AEESP DURHAM, NC MAY 20-22 2025
INFORMATION & ENGINEERING FOR THE PUBLIC SECTOR

Tentative Program Schedule (v. 31Jan2025)

color code: Technical Session | Workshop

Tuesday, May 20

8:30a - 10:00a	**24.** Hydrogen Production and Storage: Engineering Sustainable Solutions for Human-Environmental Systems	**26.** Managing the Financial Risk of Environmental Extremes	**33.** Advancing Life Cycle Assessment via Integration with Machine Learning: Challenges and Opportunities	**9a.** Emerging Waterborne Viruses: Challenges in Water and Wastewater Treatment	**4a.** One Water Solution to Infrastructure Challenges in Rural, Underserved U.S. Communities	**11a.** Integrated Multi-omics for Environmental Engineering and Science: Opportunities and Challenges	**16a.** Advanced Reactive Materials and Interface Engineering for Pollution Mitigation, Disinfection, and Sustainable Resource Recovery	**32a.** Machine Learning in Environmental Science, Health, and Engineering	**35a.** Advances in PFAS Treatment and Destruction
	Break	Break	Break	Break	Break	Break	Break	Break	Break
10:15a - 11:45a	**15.** Lessons Learned from Studying Lead in U.S. School Drinking Water: Compiling Best Practices on Sampling, Testing, and Remediation	**23.** Equitable Solutions to Air, Energy, and Human Health	**17.** Dumping our Data: Challenges Faced in Municipal Solid waste Data Management and Implications to Public Policy and Health	**9b.** Emerging Waterborne Viruses: Challenges in Water and Wastewater Treatment	**4b.** One Water Solution to Infrastructure Challenges in Rural, Underserved U.S. Communities	**11b.** Integrated Multi-omics for Environmental Engineering and Science: Opportunities and Challenges	**16b.** Advanced Reactive Materials and Interface Engineering for Pollution Mitigation, Disinfection, and Sustainable Resource Recovery	**32b.** Machine Learning in Environmental Science, Health, and Engineering	**35b.** Advances in PFAS Treatment and Destruction
	Lunch								
1:00p - 3:45p	Career Paths in Environmental Engineering & Science after Graduate School	Preparing for the NSF CAREER Proposal	Environmental Engineering Program Leaders Meeting	Community Based Research and Teaching Project Development and Evaluation	CSU AGEP Alliance for Diversity and Strengths of STEM Faculty: Applying culturally informed, strengths-based attitudes and practices in faculty work	Reviving your Teaching Practice: AI, SoTL and CBL approaches to enhancing student engagement and creating inclusive classrooms	Research Translation to Public Health Action: Case Studies in Wastewater Based Surveillance	CAPEES Panel Discussion on International Collaboration	
4:00p - 5:30p	**Plenary I and AEESP Awards**								
5:30p - 8:00p	**Student & Postdoc Social Mixer**	**Faculty/Professionals Social Mixer**							

Wednesday, May 21

8:30a - 10:30a	**6a.** Innovation in Environmental Engineering and Science Education through Emerging Technologies and Experiential Learning	**20a.** Climate Change Solutions	**28a.** Chemical and Biological Contaminant Oxidation and Reduction Processes	**30.** Advances in UV Treatment of Air, Water and Surfaces	**31.** Next-Generation Water Management: Mainstreaming Anaerobic Wastewater Treatment and Sustainable Wastewater Resource Recovery	**12.** Microbiology and Chemistry of Indoor Environments	**22.** Sustainable Agriculture: Meeting a Nexus of Sustainable Development Goals	**25.** Creating Circular Phosphorus and Nitrogen Systems	
	Break								
11:00a - 12noon	**Plenary II**								
	Lunch								
1:00p - 3:00p	**Poster Session I**	***AEESP Award Ceremony***							
3:00p - 5:30p	**6b.** Innovation in Environmental Engineering and Science Education through Emerging Technologies and Experiential Learning	**20b.** Climate Change Solutions	**28b.** Chemical and Biological Contaminant Oxidation and Reduction Processes	**36.** PFAS in Water and Wastewater Treatment Residuals: Technology Hurdles and Solutions	**14.** Microbial Dynamics of the Built Environment: Designing for Health and Sustainability	**18.** Data-Driven Solutions to Emerging Issues in Solid Waste Management	Empowering AEESP Members to Engage in Public Policy	An Introduction to Machine Learning Tools for Solving Environmental Challenges	
6:00p - 9:00p	**Party on the Plaza!**								

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Thursday, May 22

8:30a - 10:30a	**19a.** Resource Recovery from Waste Streams Towards a Circular Economy	**29a.** Electrified Approaches at the Water-Energy-Environment Nexus	**7.** Mobilizing Our Universities for Education on Energy Use, Carbon Emissions, and Climate Change	**3.** Leveraging Public Datasets for Water and Energy Information Across Sectors and Spatial and Temporal Scales	**5.** Community-based Air Quality Research: Technical Tools, Communication Strategies, Engagement Approaches, and Public Policy Implications	**13.** Biofilm-Associated Risks in the Built Environment	**21.**Wastewater GHG Emissions and Decarbonization	**27.** Environmental Implications of Renewable Energy Infrastructure	**37.** New Insights into PFAS Exposure, Mixture Effects, and Control Strategies
	Break								
11:00a - 12noon	**Plenary III**								
	Lunch								
1:00p - 3:00p	**Poster Session II**								
3:00p - 5:30p	**19b.** Resource Recovery from Waste Streams Towards a Circular Economy	**29b.** Electrified Approaches at the Water-Energy-Environment Nexus	**10.**Preventing Good Microbes from Going Bad: Environmental Biotechnology Applications and Management in the Era of Synthetic Biology	**34.** Modeling Contaminant Fate and Transport in Natural and Engineered Systems	Charting the Future for Environmental Engineering and Science: Research, Reaching, Practice, Communications	Adding Sustainability Content to Engineering Courses: From Fundamental Principles to Public Sector Applications	Early Career Faculty Survival Guide: Tips and Best Practices for Navigating the Tenure Process	Bridging Research and Practice: Strategies for Enhancing Stakeholder Communication for Data-driven Management of PFAS Impacts	
5:30p- 9:00p	**Night Out in Durham Reception**								