineering with nature, programming and sensors, and fluid mechanics.

Description:

We have created a set of novel instrument platforms to measure ice shape and velocities at the face of a tidewater glacier (a glacier that terminates in the ocean). Working at the ice face is dangerous, and so the platforms need to be able to deploy and recover instruments without humans aboard. During this talk, I will share what the instrumentation looks like, what it is measuring, and some of the challenges associated with this type of surveying.

PRESENTATIONS

Surveying the Last Five Icecapped Peaks of the Contiguous US

Presenter: **Eric Gilbertson**, PhD



Bio:

Dr. Eric Gilbertson is a teaching professor in mechanical engineering at Seattle University. He has a PhD in mechanical engineering from MIT. His research involves studying mountain elevations in Washington and around the world. He has discovered new national highpoints in eight countries, and has tracked how climate change is affecting elevations of icecapped peaks, such as Mt Rainier. He publishes work in scientific journals such as Progress in Physical Geography and Arctic, Antarctic, and Alpine Research.

Description:

There have historically existed five mountains in the contiguous US that had permanent year-round snow or ice on the summits - icecapped peaks. They are Mt Rainier, Liberty Cap, Colfax Peak, Eldorado Peak, and East Fury, all in Washington. Since 2024 I have taken annual elevation measurements of these peaks and tracked how they are melting down due to climate change. I have also used ground penetrating radar to measure summit ice thicknesses, and placed temperature loggers on summits to track days above freezing. I will present my findings, including updates from summer 2026 measurements.

PRESENTATIONS

Team Building Microlessons: Soft Skills & Emotional Literacy for Engineering & Land Survey

Presenter: **Brett Murphy**, PLS - OSU



Bio:

Brett Murphy is an instructor of Geomatics in the School of Civil and Construction Engineering at Oregon State University. He received a Bachelors of Science in GIS & Remote Sensing from Southern Illinois University, holds a Private Pilot's license, and is a licensed Professional Land Surveyor in Oregon. After several seasons working as a wildland firefighter, dogsled musher, botany technician, and various other wilderness based positions, he began his career in geomatics in 2012 working for an aerial remote sensing firm that operated throughout North and Central America. Eventually Brett moved into research and development in the Engineering Automation Section at the Oregon Department of Transportation involving lidar, automated machine guidance, photogrammetry, UAS, and traditional survey methods. After leaving ODOT Brett worked as a commercial drone pilot and land surveyor throughout western Oregon. Geomatics has taken him to nearly all 50 states and internationally, and Brett loves to share his enthusiasm for geomatics and the opportunities it provides.

Description:

Many of the challenges in our daily experience at work have little to do with technical details and everything to do with people. In highly technical professions like land surveying and engineering, it's easy to overlook the human side—leadership, teamwork, and self-awareness. To address this, we've created and integrated a series of team-building microlessons into our introductory survey courses to better prepare future professionals for real-world collaboration. In this session we'll share our approach, walk through the microlessons, then open the floor for discussion on how these ideas can be adapted to your own teams. Ideally everyone walks away with at least one actionable idea to strengthen the interpersonal dynamics in your workplace.

PRESENTATIONS

Student Spotlight: Mitigation liquefaction in fine grained soils using Microbially Induced Desaturation

Presenter: **Fadzai Zivanai**, PhD Student - PSU



Bio:

Fadzai Zivanai is a Ph.D. student in Civil and Environmental Engineering at Portland State University (PSU), specializing in geotechnical engineering. Her research centers on Microbially Induced Desaturation (MID), a liquefaction mitigation technology that uses microbial processes to generate nitrogen gas to reduce soil saturation, therefore increasing the cyclic resistance of soils. She investigates the long-term performance, gas distribution, and retreatment potential of MID through laboratory and field-scale studies. She earned a Master of Science in Civil Engineering from PSU in 2025 and has experience with both field and laboratory soil testing. She received her Bachelor's degree in Civil and Water Engineering in Zimbabwe and worked for two years at a structural consulting firm before starting her graduate studies.

Description:

Microbially Induced Desaturation (MID) is an emerging ground improvement method that can mitigate liquefaction in saturated loose soils. MID stimulates naturally occurring soil bacteria to generate nitrogen gas, creating partial soil desaturation that improves liquefaction resistance without the need for extensive invasive ground improvement methods and can potentially be applied underneath already existing infrastructure. My work combines laboratory experiments, large-scale seepage tank testing, and field monitoring to evaluate the effectiveness, longevity, and reapplication of MID under realistic conditions. This research aims to advance biologically based ground improvement technologies that enhance the seismic resilience of critical infrastructure while providing practical and environmentally sustainable alternatives to conventional liquefaction mitigation methods.