



ENVR Program Summary

August 21-25, 2022

Chicago, IL & Online

Virender K. Sharma, ENVR Fall Program Chair; Christie Sayes, ENVR Assistant Fall Program Chair

Jillian Goldfarb, National Meeting Chair

Sherine Obare, Division Chair

All times are Central Daylight Savings Time Zone (USA). Oral sessions will not be recorded, but individual presentations may be available on demand at the discretion of the presenters.

Three types of **ENVR oral sessions** are offered Sunday through Thursday:

Hybrid: Held in meeting rooms in the Marriott Marquis Chicago Hotel and within the virtual meeting platform. Sessions include in-person and virtual presenters and interactive Q&A.

In Person: Held in meeting rooms in the Marriott Marquis Chicago Hotel with in-person presenters and audience. No virtual participation.

Virtual: Held virtually, accessed via the ACS virtual meeting platform. All attendees and presenters will participate virtually and Q&A will use zoom chat.

ENVR virtual and in-person poster sessions will be Wednesday 7-9 pm. During virtual poster sessions, presenters will be located with their poster in separate break-out rooms. Attendees may move between rooms to view and discuss posters.

NETWORKING EVENTS

The **ENVR Annual Members' Business Meeting** will be Sunday, August 21, 6:30-7:00 PM, Shedd (Marriott Marquis).

Join ENVR colleagues in Chicago for **Coffee & Conversation**, Sunday-Wednesday, 1:00-2:00 PM, Glessner House A-B (Marriott Marquis).

Don't miss the **ENVR Social**, Tuesday, August 23, 7:30-9:30 pm, Fatpour Tap Works, 2206 S. Indiana Ave. Tickets (\$20) are available with meeting registration. A few tickets may be available at the door—but don't wait!

A **reception** honoring the 2022 recipients of the **C. Ellen Gonter Graduate Student Award** will be held immediately following the student symposium, Tuesday, August 23, 4:30-5:30 PM, Daniel Burnham (Marriott Marquis Chicago). Learn what research some of ENVR's best graduate students are doing and meet the awardees.

TECHNICAL SESSIONS

The Division of Environmental Chemistry is proud to co-host the conference theme, *Sustainability in a Changing World*, along with the ACS Committee on Environmental Improvement (CEI). Thematic and other programming cosponsored by ENVR is included in this summary.

SUNDAY

Hybrid Session - Morning

8:00 AM - 12:00 PM (CDT)

Applications of Wastewater-Based Epidemiology for Public Health

Organizers: Adhikari, Sangeet; Arizona State University | Kumar, Rahul; Arizona State University | Driver, Erin; Arizona State University | Getzinger, Gordon; Biobot Analytics | Subedi, Bikram

Oral - Hybrid

8:00 AM-12:00 PM (CDT), Sunday 8/21, Great Lakes B (Marriott Marquis Chicago)

Novel Separations & Reactive Processes for Sustainable Water Treatment

Organizers: Ray, Jessica; University of Washington | Tarpeh, William; Stanford University

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

8:00 AM-11:40 AM (CDT), Sunday 8/21, Great Lakes C (Marriott Marquis Chicago)

[AGRO] Environmental Fate, Transport, & Modeling of Agriculturally-related Chemicals

Scott Jackson, Organizer, Presider; Ralph Warren, Organizer, Presider

Financial Cosponsors: Stone Environmental; Intrinsik Corp.

Nominal Cosponsors: ANYL: Division of Analytical Chemistry, AGFD: Division of Agricultural and Food Chemistry, ENVR: Division of Environmental Chemistry

Oral - Hybrid

08:00am - 12:00pm CDT, Sunday 8/21, S501bc (McCormick Place Convention Center)

[AGRO] Sustainable Agriculture: A Promise for the Future:

Shanique Grant, Organizer, Presider; John Rohanna, Organizer; Peter Maienfisch, Organizer; Natalia Peranginangin, Organizer, Presider; Leah Riter, Organizer; Amy Ritter, Organizer

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry,

Oral – Hybrid

08:00am - 12:00pm CDT, Sunday 8/21, S501a (McCormick Place Convention Center)

[POLY] Polymer Characterization for Sustainability: Degradation and Plastics in the Environment

David Meunier, Organizer; Yujing Tan, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

08:00am - 12:00pm CDT, Sunday 8/21, S105a (McCormick Place Convention Center)

[I&EC] Sustainable Chemicals, Energy, and Materials Use

Joseph Sabol, Organizer, Presider

Nominal Cosponsors: CEI: Committee on Environmental Improvement, SCHB: Division of Small Chemical Businesses,

ENFL: Division of Energy and Fuels

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

08:00am - 11:55am CDT, Sunday 8/21, W190a (McCormick Place Convention Center)

[AGFD] Extraction & Biotechnology: A Natural & Sustainable Future for Flavors

Lewis Jones, Organizer; Lewis Jones, Organizer; Elizabeth Kreger, Organizer; Fanette Peche, Presider; Terry Miesle,

Presider; Taylor Windbiel, Presider

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning Group, ENVR: Division of Environmental Chemistry

Oral - Hybrid

08:00am - 10:00am CDT, Sunday 8/21, S504bc (McCormick Place Convention Center)

In-Person Session - Morning

8:00 AM - 12:00 PM (CDT)

Recent Advances in PFAS Research & Environmental Sustainability

Organizers: Shukla, Manoj; US Army ERDC|Kolel-Veetil, Manoj; Naval Research Laboratory|Kelley-Loughnane, Nancy|Nadagouda, Mallikarjuna; US EPA

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Oral - In-person

8:00 AM-12:00 PM (CDT), Sunday 8/21, Daniel Burnham (Marriott Marquis Chicago)

Disinfection & Oxidation Byproducts in Water Treatment

Organizers: Yang, Xin; Sun Yat-sen University, Environmental Science|Li, Xing-Fang; University of Alberta|Richardson, Susan|Prasse, Carsten; Johns Hopkins University

Oral - In-person

8:00 AM-11:20 AM (CDT), Sunday 8/21, George Pullman (Marriott Marquis Chicago)

Advanced Oxidation/Reduction Processes for Water & Wastewater Treatment: Progress & Challenges

Organizers: Fang, Jingyun; Sun Yat-Sen University|Dionysiou, Dionysios; University of Cincinnati|Waclawek, Stanislaw; Technicka univerzita v Liberci

Oral - In-person

8:00 AM-11:35 AM (CDT), Sunday 8/21, Great Lakes A (Marriott Marquis Chicago)

[AGRO] Advances in the Control of Medical, Agricultural, & Veterinary Disease Vectors

Organizers: Aaron Gross, Kumudini Meepagala, Edmund Norris, Daniel Swale

Nominal Cosponsors: ANYL: Division of Analytical Chemistry, ENVR: Division of Environmental Chemistry, MEDI: Division of Medicinal Chemistry, BIOT: Division of Biochemical Technology

Oral – In-Person

08:00am - 11:35am CDT, Sunday 8/21, S501d (McCormick Place Convention Center)

Hybrid Session - Afternoon

2:00 AM - 6:00 PM (CDT)

Recent Advances in PFAS Research & Environmental Sustainability

Organizers: Shukla, Manoj; US Army ERDC|Kolel-Veetil, Manoj; Naval Research Laboratory|Kelley-Loughnane, Nancy|Nadagouda, Mallikarjuna; US EPA

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

2:00 PM-6:00 PM (CDT), Sunday 8/21, Great Lakes B (Marriott Marquis Chicago)

Sustainable Water & Sediment Management: Symposium in Honor of Danny Reible

Organizers: Ma, Xingmao; Texas A&M University|Thoma, Greg; University of Arkansas|Lampert, David; Illinois Institute of Technology

Oral - Hybrid

2:00 PM-5:55:00 PM (CDT), Sunday 8/21, Great Lakes C (Marriott Marquis Chicago)

[PRES] Enabling the Circular Economy through Polymer Molecular Recycling

Organizers: Lucian Lucia, Glenn Larkin, M Barclay Satterfield, Michael Mazzotta, Lokendra Pal

Financial Cosponsor: Eastman Chemical

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning Group, ENVR: Division of Environmental Chemistry

Nominal Cosponsor: CEI: Committee on Environmental Improvement

Oral – Hybrid

02:00pm - 06:00pm (CDT), Sunday 8/21, Skyline ballroom W375ab (McCormick Place Convention Center)

[AGRO] Environmental Fate, Transport, & Modeling of Agriculturally-related Chemicals

Scott Jackson, Organizer, Presider; Ralph Warren, Organizer, Presider

Financial Cosponsors: Stone Environmental; Intrinsik Corp.

Nominal Cosponsors: ANYL: Division of Analytical Chemistry, AGFD: Division of Agricultural and Food Chemistry, ENVR: Division of Environmental Chemistry

Oral - Hybrid

02:00pm - 06:00pm (CDT), Sunday 8/21, S501bc (McCormick Place Convention Center)

[POLY] Polymer Characterization for Sustainability: Renewables

David Meunier, Organizer; Yujing Tan, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

02:00pm - 06:00pm CDT, Sunday 8/21, S105a (McCormick Place Convention Center)

[I&EC] Sustainable Chemicals, Energy, and Materials Use

Joseph Sabol, Organizer, Presider

Nominal Cosponsors: CEI: Committee on Environmental Improvement, SCHB: Division of Small Chemical Businesses, ENFL: Division of Energy and Fuels

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group
Oral - Hybrid

02:00pm – 5:55pm CDT, Sunday 8/21, W190a (McCormick Place Convention Center)

In-Person Session - Afternoon

2:00 PM - 6:00 PM (CDT)

Applications of Wastewater-Based Epidemiology for Public Health

Organizers: Adhikari, Sangeet; Arizona State University|Kumar, Rahul; Arizona State University|Driver, Erin; Arizona State University|Getzinger, Gordon; Biobot Analytics|Subedi, Bikram

Oral - In-person

2:00 PM-6:00 PM (CDT), Sunday 8/21, Water Tower B (Marriott Marquis Chicago)

Disinfection & Oxidation Byproducts in Water Treatment

Organizers: Yang, Xin; Sun Yat-sen University, Environmental Science|Li, Xing-Fang; University of Alberta|Richardson, Susan|Prasse, Carsten; Johns Hopkins University

Oral - In-person

2:00 PM-5:00 PM (CDT), Sunday 8/21, George Pullman (Marriott Marquis Chicago)

Novel Separations & Reactive Processes for Sustainable Water Treatment

Organizers: Ray, Jessica; University of Washington|Tarpeh, William; Stanford University

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Oral - In-person

2:00 PM-5:55:00 PM (CDT), Sunday 8/21, Daniel Burnham (Marriott Marquis Chicago)

Advanced Oxidation/Reduction Processes for Water & Wastewater Treatment: Progress & Challenges

Organizers: Fang, Jingyun; Sun Yat-Sen University|Dionysiou, Dionysios; University of Cincinnati|Waclawek, Stanislaw; Technicka univerzita v Liberci

Oral - In-person

2:00 PM-5:15:00 PM (CDT), Sunday 8/21, Great Lakes A (Marriott Marquis Chicago)

[AGRO] Sustainable Agriculture: A Promise for the Future:

Shanique Grant, Organizer, Presider; John Rohanna, Organizer; Peter Maienfisch, Organizer; Natalia Peranginangin, Organizer, Presider; Leah Riter, Organizer; Amy Ritter, Organizer

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry

Oral – In-Person

2:00 PM – 6:00 PM CDT, Sunday 8/21, S502b (McCormick Place Convention Center)

[AGRO] Advances in the Control of Medical, Agricultural, & Veterinary Disease Vectors

Organizers: Aaron Gross, Kumudini Meepagala, Edmund Norris, Daniel Swale

Nominal Cosponsors: ANYL: Division of Analytical Chemistry, ENVR: Division of Environmental Chemistry, MEDI: Division of Medicinal Chemistry, BIOT: Division of Biochemical Technology

Oral – In-Person

2:00 PM – 6:00 PM CDT, Sunday 8/21, S501d (McCormick Place Convention Center)

[AGFD] Extraction & Biotechnology: A Natural & Sustainable Future for Flavors

Lewis Jones, Organizer; Lewis Jones, Organizer; Elizabeth Kreger, Organizer; Fanette Peche, Presider; Terry Miesle, Presider; Taylor Windbiel, Presider

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning Group, ENVR: Division of Environmental Chemistry

Oral – In-Person

02:00pm – 4:05pm CDT, Sunday 8/21, S503a (McCormick Place Convention Center)

Posters - Evening

7:00 PM - 9:00 PM (CDT)

[SCHB] Chemical Business: Resources & Best Practices:

Organizer: Joseph Pack

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning, ENVR: Division of Environmental Chemistry, BMGT: Division of Business Development and Management

Poster -- In-Person

07:00pm - 09:00pm (CDT), Sunday 8/21, Hall F2 (McCormick Place Convention Center)

[COLL] Advanced Nanomaterials used for Energy Storage & Conversion

Emanuela Andreescu, Organizer; Dr. Jingbo Louise Liu, Organizer; Sajid Bashir Liu, Organizer

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning, ENVR: Division of Environmental Chemistry

Poster - In-person

07:00pm - 09:00pm CDT, Sunday 8/21, Hall F2 (McCormick Place Convention Center)

Poster - Virtual

07:00pm - 09:00pm CDT, Sunday 8/21, Virtual-only (Zoom)

MONDAY

Hybrid Session - Morning

8:00 AM - 12:00 PM (CDT)

Toward Resilient Ecosystems & Water-Food Security for Sustainable Development

Organizers: Abusllah, Meshal|Zubari,Waleed; Arabian Gulf University|Al Enizi, Bader|Alii,Waad; Sultan Qaboos University|Al Awadhi,Talal

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

8:00 AM-12:00 PM (CDT), Monday 8/22, Great Lakes C (Marriott Marquis Chicago)

Environmental Justice: Achieving Global Equity through Green and Sustainable Chemistry

Organizers: Brush, Edward; Bridgewater State University|Goldfarb, Jillian; Cornell University|Wissinger, Jane; University of Minnesota

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

8:00 AM-12:00 PM (CDT), Monday 8/22, Great Lakes B (Marriott Marquis Chicago)

[PRES] Enabling the Circular Economy through Polymer Molecular Recycling

Organizers: Lucian Lucia, Glenn Larkin, M Barclay Satterfield, Michael Mazzotta, Lokendra Pal

Financial Cosponsor: Eastman Chemical

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning Group, ENVR: Division of Environmental Chemistry

Nominal Cosponsor: CEI: Committee on Environmental Improvement

Oral – Hybrid

8:00am - 12:00pm (CDT), Monday 8/22, Skyline ballroom W375ab (McCormick Place Convention Center)

[AGRO] Sustainable Agriculture: A Promise for the Future:

Shanique Grant, Organizer, Presider; John Rohanna, Organizer; Peter Maienfisch, Organizer; Natalia Peranginangin, Organizer, Presider; Leah Riter, Organizer; Amy Ritter, Organizer

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry

Oral – Hybrid

08:00am - 12:00pm CDT, Sunday 8/21, S501a (McCormick Place Convention Center)

[AGRO] Support of Agricultural Research & Development using LC-Mass Spectrometry or Extraction Efficiency Testing: New Trends & Best Practices

Kaushik Banerjee, Organizer; Steve Perez, Organizer, Presider; Manasi Saha, Organizer, Presider; James Ferguson, Organizer, Presider; Rory Mumford, Organizer

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry, ANYL: Division of Analytical Chemistry, ENVR: Division of Environmental Chemistry

Oral – Hybrid

08:00am - 12:00pm CDT, Monday 8/22, S501bc (McCormick Place Convention Center)

[TOXI] Developing Role for Artificial Intelligence in Drug Discovery in Drug Design, Development, & Safety Assessment

Nicholas Meanwell, Organizer, Presider; Fred Guengerich, Organizer, Presider

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning Group, ENVR: Division of Environmental Chemistry

Nominal Cosponsor: MEDI: Division of Medicinal Chemistry

Oral - Hybrid

08:00am - 11:50am CDT, Monday 8/22, Regency A (Hyatt Regency McCormick Place)

In-Person Session - Morning

8:00 AM - 12:00 PM (CDT)

Recent Advances in PFAS Research & Environmental Sustainability

Organizers: Shukla, Manoj; US Army ERDC|Kolel-Veetil, Manoj; Naval Research Laboratory|Kelley-Loughnane, Nancy|Nadagouda, Mallikarjuna; US EPA

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Oral - In-person

8:00 AM-12:00 PM (CDT), Monday 8/22, Daniel Burnham (Marriott Marquis Chicago)

Advanced Oxidation/Reduction Processes for Water & Wastewater Treatment: Progress & Challenges

Organizers: Fang, Jingyun; Sun Yat-Sen University | Dionysiou, Dionysios; University of Cincinnati | Wacławek, Stanisław; Technická univerzita v Liberci

Oral - In-person

8:00 AM-11:35 AM (CDT), Monday 8/22, Great Lakes A (Marriott Marquis Chicago)

Sustainable Water & Sediment Management: Symposium in Honor of Danny Reible

Organizers: Ma, Xingmao; Texas A&M University | Thoma, Greg; University of Arkansas | Lampert, David; Illinois Institute of Technology

Oral - In-person

8:00 AM-12:00 PM (CDT), Monday 8/22, Water Tower B (Marriott Marquis Chicago)

Holistic Management Approach to Emerging Micropollutants in the Environment & Biological Systems

Organizers: Kim, Hyunook; University of Seoul

Oral - In-person

8:00 AM-11:40 AM (CDT), Monday 8/22, Grand Horizon F (Marriott Marquis Chicago)

Sensors & Biosensors for Widespread Environmental Monitoring

Organizers: Schorr, Paul; New Jersey Institute of Technology | Romero-Gonzalez, Maria | Rajasekharan, Vishnu; Hach Company | Li, Tao | McCaul, Margaret

Oral - In-person

8:00 AM-11:35 AM (CDT), Monday 8/22, George Pullman (Marriott Marquis Chicago)

[CHED] Campus as a Living Laboratory for Sustainability

Patrick Daubenmire, Organizer, Presider; Dr. Catherine Hurt Middlecamp, Organizer, Presider; Christie Sayes, Organizer

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Nominal Cosponsors: CEI: Committee on Environmental Improvement, MPPG: Multidisciplinary Program Planning Group

Oral – In-Person

08:00am - 11:30am CDT, Monday 8/22, S405b (McCormick Place Convention Center)

[AGRO] Environmental Fate, Transport, & Modeling of Agriculturally Related Chemicals

Scott Jackson, Organizer, Presider; Ralph Warren, Organizer, Presider

Financial Cosponsors: Stone Environmental; Intrinsik Corp.

Nominal Cosponsors: ANYL: Division of Analytical Chemistry, AGFD: Division of Agricultural and Food Chemistry, ENVR: Division of Environmental Chemistry

Oral – In-Person

08:00am – 11:35am CDT, Monday 8/22, S501bc (McCormick Place Convention Center)

[PMSE] Polymers for Electrochemical Energy Storage & Conversion

Shudipto Dishari, Organizer, Presider; Jennifer Schaefer, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - In-person

08:00am - 12:00pm CDT, Monday 8/22, S102a (McCormick Place Convention Center)

[POLY] Polymer Characterization for Sustainability: Recycling

David Meunier, Organizer; Yujing Tan, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral – In-Person

08:00am - 12:00pm CDT, Monday 8/22, S102d (McCormick Place Convention Center)

[ENFL] Chemical Transformations Powered by Renewable Energy Resources for Carbon Capture, Conversion, Storage & Removal, Low Carbon Energy Carriers, & Metal Recovery: Chemical Transformations for CCUS

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group
Greeshma Gadikota, Organizer, Presider; Hassnain Asgar, Organizer, Presider; Sohaib Mohammed, Organizer, Presider; Deepika Malhotra, Organizer, Presider; Wei Wang, Organizer

Oral - In-person

08:00am - 11:15am CDT, Monday 8/22, W184d (McCormick Place Convention Center)

Virtual Session - Morning

10:00 AM - 2:00 PM (CDT)

Disinfection & Oxidation Byproducts in Water Treatment

Organizers: Yang, Xin; Sun Yat-sen University, Environmental Science | Li, Xing-Fang; University of Alberta | Richardson, Susan | Prasse, Carsten; Johns Hopkins University

Oral - Virtual

10:00 AM-1:00 PM (CDT), Monday 8/22, Virtual-only (Zoom)

Posters - Midday

12:00 PM - 2:00 PM (CDT)

[ENFL] ACS Women in Energy

Greeshma Gadikota, Organizer; Anne Gaffney, Organizer; Ah-Hyung Park, Organizer

Nominal Cosponsor: ENVR: Division of Environmental Chemistry, PROF: Division of Professional Relations, COLL: Division of Colloid and Surface Chemistry

Poster - In-person

12:00pm - 02:00pm CDT, Monday 8/22, Hall F2 (McCormick Place Convention Center)

[ENFL] Advanced Materials & Novel Technologies for Carbon Capture & Utilization for Sustainable Fuels Production

Andre Boehman, Organizer; Sehoon Chang, Organizer; Babak Fayyaz-Najafi, Organizer; César Ovalles, Organizer; Hooisweng Ow, Organizer; Wei Wang, Organizer

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Poster - In-person

12:00pm - 02:00pm CDT, Monday 8/22, Hall F2 (McCormick Place Convention Center)

Hybrid Session - Afternoon

2:00 PM - 6:00 PM (CDT)

Holistic Management Approach to Emerging Micropollutants in the Environment & Biological Systems

Organizers: Kim, Hyunook; University of Seoul

Oral - Hybrid

2:00 PM-5:00 PM (CDT), Monday 8/22, Great Lakes C (Marriott Marquis Chicago)

Environmental Justice: Achieving Global Equity through Green and Sustainable Chemistry

Organizers: Wissinger, Jane; University of Minnesota | Brush, Edward; Bridgewater State University | Goldfarb, Jillian; Cornell University

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

2:00 PM-6:00 PM (CDT), Monday 8/22, Great Lakes B (Marriott Marquis Chicago)

[AGRO] Unmanned Aerial Systems (aka Drones): Pesticide Spraying & Other Agricultural Applications

Ross Breckels, Organizer; Melissa Bridges, Organizer, Presider; Shanique Grant, Organizer, Presider; Zhenxu Tang, Organizer

Financial Cosponsors: Stone Environmental; Intrinsic Corp.

Nominal Cosponsors: ANYL: Division of Analytical Chemistry, ENVR: Division of Environmental Chemistry

Oral - Hybrid

2:00pm - 06:00pm CDT, Monday 8/22 S501a (McCormick Place Convention Center)

In-Person Session - Afternoon

2:00 PM - 6:00 PM (CDT)

Environmental Health & Toxicology: The Challenge of Complex Environmental Mixtures

Organizers: Prasse, Carsten; Johns Hopkins University | Sayes, Christie; Baylor University

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Oral - In-person

2:00 PM-5:20 PM (CDT), Monday 8/22, Great Lakes A (Marriott Marquis Chicago)

Sustainable Water & Sediment Management: Symposium in Honor of Danny Reible

Organizers: Ma, Xingmao; Texas A&M University | Thoma, Greg; University of Arkansas | Lampert, David; Illinois Institute of Technology

Oral - In-person

2:00 PM-5:40 PM (CDT), Monday 8/22, Water Tower B (Marriott Marquis Chicago)

Software Tools & Methodologies to Evaluate the Hazard & Properties of Chemical Alternatives

Organizers: Martin, Todd; US EPA | Lowe, Charles; U.S. Environmental Protection Agency | Williams, Antony

Oral - In-person

2:00 PM-5:55 PM (CDT), Monday 8/22, Daniel Burnham (Marriott Marquis Chicago)

Sensors & Biosensors for Widespread Environmental Monitoring

Organizers: Schorr, Paul; New Jersey Institute of Technology | Romero-Gonzalez, Maria | Rajasekharan, Vishnu; Hach Company | Li, Tao | McCaul, Margaret

Oral - In-person

2:00 PM-6:00 PM (CDT), Monday 8/22, George Pullman (Marriott Marquis Chicago)

AGRO] Sustainable Agriculture: A Promise for the Future:

Shanique Grant, Organizer, Presider; John Rohanna, Organizer; Peter Maienfisch, Organizer; Natalia Peranginangin, Organizer, Presider; Leah Riter, Organizer; Amy Ritter, Organizer

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry

Oral – In-Person

2:00pm – 5:35pm CDT, Sunday 8/21, S501a (McCormick Place Convention Center)

[AGRO] Advances in the Control of Medical, Agricultural, & Veterinary Disease Vectors

Organizers: Aaron Gross, Kumudini Meepagala, Edmund Norris, Daniel Swale

Nominal Cosponsors: ANYL: Division of Analytical Chemistry, ENVR: Division of Environmental Chemistry, MEDI: Division of Medicinal Chemistry, BIOT: Division of Biochemical Technology

Oral – In-Person

2:00 PM – 6:00 PM CDT, Monday 8/22, S501d (McCormick Place Convention Center)

[AGFD] Sustainable Agriceuticals

Hyunook Kim, Organizer, Presider; Lin Liu, Organizer; Daxi Ren, Organizer; Wallace Yokoyama, Organizer; Liangli Yu, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group
Oral - In-person
02:00pm - 05:25pm CDT, Monday 8/22, S504d (McCormick Place Convention Center)

[ENFL] Chemical Transformations Powered by Renewable Energy Resources for Carbon Capture, Conversion, Storage & Removal, Low Carbon Energy Carriers, & Metal Recovery: Chemical Transformations for CCUS

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group
Greeshma Gadikota, Organizer, Presider; Hassnain Asgar, Organizer, Presider; Sohaib Mohammed, Organizer, Presider; Deepika Malhotra, Organizer, Presider; Wei Wang, Organizer

Oral - In-person
02:00pm - 05:25pm CDT, Monday 8/22, W184d (McCormick Place Convention Center)

Virtual Session - Afternoon

3:00 PM - 7:00 PM (CDT)

Advanced Oxidation/Reduction Processes for Water & Wastewater Treatment: Progress & Challenges

Organizers: Fang, Jingyun; Sun Yat-Sen University|Dionysiou, Dionysios; University of Cincinnati|Waclawek, Stanislaw; Technicka univerzita v Liberci

Oral - Virtual
3:00 PM-6:35 PM (CDT), Monday 8/22, Virtual-only (Zoom)

Toward Resilient Ecosystems & Water-Food Security for Sustainable Development

Organizers: Abusllah, Meshal|Zubari,Waleed; Arabian Gulf University|Al Enizi, Bader|Alii,Waad; Sultan Qaboos University|Al Awadhi,Talal

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group
Oral - Virtual
3:00 PM-4:40 PM (CDT), Monday 8/22, Virtual-only (Zoom)

Environmental Chemistry & Polymer Science: Convergence at the Interface

Organizers: Dai, Ning; University at Buffalo|Xiong, Boya; University of Minnesota Twin Cities|Ward, Collin; Collin Ward
Oral - Virtual
3:00 PM-4:40 PM (CDT), Monday 8/22, Virtual-only (Zoom)

Sci-Mix Posters - Evening

8:00 PM - 10:00 PM (CDT)

Selected Division of Environmental Chemistry Posters

See details at <https://acs.digitellinc.com/acs/live/28/page/905>

Posters - Virtual
3:00 PM-4:40 PM (CDT), Monday 8/22, Virtual-only (Zoom)
Posters – In-Person
8:00 PM – 10:00 PM CDT, Monday 8/22, Hall F2 (McCormick Place Convention Center)

TUESDAY

Hybrid Session - Morning

8:00 AM - 12:00 PM (CDT)

Environmental Health & Toxicology: The Challenge of Complex Environmental Mixtures

Organizers: Prasse, Carsten; Johns Hopkins University | Sayes, Christie; Baylor University

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

8:00 AM-11:40 AM (CDT), Tuesday 8/23, Great Lakes B (Marriott Marquis Chicago)

Developed & Emerging PFAS Treatment Technologies for Per- & Polyfluoroalkyl Substances (PFAS)

Organizers: Juriasingani, Purshotam; Tetra Tech Inc | Bentel, Michael; Clemson University | Chaplin, Brian; University of Illinois at Chicago

Oral - Hybrid

8:00 AM-11:35 AM (CDT), Tuesday 8/23, Great Lakes C (Marriott Marquis Chicago)

[PRES] Enabling the Circular Economy through Polymer Molecular Recycling

Organizers: Lucian Lucia, Glenn Larkin, M Barclay Satterfield, Michael Mazzotta, Lokendra Pal

Financial Cosponsor: Eastman Chemical

Nominal Cosponsor: CEI: Committee on Environmental Improvement

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning Group, ENVR: Division of Environmental Chemistry

Oral – Hybrid

8:00am - 12:00pm (CDT), Tuesday 8/23, Skyline ballroom W375ab (McCormick Place Convention Center)

[SCHB] Chemical Business: Resources & Best Practices:

Organizer: Mevan Dissanayake, Michael Mazzotta

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning, ENVR: Division of Environmental Chemistry, BMGT: Division of Business Development and Management

Oral – Hybrid

8:00am – 11:50am (CDT), Tuesday, 8/23, Regency D (Hyatt Regency McCormick Place)

[AGRO] Upfront Mitigation: What that Means in the FIFRA/ESA Consultation Process

Kathryn Bissell, Organizer, Presider; Tilghman Hall, Organizer, Presider; Bernalyn McGaughey, Organizer, Presider

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry, ANYL: Division of Analytical Chemistry, ENVR: Division of Environmental Chemistry, BIOL: Division of Biological Chemistry

Oral - Hybrid

08:00am - 10:40am CDT, Tuesday 8/23, S501bc (McCormick Place Convention Center)

[AGRO] Early Career Symposium: Deciphering Plant-Insect-Microorganism Signals for Sustainable Crop Production

Nurhayat Tabanca, Organizer, Presider; Gareth Thomas, Organizer, Presider

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning Group, ENVR: Division of Environmental Chemistry

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry, CTA: Committee on Technical Affairs, BIOT: Division of Biochemical Technology

Oral - Hybrid

08:00am - 10:50am CDT, Tuesday 8/23, S501a (McCormick Place Convention Center)

In-Person Session - Morning

8:00 AM - 12:00 PM (CDT)

Engineered, Natural, & Incidental Nanomaterials & their Impacts on the Environmental System: Symposium In Honor of Michael Hochella

Organizers: Sharma, Virender; Texas AM University|Dionysiou, Dionysios; University of Cincinnati|Vikesland, Peter; Virginia Tech|Wan, Quan; Institute of Geochemistry Chinese Academy of Sciences

Oral - In-person

8:00 AM-12:00 PM (CDT), Tuesday 8/23, Great Lakes A (Marriott Marquis Chicago)

Porous Framework Materials for the Removal of Emerging Contaminants from Aqueous Environments

Organizers: Wriedt, Mario; Clarkson University|Islamoglu, Timur; Northwestern University

Oral - In-person

8:00 AM-11:40 AM (CDT), Tuesday 8/23, Daniel Burnham (Marriott Marquis Chicago)

[AGRO] Bioisosteric Replacement & Scaffold Hopping for Bioactive Compound Discovery

Clemens Lamberth, Organizer, Presider; Peter Maienfisch, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - In-person

08:00am - 10:20am CDT, Tuesday 8/23, S501d (McCormick Place Convention Center)

[AGFD] Advances in Packaging Recycling and Sustainability

John L Koontz, Organizer, Presider; Yoon Song, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Nominal Cosponsors: POLY: Division of Polymer Chemistry, PMSE: Division of Polymeric Materials Science and Engineering

Oral - In-person

08:00am - 11:40am CDT, Tuesday 8/23, S505a (McCormick Place Convention Center)

[ENFL] ACS Women in Energy

Anne Gaffney, Organizer, Presider; Greeshma Gadikota, Organizer, Presider; Ah-Hyung Park, Organizer

Nominal Cosponsors: ENVR: Division of Environmental Chemistry, PROF: Division of Professional Relations, COLL: Division of Colloid and Surface Chemistry

Oral - In-person

08:00am - 11:15am CDT, Tuesday 8/23, W186c (McCormick Place Convention Center)

[BIOL] Biocatalysis for a Sustainable World

Mark D Distefano, Organizer, Presider; Phoebe Glazer, Organizer; Ekaterina Pletneva, Organizer

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning Group, ENVR: Division of Environmental Chemistry

Oral - In-person

08:00am - 12:00pm CDT, Tuesday 8/23, Glessner House C (Marriott Marquis Chicago)

Virtual Session - Morning

10:00 AM - 2:00 PM (CDT)

Advanced Oxidation/Reduction Processes for Water & Wastewater Treatment: Progress & Challenges

Organizers: Fang, Jingyun; Sun Yat-Sen University | Dionysiou, Dionysios; University of Cincinnati | Wacławek, Stanisław; Technická univerzita v Liberci

Oral - Virtual

10:00 AM-1:35 PM (CDT), Tuesday 8/23, Virtual-only (Zoom)

[AGFD] Sustainable Agriceuticals

Hyunook Kim, Organizer; Lin Liu, Organizer; Daxi Ren, Organizer, Presider; Wallace Yokoyama, Organizer, Presider; Liangli Yu, Organizer

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - Virtual

10:00am - 12:30pm CDT, Tuesday 8/23, Location: Virtual-only (Zoom)

Hybrid Session - Afternoon

2:00 PM - 6:00 PM (CDT)

Environmental Health & Toxicology: The Challenge of Complex Environmental Mixtures

Organizers: Prasse, Carsten; Johns Hopkins University | Sayes, Christie; Baylor University

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

2:00 PM-4:20 PM (CDT), Tuesday 8/23, Great Lakes B (Marriott Marquis Chicago)

Porous Framework Materials for the Removal of Emerging Contaminants from Aqueous Environments

Organizers: Wriedt, Mario; Clarkson University | Islamoglu, Timur; Northwestern University

Oral - Hybrid

2:00 PM-5:55 PM (CDT), Tuesday 8/23, Great Lakes C (Marriott Marquis Chicago)

[SCHB] Sustainable Chemical Business in a Changing World

Organizers, Mevan Dissanayake, Michael Mazzotta; Joseph Sabol, Presider

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning Group, ENVR: Division of Environmental Chemistry

Nominal Cosponsor: BMGT: Division of Business Development and Management

Oral – Hybrid

02:00pm - 05:05pm CDT, Tuesday 8/23, Regency D (Hyatt Regency McCormick Place)

[ENFL] ACS Women in Energy

Anne Gaffney, Organizer, Presider; Greeshma Gadikota, Organizer, Presider; Ah-Hyung Park, Organizer

Nominal Cosponsors: ENVR: Division of Environmental Chemistry, PROF: Division of Professional Relations, COLL: Division of Colloid and Surface Chemistry

Oral - Hybrid

2:00 PM-5:15 PM CDT, Tuesday 8/23, W175a (McCormick Place Convention Center)

[AGFD] Advances in Packaging Recycling and Sustainability

John L Koontz, Organizer, Presider; Yoon Song, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Nominal Cosponsors: POLY: Division of Polymer Chemistry, PMSE: Division of Polymeric Materials Science and Engg.

Oral - Hybrid

2:00 PM-5:40 PM CDT, Tuesday 8/23, S504a (McCormick Place Convention Center)

[AGRO] Bioisosteric Replacement & Scaffold Hopping for Bioactive Compound Discovery

Clemens Lamberth, Organizer, Presider; Peter Maienfisch, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

2:00 PM-6:00 PM CDT, Tuesday 8/23, S501bc (McCormick Place Convention Center)

[AGRO] From Colloids to Drift Effect: Bridging Formulations to Fields

Naresh Pai, Organizer, Presider; Frederick Salzman, Organizer, Presider; Solito Sumulong, Organizer, Presider; Susannah Banziger, Organizer, Presider; Ricardo Acosta Amado, Organizer, Presider

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry, ANYL: Division of Analytical Chemistry, ENVR: Division of Environmental Chemistry

Oral - Hybrid

02:00pm - 06:00pm CDT, Tuesday 8/23, S501a (McCormick Place Convention Center)

[CHAS] Latest Developments in Cannabis Science and Sustainability: Analytics of Various Compounds from the Cannabis Plant

Kyle Boyar, Organizer, Presider; Julia Bramante, Organizer, Presider; Amber Wise, Organizer, Presider

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning Group, ENVR: Division of Environmental Chemistry

Oral - Hybrid

02:00pm - 05:15pm CDT, Tuesday 8/23, Dusable / CC 21 (Hyatt Regency McCormick Place)

In-Person Session - Afternoon

2:00 PM - 6:00 PM (CDT)

Developed & Emerging PFAS Treatment Technologies for Per- & Polyfluoroalkyl Substances (PFAS)

Organizers: Juriasingani, Purshotam; Tetra Tech Inc|Bentel, Michael; Clemson University|Chaplin, Brian; University of Illinois at Chicago

Oral - In-person

2:00 PM-6:00 PM (CDT), Tuesday 8/23, Water Tower A (Marriott Marquis Chicago)

Greener Strategies in Environmental Sustainability In Honor of John Crittenden

Organizers: Minakata, Daisuke; Michigan Technological University College of Engineering|Sharma, Virender; Texas AM University|Guan, Xiaohong

Oral - In-person

2:00 PM-5:55PM (CDT), Tuesday 8/23, George Pullman (Marriott Marquis Chicago)

Environmental Chemistry & Polymer Science: Convergence at the Interface

Organizers: Dai, Ning; University at Buffalo|Xiong, Boya; University of Minnesota Twin Cities|Ward, Collin; Collin Ward

Oral - In-person

2:00 PM-5:15PM (CDT), Tuesday 8/23, Water Tower B (Marriott Marquis Chicago)

Engineered, Natural, & Incidental Nanomaterials & their Impacts on the Environmental System: Symposium In Honor of Michael Hochella

Organizers: Sharma, Virender; Texas AM University|Dionysiou, Dionysios; University of Cincinnati|Vikesland, Peter; Virginia Tech|Wan, Quan; Institute of Geochemistry Chinese Academy of Sciences

Oral - In-person

2:00 PM-6:00 PM (CDT), Tuesday 8/23, Great Lakes A (Marriott Marquis Chicago)

C. Ellen Gonter Graduate Student Award Symposium

Organizers: O'Shea, Kevin; Florida Intrntnl Univ|Sharma, Virender; Texas AM University|Sayes, Christie; Baylor University

Oral - In-person

2:00 PM-4:40 PM (CDT), Tuesday 8/23, Daniel Burnham (Marriott Marquis Chicago)

[AGRO] Upfront Mitigation: What that Means in the FIFRA/ESA Consultation Process

Kathryn Bissell, Organizer, Presider; Tilghman Hall, Organizer, Presider; Bernalyn McGaughey, Organizer, Presider

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry, ANYL: Division of Analytical Chemistry, ENVR:

Division of Environmental Chemistry, BIOL: Division of Biological Chemistry

Oral – In-Person

2:00 PM-6:00 PM CDT, Tuesday 8/23, S503a (McCormick Place Convention Center)

[AGRO] Early Career Symposium: Deciphering Plant-Insect-Microorganism Signals for Sustainable Crop Production

Nurhayat Tabanca, Organizer, Presider; Gareth Thomas, Organizer, Presider

Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning Group, ENVR: Division of Environmental Chemistry

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry, CTA: Committee on Technical Affairs, BIOT:

Division of Biochemical Technology

Oral – In-Person

2:00 PM-6:00 PM (CDT), Tuesday 8/23, S501d (McCormick Place Convention Center)

[ENFL] Advanced Materials & Novel Technologies for Carbon Capture & Utilization for Sustainable Fuels Production

Andre Boehman, Organizer; Sehoon Chang, Organizer; Babak Fayyaz-Najafi, Organizer, Presider; César Ovalles,

Organizer; Hooisweng Ow, Organizer, Presider; Wei Wang, Organizer

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - In-person

02:00pm - 04:40pm CDT, Tuesday 8/23, W185a (McCormick Place Convention Center)

Virtual Session - Afternoon

3:00 PM - 7:00 PM (CDT)

Advanced Oxidation/Reduction Processes for Water & Wastewater Treatment: Progress & Challenges

Organizers: Fang, Jingyun; Sun Yat-Sen University|Dionysiou, Dionysios; University of Cincinnati|Waclawek, Stanislaw;

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Oral - Virtual

3:00 PM-6:55 PM (CDT), Tuesday 8/23, Virtual-only (Zoom)

Electrochemical Materials & Interfaces for Environmental & Sustainability Challenges

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Organizers: Kim, Taeyoung; Clarkson University|Su, Xiao; University of Illinois at Urbana-Champaign|Arges, Christopher;

University of Chicago

Oral - Virtual

3:00 PM-5:20 PM (CDT), Tuesday 8/23, Virtual-only (Zoom)

Sensors & Biosensors for Widespread Environmental Monitoring

Organizers: Schorr, Paul; New Jersey Institute of Technology|Romero-Gonzalez, Maria|Rajasekharan, Vishnu; Hach

Company|Li, Tao|McCaul, Margaret

Oral - Virtual

3:00 PM-4:40 PM (CDT), Tuesday 8/23, Virtual-only (Zoom)

[AGFD] Sustainable Agriceuticals

Hyunook Kim, Organizer; Lin Liu, Organizer; Daxi Ren, Organizer, Presider; Wallace Yokoyama, Organizer, Presider; Liangli Yu, Organizer

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group
Oral - Virtual
3:00pm – 6:10pm CDT, Tuesday 8/23, Location: Virtual-only (Zoom)

WEDNESDAY

Hybrid Session - Morning

8:00 AM - 12:00 PM (CDT)

Engineered, Natural, & Incidental Nanomaterials & their Impacts on the Environmental System: Symposium In Honor of Michael Hochella

Organizers: Sharma, Virender; Texas AM University|Dionysiou, Dionysios; University of Cincinnati|Vikesland, Peter; Virginia Tech|Wan, Quan; Institute of Geochemistry Chinese Academy of Sciences

Oral - Hybrid

8:00 AM-12:00 PM (CDT), Wednesday 8/24, Great Lakes B (Marriott Marquis Chicago)

Current Perspectives in General Environmental Chemistry

Organizers: Sharma, Virender; Texas AM University|Sayes, Christie; Baylor University

Oral - Hybrid

8:00 AM-10:50 AM (CDT), Wednesday 8/24, Great Lakes C (Marriott Marquis Chicago)

[GEOC] Multi-scale Geochemical Approaches in CO₂ Capture, Conversion, and Sequestration

Xin Gu, Organizer; Sang Soo Lee, Organizer; Ke Yuan, Organizer; Rui Zhang, Organizer

Nominal Cosponsors: ENVR: Division of Environmental Chemistry, I&EC: Division of Industrial and Engineering Chemistry

Oral - Hybrid

08:00am - 10:50am CDT, Wednesday 8/24, Regency B (Hyatt Regency McCormick Place)

[AGRO] Nontarget Arthropod Risk Assessment: Scientific Developments, Challenges & Research Needs

Domenica Auteri, Organizer; Alessio Ippolito, Organizer, Presider; Keith Sappington, Organizer; Tom Steeger, Organizer; Katrina White, Ph.D., Organizer, Presider

Nominal Cosponsors: AGFD: Division of Agricultural and Food, ANYL: Division of Analytical Chemistry, ENVR: Division of Environmental Chemistry, BIOL: Division of Biological Chemistry, TOXI: Division of Chemical Toxicology

Oral - Hybrid

08:00am - 12:00pm CDT, Wednesday 8/24, S501a (McCormick Place Convention Center)

[AGRO] New Crop Yield Technology Companies Improving Sustainability

Pam Marrone, Organizer, Presider; Keith Wing, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry, ANYL: Division of Analytical Chemistry, BIOT: Division of Biochemical Technology

Oral - Hybrid

08:00am - 12:00pm CDT, Wednesday 8/24, S501bc (McCormick Place Convention Center)

[COLL] Advanced Nanomaterials used for Energy Storage & Conversion

Emanuela Andreescu, Organizer, Presider; Dr. Jingbo Louise Liu, Organizer, Presider; Sajid Bashir Liu, Organizer, Presider
Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group
Oral - Hybrid
08:00am - 10:35am CDT, Wednesday 8/24, W196b (McCormick Place Convention Center)

[AGFD] Modification of Agricultural Biomass into Value-Added Products: Utilization of Agricultural Biomass

Helen Ngo, Organizer, Presider; Majher Sarker, Organizer, Presider; Madhav Yadav, Organizer
Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group
Oral - Hybrid
08:00am - 12:00pm CDT, Wednesday 8/24, S504bc (McCormick Place Convention Center)

[CHED] Sustainable Polymeric Materials & Strategies in Education & Outreach

Jane Wissinger, Organizer, Presider; Sarah Morgan, Organizer; Heather Broadhead, Organizer
Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group
Nominal Cosponsor: POLY: Division of Polymer Chemistry
Oral - Hybrid
08:00am - 11:20am CDT, Wednesday 8/24, Vista Room S406a (McCormick Place Convention Center)

[ENFL] Advanced Materials & Novel Technologies for Carbon Capture & Utilization for Sustainable Fuels Production

Andre Boehman, Organizer; Sehoon Chang, Organizer; Babak Fayyaz-Najafi, Organizer, Presider; César Ovalles, Organizer; Hooisweng Ow, Organizer, Presider; Wei Wang, Organizer
Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group
Oral - Hybrid
8:00 AM-12:00 PM (CDT), Wednesday 8/24, W175a (McCormick Place Convention Center)

In-Person Session - Morning

8:00 AM - 12:00 PM (CDT)

Developed & Emerging PFAS Treatment Technologies for Per- & Polyfluoroalkyl Substances (PFAS)

Organizers: Juriasingani, Purshotam; Tetra Tech Inc | Bentel, Michael; Clemson Univ. | Chaplin, Brian; Univ. of Illinois at Chicago
Oral - In-person
8:00 AM-11:35 AM (CDT), Wednesday 8/24, Water Tower A (Marriott Marquis Chicago)

Sensors for Water Quality Monitoring in Resource Limited Environments

Organizers: Wiederoder, Michael | Brack, Eric | Alexander, Todd
Oral - In-person
8:00 AM-11:10:00 AM (CDT), Wednesday 8/24, George Pullman (Marriott Marquis Chicago)

Electrochemical Materials & Interfaces for Environmental & Sustainability Challenges

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group
Organizers: Kim, Taeyoung; Clarkson Univ. | Su, Xiao; Univ. of Illinois at Urbana-Champaign | Arges, Christopher; Univ. of Chicago
Oral - In-person
8:00 AM-11:25 AM (CDT), Wednesday 8/24, Great Lakes A (Marriott Marquis Chicago)

Environmental Chemistry & Polymer Science: Convergence at the Interface

Organizers: Dai, Ning; University at Buffalo|Xiong, Boya; University of Minnesota Twin Cities|Ward, Collin; Collin Ward

Oral - In-person

8:00 AM-11:35 AM (CDT), Wednesday 8/24, Water Tower B (Marriott Marquis Chicago)

Advances Made by Early to Mid-Career Researchers in Environmental Science & Engineering

Organizers: Dionysiou, Dionysios; University of Cincinnati|Sharma, Virender; Texas AM University

Oral - In-person

8:00 AM-12:05:00 PM (CDT), Wednesday 8/24, Daniel Burnham (Marriott Marquis Chicago)

[AGRO] Climate Change and Sustainable Agriculture: Impacts on food security/trade, risk assessment and pesticide fate studies (including Early Career Symposium)

Patricia Engel, Organizer; Cornelis Hoogeweg, Organizer; Frederick Salzman, Organizer, Presider; Pamela Rice, Organizer; Xavier Poole, Organizer, Presider; Aleksandra Dean, Organizer; Samantha Nedder, Organizer, Presider; Amy Ritter, Organizer

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry, CELL: Division of Cellulose and Renewable Materials, TOXI: Division of Chemical Toxicology, ENFL: Division of Energy and Fuels

Oral - In-person

08:00am - 12:00pm CDT, Wednesday 8/24, S502b (McCormick Place Convention Center)

[AGRO] INSecticide TARgets (INSTAR) Summit

Troy Anderson, Organizer; Stephen Duke, Organizer; Daniel Swale, Organizer, Presider

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry, ANYL: Division of Analytical Chemistry, ENVR: Division of Environmental Chemistry, Nominal BIOT: Division of Biochemical Technology

Oral - In-person

08:00am - 11:50am CDT, Wednesday 8/24, S501d (McCormick Place Convention Center)

Virtual Session - Morning

10:00 AM - 2:00 PM (CDT)

Greener Strategies in Environmental Sustainability In Honor of John Crittenden

Organizers: Minakata, Daisuke; Michigan Technological University College of Engineering|Sharma, Virender; Texas AM University|Guan, Xiaohong

Oral - Virtual

10:00 AM-1:50 PM (CDT), Wednesday 8/24, Virtual-only (Zoom)

Hybrid Session - Afternoon

2:00 PM - 6:00 PM (CDT)

Sensors for Water Quality Monitoring in Resource Limited Environments

Organizers: Wiederoder, Michael|Brack, Eric|Alexander,Todd

Oral - Hybrid

2:00 PM-5:10 PM (CDT), Wednesday 8/24, Great Lakes C (Marriott Marquis Chicago)

Engineered, Natural, & Incidental Nanomaterials & their Impacts on the Environmental System: Symposium In Honor of Michael Hochella

Organizers: Sharma, Virender; Texas AM University|Dionysiou, Dionysios; University of Cincinnati|Vikesland, Peter; Virginia Tech|Wan, Quan; Institute of Geochemistry Chinese Academy of Sciences

Oral - Hybrid

2:00 PM-6:00 PM (CDT), Wednesday 8/24, Great Lakes B (Marriott Marquis Chicago)

[AGRO] Bioisosteric Replacement & Scaffold Hopping for Bioactive Compound Discovery

Clemens Lamberth, Organizer, Presider; Peter Maienfisch, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

2:00 PM-5:35 PM CDT, Wednesday 8/24, S501bc (McCormick Place Convention Center)

[AGRO] Good Laboratory Practices for the Agrochemical Professional

Jennifer Cypher, Organizer, Presider; Kimberly Frazier, Organizer; Johanna Mazlo, Organizer; Ms Barb Munch, Organizer

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry, ANYL: Division of Analytical Chemistry, ENVR: Division of Environmental Chemistry, CTA: Committee on Technician Affairs

Oral - Hybrid

02:00pm - 05:35pm CDT, Wednesday 8/24, S501a (McCormick Place Convention Center)

[COLL] Advanced Nanomaterials used for Energy Storage & Conversion

Emanuela Andreescu, Organizer, Presider; Dr. Jingbo Louise Liu, Organizer, Presider; Sajid Bashir Liu, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

2:00 PM-4:15 PM CDT, Wednesday 8/24, W196b (McCormick Place Convention Center)

[AGFD] Alternative Protein Sources for Human Nutrition (Plant-Based Protein)

John Finley, Organizer, Presider; Brian Guthrie, Organizer, Presider; Michael Morello, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

02:00pm - 05:25pm CDT, Wednesday 8/24, S504bc (McCormick Place Convention Center)

[CHED] Carbon Capture, Utilization, and Storage in Undergraduate Teaching and Research: OnDemand

Edward Brush, Organizer, Presider; Alyssa Deline, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Nominal Cosponsor: CEI: Committee on Environmental Improvement

Oral - Hybrid

02:00pm - 05:25pm CDT, Wednesday 8/24, Vista Room S406a (McCormick Place Convention Center)

[PROF] URM Talent Acquisition, Retention and Career Development in STEM Private Sectors

Matthew Grandbois, Organizer

Financial Cosponsor: Dow, DuPont, Arkema, 3M

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

02:00pm - 05:30pm CDT, Wednesday 8/24, Field / CC 20 (Hyatt Regency McCormick Place)

In-Person Session - Afternoon

2:00 PM - 6:00 PM (CDT)

Developed & Emerging PFAS Treatment Technologies for Per- & Polyfluoroalkyl Substances (PFAS)

Organizers: Juriasingani, Purshotam; Tetra Tech Inc | Bentel, Michael; Clemson University | Chaplin, Brian; University of Illinois at Chicago

Oral - In-person

2:00 PM-6:00 PM (CDT), Wednesday 8/24, Water Tower A (Marriott Marquis Chicago)

Greener Strategies in Environmental Sustainability In Honor of John Crittenden

Organizers: Minakata, Daisuke; Michigan Technological University College of Engineering | Sharma, Virender; Texas AM University | Guan, Xiaohong

Oral - In-person

2:00 PM-6:00 PM (CDT), Wednesday 8/24, George Pullman (Marriott Marquis Chicago)

Electrochemical Materials & Interfaces for Environmental & Sustainability Challenges

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group

Organizers: Kim, Taeyoung; Clarkson University | Su, Xiao; University of Illinois at Urbana-Champaign | Arges, Christopher; University of Chicago

Oral - In-person

2:00 PM-5:50 PM (CDT), Wednesday 8/24, Great Lakes A (Marriott Marquis Chicago)

Environmental Chemistry & Polymer Science: Convergence at the Interface

Organizers: Dai, Ning; University at Buffalo | Xiong, Boya; University of Minnesota Twin Cities | Ward, Collin; Collin Ward

Oral - In-person

2:00 PM-5:25 PM (CDT), Wednesday 8/24, Water Tower B (Marriott Marquis Chicago)

Current Perspectives in General Environmental Chemistry

Organizers: Sharma, Virender; Texas AM University | Sayes, Christie; Baylor University

Oral - In-person

2:00 PM-4:50 PM (CDT), Wednesday 8/24, Daniel Burnham (Marriott Marquis Chicago)

[AGRO] INSecticide TARgets (INSTAR) Summit

Troy Anderson, Organizer; Stephen Duke, Organizer; Daniel Swale, Organizer, Presider

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry, ANYL: Division of Analytical Chemistry, ENVR: Division of Environmental Chemistry, Nominal BIOT: Division of Biochemical Technology

Oral - In-person

02:00pm-5:25pm CDT, Wednesday 8/24, S501d (McCormick Place Convention Center)

[AGRO] New Crop Yield Technology Companies Improving Sustainability

Pam Marrone, Organizer, Presider; Keith Wing, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry, ANYL: Division of Analytical Chemistry, BIOT: Division of Biochemical Technology

Oral - In-person

02:00pm - 06:00pm CDT, Wednesday 8/24, S502b (McCormick Place Convention Center)

[AGFD] Modification of Agricultural Biomass into Value-Added Products: Utilization of Agricultural Biomass

Helen Ngo, Organizer, Presider; Majher Sarker, Organizer, Presider; Madhav Yadav, Organizer

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral – In-Person

2:00 PM-6:00 PM (CDT), Wednesday 8/24, S504bc (McCormick Place Convention Center)

[ANYL] Plastics in the Environment: Analytical Strategies for Characterizing the Fate & Transformation of Plastic Debris

Melissa Maurer-Jones, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - In-person

02:00pm - 04:35pm CDT, Wednesday 8/24, Grand Horizon F (Marriott Marquis Chicago)

[ENFL] Advanced Materials & Novel Technologies for Carbon Capture & Utilization for Sustainable Fuels Production

Andre Boehman, Organizer; Sehoon Chang, Organizer; Babak Fayyaz-Najafi, Organizer, Presider; César Ovalles,

Organizer; Hooisweng Ow, Organizer, Presider; Wei Wang, Organizer

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral – In-Person

02:00pm – 05:40pm CDT ,Wednesday 8/24, W185a (McCormick Place Convention Center)

Virtual Session - Afternoon

3:00 PM - 7:00 PM (CDT)

Advances Made by Early to Mid-Career Researchers in Environmental Science & Engineering

Organizers: Dionysiou, Dionysios; University of Cincinnati | Sharma, Virender; Texas AM University

Oral - Virtual

3:00 PM-5:30 PM (CDT), Wednesday 8/24, Virtual-only (Zoom)

Posters - Evening

7:00 PM - 9:00 PM (CDT)

All Division of Environmental Chemistry Posters

See details at <https://acs.digitellinc.com/acs/live/28/page/905>

Posters - Virtual

7:00 PM-9:00 PM (CDT), Wednesday 8/24, Virtual-only (Zoom)

Posters – In-Person

7:00 PM –9:00 PM CDT Wednesday 8/24, Hall F2 (McCormick Place Convention Center)

[ANYL] Plastics in the Environment: Analytical Strategies for Characterizing the Fate & Transformation of Plastic Debris

Melissa Maurer-Jones, Organizer

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Poster - In-person

07:00pm - 09:00pm CDT, Wednesday 8/24, Hall F2 (McCormick Place Convention Center)

Virtual Session - Evening

7:30 PM - 11:00 PM (CDT)

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

Organizers: Zheng, Chunxiao; ACS|Zhao, Chun; Chongqing University

Oral - Virtual

7:30 PM-11:00 PM (CDT), Wednesday 8/24, Virtual-only (Zoom)

THURSDAY

Hybrid Session - Morning

8:00 AM - 12:00 PM (CDT)

Current Perspectives in General Environmental Chemistry

Organizers: Sharma, Virender; Texas AM University|Sayes, Christie; Baylor University

Oral - Hybrid

8:00 AM-10:50 AM (CDT), Thursday 8/25, Great Lakes B (Marriott Marquis Chicago)

Platinum Group Metal-based Sustainable Catalysts for Emission Control & Efficient CH₄ Conversion

Organizers: Sharma, Virender; Texas AM University|Kunal,Pranaw; Oak Ridge National Laboratory|Sayes, Christie; Baylor University|Patton, Penelope; Self-Employed

Oral - Hybrid

8:00 AM-11:25 AM (CDT), Thursday 8/25, Great Lakes C (Marriott Marquis Chicago)

[AGRO] Nontarget Arthropod Risk Assessment: Scientific Developments, Challenges & Research Needs

Domenica Auteri, Organizer; Alessio Ippolito, Organizer, Presider; Keith Sappington, Organizer; Tom Steeger, Organizer; Katrina White, Ph.D., Organizer, Presider

Nominal Cosponsors: AGFD: Division of Agricultural and Food Chemistry, ANYL: Division of Analytical Chemistry, ENVR: Division of Environmental Chemistry, BIOL: Division of Biological Chemistry, Nominal TOXI: Division of Chemical Toxicology

Oral - Hybrid

08:00am - 12:00pm CDT, Thursday 8/25, S501a (McCormick Place Convention Center)

[AGRO] Bioisosteric Replacement & Scaffold Hopping for Bioactive Compound Discovery

Clemens Lamberth, Organizer, Presider; Peter Maienfisch, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

08:00am - 12:00pm CDT, Thursday 8/25, S501bc (McCormick Place Convention Center)

[AGFD] Utilization of Upcycled Foods in New Product Innovation

Dr. Xiaofen Du, Organizer, Presider; Yixiang Xu, Organizer, Presider

Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group

Oral - Hybrid

08:00am - 11:20am CDT, Thursday 8/25, S504a (McCormick Place Convention Center)

[CHAS] Latest Developments in Cannabis Science and Sustainability: Analytics of Various Compounds from the Cannabis Plant

Kyle Boyar, Organizer, Presider; Julia Bramante, Organizer, Presider; Amber Wise, Organizer, Presider
Cooperative Cosponsors: MPPG: Multidisciplinary Program Planning Group, ENVR: Division of Environmental Chemistry
Oral - Hybrid
08:00am – 11:35am CDT, Thursday 8/25, Dusable / CC 21 (Hyatt Regency McCormick Place)

In-Person Session - Morning

8:00 AM - 12:00 PM (CDT)

Electrochemical Materials & Interfaces for Environmental & Sustainability Challenges

Cooperative Cosponsor: MPPG: Multidisciplinary Program Planning Group
Organizers: Kim, Taeyoung; Clarkson University | Su, Xiao; University of Illinois at Urbana-Champaign | Arges, Christopher; University of Chicago
Oral - In-person
8:00 AM-11:25 AM (CDT), Thursday 8/25, Great Lakes A (Marriott Marquis Chicago)

ENFL] Advanced Materials & Novel Technologies for Carbon Capture & Utilization for Sustainable Fuels Production

Andre Boehman, Organizer; Sehoon Chang, Organizer; Babak Fayyaz-Najafi, Organizer, Presider; César Ovalles, Organizer; Hooisweng Ow, Organizer, Presider; Wei Wang, Organizer
Cooperative Cosponsors: ENVR: Division of Environmental Chemistry, MPPG: Multidisciplinary Program Planning Group
Oral – In-Person
8:00 AM-10:00 AM (CDT), Thursday 8/25, W185a (McCormick Place Convention Center)

Virtual Session - Morning

10:00 AM - 2:00 PM (CDT)

Greener Strategies in Environmental Sustainability In Honor of John Crittenden

Organizers: Minakata, Daisuke; Michigan Technological University College of Engineering | Sharma, Virender; Texas AM University | Guan, Xiaohong
Oral - Virtual
10:00 AM-1:45:00 PM (CDT), Thursday 8/25, Virtual-only (Zoom)

Virtual Session - Evening

7:30 PM - 11:00 PM (CDT)

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

Organizers: Zheng, Chunxiao; ACS | Zhao, Chun; Chongqing University
Oral - Virtual
7:30 PM-11:00 PM (CDT), Thursday 8/25, Virtual-only (Zoom)