Samuel Salemink-Harry

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RESEARCH INTERESTS

Ocean Infrastructure
- Tsunami-like waves
- Wave-current interaction
- Boulder transport

Ecosystem Processes
- Aquatic optics
- Atmosphere-ocean gas transfer
- Primary ice formation on lakes

EDUCATION

Ph.D. in Civil Engineering — *Oregon State University, Corvallis, OR*
Advised by Harry Yeh — 2023

M.S. in Civil Engineering — *Oregon State University, Corvallis, OR*
Advised by Harry Yeh — 2018

B.S. in Civil Engineering — *University of Delaware, Newark, DE*
2016

PROFESSIONAL EXPERIENCE

Postdoctoral Research Associate — Madison, WI
University of Wisconsin-Madison — 2023-Present

Graduate Research Assistant — Corvallis, OR
Oregon State University — 2016-2023

PUBLICATIONS

Salemink-Harry, S.T., Smith, B.J., Dugan, H.A., Franck, J.A., Wagner, T.J.W., Zoet, L.K., Wilkinson, G.M., & Pujara, N.. Light attenuation due to preferential orientation of particles in waves and shear flow: idealized modeling for bacteria, algae, and microplastics. *Limnol. Oceanogr.*, in press.

Gushulak, C.A.C., Bertram, T.H., Dugan, H.A., Franck, J.A., Rogers, M.N., **Salemink-Harry, S.T.**, Smith, B.J., Wagner, T.J.W., Zoet, L.K., Pujara, N., & Wilkinson, G.M. (2025). The role of surface water waves in cyanobacterial blooms in lakes. *Limnol. Oceanogr. Lett.*

Salemink-Harry, S., & Yeh, H. (2025). Transition of solitary waves and undular bore from basin to channel with opposing current. *Journal of Fluid Mechanics*, 1006, A1.

Salemink-Harry, S. (2023). Transition of Tsunami-Like Waves from Basin to Out-Flowing Channel. Oregon State University.

Yeh, H., Ko, H., Knowles, J., & **Harry, S.** (2020). Solitary waves perturbed by a broad sill. Part 2. Propagation along the sill. *Journal of Fluid Mechanics*, 883, A26.

Harry, S., Exton, M., & Yeh, H. (2019). Boulder Pickup by Tsunami Surge. J*ournal of Earthquake and Tsunami*, 13(05n06), 1941006.

Exton, M., **Harry, S.**, Kutter, B., Mason, H. B., & Yeh, H. (2019). Simulating tsunami inundation and soil response in a large centrifuge. *Scientific reports*, 9(1), 1-12.

Harry, S. (2018). Boulder Transport by High Energy Surge. Oregon State University.

Exton, M. C., **Harry, S.**, Mason, H. B., Yeh, H., & Kutter, B. L. (2018). Novel experimental device to simulate tsunami loading in a geotechnical centrifuge. In *Physical Modelling in Geotechnics* (pp. 371-375). CRC Press.

PRESENTATIONS

CONFERENCES

Salemink-Harry, S., Huang, E., Pujara, N. (2025). Pickup of particles by wave-swash interactions. Young Coastal Scientists and Engineers Conference – Americas.

Salemink-Harry, S., Bertram, T.H., Dugan, H.A., Franck, J.A., Smith, B.J., Wagner, T.J.W., Wilkinson, G.M., Zoet, L.K., Pujara, N. (2025). Light attenuation due to preferential orientation of non-spherical particles in waves and shear flow. Physical Processes in Natural Waters.

Salemink-Harry, S., Bertram, T.H., Dugan, H.A., Franck, J.A., Smith, B.J., Wagner, T.J.W., Wilkinson, G.M., Zoet, L.K., Pujara, N. (2024). Light attenuation by particles under water waves. Association for the Sciences of Limnology and Oceanography.

Salemink-Harry, S., & Yeh, H. (2022). Transition of tsunami-like long waves from ma basin into a channel with outflow jet. International Conference of Coastal Engineering.

Harry, S., & Yeh, H. (2022). Tsunami-like Long Wave & Current Interaction. Ocean Sciences Meeting.

Harry, S., & Yeh, H. (2020). Tsunami intrusion into a river. AGU Fall Meeting.

Harry, S., Exton, M., Kutter, B., Mason, B., & Yeh, H. (2019). Boulder Transport by Tsunami. Engineering Mechanics Institute and GeoInstitute Special Conference.

Harry, S., Exton, M., & Yeh, H. (2019). Boulder Transport by Tsunami Surge. Oregon State University Graduate Research Showcase.

INVITED GUEST

Settling velocity of small particles (2024). Guest lecture for environmental fluid mechanics course, University of Wisconsin-Madison, Madison, WI.

Transition of Tsunami-Like Long Waves from a Basin into a Channel with Outflow jet (2023). CPEP Seminar, University of Wisconsin-Madison, Madison, WI.

Transition of Tsunami-Like Long Waves from a Basin into a Channel with Outflow jet (2022). Western Coastal Collaboratorium, Stanford University, Stanford, CA.

Drag forces by fluid motion (2018). Guest lecture for fluid mechanics course, Civil and Construction Engineering. Oregon State University, Corvallis, OR.

TEACHING

Fall 2024	Fluid Mechanics	Teaching Assistant
Fall 2022	Power to the People: Energy Access & Environmental Justice	Teaching Assistant
Fall 2021	Hydrology	Teaching Assistant

PROFESSIONAL DEVELOPMENT

MENTORING

Undergraduate Research Scholar Supervisor, University of Wisconsin-Madison, Academic Year 2024

Research Mentoring Workshop, University of Wisconsin-Madison, Summer 2024

SERVICE

Organizing committee member for the 10th Annual UW–Madison Postdoctoral Research Symposium

AWARDS

Outstanding Student Abstract award. International Conference on Coastal Engineering, Sydney, Australia, 2022

PEER REVIEW

Physics of Fluids