Samantha Hartzell

June 10, 2026

EDUCATION

Ph.D.	2020	Civil and Environmental Engineering	Princeton University
M.S.	2017	Civil and Environmental Engineering	Duke University
B.S.	2015	Civil and Environmental Engineering	Massachusetts Institute of Technology

EMPLOYMENT

Assistant Professor, Civil and Environmental Engineering, Portland State University 9/2020 -present

DISSERTATION

The role of CAM photosynthesis in the soil-plant-atmosphere continuum (5/2020)
Advisor: Amilcare Porporato

REFEREED PUBLICATIONS

Journal

1. J. Gottlieb, D. Ochman, C.-W. Huang, J.-C. Domec, N. Schwartz, and S. Hartzell, "Translating soil salinity to agricultural salt stress: Key salt-tolerance mechanisms for agrohydrologic models," *iScience*, vol. 28, no. 8, 2025.
2. C.-W. Huang, J.-C. Domec, T. L. O'Halloran, and S. Hartzell, "Dynamic interactions between groundwater level and discharge by phreatophytes," *Advances in Water Resources*, vol. 193, p. 104814, 2024.
3. K. Yu, P. D'Odorico, A. Novoa, S. L. Collins, S. Hartzell, H. Huang, H. Liu, P. Weigelt, and A. M. Porporato, "Potential expansion of plants with Crassulacean acid metabolism in the Anthropocene," *BioScience*, vol. 74, no. 7, pp. 478–487, 2024.
4. A. Leverett, A. M. Borland, E. J. Inge, and S. Hartzell, "Low internal air space in plants with Crassulacean acid metabolism may be an anatomical spandrel," *Annals of Botany*, vol. 132, no. 4, pp. 811–817, 2023.
5. A. Leverett, S. Hartzell, K. Winter, M. Garcia, J. Aranda, A. Virgo, A. Smith, P. Focht, A. Rasmussen-Arda, W. G. Willats *et al.*, "Dissecting succulence: Crassulacean acid metabolism and hydraulic capacitance are independent adaptations in Clusia leaves," *Plant, Cell & Environment*, vol. 46, no. 5, pp. 1472–1488, 2023.
6. R. Souza, S. Hartzell, A. P. F. Ferraz, A. Q. de Almeida, J. R. de Sousa Lima, A. C. D. Antonino, and E. S. de Souza, "Dynamics of soil penetration resistance in water-controlled environments," *Soil and Tillage Research*, vol. 205, p. 104768, 2021.
7. G. Miller, S. Hartzell, and A. Porporato, "Ecohydrology of epiphytes: Modelling water balance, CAM photosynthesis, and their climate impacts," *Ecohydrology*, vol. 14, no. 3, Apr. 2021.
8. S. Hartzell, M. S. Bartlett, P. Inglese, S. Consoli, J. Yin, and A. Porporato, "Modelling nonlinear dynamics of Crassulacean acid metabolism productivity and water use for global predictions," *Plant Cell and Environment*, vol. 44, no. 1, pp. 34–48, 2020.

9. R. Souza, S. Hartzell, X. Feng, A. Celso, D. Antonino, E. Soares, D. Souza, R. Simões, C. Menezes, and A. Porporato, "Optimal management of cattle grazing in a seasonally dry tropical forest ecosystem under rainfall fluctuations," *Journal of Hydrology*, vol. 588, no. May, p. 125102, 2020.
10. K. Yu, P. D'Odorico, S. Collins, D. Carr, A. Porporato, W. Anderegg, W. Gilhooly, L. Wang, A. Bhattachan, M. Bartlett, S. Hartzell, J. Yin, W. Li, M. Tatlhego, and J. D. Fuentes, "The competitive advantage of a constitutive CAM species over a C4 grass species under drought and CO_2 enrichment," *Ecosphere*, 2019.
11. S. Hartzell, M. Bartlett, J. Yin, and A. Porporato, "Similarities in the evolution of plants and cars," *Plos one*, vol. 13, no. 6, 2018.
12. S. Hartzell, M. S. Bartlett, and A. Porporato, "Unified representation of the C3, C4, and CAM photosynthetic pathways with the Photo3 model," *Ecological Modelling*, vol. 384, pp. 173–187, Sep. 2018.
13. ——, "The role of plant water storage and hydraulic strategies in relation to soil moisture availability," *Plant and Soil*, vol. 419, pp. 503–521, 2017.
14. S. Hartzell, M. S. Bartlett, L. Virgin, and A. Porporato, "Nonlinear dynamics of the CAM circadian rhythm in response to environmental forcing," *Journal of Theoretical Biology*, vol. 368, pp. 83–94, 2015.

BOOK CHAPTERS

1. S. Hartzell, "Ecohydrology of Photosynthesis," in *Dryland Ecohydrology*, P. D'Odorio, A. Porporato, and C. W. Runyan, Eds. Springer, 2019.
2. M. Follador, J. Viezzer, M. Egler, M. Becher, L. Hach, V. Pereira, A. Rocha, C. Vaz, T. Vieira, M. Amoni *et al.*, "Modelling potential biophysical impacts of climate change in the Atlantic Forest: closing the gap to identify vulnerabilities in Brazil," in *Climate change adaptation in Latin America: Managing vulnerability, fostering resilience*. Springer, 2017, pp. 33–64.

PRESENTATIONS AT PROFESSIONAL MEETINGS

1. Islam, M.* and **Hartzell, S.** Understanding water use and conservation in pomegranate (*Punica granatum*) under deficit rainfall conditions. American Water Works Association 2026. Poster presentation.
2. Islam, M.,* Turley, D.,* and **Hartzell, S.** Predicting irrigation demand in pecan and pomegranate orchards using a soil–plant–atmospheric continuum model. American Water Works Association 2026. Poster presentation.
3. Khandoker, T.* and **Hartzell, S.** Greater cooling sensitivity of evapotranspiration in water-limited urban environments: Evidence from Portland, Oregon. American Water Works Association 2026. Poster presentation.
4. Price, R.,* **Hartzell, S.**, Gotsch, S., and Lowman, L. The impact of relative humidity and soil moisture on foliar water uptake for urban tree planning. Urban Ecology Research Consortium 2026. Oral presentation.
5. Khandoker, T.,* Thomson, H.,* Corro Sanchez, A.,* and **Hartzell, S.** Evapotranspiration estimation using a water balance model for urban green roof vegetation in Portland, OR. Urban Ecology Research Consortium 2026. Oral presentation.
6. Islam, M.* and **Hartzell, S.** Using soil-plant-atmosphere continuum modelling to evaluate drought tolerance in the urban environment. Urban Ecology Research Consortium 2026. Poster presentation.

7. **Hartzell, S.**, Gottlieb, J.,* and Turley, D.* Co-occurring salinity adaptations and their impacts on water use and productivity. American Geophysical Union 2025. Invited talk.
8. Price, R.* and **Hartzell, S.** The impact of relative humidity on foliar water uptake. American Geophysical Union 2025. Poster presentation.
9. Thomson, H.* and **Hartzell, S.** Ecoroof mitigation comparison by photosynthetic pathway in three species of interest. American Geophysical Union 2025. Poster presentation.
10. Turley, D.* and **Hartzell, S.** Gauging salinity's impact on root water uptake and testing for hydraulic redistribution in pecan (*Carya illinoinensis*). American Geophysical Union 2025. Poster presentation.
11. **Hartzell, S.**, Hydraulic redistribution in phreatophytes and potential impacts of soil and groundwater salinization. Wake Forest Department of Ecology and Evolutionary Biology. Invited talk.
12. Corro Sanchez, A.* and **Hartzell, S.** Energy balance on green roofs: Three species comparison. Portland Sustainable Stormwater Symposium 2025. Poster presentation.
13. Price, R.* and **Hartzell, S.** Foliar water uptake for stormwater mitigation. Portland Sustainable Stormwater Symposium 2025. Poster presentation.
14. Chable, A.,* Swift, C.*, Starry, O. and **Hartzell, S.** Optimizing green roofs in a Mediterranean climate: Idaho fescue's potential. American Meteorological Society Student Conference 2025. Poster presentation.
15. Corro Sanchez, A.,* Starry, O., and **Hartzell, S.** Impact of sedum and grass on green roof albedo and sensible heat flux. American Meteorological Society Student Conference 2025. Poster presentation.
16. Price R.* and **Hartzell, S.** Modeling foliar water uptake in Fagus grandifolia. American Meteorological Society Student Conference 2025. Poster presentation.
17. Lowman, L., Gotsch, S., **Hartzell, S.**, Vaughan, D., and Attea, G. How patterns of cloudiness affect vegetation water status in mountain regions. American Meteorological Society Conference 2025. Poster presentation.
18. Lowman, L., **Hartzell, S.**, Gotsch, S., Attea, G., Tran, C.*, Hosburgh, L., and Price, R.* Simulating foliar water uptake assuming leaf undersaturation recreates observed patterns of leaf gas exchange. American Geophysical Union 2024. Poster presentation.
19. Turley, D.,* Snyder, J., and **Hartzell, S.** Interactive Sonification and visualization of CAM photosynthesis to distinguish dynamical system outcomes. American Geophysical Union 2024. Poster presentation.
20. **Hartzell, S.** Cooling potential of urban green infrastructure: Constraints imposed by plant hydraulics and photosynthetic pathway. American Geophysical Union 2024. Oral presentation.
21. **Hartzell, S.** Ecohydrological tools for green city design. School of Planning, Public Policy, and Management, University of Oregon, 2024. Invited lecture.
22. **Hartzell, S.** Advancing our understanding of green roofs. Cascadia Grey to Green Conference, 2024. Invited talk.
23. **Hartzell, S.** Engineering Green Cities: Urban heat, stormwater mitigation, and nature-based solutions. School of Planning, Public Policy, and Management, University of Oregon, 2024. Invited lecture.
24. **Hartzell, S.** Using plant hydraulic models to predict species-climate interactions and their impact on ecosystem services. Department of Physics, Portland State University, 2024. Invited talk.

25. **Hartzell, S.** Deep and shallow: Implications of vegetation-climate interactions for groundwater recharge and green roof performance. Department of Biological and Ecological Engineering, Oregon State University, 2024. Invited talk.

26. **Hartzell, S.** and Starry, O. Seasonality-mediated impacts of vegetation type on green roof stormwater retention. American Geophysical Union 2023. Poster presentation.

27. Swift, C.,* Hesek, M., Parish, F.,* Starry, O., and **Hartzell, S.** Vegetation impact on green roof performance. Portland Sustainable Stormwater Symposium 2023. Poster presentation.

28. **Hartzell, S.**, Brennan, D.* and Huang, C.W.* Modeling undersaturation in the leaf internal airspace and its effect on the soil-plant-atmosphere continuum. Eighth Interagency Conference on Research in the Watershed, 2023. Poster presentation.

29. Huang, C.W.* and **Hartzell, S.** Dynamic interactions between groundwater level and transpiration by phreatophytes. Eighth Interagency Conference on Research in the Watershed, 2023. Poster presentation.

30. **Hartzell, S.** Potential of CAM photosynthetic species for green roof cooling and runoff mitigation. CAM 2023 workshop on Crassulacean Acid Metabolism. Oral presentation.

31. Leverett, A., Ferguson, K., **Hartzell, S.**, and Borland, A. Exploring the functional relevance and anatomical traits associated with CAM in the genus Clusia. CAM 2023 workshop on Crassulacean Acid Metabolism. Oral presentation.

32. **Hartzell, S.** and Starry, O. Optimizing vegetation choice for green roof runoff management. American Geophysical Union 2022. Poster presentation.

33. Brennan, D.,* Huang, C.W.,* Feng, X., Thompson, S., Porporato, A. and **Hartzell, S.** Consequences for assuming leaf vapor pressure saturation under drought conditions. American Geophysical Union 2022. Poster presentation.

34. **Hartzell, S.** Understanding the contributions of vascular epiphytes to canopy water use and carbon uptake: modeling unique water use strategies and accounting for C3 and CAM photosynthesis. Frontiers in Hydrology 2022. Invited talk.

35. **Hartzell, S.** The role of CAM photosynthesis in the soil-plant-atmosphere continuum. St. Anthony Falls Laboratory, University of Minnesota, 2022. Invited talk.

36. Huang, C.W.* and **Hartzell, S.** Dynamic interactions between groundwater level and discharge by phreatophytes. American Geophysical Union 2021. Oral presentation.

37. Silva, J., de Souza, E., Lima, J.R., Montenegro, S., Almeida, A., Sales, A.T., Antonino, A., **Hartzell, S.**, Calabrese, S., and R. Souza. Response of a seasonally dry tropical forest to interannual rainfall variability. American Geophysical Union 2020. Poster presentation.

38. Tarolli, P., Calabrese, S., **Hartzell, S.**, Cucchiaro, S. and A. Porporato. Earth, Agriculture and Society: towards sustainable development in the Anthropocene. American Geophysical Union 2020. Oral presentation.

39. Porporato, A. and **Hartzell, S.** Ecohydrology of CAM plants: environmental co-benefits for agroecosystems. European Geophysical Union 2020. Oral presentation.

40. Porporato, A., **Hartzell, S.** and Yin, J. On soil moisture, plants, and the atmospheric boundary layer. American Meteorological Society 2020. Oral presentation.

41. **Hartzell, S.** Innovative crops for arid and semiarid ecosystems. USDA-ARS 2019. Invited talk.

42. **Hartzell, S.**, Perri, S., Molini, A and Porporato, A. Plant osmoregulation and productivity under water and salt stress. American Geophysical Union Fall Meeting 2018. Oral presentation.

43. Porporato, A., **Hartzell, S.** and Bartlett, M. Agricultural risk management under hydroclimatic variability: the role of crop diversification. American Geophysical Union Fall Meeting 2018. Poster presentation.

44. **Hartzell, S.**, Bartlett, M, and Porporato, A. Physiological modeling of CAM for agroecosystems. Biology of CAM Plants 2018. Oral presentation.

45. **Hartzell, S.**, Bartlett, M and Porporato, A. The Photo-3 model: A Python-based model for C3, C4, and CAM photosynthesis coupled with environmental conditions. American Geophysical Union Fall Meeting 2017. Oral presentation.

46. **Hartzell, S.**, Bartlett, M and Porporato, A. Optimal traits of plant hydraulic capacitance as an adaptation to hydroclimatic variability. American Geophysical Union Fall Meeting 2016. Poster presentation.

47. Porporato, A. Bartlett, M and **Hartzell, S.**. Ecohydrology of the different photosynthetic pathways and implications for sustainable agriculture. American Geophysical Union Fall Meeting 2016. Oral presentation.

SCHOLARLY WORK UNDER REVIEW

1. S. Daems, A. V. Perez-Lopez, J. Prtichard, M. Chomthong, S. Hartzell, T. F. E. Messerschmid, B. A. Morris, C. Siadjeu, M. Subaylaa, V. Reichel-Deland, A. Leverett, and R. Callegari Ferrari, "Together we 'CAM': Twelve open questions in Crassulacean acid metabolism biology," *Annals of Botany*, Under Review.

2. M. Thornwell, D. Yang, C. Huang, P. Abbaszadeh, and S. Hartzell, "Assessing global drivers of forest transpiration using clustered machine learning models," *Science of the Total Environment, preprint arXiv:2605.22755*, Under Review.

3. A. Mahdipour, S. Hartzell, and P. Abbaszadeh, "Improving open channel sewer flow estimation using dual sensors and physical constraints: The benefit of data assimilation," *Journal of Hydraulic Engineering*, Under review.

FUNDED RESEARCH GRANTS

(Personal share in parentheses for grants with multiple PIs.)

Total funded: $1,765,512 ($735,229)

Title: ORE-CZ: Modeling impacts of salt stress on coupled carbon and water dynamics in dryland critical zones
Investigators: Samantha Hartzell (PI)
Amount: $249,742
Source: National Science Foundation
Dates: 09/2024-08/2027

Title: Understanding the drivers of hydraulic redistribution under salt stress
Investigators: Samantha Hartzell (PI), Nimrod Schwartz (co-PI)
Amount: $310,000 ($120,000)
Source: US-Israel Binational Agricultural Research and Development Fund
Dates: 12/2024-12/2027

Title: Improving models of stand and watershed carbon and water fluxes with more accurate representations of soil-plant-water dynamics in Southern pine ecosystems
Investigators: Tom O'Halloran (PI), Jamie Duberstein (co-PI), Tom Williams (co-PI), J.C. Domec (co-PI), Samantha Hartzell (co-PI with Cheng-Wei Huang), Chris Oishi (co-PI), Brian Viner (co-PI)
Amount: $997,953 ($157,670)
Source: US Department of Energy
Dates: 09/2023-08/2026

Title: ERI: Improving green roof technologies by modeling species-specific impacts in the urban microclimate
Investigators: Samantha Hartzell (PI)
Amount: $193,417
Source: National Science Foundation
Dates: 09/2022-08/2026

Faculty Development Grant: The impacts of CAM photosynthesis on green roof cooling and water use
Investigators: Samantha Hartzell (PI)
Amount: $14,400
Source: Portland State University
Dates: 07/2021-06/2023

HONORS & FELLOWSHIPS

2021-2022	Portland State University Inclusive Excellence Course Based Undergraduate Research Fellowship
2020	Lorenz G. Straub award
2020	Robert H. Socolow Carbon Mitigation Initiative Best Paper Award for Doctoral Students
2016-2020	National Science Foundation Graduate Research Fellowship
2015	James B. Duke Fellowship
2015	Pratt-Gardner Fellowship
2015	Paul L. Busch Prize for academic achievement and contributions to the MIT CEE community
2014	Chi Epsilon Civil Engineering Honor Society
2010	National Merit Scholarship

TEACHING

Portland State University

CE 410/510: Urban Green Infrastructure
- Contribution: Instructor, course developer
- Quarters taught: 1

CE 367: Environmental Sustainability
- Contribution: Instructor, course developer
- Quarters taught: 2

CE 510/610: Research Methods for CEE Graduate Students
- Contribution: Co-instructor with Diane Moug, Co-developer with Diane Moug and Thomas Schumacher
- Quarters taught: 1

CE 412/512: Seminar: Sustainability in CEE
- Contribution: Instructor
- Quarters taught: 2

CE 410/510: Terrestrial Biosphere-Atmosphere Fluxes
- Contribution: Instructor, course developer
- Quarters taught: 2

CE 362: Engineering Hydraulics
- Contribution: Instructor
- Quarters taught: 8

CE 364: Water Resources Engineering
- Contribution: Instructor
- Quarters taught: 4

CE 575: Ecohydrology
- Contribution: Instructor, course developer
- Quarters taught: 3

ADVISING

Postdoctoral Fellows

1. Cheng-Wei Huang, 03/2022-08/2025.

PhD

1. Tarannum Khandoker, 06/2025-present.
2. Morgan Thornwell (née Tholl), 06/2026-present.

M.S. Thesis Supervisor

1. Md. Jahidul Islam, 09/2025-present.
2. Duncan Turley, 09/2024-present.
3. Danlyn Brennan, *Modeling Leaf-Level Transpiration: Exploring the Consequences of Assumed Saturated Vapor Pressure in Leaves*, 06/2021-06/2023.
4. Morgan Thornwell (née Tholl), *Learning From Machines: Insights in Forest Transpiration Using Machine Learning Methods*, 11/2020-08/2022.

M.S. Project Supervisor

1. Josh Gottlieb, *Mechanistic Simulation of Hydraulic Functioning Under Salinity: Roles of Osmotic Adjustment and Internal Water Storage using Pecan (Carya Illinoiensis) as a model crop*, 09/2024-08/2026.

PhD Committee

1. Achyuth Ravilla, *Sustainability Assessment of Photovoltaic Cells in Cross-Functional Applications*, 2025.
2. Junjie Chen (Department of Geography), *Post-Wildfire Water Quality Dynamics: A Multiscale Examination and Predictive Modeling of Stream Temperature and Turbidity in Western U.S. Watersheds*, 2024.

M.S. Committee

1. Punyotoya Paul (Department of Environmental Science and Management), *The Fate of Recycled Water in Restored Wetlands*, 2025.

Undergraduate Research

1. Harper Thomson, *Ecoroof runoff mitigation comparison by photosynethic pathway in three specis of interest*, 06/2025-present.
2. Abigail Chable, *Modeling vegetation water stress on green roofs: A study on Idaho Fescue (Festuca idahoensis)*, 06/2024-present.
3. Arely Corro Sanchez, *Energy balance on green roofs: Three species comparison*, 06/2024-present.
4. Rory Price, *Reversing the flow: Mechanistic modeling of foliar water uptake in saturated and unsaturated leaf environments*, 06/2024-present.
5. Roberto Palacios, *Ecosystem-based spatial validation of machine learning models for global plant transpiration prediction*, 06/2025-08/2025.
6. Shanaya Spang, *Ecoroof water balance monitoring*, 10/2023-03/2024.

7. Camellia Tran, *Modeling foliar water uptake in Quercus rubra (Northern Red Oak)*, 06/2023-06/2024.
8. Duncan Turley, *Differentiating dynamic system outcomes in CAM photosynthesis through sonification*, Undergraduate Honors Thesis, 06/2023-06/2024.
9. Cara Swift, *Vegetation impact on green roof performance*, 06/2023-09/2024.
10. Alden Woodrum, *Soil water retention in ecoroof media*, 22/2022-06/2023.
11. Faye Parish, *Understanding nutrient response in the resource limited crop Opuntia ficus-indica*, 06/2023-06/2024.
12. Josh Gottlieb, *Hydraulic redistribution under saline conditions*, Undergraduate Honors Thesis, 02/2021-06/2022.

High School Internships

1. Amelia Kuelgen, St. Mary's Academy, *Green roof stormwater retention*, 02/2025-06/2025.
2. Georgia Hoffbeck, St. Mary's Academy, *Calibration of tipping bucket flow gauges for ecoroof runoff monitoring*, 02/2023-06/2023.

Student Awards

1. 2026 American Water Works Association Pacific Northwest Fresh Ideas Competition Second Place Poster, *Md. Jahidul Islam and Duncan Turley*
2. 2026 American Water Works Association Pacific Northwest Fresh Ideas Competition Third Place Poster, *Md. Jahidul Islam*
3. 2026 American Geophysical Union Hydrology Section Bridges to the Future Grant, $2,000, *Rory Price*
4. 2025 Sustainable Stormwater Symposium Second Place and Audience Favorite Scholarship, $3,000, *Rory Price*
5. 2025 Sustainable Stormwater Symposium Third Place Scholarship, $1,000, *Arely Corro Sanchez*
6. 2025 Maseeh College of Engineering and Computer Science Showcase Award, *Arely Corro Sanchez*
7. 2022 PSU Three Minute Thesis Competition Winner, *Morgan Thornwell (née Tholl)*
8. 2021 Gregory K and Mary Chomenko Hinckley Scholarship, $14,400, *Danlyn Brennan*

SERVICE

Professional

2025-present	Associate Editor, Journal of Hydrology
2022	Session co-chair, Frontiers in Hydrology
2020	Session co-chair, American Geophysical Union Fall Meeting

University, College, and Department

2026	Mentoring Academy co-facilitator, Portland State University Center for Internship Mentoring and Research
2024-present	Department Outreach Committee
2024-present	Department Instructional Laboratories Committee
2022-2023	Department Faculty Search Committee
2020-2023	Department Graduate Admissions Committee

Panelist

2026 National Science Foundation
2022 National Science Foundation
2021 Department of Energy
2021 National Science Foundation (ad-hoc grant reviewer)

Reviewer

(Year denotes first year I reviewed for that journal.)

2025 Journal of Hydrology
2025 Journal of Geophysical Research - Biogeosciences
2025 Water Resources Research
2022 Agricultural and Forest Meteorology
2021 Irrigation and Drainage
2019 Proceedings of the National Academy of Sciences
2019 Hydrological Processes

Outreach

Tree sap flux sensing workshop, Portland Community College - Rock Creek, May 6 2026
Community College Transfer Day, Ecohydrology Demonstrations, February 27 2026
David Douglas High School Career Day Presenter, November 20 2025
Civil & Environmental Engineering outreach presentation, Clackamas Community College, November 5 2025
Bring Your Kids to Campus Day, Watershed Demonstration, April 4 2025
MESA Career Fair, Ecohydrology Demonstration, April 17 2024

Significant Professional Development

2024 Portland State University Center for Internship Mentoring and Research,
Mentoring Academy, November 12-21, 2024
2024 Portland State University Center for Executive and Professional Education
Conflict Management, October 31, 2024
2021 National Association of Geoscience Teachers,
Early Career Geoscience Faculty workshop, July 26-29, 2021
2021 Portland State University Inclusive Excellence Course Based Undergraduate Research
Experience (CURE) Workshop, September 7-10, 2021
2021 National Effective Teaching Institute NETI-3 Online Teaching Workshop
January 4-5, 2021

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

2025 Sigma Xi Scientific Research Honor Society
2023 Society of Women Engineers
2021 National Association of Geoscience Teachers
2016 American Geophysical Union
2015 Chi Epsilon Civil Engineering Honor Society