

# AEESP Newsletter

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Need to renew your AEESP membership? Go to "Membership > Renew My AEESP Membership" on the AEESP Website: [AEESP.org](http://AEESP.org)

### **AEESP Newsletter Submissions**

Please send news, conference announcements, job postings, letters to the editor, and other contributions to the newsletter to Kyle Doudrick at [kdoudrick@nd.edu](mailto:kdoudrick@nd.edu). The next newsletter will appear in July 2026.

## **President's Letter: Spreading Light**

By Kara L. Nelson, Ph.D.  
University of California, Berkeley



If you are reading this from the Northern Hemisphere, the shortest days of the year are behind us, and we have more light to look forward to. While the daylight waned throughout the fall, AEESP activities ramped up to compensate - the AEESP calendar was action-packed!

There was so much to keep track of so we revised the [Events](#) section of the website (and a "Recent Events" section will be added soon). We aim for this to be a "one-stop shop" that you can check; please send details of any AEESP-sponsored events to Brian Schorr ([bschorr@aeesp.org](mailto:bschorr@aeesp.org)) to be posted.

If you missed an event, recordings of many activities are available on our [AEESP Profs](#) YouTube channel so you can catch up whenever you like: Future Faculty Seminars featuring eight outstanding speakers (collected under a playlist for "Student Postdoc Services Future Faculty Series"); two Education Committee webinars (The Scholarship of Teaching and Learning, Developing a Global Mindset in Environmental Engineering Students); and webinars by REGENESIS, OLI Systems Inc, and Dynamita (collected under a playlist for "Sustaining Member Webinars"). We also have a new playlist for our AEESP Distinguished Lecturers, which has both of Elizabeth Edwards' talks and we will soon be adding Lynn Katz's talks. On that note, our current [Distinguished Lecturer David Sedlak](#) is partway through his world tour; he has visited five schools and has 11 more stops this Spring. I've enjoyed hearing about his visits from posts on LinkedIn.

Another important update is our LinkedIn presence. Our original LinkedIn "group" had limited functionality, as it isn't possible to tag groups. After researching options, the Internet Resources Committee created a new 'company' page that can be tagged using [@AEESP](#) (see IRC announcement on page 3). We

are part way through the transition, with ~500 followers of the new page. We hope to transition all 3,000 members of our AEESP group to followers of our page. Please follow it if you haven't already. You are also invited to follow the "Voices of AEESP" page that is run by the Voices of AEESP Community of Practice.

These events and improvements happen because of the dedicated efforts of our committees. Thank you! To further support the work of our committees, the Board approved a small grants program (up to \$5,000) at our September meeting, which was announced to our Committee Chairs in November. Proposed activities should benefit AEESP members and be aligned with AEESP's [vision and mission](#) as well as the charge of the committee. Details for how to prepare and submit a proposal can be found [here](#). I commend the Board for doing an excellent job stewarding our funds for the last few years, which makes this grant program possible.

In October, I invited AEESP members to apply to join two task forces. With help from the Board of Directors, 10 members were selected to form the Policy Toolkit Task Force and 23 members were selected to form the Grand Challenges Task Force. Each group kicked off monthly meetings in January; meetings of smaller groups and other supporting activities will occur in parallel to move the work forward. In addition, there will be opportunities for AEESP members to provide input to the work of each task force through consultations, input sessions, and possibly surveys. These will be announced through our email listserv and social media, so stay tuned! Additional detail about these efforts is provided below, organized around the three strategic areas that are my focus this year.

**Public Engagement.** To kick off activities related to public engagement, AEESP hosted the webinar "The Art of Science Communication" with Dr. Dione Rossiter in November. Even though it was my second time

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AEESP Membership Application:

[www.aeesp.org/membership](http://www.aeesp.org/membership)

### President's Letter (cont.)

hearing this talk, I took away new skills and insights in addition to having some good laughs. If you missed the event, you can request a copy of the slides and recording of the webinar by emailing me ([karanelson@berkeley.edu](mailto:karanelson@berkeley.edu)) or Brian Schorr ([bschorr@aeesp.org](mailto:bschorr@aeesp.org)). Our Policy Toolkit Task Force kicked off in January. We aim to develop resources for our members about (1) how to engage in different types of policy-relevant work as well as how universities credit such work, and (2) how to describe that work in tenure/promotion materials. In addition, we will consider ways to recognize our members for policy engagement.

**Grand Challenges in Environmental Engineering.** Members of the Grand Challenges Task Force will guide and contribute to an assessment of progress towards addressing the [Grand Challenges of Environmental Engineering](#). The initial activity will consist of bibliometric and content analysis of research publications; the task force will establish the specific research questions and methods. A manuscript will be prepared for submission to *Environmental Engineering Science* in fall 2026. It is expected that the initial analysis will lead to follow-on questions, analysis, and activity, including a workshop at the AEESP 2027 conference.

**International Connections.** In this newsletter you will find two articles titled "International Spotlight." Each spotlight article describes an international organization with whom we have a shared purpose. With these features, which I hope will become a regular part of our newsletters, we aim for our members to learn about the work of other organizations which may lead to further ideas for international partnerships either as individuals or through AEESP. I extend my gratitude to Prof. Kyoung-Yeol Kim and Prof. Daniel Oerther for leading the first two International Spotlights! Please contact me if you have suggestions for a future Spotlight.

As emphasized in the NASEM Grand Challenges report and articulated in Blaney et al. ("Another Grand Challenge: Diversity in Environmental Engineering", *Environmental Engineering Science*, 35(6): 568-572, 2018), our field must continue to diversify our demographics if we are to make progress addressing the grand challenges. AEESP remains steadfast in our commitment to advancing diversity. Last year our DEIA Committee, with input from the Board, developed an updated statement that is posted on our [About](#) page:

*"AEESP supports and encourages diversity, equity, inclusion, access, justice, and belonging in research, teaching, public engagement, and professional practice. We seek to eliminate systemic barriers that limit these goals. Diversity is a critical source of collective strength necessary to foster global stewardship."*

To assist us in measuring our progress toward diversifying the demographics of our organization, we collect anonymized demographic data from our members annually. The current survey was updated in 2022 using best practices learned through our engagement with ACCESS+, an NSF-funded partnership that aims to improve diversity, equity, and inclusion in professional societies. The survey results are useful in many ways, such as to inform our programming and recruitment efforts, encourage more engagement in AEESP, and help us to be more inclusive of our members. We report the aggregate survey data each year in the October newsletter, and our Membership and Demographics Committee is currently conducting a trend analysis now that we have three years of data.

**President's Letter (cont.)**

Thank you for all you are doing – individually and collectively – to make our community stronger. As the days get longer, let us continue to spread the light.

*"There are two ways of spreading light: to be the candle or the mirror that reflects it."*  
 - Edith Wharton



Kara L. Nelson, Ph.D.  
 2025-26 AEESP President

**Changes to AEESP's Social Media**

*By Joe Charbonnet, Ph.D., Chair, AEESP Internet Resources Committee, Iowa State University*

If you still think that the kids are saying "6-7" to refer to a slightly acidic pH range, it's time to update how you follow AEESP on social media. As the environmental engineering and science community changes how it communicates, AEESP is changing too. We're shifting our focus to posting on Bluesky and LinkedIn, where engagement is growing. Be sure to follow us on Bluesky [@aeesprofs.bsky.social](https://bsky.app/profile/aeesprofs.bsky.social) and on LinkedIn [linkedin.com/company/aeesp](https://www.linkedin.com/company/aeesp). We'll also maintain our presence on Instagram ([@aeesprofs](https://www.instagram.com/aeesprofs)) and Facebook ([facebook.com/AEESPROFS](https://www.facebook.com/AEESPROFS)).

Beginning on April 1 (no joke!), AEESP will no longer maintain its presence on X (Twitter), as many of our members and peer organizations have stopped their activity on the platform. As our engagement was naturally declining, we will instead use that account to point toward our active platforms. We will similarly discontinue use of our private LinkedIn *Group* in favor of our new, public LinkedIn *Page*, which allows wider access and facilitates communication amongst our members.

## Connect with AEESP

**AEESP on LinkedIn**  
[www.linkedin.com/company/aeesp](https://www.linkedin.com/company/aeesp)  
 or Search: "AEESP" on LinkedIn.com




**AEESP on Bluesky**  
[@aeesprofs.bsky.social](https://bsky.app/profile/aeesprofs.bsky.social)  
 or Search: "AEESP" on bsky.app




## AEESP Foundation Recognizes the Contributions of 2025 Donors

By Phil Larese-Casanova, Ph.D., Chair, AEESP Foundation, Northeastern University



The AEESP Foundation works to enhance the public outreach and education efforts of AEESP members and to encourage excellence in environmental engineering and science education and research. The Foundation accomplishes this mission, in part, by providing stewardship of the financial resources needed to support the AEESP Distinguished Lecturer Series and AEESP Awards. In recent years, the Foundation has worked to endow several awards, which ensures that the AEESP Foundation can continue to provide cash prizes, plaques, and travel stipends to award recipients.

The AEESP Foundation is grateful to all of the individuals who generously donated to the AEESP Foundation in 2025, listed below in alphabetical order:

- Nirupam Aich, University of Nebraska Lincoln
- William Arnold, University of Minnesota
- Shannon Bartelt-Hunt, University of Nebraska Lincoln
- Jennifer Becker and Eric Seagren, Michigan Technological University
- Lee Blaney, University of Maryland Baltimore County
- Douglas Call, North Carolina State University
- José Cerrato Corrales, University of New Mexico
- Megan and Cliff Davidson, Syracuse University (*donation in memory of Dr. Richard Luthy*)
- Francis DiGiano, University of North Carolina Chapel Hill
- Michael Dodd, University of Washington
- David Dzombak, Carnegie Mellon University
- Matthew Eckelman, Northeastern University
- Elizabeth Edwards, University of Toronto
- David Freedman, Clemson University
- Jeremy Guest, University of Illinois at Urbana-Champaign
- Charles Haas, Drexel University
- Ramanitharan Kandiah, Central State University
- Heileen Hsu-Kim, Duke University
- W. Andrew Jackson, Texas Tech University
- Ryan Kingsbury, Princeton University
- Yalin Li, Rutgers University
- Karl Linden, University of Colorado Boulder
- Allison MacKay, The Ohio State University
- Susan Masten, Michigan State University
- Eugene McCall, McCall Environmental, P.A.
- Juan Fausto Ortiz Medina, Arizona State University
- Junko Munakata Marr, Colorado School of Mines
- Kara Nelson, University of California, Berkeley
- Kurt Pennell, Brown University
- Carsten Prasse, Johns Hopkins University
- Alan Rabideau, University at Buffalo
- Debora Frigi Rodrigues, Clemson University
- Lewis Semprini, Oregon State University
- Lindsay Soh, Lafayette College
- Peter Strom, Rutgers University
- Belinda Sturm, University of Kansas
- Qingqing Sun, University of Missouri
- Jessica Wilson, Manhattan University
- Yuefeng Xie, Penn State University

Additionally, several individuals opted to remain anonymous in their donations, and we greatly appreciate their support as well.

To learn more about the AEESP awards, including their endowment status, please visit <https://aeespfoundation.org/awards>. To make a contribution to the AEESP Foundation via credit card, please visit <https://aeespfoundation.org/donate> or contact Brian Schorr by email at [bschorr@aeesp.org](mailto:bschorr@aeesp.org) or via telephone at 202-261-1309.

### Nominate a Colleague to be a 2026 AEESP Fellow!

There is still time to nominate a colleague to be a 2026 AEESP Fellow. The [deadline to submit Fellows nominations](#) is **11:59 pm ET (U.S.) on Sunday, March 15, 2026**. 2026 AEESP Award and Fellow Recipients will be recognized during AEESP's online ceremony on Tuesday, June 23 at 12 pm ET / 9 am PT. In-person recognitions will be held during the 2027 AEESP Research and Education Conference.

## International Spotlight: The Global Platform of IFEES and Opportunities for AEESP

By Daniel D. Oerther, Ph.D., F.AEESP and Hans Jürgen Hoyer, Ph.D., Executive Director, IFEES



The Association of Environmental Engineering and Science Professors (AEESP) is uniquely positioned to lead the global response to planetary-scale challenges. Our mission to educate the next generation requires a perspective that spans continents and disciplines. In this spotlight, we introduce the International Federation of Engineering Education Societies

(IFEES), an important international partner for expanding the impact of environmental engineering education and scholarship.

Founded in 2006, IFEES is a global network of engineering educators and allies whose mission is to advance engineering education worldwide by identifying, sharing, and promoting effective practices. Headquartered in Frederick, Maryland, the Federation is truly international, with more than 85 member organizations representing over 30 countries across the Americas, Europe, Africa, Asia, and the Pacific. Its diverse membership includes engineering education organizations (e.g., American Society for Engineering Education, ASEE), corporate partners (e.g., ABET Inc.), professional societies (SAE, ASME, IEEE), and academic institutions. The collaborative authorship of this spotlight – including Dr. Oerther, Fellow of AEESP and Dr. Hoyer, Executive Director of IFEES – underscores the strong link between our professional communities.

### A Shared Mission: Sustainability and Systems Thinking

The topical areas championed by IFEES align directly with AEESP's core mission. IFEES has made the UN's 17 Sustainable Development Goals (SDGs) a central focus of engineering curriculum reform. This commitment creates meaningful common ground with AEESP members, whose expertise in water and sanitation, clean energy, and climate action directly supports key SDGs.

IFEES recognizes that preparing engineers for the 21st century means leveraging deep scientific expertise to create systems-level solutions for society's grand challenges. The Federation actively promotes methodologies such as Problem-Based Learning (PBL) to foster interdisciplinary collaboration and to integrate social and behavioral in-

sights into sustainability. This global perspective encourages environmental engineering education to develop "V-shaped professionals" – individuals who converge disciplines towards a better future. Many AEESP members are already exemplifying this model through innovative teaching and research that connect technical excellence with societal impact, an approach IFEES seeks to amplify worldwide (i.e., Oerther's presentation to IFEES on YouTube: <https://www.youtube.com/watch?v=czE2ry90-ec/>).

### Global Visibility and Recognition

IFEES offers an important platform for AEESP members to share their work and connect globally. As the major collaborating partner with the Global Engineering Deans Council (GEDC), IFEES co-organizes the annual World Engineering Education Forum (WEEF), a premier international venue for faculty and students to engage on issues such as human-centered engineering education and sustainable innovation.

To recognize and celebrate excellence in sustainability-focused education, IFEES sponsors several global awards:

- Quanser Global Sustainability Award: Offered in partnership with Quanser and GEDC, this award recognizes initiatives that integrate sustainability education and address the UN SDGs at the undergraduate and master's levels.
- Lueny Morell Award: Honors excellence in educational innovation across all STEAM fields, offering AEESP faculty another opportunity for international visibility.
- Duncan Fraser Global Award for Excellence in Engineering Education: Celebrates individuals or teams whose contributions have significantly advanced engineering education.

While IFEES primarily supports its member societies, it also accepts gifts, grants, and legacies—laying the foundation for future collaborative projects that could fund global environmental engineering initiatives.

### Engagement Opportunities for AEESP Members

AEESP members are encouraged to engage with IFEES to help shape the next generation of global engineering education:

### **International Spotlight (cont.)**

- **Contribute Your Scholarship:** Share your expertise on sustainability and curriculum innovation through IFEEES-affiliated publications and working groups.
- **Join the Conversation:** Participate in the annual WEEF/GEDC conference or volunteer with IFEEES's special interest groups (SIGs) on sustainability and innovation. Your insights into water, air, and climate systems are vital to advancing environmental engineering education worldwide.
- **Seek Global Recognition:** Submit your teaching and educational initiatives for consideration in IFEEES's international award programs to highlight AEESP's leadership in environmental education.

By embracing this global platform, AEESP members can help accelerate the transformation of engineering education needed to build a sustainable and resilient future for all.

Contact: Daniel B. Oerther ([oertherd@mst.edu](mailto:oertherd@mst.edu)) and visit [www.ifees.net](http://www.ifees.net) for additional information.

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## **International Spotlight: Korean Society of Environmental Engineers (KSEE)**

*By Kyoung-Yeol Kim, Ph.D., University at Albany, SUNY, and Jin Chul Joo, Ph.D., KSEE vice-president for International Collaboration, Hanbat National University, South Korea*

**About KSEE.** The Korean Society for Environmental Engineers (KSEE) is an academic organization established in 1978 in South Korea. KSEE has been dedicated to advancing environmental engineering technologies, connecting members for knowledge exchange and collaboration, and assisting the government with establishing new policies or regulations to protect the environment. KSEE is the largest society for Environmental Engineers in Korea with 11,046 registered members (as of 2025) from academic institutions (faculty and students, 55%), government agencies (23%), and industries (16%). Topical areas of interest are not limited; KSEE covers all aspects of the environmental engineering field.

**KSEE sponsors conferences and professional meetings.** This year (in November), the KSEE annual conference was held in Jeju Island, where 1,813 members participated from academia and industries. There were 18 special sessions or workshops, and 326 oral and 485 poster presentations in regular sessions. To encourage participation from young scholars and students, KSEE offers a travel grant for selected participants and events such as a lucky draw during the banquet (a new iPhone 17 Pro for a winner this year). KSEE has been devoted to assisting early-stage scholars. KSEE coordinates a special session (called the PIVOT program) only for early-career scholars (mostly postdocs) during the annual conference to give them opportunities to advertise themselves. Not only annual meetings, but KSEE also holds a Specialized group meeting every summer, which focuses on more in-depth technical meetings for members who have similar research interests. These are two major meetings for KSEE members, and there are a few more regional meetings and networking events to connect members.

**KSEE publishes journals.** To help members share and disseminate the research outcomes and reports, KSEE publishes domestic (in Korean, Journal of Korean Society of Environmental Engineers, eISSN: 2382-7810) and international journals (English only, Environmental Engineering Research, eISSN:2005-968X, SCIE, Open Access). The international journal was indexed in the Web of Science database in 2015.

**KSEE actively participates in the environmental policy and decision-making processes of government and public institutions.** KSEE sends experts to key government institutions, including the Ministry of Environment, the National Institute of Environmental Research, the Korea Environment Corporation, and the Korea Environmental Industry & Technology Institute, to provide advice on improving policies and systems related to water quality, air, waste, soil, and emerging pollutants (PFAS, microplastics, etc.). KSEE also actively participates in the planning and evaluation of national research and development projects, providing professional review and technical advice in various areas.

**Community engagement and educational activities by KSEE.** For local communities, KSEE offers open lectures and information sessions on environmental health, water quality management, and household waste reduction; environmental science experience programs for schools and youth groups; career exploration training; and basic education on water and air environments. Furthermore, KSEE collaborates with universities and research institutes to host workshops for training the next generation of environmental engineers, and environmental technology contests (for undergraduate students) to

draw more attention from prospective environmental engineers.

**Funding and award opportunities from KSEE.** Although KSEE does not offer research grant programs, KSEE has continuously expanded its financial programs, including academic research awards for outstanding papers, support for students and early-career researchers, and support for academic events, with the goal of strengthening industry-academia-research collaboration. To encourage high-standard research contributions, KSEE awards members for prizes such as the Award from Minister of Environment, Outstanding Paper Award, Academic Achievement Award, Innovative Technology Award, and Young Environmental Engineer Award (along with some cash that can be used for their research activities). The ultimate honor is “Doosan Yonkang academic award” (sponsored by Doosan Yonkang Foundation). This prestigious award is open to all researchers who have contributed to the field of environmental engineering, with only two recipients selected annually to receive a cash prize of approximately \$27,000.

**Here are some ideas to connect AEESP and KSEE members.** 1) Establishing a research collabora-

tion platform-- organizing a joint working group on emerging topics, co-hosting regular joint workshops or seminars. 2) Scholar exchange and visiting program-- short or long-term visiting scholar program for faculty and graduate students, invitation to the conference, and organizing special sessions at the conference. 3) Developing an online teaching module and organizing a mentoring program for early-career scholars. 4) Inviting AEESP members for international consulting and task forces for the Korean governmental policy and regulation.

**Message from the KSEE president-elect** (Prof. Sung Kyu Maeng, Sejong University, Korea): On behalf of the Korean Society of Environmental Engineers (KSEE), I sincerely appreciate the opportunity to be introduced through the AEESP Spotlight. I would also like to express my gratitude to AEESP for its efforts in promoting global collaboration in environmental science and engineering. KSEE shares the same vision as AEESP of being “a collaborative, supportive, and diverse community of researchers and educators in environmental engineering and science.” Together, we can pave the way for a more sustainable future through robust academic exchange and mutual growth. We look forward to strengthening our collaboration.

## AEESP Student and Post-Doc Services Committee News

The AEESP Student and Postdoc Services Committee wrapped up another successful Academic Job Application Review Program in Fall 2025. The program links student and postdoctoral researchers who are interested in applying for academic jobs with faculty members who provide individualized advice to strengthen academic job applications. In this virtual program, participants interacted with professors from different institutions to receive comments on their draft documents that comprised an application for a faculty position as well as to get perspectives on job expectations for respective position types.

During Fall 2025, the AJAR Program engaged 50 participants and 43 faculty reviewers. Of the participants, eight were selected for the Future Faculty seminar series, where they delivered presentations on their work to the academic community and participated in mock search committee interviews. These presentations are available on the [AEESP Profs YouTube channel](#). We thank all program participants and reviewers. Missed the 2025 AJAR program? The next cycle will open in July!

### Future Faculty Participants and Presentations

- Hannah Spero, Ph.D. Candidate, University of Notre Dame  
Title: When Storm Waves Move Boulders: Linking the Field to Models
- Dr. Ke Zhang, Postdoctoral Researcher, University of Michigan

Title: From Influenza Viruses to Emerging Genetically Modified Crops: A Glance at Environmental Biorisk Assessment

- Dr. Quanhui Ye, Postdoctoral Researcher, University of Illinois Urbana-Champaign  
Title: Harnessing Synthetic Biology for Environmental Solutions
- Dr. Hunter Quon, Postdoctoral Research Scholar, Arizona State University  
Title: Integrating Data, Microbes, and Society: Modeling for Sustainable Water and Health
- Dr. Seju Kang, Postdoctoral Fellow, EAWAG, Switzerland  
Title: Transforming Environmental Health Surveillance and Epidemiology for an Equitable and Affordable Future
- Dr. Mary Kate Lane, Postdoctoral Researcher, Massachusetts Institute of Technology  
Title: Defossilizing the Chemical Industry Through Design and Deployment of an Agile and Sustainable Bioeconomy
- Dr. Yuxuan Huang, Postdoctoral Researcher, Rice University  
Title: Advancing Selectivities of Ion-Exchange Membranes for Water, Energy, and the Environment
- Dr. Onja Davidson Raelison, Postdoctoral Fellow, Stanford University  
Title: Leveraging Nature-Based Solutions to Mitigate the Environmental Health Impacts of Wildfires

## Spotlight: Environmental Engineering Science, AEESP Journal

AEESP Publications Committee: Dr. Adeyemi Adeleye, Columbia University, Dr. Baolin Deng, University of Missouri, Dr. Venkataramana Gadhamshetty, South Dakota School of Mines and Technology, Dr. Veera Gnanaswar Gude, Purdue University Northwest/Purdue University, Dr. David Ladner, Clemson University, Dr. Elodie Passeport, Rutgers University

The “Spotlight” column draws attention to selected articles in *Environmental Engineering Science* (EES), the official journal of the Association of Environmental Engineering and Science Professors (AEESP). Spotlight articles appear three times per year in the journal as well as in the AEESP newsletter. Through the publication of high-quality peer-reviewed research, EES helps AEESP achieve its mission of developing and disseminating knowledge in environmental engineering and science. In this entry, we shine the spotlight on selected articles from the July 2025 through October 2025 issues of EES. Congratulations to all whose work is highlighted.

[William A. Arnold, Gudrun Lock, Emily L. Goff, Natasha Wright, Martha B. Weitekamp, and Paige J. Novak R. \(2025\)](#). “Circularity and sustainability: A course that advances critical thinking and teamwork via art, community, and policy.” *Environmental Engineering Science*, 42(8), 329-339. (DOI: 10.1089/ees.2025.0040)

Based on the belief that true circular systems need the combined effort and perspectives of scientists, engineers, policy-makers, cultural leaders, industry, and the community, a three-credit survey course titled “A Circularity Revolution: Working to Close the Loop on Global Issues” was developed as part of a University of Minnesota National Science Foundation-funded Research Traineeship (NRT) program. The course targets upper-division undergraduate students and graduate students in STEM and policy disciplines who are interested in sustainability and circularity. The article by **Arnold et al. (2025)** describes the course’s learning objectives, approach, structure, and outcomes across its three offerings.

The course was developed collaboratively by engineering professors, a consulting artist, and an evaluator. It is co-taught by an environmental engineering professor and the consulting artist, with guest speakers from business and policy invited to present real-world circularity examples. Topics focus on frameworks and basic tools for achieving and interrogating circularity, such as systems thinking, life-cycle assessment, mass balances, solution co-creation, and basic policy tools. Enrollment ranged from 13 to 25 students over the three offerings covered in the article. Course assignments included (i) analyzing four case studies presented in class (case-based learning), (ii) critically reflecting on individual and disciplinary identity to build shared mental models, and (iii) completing a large project in an interdisciplinary team (project-based learning).

Both qualitative feedback and quantitative evaluations using the Interprofessional Socialization and Valuing Scale (ISVS-21) revealed statistically significant improvements in students’ teamwork skills, interdisciplinary communication, and ability

to tackle complex problems from multiple perspectives. The interdisciplinary group projects were particularly successful, with students reporting increased confidence in articulating their expertise and collaborating across disciplines. Based on iterative evaluations and instructor reflections, the course evolved over its three offerings—for example, fully integrating the artist as a co-instructor from Day 1 and helping students “right-size” their project topics. The authors provide detailed lessons learned and recommend that other institutions adopt similar co-taught courses to train circularity professionals who can work effectively across disciplines.

[Nicholas Herkert, Bekir Zahit Demiray, Ibrahim Demir, Andres Martinez, and Keri C. Hornbuckle \(2025\)](#). “Web-based data analytics framework for polyurethane foam passive air sampling rate and effective volume.” *Environmental Engineering Science*, 42(9), 370-380. (DOI: 10.1177/15579018251359733)

**Herkert et al. (2025)** describe an open-source web-based interface that calculates and plots hourly sampling rates and effective sampling volumes for polyurethane foam passive air samplers (PUF-PAS) anywhere on the globe. The model is coupled with Google Maps for location, the MERRA database for meteorological data, and a chemical database containing molecular weight, internal energy of transfer, the octanol-air partitioning coefficient, and linear free energy relationship parameters for 209 polychlorinated biphenyl compounds (PCBs). While the model was originally developed for PCB, it can be used for other semi-volatile organic chemicals whose sampling rates are expected to be similar to those of PCBs. The model can be used to estimate the deployment duration of PUF-PAS and identify chemicals that might saturate and is an excellent example of the use of web-based technologies to collect and manage environmental data.

[Ernesto J. Perea, Tybur Q. Casuse Driovinto, Brian R. Ellis, Michael Spilde, Eric J. Peterson, Abdul-Mehidi S. Ali, Angelica Benavidez, Bruce Thomson, John C. Stormont, and José M. Cerato \(2025\)](#). “Wellbore Integrity in Energy Applications: Precipitation Products after Reaction with Produced Water from the Permian Basin.” *Environmental Engineering Science*, 42(10), 434-444. (DOI: 10.1177/15579018251378317)

Long-term integrity of oil and gas wellbores is important for preventing upward migration of produced water (PW), hydrocarbons, and gas into overlying aquifers. While mechanical degradation of cemented wells is well documented, the geochemical controls on microannulus permeability at the casing–cement interface remain insufficiently understood. **Perea et al. (2025)** investigate the coupled chemical and

### Environmental Engineering Science Spotlight (cont.)

hydraulic evolution of the steel–cement microannulus following exposure to both field-sampled and simulated Permian Basin PW under controlled laboratory conditions. Using X-ray diffraction, electron probe microanalysis, aqueous geochemistry, and gas-flow–based hydraulic aperture measurements, the study directly links secondary mineral precipitation to changes in annular permeability. Results show that interaction between PW and cement elevates pH through dissolution of cementitious phases, driving supersaturation with respect to carbonate, sulfate, and silicate minerals. Importantly, these findings challenge the assumption that chemical reactions at the casing–cement interface are uniformly detrimental. While corrosion and cement alteration occur, precipitation-driven pore filling partially occludes leakage pathways, reducing permeability under the conditions studied. By quantitatively coupling mineralogical transformations with flow measurements, this work provides experimental evidence that reactive sealing processes may enhance annular integrity in high-salinity environments. The study highlights the need to integrate reactive transport, mineral precipitation kinetics, and long-term geochemical evolution into wellbore integrity assessments, informing both environmental risk evaluation and the design of more resilient cement systems for energy applications.

[Michael A. Butkus, Nolan T. Owens, Philip J. Dacunto, and Andrew R. Pfluger \(2025\)](#). "An Estimate of Greenhouse Gas Emissions from Light Duty Vehicles Resulting from Traffic Calming Stops in the US Suburbs" *Environmental Engineering Science*, 42(11), 467-475. (DOI: 10.1177/15579018251380486)

Road transport contributes significantly to greenhouse gas (GHG) emissions in the U.S. and traffic calming measures can be

key contributors. Traffic calming measures such as all-way stop (AWS) intersections are often implemented to facilitate the pedestrian and cyclist safety but without the concern for vehicle exhaust emissions. In this context, light duty vehicles in both urban and suburban settings can become significant GHG emitters. **Butkus et al. (2025)** estimated the GHG emissions from gasoline and electric power light duty vehicles generated from traffic calming stop signs in U.S. suburban neighborhoods under low traffic volume conditions. They used deterministic models to determine the estimates for different types of vehicles under specific conditions, while stochastic models (Monte Carlo simulation) were used to take the variability and uncertainty of individual stop signs and associated data inputs. The study reported that a triple increase in speed limit (from 15 mph to 45 mph) could increase the emissions by 102% and 84% for sedan/wagon class and pickup class vehicles, respectively, indicating the key contribution of traffic calming stops. According to the stochastic modeling, on average, one million metric tons of carbon equivalent GHG emissions per year resulted from traffic calming stops at a speed limit of 15 mph and three million metric tons of carbon equivalent GHG emissions per year resulted from traffic calming stops at a speed limit of 30 mph. The study concluded that AWS intersections contribute the most to GHG emissions and recommended steps to eliminate or optimize these measures for roadways with higher speed limits. While communities consider increased number of traffic calming stops for vehicle and pedestrian safety, there is no clear evidence that these measures protect the pedestrians. The findings from this study inform policy makers to consider existing and new traffic safety studies to identify and eliminate traffic calming stops to avoid substantial amounts of GHG emissions.

## AEESP Presents at the 43<sup>rd</sup> Conference of the American Association for Aerosol Research (AAAR)



We would like to extend our thanks and appreciation to **Dr. Ann Dillner**, Associate Director of Analytical Research, Air Quality Research Center, at UC-Davis for providing her lecture "U.S. and Global Aerosol Speciation Monitoring Networks: Success and Opportunities" on behalf of AEESP on October 16, 2025 at the AAAR Annual Conference in Buffalo, NY. We also thank AAAR for inviting AEESP to speak at this annual event.

If you would like to nominate someone to serve as AEESP's Lecturer at this year's annual conference, [click here](#).



**American Association  
for Aerosol Research**

## ***AEESP Community of Practice: Standing on the Shoulders (S.o.S.) of Giants Conversation with Dr. Lee Blaney***

The inaugural S.o.S. Giants conversation featured Dr. Lee Blaney, Professor of Chemical, Biochemical, and Environmental Engineering at the University of Maryland, Baltimore County, and 2024–25 AEESP President. Although he was introduced as a “giant” in the community, Dr. Blaney opened by admitting that he felt a bit uncomfortable with the label, noting that he sees the profession as a collective effort. “I don’t feel like a giant,” he said. “I feel like we’re all giants... we’re all doing this thing together.” He explained that he is trying to “lean into” the opportunity by listening to the positive feedback he receives and using it as motivation to share his story.

Dr. Blaney described a very clear turning point in his academic journey. As an undergraduate at Lehigh University, he spent his first two years more focused on political activism than on a specific career path. That changed when he attended a seminar by Prof. Arup Sengupta on arsenic treatment for rural villages in south Asia. “That one-hour seminar changed my whole life, my whole trajectory, my whole mindset,” he recalled. Immediately afterward, he asked to switch his major to environmental engineering, joined Sengupta’s lab, and became part of the first undergraduate environmental engineering cohort at Lehigh.

His early research focused on developing materials for selective arsenic removal and, importantly, on how to handle arsenic-laden wastes safely in rural areas with limited infrastructure. A second key moment came during a trip to India as a master’s student, where he worked directly in affected villages, meeting people who had lost limbs or family members to arsenic poisoning and seeing children relying on contaminated water sources. “All of a sudden, it became very real for me why we do this work,” he said. “It’s to help people.” He framed his view of academia in those terms: research and teaching are ultimately about improving people’s lives and expanding opportunities for students.

During that same period, an unusual description helped connect him to his PhD advisors. Sengupta encouraged him to contact “this guy down in Texas, who’s kind of a hippie like you,” referring to Prof. Des Lawler at the University of Texas at Austin. Dr. Blaney, who had grown up listening to punk rock and looked very different from the faculty photos we see today, sent a short email and received a very long response. That exchange led him to visit UT Austin and ultimately to work with Prof. Lawler and Prof. Lynn Katz as co-advisors. He credited the alignment between his personal values and those of his co-advisors as a major element of his success as a graduate student, and he still looks for shared values in collaborators and students.

To explain how his responsibilities and perspective have evolved over time, Dr. Blaney used a story from his childhood

paper route. As a fourth or fifth grader delivering about 150 newspapers, he first learned simply to complete the task: carrying smaller batches, making multiple trips, and slowly becoming more efficient. Later, he added a bicycle to speed things up and eventually challenged himself to throw papers accurately onto doorsteps. When that became easy, he started aiming for harder targets like car roofs and trash can lids. “You can probably figure out I got fired pretty quickly after that,” he said, because customers did not appreciate finding their papers on top of cars or in trash cans.

He related this story to academic life. Early on, the goal is just to show that you can do the work: publish papers, secure grants, and earn tenure; the equivalent of carrying and delivering the papers. With experience, the focus shifts to efficiency, higher success rates, and then to “bigger projects” and “bigger impact,” analogous to more ambitious throws. Leadership roles, such as serving as AEESP President, feel to him like taking on those riskier but more impactful throws. The workload increases, but so does the potential to create programs that support the broader community. “It always gets a little bit more demanding,” he said, “but at the same time, the gratification is higher.”

On the familiar triad of research, teaching, and service, Dr. Blaney resists the idea that one must always come first. He credits a line from Des Lawler, “the best researchers should be the best teachers, and the best teachers should be the best researchers,” and has extended that mindset to include service. He views all three as integral to the job, giving them “equal weight,” even if not always equal time.

Failures and setbacks were a recurring theme in his story. Dr. Blaney emphasized that his CV does not reflect the many rejections and disappointments behind it. He referenced the film *Rocky* (set in his hometown of Philadelphia) to illustrate how he thinks about big opportunities and losses: the important part is taking the chance, not always winning. His experience with the NSF CAREER Award was a prime example. He applied in his first year as an assistant professor despite the common advice not to do so. His first proposal was rejected but received relatively constructive feedback. A few years later, with more data and experience, he submitted a second proposal that he thought was his best work, but “the panel hated it” and the reviews were the worst he had received. During the final year he was eligible, he drafted and discarded two complete proposals that he did not fully believe in, before writing a third that he felt “100%” confident about. He then sent it to multiple colleagues for critical feedback, revised carefully, and ultimately received the award “by the skin of [his] teeth” as the last proposal funded in that cycle. For him, this experience reinforced the need for resilience, openness to feedback, and persistence,

**AEESP Community of Practice: S.o.S. Giants Conversation (cont.)**

as well as the reality that rejections still hurt and often require a day or two of distance before re-engaging.

Networking and professional visibility have, in his case, been strongly tied to service in AEESP. When he first joined the association, he was willing to “join any committee that wants to have me.” Membership and Demographics was the first committee to respond, and within a few meetings, he became chair. Working with colleagues, he helped develop and publish data-driven analyses of environmental engineering student and faculty demographics. Although these papers have modest citation counts, he frequently sees them referenced in NSF broader impacts and education plans, and he feels proud of the practical impact they have had. This work, and his willingness to “throw [himself] into” committee efforts, helped bring him to the attention of the AEESP Board and eventually to the presidency. His take-home message to early-career members is that impact comes less from the number of roles one holds and more from doing each role well and consistently.

Mentorship runs through many of his stories. He described Prof. Sengupta as “like a second father” and the person who showed how academic knowledge can be used directly to help people. When asked about his own role as an advisor, he emphasized that supporting mentees covers “everything,” from listening when they need to vent, to making space for emotions, to helping them grow from one stage to another. He noted, with some pride, that his group probably “cries more than any other group,” not because he is harsh, but because students know they can be vulnerable in his office. “People don’t remember what you did, they remember how you treated them.” He has also tried in recent years to be more transparent about his own struggles. A former PhD student told him that he had made things look too easy and had not shown his own frustrations and difficulties. Since then, he has made more effort to share when he is struggling with a proj-

ject or interaction, to make the academic process more realistic for trainees and to “show people what’s behind the scenes.”

On the question of what makes students or young scholars successful, he drew inspiration from a recurring graffiti in Baltimore that reads “Bmore,” which he intentionally misread as a personal directive from the city. Rather than naming a single ideal trait, he encouraged individuals to decide what they need to “be more” of—more proactive, more resilient, more open to feedback, more positive, or more balanced—depending on their own context. He stressed authenticity and teamwork as core qualities he looks for in prospective group members: good work ethic, a positive mindset, and a genuine desire to be part of a team. There are, in his view, “lots of models for success,” and being one’s “best self” matters more than fitting a specific mold.

In the final portion of the conversation, he addressed impostor syndrome and personal well-being more directly. The invitation to be the first S.o.S. “giant” triggered the familiar “who am I?” reaction, but he has tried to channel that feeling into staying grounded and focused on doing good work rather than on titles. He also highlighted the importance of exercise and other non-work activities for managing stress and avoiding burnout. He is now a regular, if self-described “slow,” runner, going out four to five times per week and finding that running reliably reduces stress and anxiety, even when he does not notice it immediately. His broader message was that academics cannot go at “100% all the time” without consequences for both their own health and their relationships, and that intentional decompression is essential.

The session closed with audience questions on choosing collaborators, the decision to go straight from PhD to a faculty position, and how to think about research productivity.



## AEESP Community of Practice: S.o.S. Giants Conversation (cont.)

Across these topics, his answers returned to a few consistent themes: aligning values and styles when selecting collaborators (even if that means turning down opportunities), accepting that early assistant professor years are challenging regardless of prior postdoctoral experience, and prioritizing quality and impact over simple counts of papers or grants.

Reflecting on the event, AEESP President Kara Nelson noted how valuable these kinds of conversations can be across career stages. She recalled attending similar sessions as a PhD student and assistant professor and finding them “extremely motivating, reassuring, and overall helpful,” especially in seeing senior faculty as “whole multi-dimensional” people rather than only as lecturers or researchers. She added that this conversation with Dr. Blaney highlighted that such exchanges remain meaningful later in one’s career as well, and that “our community is about people and our connections to each other, and to the grand challenges our work aims to address.” This perspective captures the intent of the S.o.S. Giants community and the spirit of the inaugural seminar.

### S.o.S. Giants Community of Practice

The Standing on the Shoulders of Giants (S.o.S. Giants) Community of Practice was established within AEESP to create a dedicated space for personal and professional reflection that is distinct from traditional research seminars. The community’s goal is to facilitate conversations that highlight the people behind the science, spotlighting formative experiences, personal val-

ues, career challenges, and lessons learned from leaders across the field. S.o.S. Giants is organized by a team of early- and mid-career faculty volunteers and is envisioned as a recurring series open to all AEESP members, with each session featuring an invited “giant” whose experiences can support intergenerational learning and mentorship across the community.

### About the Speaker

Dr. Lee Blaney is a Professor in the Department of Chemical, Biochemical, and Environmental Engineering at the University of Maryland, Baltimore County. His research program focuses on contaminants of emerging concern, their occurrence and transformation in natural and engineered systems, and the development of technologies for resource recovery from municipal and agricultural waste streams. His contributions to environmental engineering research and education have been recognized through several honors, including the ES&T James J. Morgan Early Career Award, the NSF CAREER Award, and the AEESP Award for Outstanding Teaching in Environmental Engineering and Science. Dr. Blaney served as AEESP President for 2024–25, a role he has described as the most meaningful experience of his career in professional service.

### Link to the video:

<https://youtu.be/EdLebbgxU1o?si=2DaCIJ9FqTeCdX7>

**Number of participants:** ~30

**Date:** November 14, 2025

## AEESP Presents at the 2025 American Water Works Association’s Water Quality Technology Conference (AWWA-WQTC)



Drs. Caitlin Proctor  
and Chad Seidel

On November 10, 2025, **Dr. Caitlin Proctor**, Assistant Professor, Sustainability and Environmental Engineering at Purdue University, provided AEESP’s Emerging Investigator Lecture on the Association’s behalf. The title of her lecture was “*Exploring Pipe Ecology and Maintaining Water Quality at the Tap*”. **Dr. Chad Seidel**, President of Sustaining Member Corona Environmental Consulting, served as Session Chair. We thank Dr. Proctor and Dr. Seidel for representing AEESP at this annual conference, and we thank Corona Environmental Consulting for their sponsorship to support Dr. Proctor’s lecture. We also thank AWWA for hosting AEESP.

If you would like to nominate someone to serve as AEESP’s Lecturer at this year’s AWWA-WQTC, [click here](#).

**CORONA**  
ENVIRONMENTAL CONSULTING

  
American Water Works  
Association

## **MEMORIAL RESOLUTION: DR. RICHARD GODFREY LUTHY (1945-2025)**



Richard Godfrey Luthy, the Silas H. Palmer Professor of Civil and Environmental Engineering at Stanford University, died October 6, 2025 in Palo Alto. Known affectionately to his students and colleagues alike as Dick, he served on the faculty at Stanford since 2000, where he taught a variety of courses on the treatment of drinking water, urban stormwater, hazardous waste, and the sustainability of water resources in

the American West. He is the author or co-author of over three hundred technical papers and six patents on these topics.

Born in Buffalo, New York, on June 11, 1945, Luthy lived in Prairie Village, Kansas until moving to Palo Alto at age 11. After graduating from Cubberley High School in Palo Alto in 1963, Luthy obtained his B.S. in Chemical Engineering from the University of California at Berkeley in 1967, and his M.S. in Ocean Engineering from the University of Hawai'i at Manoa in 1969. After graduation, Luthy joined the Civil Engineer Corps of the U.S. Navy from 1969 to 1972, where he was a lieutenant. In the Navy, Luthy was a qualified deep-sea diver involved in salvage and underwater construction.

Influenced by the emerging environmental movement in the early 1970s, Luthy returned to the University of California at Berkeley after his time in the Navy to obtain M.S. and Ph.D. degrees in Environmental Engineering in 1974 and 1976, respectively. His dissertation included the clean-up and recovery of waste oils at the Chevron Refinery near San Francisco.

Luthy started his first faculty position at Carnegie Mellon University in 1975. His early research focused on clean-up of contaminated soils and sediments, particularly those associated with the prevalent legacy contamination sites associated with coal gasification. Other research interests included the remediation of sediments impacted by PCBs, DDT and other Persistent Organic Pollutants (POPs). At the time, remedial strategies typically involved dredging contaminated sediments and disposing of them within hazardous waste landfills. In addition to disrupting benthic ecosystems, the disturbance of sediments during dredging further disperses the contamination to adjacent sediments. Instead, Luthy pioneered the novel approach of churning activated carbons and other engineered char materials into sediments. The strong binding by PCBs and other target contaminants to these materials substantially reduces their bioavailability to benthic organisms.

Luthy illustrated this approach by demonstrating that clams placed in POP-contaminated sediments containing activated carbons exhibited limited uptake of POPs. This strategy has been adopted to mitigate contaminated sediments at many military facilities and industrial sites, thereby avoiding the dispersal of contaminants associated with dredging.

Luthy joined the faculty of Civil and Environmental Engineering at Stanford in 2000, returning to his beloved Palo Alto. He served as department chair from 2003-2009. While continuing his research on sediment remediation, the increasing frequency of droughts in California sparked Luthy's interest in the challenges California was facing in ensuring a sustainable water supply. Together with Prof. David Sedlak at the University of California at Berkeley, Luthy led a National Science Foundation Engineering Research Center entitled Re-Inventing the Nation's Urban Water Infrastructure (ReNUWit) from 2011 to 2022. Involving Stanford, Berkeley, the Colorado School of Mines and New Mexico State University, ReNUWit was dedicated to developing urban stormwater, municipal wastewater and other impaired waters as local, sustainable water supplies to urban centers in the arid West. Focusing on moving innovative technologies from the laboratory towards pilot-scale, ReNUWit fostered collaborations between these universities and utility partners that persist to this day.

Luthy was widely sought out for in 2005 his significant contributions to environmental engineering education, research, and practice, and for his extraordinary vision in seeing the future of the field. "In the field of water quality and supply, we can either do things differently or just keep muddling along," Luthy once said. He served on numerous academic advisory boards and visiting committees, as well as committees of the National Science Foundation, the Environmental Protection Agency, the National Research Council, and the National Academy of Engineering. Luthy also held positions in the Association of Environmental Engineering and Science Professors including vice-president and president.

Luthy received many honors for his ground-breaking research during his career. He was elected to the National Academy of Engineering in 1999, and was awarded the Gordon Maskew Fair Award from the American Academy of Environmental Engineers and Scientists in 2015. He also received the Jack Edward McKee Medal from the Water Environment Federation in 2000 and won the Cleanup Project of the Year Award from the U.S. Department of Defense in 2000. He served as president of the Association of Environmental Engineering and Science Professors from 1987 to 1988 and was elected an Einstein Professor by the Chinese Academy of Sciences in 2005. He was awarded an honorary doctorate by Clarkson University in 2005.

*continued on next page*

***In Memoriam: Dr. Richard Godfrey Luthy (cont.)***

During his career at Carnegie Mellon and Stanford, Luthy mentored many Ph.D students and junior professors, including some of us. He was a beloved teacher and his class, CEE 270, Movement and Fate of Organic Contaminants in Waters, was a fixture of the M.S. program in Environmental Engineering. He was a leader within the department, helping to promote the careers of its faculty and students and initiating the focus of the department on sustainability. Junior professors, in particular, appreciated his calming influence and wit in the face of the stresses they faced. Luthy was an effective communicator, able to readily explain complex technical material in non-technical terms approachable to a lay audience. He thereby helped spread the influence of the Civil and Environmental Engineering Department with respect to sustainability to a broader audience beyond the university. His devotion to important challenges of clean water, particularly in the arid West, in the late stages of his career inspired a whole generation of students to continue that work. His impact will be felt for many years to come thanks to their work.

Dick will be remembered for his unique leadership style. He was unwaveringly trustworthy, always set a good example for how to conduct oneself as a colleague, listened carefully, generously acknowledged and encouraged others' contributions, and took genuine joy in his friends' successes. He always made time for others whether they were students, donors, colleagues, or complete strangers. He also made plenty of time for fun and social activities: running well into his 70s, attending football games, and hosting many parties at his beautiful campus home.

Luthy is survived by his wife, Mary Sullivan; son, Matthew Luthy of Santa Clara, California; daughters Mara Luthy of Southern California and Olivia Saachi of Stanford; and grandsons Rafe Grossmann of Alaska, Jaiden Luthy of Stanford, and Michael Luthy of Stanford.

William Mitch  
Alexandria Boehm  
Peter Kitanidis  
Jeffrey Koseff

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## Did You Know?

AEESP provides distinguished lectures at various conferences, events, and college/university campuses throughout the year. Members are encouraged to nominate colleagues with relevant backgrounds to speak at these events. To nominate an individual to provide an AEESP Lecture, click on the links to each speaking event below and complete the form or [visit our website here](#). Please note: the deadlines to submit nominations varies throughout the year depending on when the events are held. All nominations are reviewed by the AEESP Lecturer's Committee.

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**AEESP Distinguished Lecture Series:** Each year, the Distinguished Lecturer is selected by the Lecturers Committee, in recognition of his or her excellence as both a researcher and educator and ability to give engaging oral presentations to members of the environmental engineering community and the general public. The Distinguished Lecturer visits at least 12 institutions and gives at least one talk from two lecture topics. The Distinguished Lecturer proposes the two topics, and each institution chooses one of these as the formal presentation.

Deadline to nominate: March 1

For more information and a list of past DLS speakers, [click here](#).

To submit a nomination, [click here](#).

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**AEESP Lecture at Air & Waste Management Association (A&WMA) Conference:** AEESP participants in, and is represented by a member to provide a lecture at the annual conference of the A&WMA. This annual conference is typically held in or around June.

Deadline to nominate: March 1

For more information, to nominate, and see a list of past speakers at this event, [click here](#).

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**AEESP Lecture at American Water Works Association's Annual Conference and Exposition (ACE):** With sponsorship provided by AEESP Sustaining Member Hazen and Sawyer, AEESP participants in, and is represented by a member to provide a lecture at the annual conference of the AWWA-ACE. This annual conference is typically held in or around June.

Deadline to nominate: March 1

For more information, to nominate, and see a list of past speakers at this event, [click here](#).

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**AEESP Master Lecture at WEFTEC:** This prestigious lecture is made possible by a collaboration between the Water Environment Federation (WEF) and AEESP. Selected lecturers alternate yearly between those with academic and practitioner backgrounds. The Master Lecturer is asked to speak about trends and ideas developed as a result of many years of endeavors in the water sector. WEFTEC is held annually in New Orleans during even-numbered years and Chicago during off-numbered years and is typically in late September or early October.

Deadline to nominate: July 15

For more information, to nominate, and see a list of past speakers at this event, [click here](#).

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**AEESP Plenary Lecture at American Association for Aerosol Research (AAAR) Conference:** AEESP participants in, and is represented by a member to provide a lecture at the annual conference of the American Association for Aerosol Research (AAAR). This annual conference is typically held in or around October.

Deadline to nominate: August 1

For more information, to nominate, and see a list of past speakers at this event, [click here](#).

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**AEESP Lecture at American Water Works Association Water Quality Technology Conference (AWWA-WQTC):** With sponsorship provided by AEESP Sustaining Member Corona Environmental Consulting, AEESP participants in, and is represented by a member to provide a lecture at the annual conference of the AWWA-WQTC Conference. Selected lecturers alternate yearly between those with academic and industry backgrounds.. This annual conference is typically held in or around November.

Deadline to nominate: August 1

For more information, to nominate, and see a list of past speakers at this event, [click here](#).

## AEESP Foundation Educational Grant Reports

Each year, the AEESP Foundation's Educational Grant program allows individuals and/or organizations to utilize expertise garnered from research and teaching at the university level to improve K-12 instruction, with the goal of preparing students to be future environmental engineers and scientists. The following Executive Summaries were provided by recent grant recipients following the conclusions of their projects. Their full reports, along with reports of other past grant recipients, as well as information on how to apply for future Educational Grants, may be found on the AEESP Foundation's website [here](#). Click on the title of each project to view the full reports.

### [Climate Across the Curriculum: WashU partners with Gateway STEM High School to connect students to opportunities in the sciences](#)

*Submitted by Dr. Daniel Giammar, Principal Investigator, Washington University in St. Louis*

The Washington University Center for the Environment, with support from an AEESP Foundation Grant, has been developing a relationship with Saint Louis Public School's Gateway STEM High School for the past 5 years. This Climate Across the Curriculum project was developed to support equitable, interdisciplinary, and solution-oriented climate change education in the St. Louis region. The project's specific goals are to:

- connect research expertise at the university to increase high school students' awareness of climate change and environmental justice issues and solutions.
- strengthen science communication skills of students from high school, to undergraduate, to graduate study.
- promote opportunities in environmental engineering undergraduate studies to a diverse high school student population.
- enable students and faculty at Washington University in St. Louis to align with our institutional mission to contribute positively to our home community of St. Louis, and to effect meaningful, constructive change in our world.

In Spring of 2024, the AEESP Foundation Grant supported the development of an English unit that used various environmental justice-themed texts to engage students in non-fiction language standards aimed at building stronger science communication skills. Connecting these standards to local issues, this unit engaged students as active citizens who must understand the science of their lived experiences, and hone their ability to effectively read, write, and speak for change.

For the full article, [click here](#).



**Where Does Data Come from? Introducing rural students to environmental sciences through hands-on deployment and data interpretation of local noise measurements**

*Submitted by Dr. Maryssa Loehr, Principal Investigator, Westminster College*

This project began in January of 2025 and ended in November of 2025. The project aimed to foster enthusiasm towards investigating one’s environment and inspire students to pursue a career in Environmental Sciences and Engineering. The specific theme of this project focused on showcasing noise pollution through classroom demonstrations, sensor deployment, and data interpretation in hands-on activities. Rural students in mid-Missouri were the target of this outreach, and two different high school groups participated.

Specifically, the project was implemented at Jefferson City High School (JCHS) and North Callaway High School (NCHS). JCHS is located in an urban area of Missouri: Jefferson City. Jefferson City has a population of approximately 42,565 people [1]. NCHS is located in a rural area of Missouri where the nearest town, Auxvasse, has a population of about 1,385 people [1]. The student participants at JCHS included five students who were either actively enrolled in the AP Environmental Science course or previously completed the course. The students who participated at NCHS included 12 students who were enrolled in an introductory biology course. Discussions with the high school coordinators mentioned that the JCHS were likely going to college after graduation while the students at NCHS were not necessarily college-bound.

Each high school was visited once by the team from Westminster College, which included the Principal Investigator (PI) and one undergraduate student. Three objectives were planned for the visits, as defined below.

1. Define and describe characteristics of noise pollution including magnitude and frequency.
2. Plan and deploy a sound level meter according to a defined data objective.
3. Use Microsoft Excel or Google Sheets to quantify and visualize the total noise profile across time.

Unfortunately, the software component of the activity (i.e., Objective #3) was omitted due to time constraints. However, the spot measurements were still interpreted through discussion and interpretation of the statistics.

A final objective (i.e., Objective #4) for the project included disseminating the results of the project to learning resources such as the National Science Teaching Association for other educators to replicate the investigation; and present at the next AEESP conference. This objective is on-going.

**For the full article, [click here](#).**



Fig. 1: Aerial Satellite with Measurement Locations in Yellow (JCHS left, NCHS right).



Fig. 2: Sound Level Meter (SLM) with Live Display.

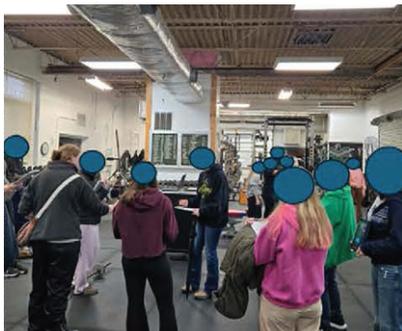


Fig. 3: Students taking Field Notes in the Weightroom of NCHS.

Number of students whose post survey result <b>increased</b> .					
	S1	S2	S3	S4	S5
JCHS (out of 5)	0	5	3	0	2
NCHS (out of 12)	4	10	3	3	3
Number of students whose post survey result <b>decreased</b> .					
	S1	S2	S3	S4	S5
JCHS (out of 5)	1	0	0	0	0
NCHS (out of 12)	1	0	1	0	0

Counts of the number of students where the post survey either increased or decreased, respectively.



Fig. 4: Students at JCHS waiting for the Courtyard Measurement.

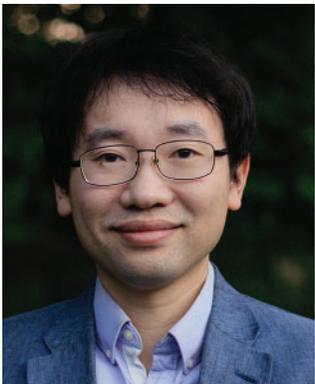
## Dr. David Kim Joins The Cooper Union



**Dr. David J. Kim** joined the Department of Civil Engineering at The Cooper Union as an assistant professor in September 2025. Prior to joining, he was a postdoctoral researcher at MIT Chemical Engineering. His research centers on the development and application of novel water treatment technologies to strengthen the resiliency

of existing water infrastructure and networks. In particular, he has focused on electrochemical sensors and modules that detect persistent pollutants and recover valuable resources from various streams, including in ocean water and industrial waste effluents. From here, he continues to investigate their process dynamics under these real sources and what kind of impacts they directly have on our built environment. Dr. Kim received his Ph.D. in Environmental Engineering from Yale University and his B.S. in Earth and Environmental Engineering from Columbia University.

## Dr. Shihong Lin Joins Rice University



**Dr. Shihong Lin** joined the Department of Civil and Environmental Engineering at Rice University as an Associate Professor in January 2026. He is also a member of the Rice Center for Membrane Excellence (RiCeME), part of the Rice Water Technologies Entrepreneurship and Research (WaTER) Institute. Prior to joining Rice, Dr. Lin was a faculty member at

Vanderbilt University from 2015 to 2025, following postdoctoral training at Yale University (2013-2014) and receipt of his Ph.D. from Duke University in 2012. His research focuses on advanced separation science and technologies for desalination, resource extraction and recovery, and sustainable brine management. At Rice, Dr. Lin will advance interdisciplinary research and collaborate with colleagues to develop innovative solutions for water and resource sustainability.

## Dr. Frank Mazzola Joins University of South Florida



**Dr. Frank A. Mazzola** joined the Department of Civil & Environmental Engineering at the University of South Florida in January 2026. He completed his Ph.D. in Civil Engineering at Virginia Tech in December 2025. He also received a Future Professoriate graduate certificate from Virginia Tech. Dr. Mazzola's doctoral research focused on devel-

oping improved guidance to optimize corrosion control at drinking water utilities and mitigate lead contamination of drinking water. His work advanced the understanding of the galvanic corrosion of lead solder in copper plumbing and identified novel corrosion control strategies. At USF, Dr. Mazzola will teach core undergraduate environmental engineering courses. Dr. Mazzola is especially passionate about engineering education and considers serving as the instructor-of-record for an introductory environmental engineering course at Virginia Tech to be one of his favorite academic experiences.

### Are Your AEESP Membership Dues Current?

You may always check your dues payment status by: your membership is in good standing ([logging into your account here](#)) and scrolling down to the bottom of your log-in page.

If you do not remember your password, click "Reset your password" beneath the login lines, enter your email, and a temporary password will be emailed to you. Your username will appear in the subject line of the email notification.

You may also contact Brian Schorr at AEESP's Business Office ([bschorr@aeesp.org](mailto:bschorr@aeesp.org)) for assistance.

## Mark Your Calendars!

The [AEESP Grantastic Community of Practice](#) has scheduled two upcoming webinars and welcomes all members to join and participate! Recordings will be uploaded to [AEESP's YouTube channel](#) afterwards.

### [How I Run and Tumble for Research Grants?](#)

Presenter: Paul Westerhoff, Ph.D.  
Regents Professor  
School of Sustainable Engineering and the Built Environment  
Arizona State University  
Tuesday, March 3; 4:00 pm ET / 1:00 pm PT  
[Register here.](#)



This session will be conversational and reflective, focusing less on specific proposals and more on decision-making, prioritization, filtering out “noise,” and sustaining a productive and balanced research life. In particular, Dr. Westerhoff will share his perspectives on:

- How he decides which funding opportunities are worth pursuing (and which are not)
- How he prioritizes among competing calls
- How he filters out opportunities outside his core research vision
- How he decides whether -- and when -- to respond to such “noise”
- How he balances grant writing with protecting time for students, research, and life

This session will mark Version 1 of a series in which seasoned faculty share their personal approaches to grant writing -- discussing trade-offs, strategies, and lessons learned.

### [How I Hypothesize?](#)

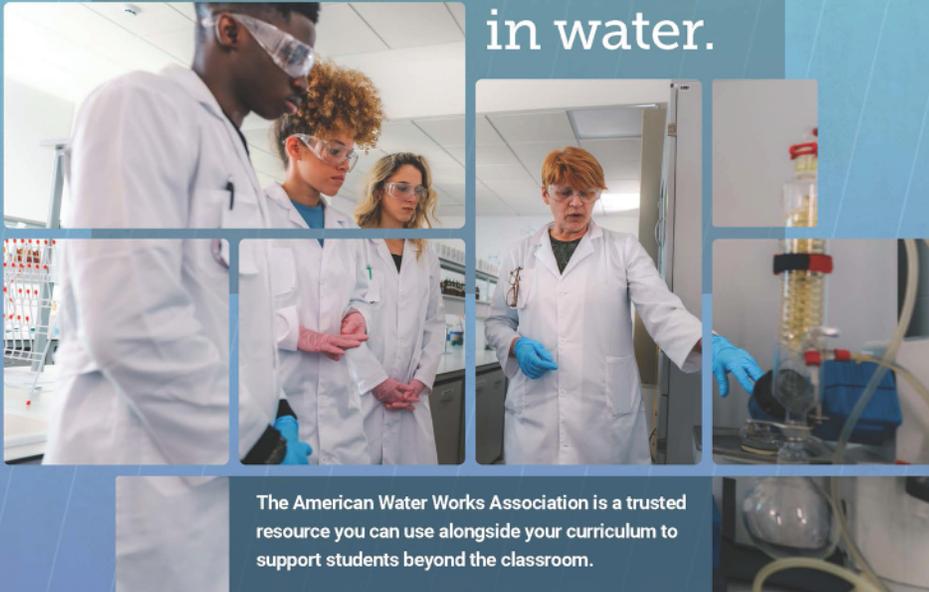
Presenter: Yang Yang, Ph.D.  
Associate Professor  
Civil and Environmental Engineering  
Clarkson University  
Friday, April 3; 11:00 am ET / 8:00 am PT  
[Register here.](#)



Dr. Yang Yang received his Ph.D. from Tsinghua University in 2014 and completed his postdoc training at the California Institute of Technology from 2014 to 2018. He joined the Department of Civil and Environmental Engineering at Clarkson University as an Assistant Professor in 2019 and was promoted to Associate Professor in 2025. Dr. Yang specializes in the synthesis and characterization of advanced electrocatalysts and piezoelectric materials and the exploration of their environmental applications, such as disinfection, emerging contaminant control, and harmful algal bloom mitigation. Dr. Yang has published peer-reviewed articles as first author or corresponding author in flagship journals (*Environmental Science & Technology* family journals, *ACS Catalysis*, *Nature Water*, etc.) and owns three patents in subject areas of emerging contaminant analysis, wastewater treatment, and flue gas purification. He is the co-founder of ResET Water, a startup company dedicated to commercializing electrochemical water treatment technology.

Dr. Yang is an associate editor of *Chemical Engineering Journal Advances* and *Emerging Contaminants*. He is an Early Career Editorial Board member of *ACS ES&T Engineering*. His research group at Clarkson received funding support from NSF, DoD, DoE, Bill and Melinda Gates Foundation, New York State Department of Environmental Conservation, and the Environmental Research and Education Foundation. In 2023, he received the prestigious NSF CAREER award. He is also the recipient of the Chinese-American Professors in Environmental Engineering and Science (CAPEES) Early Career Award in 2024. The American Academy of Environmental Engineers and Scientists introduced him to the “40 under 40 recognition program”.

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 American Water Works Association

## AEESP Membership

Membership in AEESP offers important benefits to educators, researchers, students, professionals, corporations and organizations engaged in the environmental engineering and science profession. All who are eligible for membership are welcome to join the Association and to participate in the full range of benefits and opportunities. Membership categories and fees are described below, with complete definitions provided in the AEESP Bylaws. Applying online is easy! We welcome your participation!

### Regular and Student Membership

Regular Membership in AEESP is open to persons of full-time faculty or instructional rank (instructors, lecturers, assistant, associate, full professors) in environmental engineering or environmental science at academic institutions that offer baccalaureate, diploma, or graduate degrees in environmental engineering, environmental science or related fields.

Rank	Annual Fee
Full Professors	\$130
Associate Professors	\$100
Assistant Professors	\$65
Affiliate Members	\$75
Students and Post-docs	\$20

Members residing in low and middle income countries as identified by the World Bank may request a discount by contacting the Business Office.

Applying for regular membership is made by submitting a completed application form and a brief, 2 page curriculum vitae online with payment. Alternatively, application materials may be mailed to the Business Office with a check enclosed.

### Affiliate Membership

Affiliate Membership is open to individuals who are not eligible for regular membership including:

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- Individuals primarily employed outside academia who have made contributions to education in environmental engineering or related fields.
- Educators in environmental engineering or related fields who are employed at junior colleges or other educational institutions that do not offer the degrees specified above.
- Individuals who were members at one time and who have retired from active teaching.

Application for affiliate membership is the same as for regular membership. The annual dues for affiliate members are \$75.

### Sustaining Membership

Sustaining Membership is open to individuals and organizations whose concern for education in environmental engineering and related fields stimulates them to assist in strengthening university programs devoted to this area. Sustaining members are often those who employ or interact closely with graduates of environmental engineering and science programs such as consultants, utilities, research foundations, professional organizations, publishers and equipment manufacturers. The financial support provided by Sustaining Members allows AEESP to carry out a variety of special programs that benefit all members of the profession. Sustaining Members have access to all AEESP publications and are invited to all AEESP events. Organizations or individuals desiring more information on Sustaining Membership should write to the Secretary, the President, or the Business Office.

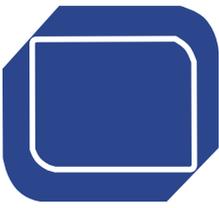
Annual dues for Sustaining Members are \$500. Organizations or individuals desiring more information on Sustaining Membership should write the Secretary, President, or Business Office.

Ready to join? You can apply for membership online!

<https://aeesp.org/membership>

More information can also be obtained from the AEESP Business Office:

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# Association of Environmental Engineering and Science Professors Newsletter

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