

All times are Eastern Daylight Savings Time (EDT)

ENVR Non-Technical Events

Long Range Planning Meeting	3:00 PM	4:00 PM	Sunday 8/17/2025	Room149A/B (Washington Convention Center)
Executive Committee Meeting	4:00 PM	6:00 PM	Sunday 8/17/2025	Room 149A/B (Washington Convention Center)
Program Planning Lunch Meeting	12:00 PM	2:00 PM	Monday 8/18/2025	East Salon F (Washington Convention Center)
Members' Annual Meeting	1:30 PM	2:00 PM	Tuesday 8/19/2025	Room 207B (Washington Convention Center)
Social/Reception	6:30 PM	8:30 PM	Tuesday 8/19/2025	Tickets \$20 in advance. Unconventional Diner, 1207 9th St. NW, Washington, DC

JOINT PROGRAMMING

Emerging Science and Technology for the Recovery and Recycling of Critical Materials

[Cosponsor: ENVR, GEOC] Organizers: Soryong (Ryan) Chae, Byong-Hun Jeon, Eunhyea Chung, Kyoung-Yeol Kim, Ramesh Kumar

Emerging technological developments for cutting-edge applications in the recovery, recycling, and regeneration of critical materials from various waste and wastewater resources, including E-waste and industrial wastewater streams, to address the challenges of the sustainable supply of materials.

JOINT024A	Monday 8/18/2025	8:00 AM	12:00 PM	Oral - In-person	Room 207B (Washington Convention Center)
JOINT024B	Monday 8/18/2025	2:00 PM	5:20 PM	Oral - In-person	Room 207B (Washington Convention Center)
JOINT025A	Monday 8/18/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Green, Low-Carbon & Resource Utilization Treatment Technology for Wastewater, Solid Waste, & Contaminated Sites of Petrochemical Ind.

[Cosponsor: ENVR, ENFL] Organizers: Bing Qin, Wen Zhang, Bing-Jie Ni, Sushil Kanel

The symposium enhances the support of environmental protection technology for carbon reduction, pollution control, and waste resource utilization in the petrochemical industry and will explore the innovation model of pollution and synergistic carbon reduction.

JOINT028A	Wednesday 8/20/2025	8:00 AM	11:40 AM	Oral - In-person	Room 103A (Washington Convention Center)
JOINT028B	Wednesday 8/20/2025	2:00 PM	4:40 PM	Oral - In-person	Room 103A (Washington Convention Center)
JOINT028D	Wednesday 8/20/2025	8:00 PM	9:40 PM	Oral - Digital	Digital Session (Digital Meeting)
JOINT029A	Wednesday 8/20/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Sustainability, Green Chemistry, and the Chemical Enterprise

[Cosponsors: CELL, ENFL, ETHX, PROF] Organizers: Glenn Larkin, Jillian Goldfarb

The impacts of chemical advances are not always fully considered in the rush to attain sustainability and the developing circular economy. This symposium addresses the ethical ramifications for chemistry through the lens of the UN sustainable development goals, the principles of green chemistry, and various justices that are sometimes neglected in the conversation about sustainability (economic, environmental, and social).

JOINT052A	Tuesday 8/19/2025	8:00 AM	11:50 AM	Oral - In-person	Room 143A (Washington Convention Center)
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Tackling World Hunger & Food Security Reducing Food Waste: Food Security CCC: Highlighting Chemistry from Multiple Divisions

[Cosponsors: AGRO, COMSCI, AGFD] Organizers: Christy Haynes, Heidi Irrig, Slawo Lomnicki, Qing Li, Michael Morrelo, Zhuohong (Kenny) Xie, Michael Tunick, Jonathan M. Deutsch

JOINT055A	Tuesday 8/19/2025	8:00 AM	11:50 AM	Oral - In-person	Room 143B (Washington Convention Center)
JOINT055B	Tuesday 8/19/2025	2:00 PM	6:00 PM	Oral - In-person	Room 143B (Washington Convention Center)

Undergraduate Research Posters, Environmental Chemistry

Sponsored by CHED

JOINT058A	Monday 8/18/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)
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ENVR PROGRAMMING

Advanced Materials for Environmental Monitoring & Remediation

Organizers: Changseok Han, Abdulaziz Al-Anazi, Xi-Zhi Niu, Mallikarjuna Nadagouda, Bineyam (Ben) Mezgebe

The study of advanced materials has the potential for solving the worldwide pollution issue. This symposium covers recent developments in the synthesis, applications, implications, and toxic effects of advanced materials in the environment.

ENVR001A	Wednesday 8/20/2025	8:00 AM	11:20 AM	Oral - In-person	Room 207B (Washington Convention Center)
ENVR001B	Wednesday 8/20/2025	2:00 PM	6:00 PM	Oral - In-person	Room 207B (Washington Convention Center)
ENVR001C	Tuesday 8/19/2025	3:00 PM	5:50 PM	Oral - Digital	Digital Session (Digital Meeting)

ENVR002A	Wednesday 8/20/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)
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Advances in PFAS Research & Outlook

Organizers: Manoj Shukla, Manoj Kolel-Veetil, Mallikarjuna Nadagouda, Nancy Kelley-Loughnane, Nanyang (Stephen) Yang

Presentations of recent research on the PFAS challenge, environmental impact, and abatement, and on fluorine-free PFAS alternatives.

ENVR004A	Monday 8/18/2025	8:00 AM	12:00 PM	Oral - In-person	Hall E - Room 23 (Washington Convention Center)
ENVR004B	Monday 8/18/2025	2:00 PM	6:00 PM	Oral - In-person	Hall E - Room 23 (Washington Convention Center)
ENVR004C	Tuesday 8/19/2025	8:00 AM	12:00 PM	Oral - In-person	Hall E - Room 23 (Washington Convention Center)
ENVR004D	Tuesday 8/19/2025	2:00 PM	6:00 PM	Oral - In-person	Hall E - Room 23 (Washington Convention Center)
ENVR004E	Wednesday 8/20/2025	8:00 AM	12:00 PM	Oral - In-person	Hall E - Room 23 (Washington Convention Center)
ENVR004F	Wednesday 8/20/2025	2:00 PM	5:40 PM	Oral - In-person	Hall E - Room 23 (Washington Convention Center)
ENVR004G	Thursday 8/21/2025	8:00 AM	11:40 AM	Oral - In-person	Room 208AB (Washington Convention Center)
ENVR004H	Wednesday 8/20/2025	10:00 AM	1:20 PM	Oral - Digital	Digital Session (Digital Meeting)
ENVR005A	Tuesday 8/19/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Advances in Water Refinery Platform: Materials, Processes, Modularization, & Automation

Organizers: Seunghyun Weon, Jaesang Lee, Jaehong Kim, Kangwoo Cho

State-of-the-art developments in technologies to facilitate water reuse and recycling to address climate change, industrial development, and emergence of micropollutants as they affect our need for drinking water and sanitation.

ENVR006A	Wednesday 8/20/2025	8:00 AM	11:40 AM	Oral - In-person	Hall E - Room 20 (Washington Convention Center)
ENVR006B	Wednesday 8/20/2025	2:00 PM	6:00 PM	Oral - In-person	Hall E - Room 20 (Washington Convention Center)
ENVR007A	Wednesday 8/20/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Biohybrid Technologies at Water-Energy-Climate Nexus

Organizers: Joshua Jack, Joshua Atkinson, Kyungho Kim

Hybrid electrochemical-biological technologies (HEBs) can leverage unbounded benefits from respective electrochemical and biological unit processes. Presentations will include new biohybrid technologies to treat waste streams, recover nutrients, synthesize valuable fuels and chemicals, and capture/recover waste CO₂.

ENVR010A	Thursday 8/21/2025	8:00 AM	11:05 AM	Oral - In-person	Room 202A (Washington Convention Center)
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C. Ellen Gonter Graduate Students Award Symposium

Organizer: Kevin O'Shea

Presentations by recipients of the 2025 C. Ellen Gonter Graduate Students Award, the highest recognition bestowed on graduated students by the Division of Environmental Chemistry.

ENVR014A	Tuesday 8/19/2025	2:00 PM	4:55 PM	Oral - In-person	Room 207B (Washington Convention Center)
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Characterization and Recovery of Critical Minerals and Materials from Solid and Aqueous Waste Streams

Organizers: Wencai Zhang, Ronghong Lin, Mengling Stuckman

The growing global demand for critical minerals and materials (CMMs) has highlighted the need for sustainable and innovative strategies to recover these resources from waste streams while minimizing environmental impacts. This symposium presents cutting-edge research and development in the characterization and recovery of CMMs.

ENVR015A	Wednesday 8/20/2025	8:00 AM	11:50 AM	Oral - In-person	Hall E - Room 22 (Washington Convention Center)
ENVR015B	Wednesday 8/20/2025	2:00 PM	5:45 PM	Oral - In-person	Hall E - Room 22 (Washington Convention Center)
ENVR015D	Thursday 8/21/2025	8:00 AM	11:45 AM	Oral - In-person	Room 158AB (Washington Convention Center)
ENVR016A	Wednesday 8/20/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Chemistry of the Transformation and Degradation of Biological Contaminants in the Environment

Organizers: Danmeng Shuai, Yun Shen

An examination of the chemical pathways and mechanisms involved in transforming and degrading biological contaminants in natural and built environments.

ENVR018A	Thursday 8/21/2025	8:00 AM	11:05 AM	Oral - In-person	Room 207A (Washington Convention Center)
ENVR018B	Monday 8/18/2025	10:00 AM	11:40 AM	Oral - Digital	Digital Session (Digital Meeting)
ENVR019A	Wednesday 8/20/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Elevating Chemistry and Engineering for Circular Economy

Organizers: Soryong (Ryan) Chae, Youngjune Park, Hanki Kim, Mallikarjuna Nadagouda

The concept of circular economy aims to minimize resource extraction and waste generation by advocating for a closed-loop system instead of the conventional linear 'take-make-dispose' model. Innovative scientific and engineering ideas to prolong circulation of materials within the global economy will be presented with the goal of a sustainable future for both humanity and nature.

ENVR020A	Wednesday 8/20/2025	2:00 PM	6:00 PM	Oral - In-person	Room 207A (Washington Convention Center)
ENVR021A	Wednesday 8/20/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Environmental Contaminants: Impacts, Exposure, and Toxic Effects

[Cosponsors: ANYL; TOXI; BIOL] Organizers: Carrie McDonough, Yanan Chen, Carsten Prasse, Matthew Newmeyer

Showcasing recent advances in understanding environmental contaminants, including the characterization of complex contaminant mixtures, structural determination and prioritization of novel contaminants, and new research advancing our understanding of exposure, toxicokinetics, and health impacts of these chemicals in humans and wildlife.

ENVR024A	Tuesday 8/19/2025	8:00 AM	11:30 AM	Oral - In-person	Hall E - Room 21 (Washington Convention Center)
ENVR024B	Monday 8/18/2025	3:00 PM	5:30 PM	Oral - Digital	Digital Session (Digital Meeting)
ENVR024C	Tuesday 8/19/2025	2:00 PM	5:50 PM	Oral - In-person	Hall E - Room 21 (Washington Convention Center)
ENVR024D	Wednesday 8/20/2025	8:00 AM	11:50 AM	Oral - In-person	Hall E - Room 21 (Washington Convention Center)
ENVR024E	Wednesday 8/20/2025	2:00 PM	5:10 PM	Oral - In-person	Hall E - Room 21 (Washington Convention Center)
ENVR025A	Wednesday 8/20/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Environmental Sensors for Biological and Chemical Parameters in Water, Air and Soil

Organizers: Margaret McCaul, Vishnu Rajasekharan, Elisabeth Steel, Paul Schorr, Tao Li

This symposium focuses on advances in deployable air, water and soil sensors to detect chemicals and pathogens in drinking water, wastewater, surface and groundwater, air and soils.

ENVR028A	Thursday 8/21/2025	8:00 AM	12:00 PM	Oral - In-person	Room 207B (Washington Convention Center)
ENVR029A	Tuesday 8/19/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Global Virtual Symposium: Achieving Sustainable Development of Safe Drinking Water: Sources, Contamination, Mitigation & Management

The symposium includes state-of-the-art knowledge on the sustainable development of clean water resources, including mechanisms of contaminant mobility and response from sources to the human body through various pathways, mitigation measures including natural and remediation techniques, as well as management of access to safe drinking water.

ENVR060A	Monday 8/18/2025	8:00 AM	11:20 AM	Oral - Digital	Digital Session (Digital Meeting)
ENVR060B	Tuesday 8/19/2025	8:00 AM	11:00 AM	Oral - Digital	Digital Session (Digital Meeting)

Global Virtual Symposium: Advanced Nanomaterials for Water Research: Innovations in Treatment, Sensing and Purification

An integration of nanomaterials in water research holds significant promise for addressing global water challenges and improving water quality and accessibility. The symposium focuses on carbon-based nanomaterials, such as graphene-based composites and carbon quantum dots.

ENVR059A	Sunday 8/17/2025	5:45 AM	9:10 AM	Oral - Digital	Digital Session (Digital Meeting)
ENVR059B	Monday 8/18/2025	8:30 AM	11:10 AM	Oral - Digital	Digital Session (Digital Meeting)

Innovative Strategies to Integrate Broad Perspectives to Address Environmental Research

Organizers: Sherine O. Obare, Chartanay D. Bonner, Eric S. McLamore, Kailyn Harris-Gilliam

Environmental science and technology centers utilize convergence approaches to solve critical societal problems. Presenters will demonstrate successful approaches that can be widely adopted to broaden perspectives and ultimately lead to applicable solutions.

ENVR033A	Monday 8/18/2025	2:00 PM	6:00 PM	Oral - In-person	Hall E - Room 21 (Washington Convention Center)
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Methods and Applications of Wastewater-based Epidemiology to Assess Environmental Exposures and Related Diseases

Organizers: Devin Bowes, Sara Castiglioni, Erin Driver, Barbara Kastprzyk-Hodern

Wastewater-based epidemiology (WBE) is a rapidly evolving scientific discipline that leverages community wastewater to understand population health in near real-time. WBE proved to be a viable tool during the COVID-19 global pandemic. This symposium encourages collaboration and further investigation of WBE to predict a potential health threat, monitor effectiveness of interventions, and inform relevant stakeholders to invoke policy change.

ENVR034A	Wednesday 8/20/2025	8:00 AM	11:05 AM	Oral - In-person	East Salon B (Washington Convention Center)
ENVR035A	Wednesday 8/20/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Microplastics, Nanoplastics, Plastic Additives: Emerging Techniques for Detection & Assessing Environmental Impacts

Organizers: Phillip Potter, Samantha McBride

This symposium will focus on advances in: (1) analytical techniques for detecting and characterizing microplastics (anthropogenic polymer particles < 5 millimeters in diameter), nanoplastics (< 1 micron in diameter), and plastic additives; (2) fate and transport of these materials in the environment and biological systems; (3) efforts to prevent the release and dispersion of these materials, as well as their remediation once in the environment.

ENVR036A	Tuesday 8/19/2025	8:00 AM	12:00 PM	Oral - In-person	Hall E - Room 20 (Washington Convention Center)
ENVR036B	Tuesday 8/19/2025	2:00 PM	6:00 PM	Oral - In-person	Hall E - Room 20 (Washington Convention Center)
ENVR037A	Tuesday 8/19/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Novel Materials for Environmental Sustainability

Organizers: Alexander Orlov, Lei Guo

Improving the quality of human life without depleting the natural resources is the focus of environmental sustainability. This symposium highlights the latest innovative materials science and engineering that can have a transformative impact on our planet.

ENVR038A	Monday 8/18/2025	8:00 AM	11:40 AM	Oral - In-person	Hall E - Room 22 (Washington Convention Center)
ENVR038B	Monday 8/18/2025	2:00 PM	6:00 PM	Oral - In-person	Hall E - Room 22 (Washington Convention Center)
ENVR038C	Tuesday 8/19/2025	10:00 AM	11:55 AM	Oral - Digital	Digital Session (Digital Meeting)
ENVR039A	Tuesday 8/19/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Pollutant Remediation Strategies for Clean Water

Organizers: Priyanka Sharma, Sunil Sharma, Huiyuan Guo

This symposium is dedicated to pollutant remediation strategies for clean water.

ENVR044A	Tuesday 8/19/2025	8:00 AM	12:00 PM	Oral - In-person	Hall E - Room 22 (Washington Convention Center)
ENVR044B	Monday 8/18/2025	10:00 AM	1:40 PM	Oral - Digital	Digital Session (Digital Meeting)
ENVR044C	Tuesday 8/19/2025	2:00 PM	5:40 PM	Oral - In-person	Hall E - Room 22 (Washington Convention Center)
ENVR044D	Tuesday 8/19/2025	3:00 PM	6:40 PM	Oral - Digital	Digital Session (Digital Meeting)
ENVR045A	Tuesday 8/19/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Sensors for Water Quality Monitoring in Resource Limited Environments

Organizers: Eric Brack, Todd Alexander, Paola D'Angelo

Research presented in this symposium addresses the need for rapid water contaminant detection and analysis at the source in remote or post-disaster environments, military theaters, and other environments with limited resources. The session will present technological advances in portable sensors and scientific solutions to rapid water analysis.

ENVR046A	Tuesday 8/19/2025	8:00 AM	12:00 PM	Oral - In-person	Room 207B (Washington Convention Center)
ENVR047A	Tuesday 8/19/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Sustainable Approaches to Plastic Waste Upcycling and Re-materialization

Organizers: Byoung-In Sang, Jeong Gil Seo

ENVR049A	Wednesday 8/20/2025	2:00 PM	5:20 PM	Oral - In-person	Hall E - Room 17 (Washington Convention Center)
ENVR050A	Wednesday 8/20/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Sustainable Carbon Chemistry for Circular Bioeconomy Schemes

Organizers: Shu-Yuan Pan, Ellen Caixia Wan, Daeseung Kyung, Qiangu Yan

Explore the latest innovations in carbon capture, utilization, and sequestration (CCUS) technologies that are shaping the circular carbon economy. You'll gain valuable insights into the technical, economic, and environmental aspects of these emerging technologies.

ENVR051A	Thursday 8/21/2025	8:00 AM	11:55 AM	Oral - In-person	Room 151B (Washington Convention Center)
ENVR052A	Wednesday 8/20/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Virtual Graduate Students Symposium in Asia-Pacific Region on Current Environmental Issues

Organizer: Chunxiao Zheng

ENVR055A	Monday 8/18/2025	8:00 PM	11:45 PM	Oral - Digital	Digital Session (Digital Meeting)
ENVR055B	Tuesday 8/19/2025	7:59 PM	11:59 PM	Oral - Digital	Digital Session (Digital Meeting)

Wastewater Surveillance for Environmental Health Monitoring

Organizers: Bikram Subedi, Tara Sabo-Attwood, Aaron Bivins, Richard Bade

Presentations on the status of the development and validation of analytical methods capable of determining trace levels of drugs (or emerging contaminants) and pathogens in wastewater, the propagation of associated uncertainties with epidemiological estimation and interpretation, and the integration of WBE data with existing statistics from community-level measures.

ENVR056B	Monday 8/18/2025	8:00 AM	12:00 PM	Oral - In-person	Hall E - Room 21 (Washington Convention Center)
ENVR057A	Tuesday 8/19/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)

Women in Science & Engineering (WISE): Tribute to Contributions Made to Environmental Chemistry

[Cosponsors: COMSCI and GEOC] Organizers: Young-Shin Jun, Ching-Hua Huang, Jessica Ray, Virender Sharma, Lan Ling

Presentations will celebrate and recognize important scientific discoveries, breakthrough technological advances, and new paradigms and policies made by both established and rising women scientists on transformative topics in the field of environmental science, engineering, and policy.

ENVR058A	Monday 8/18/2025	8:00 AM	12:00 PM	Oral - In-person	East Salon F (Washington Convention Center)
ENVR058B	Monday 8/18/2025	2:00 PM	5:40 PM	Oral - In-person	East Salon F (Washington Convention Center)

[General Posters] Advances in Environmental Chemistry & Engineering and Chemical Education

ENVR003A	Tuesday 8/19/2025	12:00 PM	2:00 PM	Poster - In-person	Hall C (Washington Convention Center)
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ENVR-Sponsored Sessions

ComSci **INNOVATIVE PROGRAM: Water-Soluble Polymers: From Foundational Science to Finished Products**

Cosponsors: , ENVR, ORGN, MEDI, POLY, I&EC

Monday 8/18/25	2:00 PM - 4:30 PM EDT	Room 201 (Walter E. Washington Convention Center)
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GEOC **Exploring Interfacial Structure and Reactivity in Mineral-Water Systems: From Single-Crystal Surfaces to Porous Media**

Cosponsors: COLL, ENVR

Monday 8/18/25	8:00 AM - 12:00 PM EDT	Meeting Room 2 (The Westin DC Downtown)
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AGFD, POLY **Innovations in Natural Polymer Science for Sustainable Agriculture and Food Security**

Cosponsors: PMSE, CARB, ENVR

Monday 8/18/25	8:00 AM - 11:55 AM EDT	Room 143B (Walter E. Washington Convention Center)
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CELL **Sustainability, Green Chemistry, and the Chemical Enterprise**

Cosponsors: ENVR, PROF, ETHX

Tuesday 8/19/25	8:00 AM - 11:50 AM EDT	Room 143A (Walter E. Washington Convention Center)
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PRES **Future of Measurement Science: Instrumentation, Methods & Data Analytics**

Cosponsors: ENVR, MEDI, ANYL, ORGN

Tuesday 8/19/25	8:00 AM - 12:00 PM EDT	Liberty Salon N/O/P (Marriott Marquis Washington)
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ANYL **Chemical Toxicology in Fragrance Safety: Yesterday, Today, and Tomorrow:**

Cosponsors: OMP, CINF, TOXI, ENVR

Tuesday 8/19/25	8:00 AM - 12:40 PM EDT	Meeting Room 4 (The Westin DC Downtown)
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ANYL **Circular Water Economy:**

Cosponsors: FLUO, ENVR

Wednesday 8/20/25	9:00 AM - 12:00 PM EDT	Room 201 (Walter E. Washington Convention Center)
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