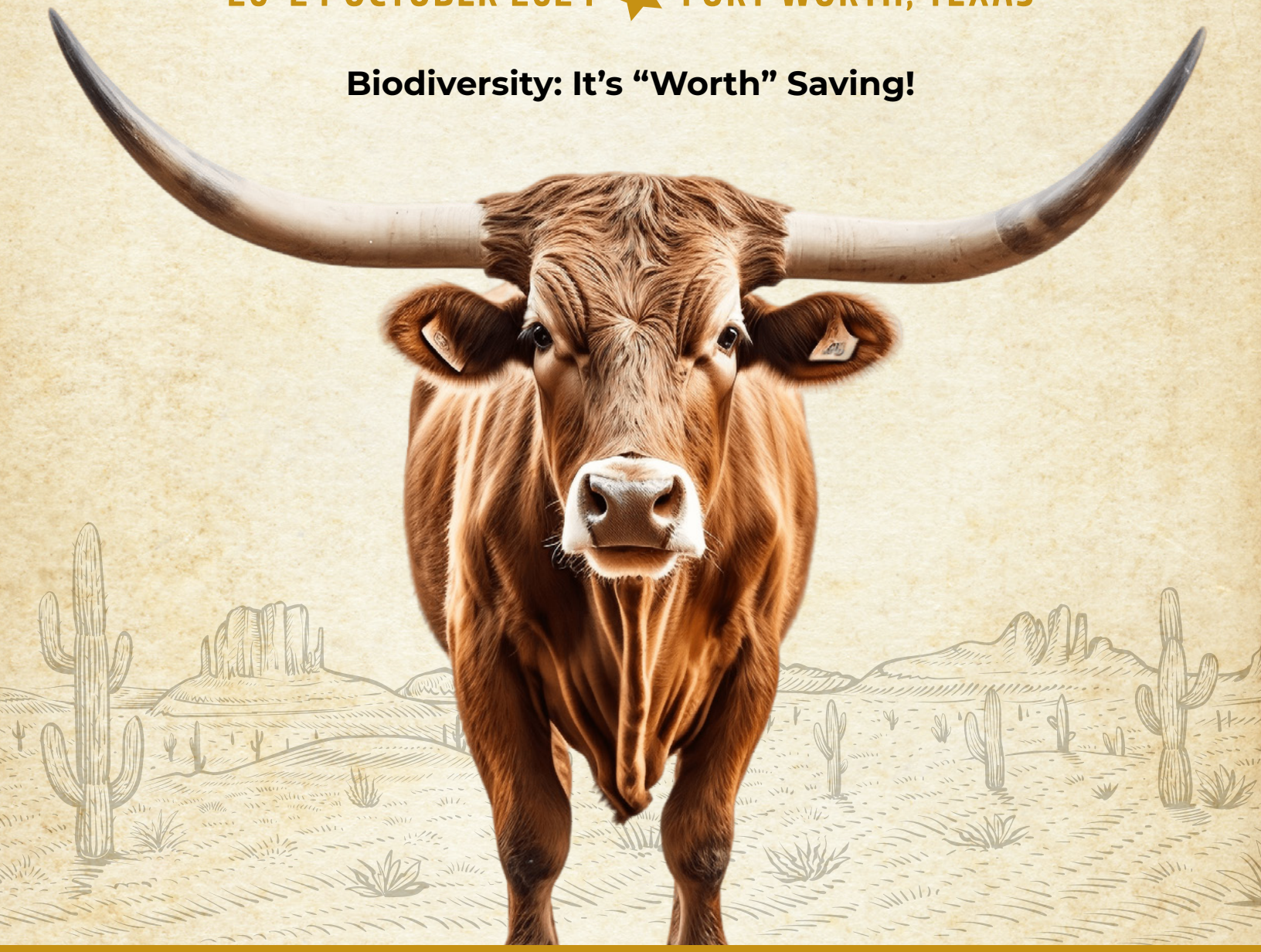
SETAC NORTH AMERICA 45TH ANNUAL MEETING

20–24 OCTOBER 2024 ★ FORT WORTH, TEXAS

Biodiversity: It's "Worth" Saving!



Program Book

NORTH AMERICA PARTNERS

Thank you to our partners that help us advance environmental science and management. SETAC North America Partners include for-profit and nonprofit organizations, institutions, government agencies and associations, who help us foster the society's mission.

If you are interested in becoming a SETAC North America Partner, please visit us at the registration desk during the meeting or contact setac@setac.org.

WELCOME TO FORT WORTH!

On behalf of SETAC, we are thrilled to welcome you to the SETAC North America 45th Annual Meeting in Fort Worth, Texas. The annual meeting is one of our most significant events in North America, playing a vital role in advancing environmental science and management. We are glad to have you with us to support Environmental Quality Through Science!

We are looking forward to a particularly robust program this year. The program committee selected the theme of "Biodiversity – It's 'Worth' Saving!" in recognition of biodiversity loss as one of the three urgent planetary crises facing the globe, and several sessions and events will focus on this topic. Our three plenary speakers will offer unique insights into how artificial intelligence is transforming risk assessment, the power of storytelling in science communication, and the interaction of evolution and today's novel chemicals. The scientific sessions will focus on issues that impact humans and the ecosystem alike, with a systems thinking mindset, while the special sessions highlight topics of emerging interests and regional importance. The program committee has also organized many networking opportunities in conjunction with the meeting that we are very excited about. We encourage you to fully engage in the parallel program by participating in socials and attending group meetings. Be sure to scour the program and identify those that appeal to you.

To make a positive impact in the local community, we partnered with SocialOffset in support of local organizations that promote equity and environmental justice.

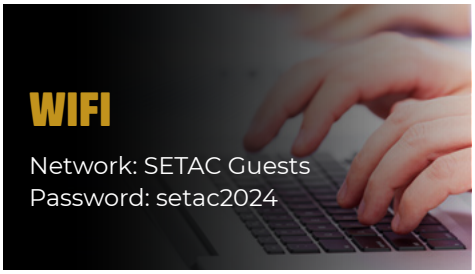
As always, sustainability was on our mind while planning the meeting. To lower the meeting footprint, we opted for sustainable choices whenever possible and encourage our attendees to do so as well. With all that said, we fully expect that the meeting encourages our participants to engage through civil dialogue in vigorous debate.

We look forward to engaging with you and hope you enjoy the meeting!

Tamar Schlekat
SETAC North America
Executive Director

Nile Kemble
SETAC North America
Board President

Content



MEETING PLATFORM

For the most up-to-date program information, visit the meeting platform. All presentations will be recorded and accessible virtually.

SOCIAL OFFSET

Contribute to local organizations in Fort Worth that make a positive difference at setac.org/SocialOffset.

PROGRAM COMMITTEE AND STAFF

PROGRAM COMMITTEE

- **Marlo Jeffries (Co-Chair)**, *TCU*
- **Sarah Hughes (Co-Chair)**, *Shell*
- Jon Doering, *Louisiana State University*
- Cole Matson, *Baylor University*
- Stephanie LaPlaca Kennedy, *Tox Strategies*
- Joe Chai, *Dow Chemical Company*
- Silvia Bogdan Zavala, *USEPA*
- Elin Ulrich, *USEPA*
- Adriana Bejatano, *Shell*
- Ramon Lavado, *Baylor University*
- Ed Mager, *University of North Texas*
- Kyle Roush, *P&G*
- Leah Thornton Hampton, *Southern California Costal Research Program*
- Louise Stevenson, *Oak Ridge National Labs*
- Karla Johanning, *KJ Scientific, LLC*

SETAC STAFF

Bart Bosveld
SETAC Global and SETAC Europe Executive Director
Bart.Bosveld@setac.org

Tamar Schlekat
SETAC North America Executive Director
Tamar.Schlekat@setac.org

Sabine Barrett
Digital Communications and Technology
Sabine.Barrett@setac.org

Rebecca Bundschuh
Programs and Technology
Rebecca.Bundschuh@setac.org

Helen Callow
Publications
Helen.Callow@setac.org

Kelly Derom
Communications
Kelly.Derom@setac.org

Roel Evens
Science
Roel.Evens@setac.org

Donna Frankel
Publications
Donna.Frankel@setac.org

Winston Fru
Programs
Winston.Fru@setac.org

Filip Gunst
Finances
Filip.Gunst@setac.org

Dusty Kennedy
Communications
Dusty.Kennedy@setac.org

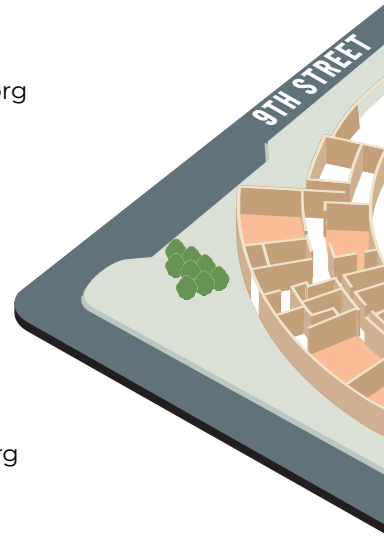
Barbara Koelman
Events
Barbara.Koelman@setac.org

Marcy LeBlanc
Programs
Marcy.LeBlanc@setac.org

Nikki Mayo
Events
Nikki.Mayo@setac.org

Terresa Murdoch
Finances
Terresa.Murdoch@setac.org

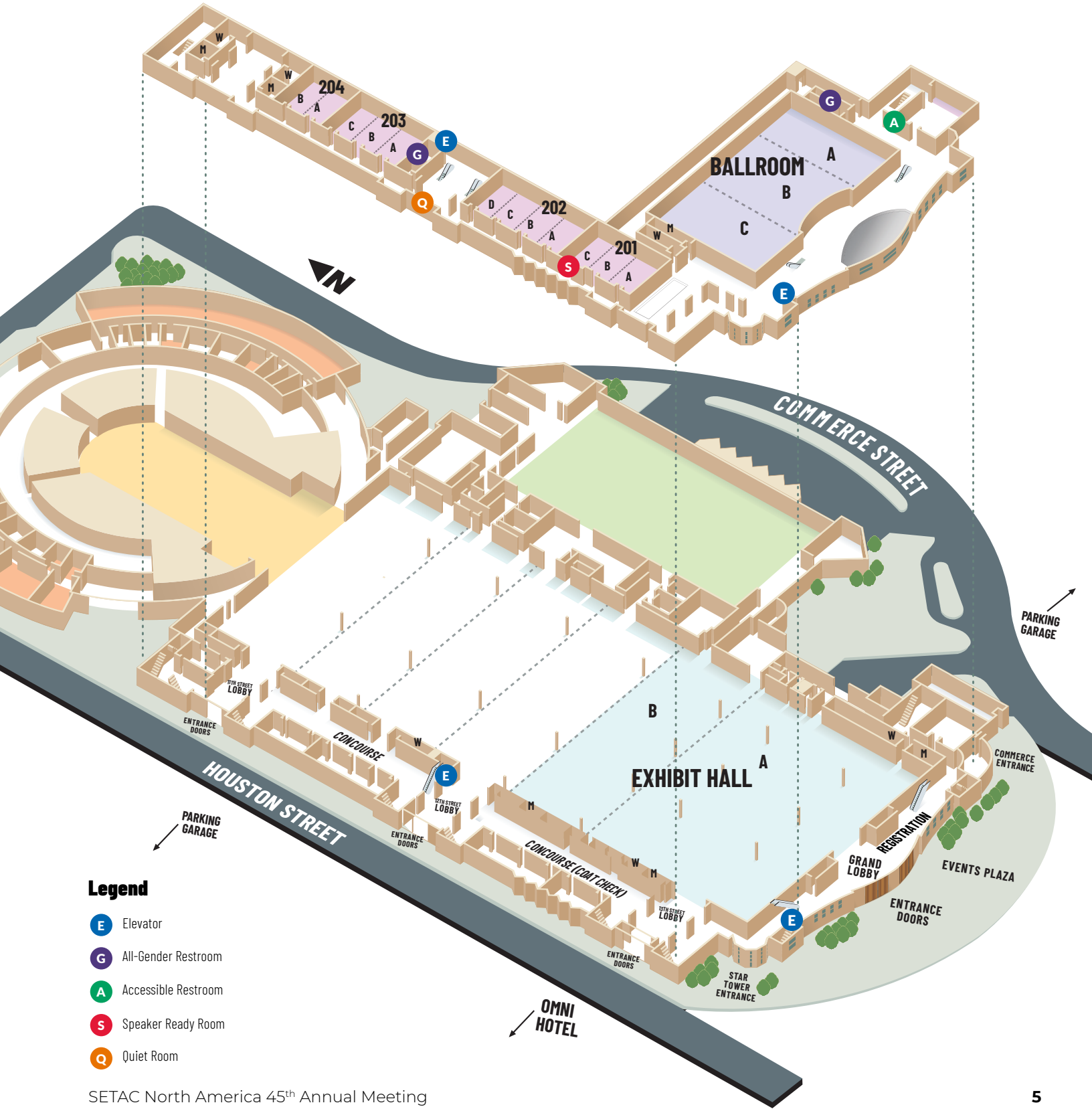
Erin Nelson
Publications
Erin.Nelson@setac.org



CONVENTION CENTER MAP

FIRST AND SECOND LEVELS

Fort Worth Convention Center



Legend

- E — Elevator
- G — All-Gender Restroom
- A — Accessible Restroom
- S — Speaker Ready Room
- Q — Quiet Room

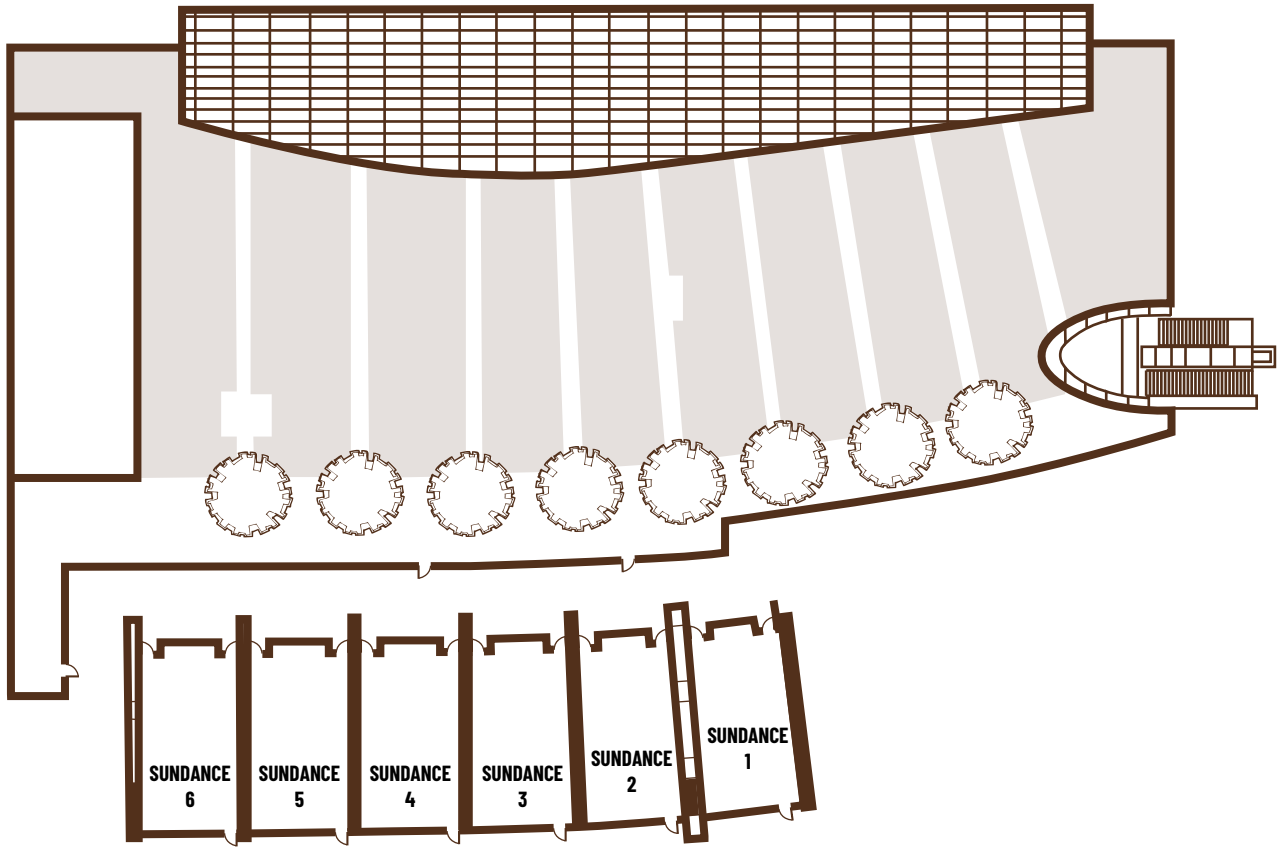
GLOBAL PARTNERS

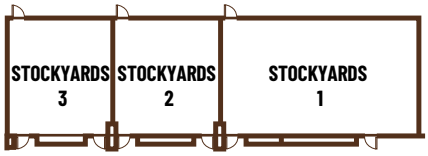
Thank you to the SETAC Global Partners and Affiliates for helping ensure our goal of Environmental Quality Through Science®.

If you are interested in becoming a SETAC Global Partner, please visit us at the registration desk during the meeting or contact barbara.koelman@setac.org.

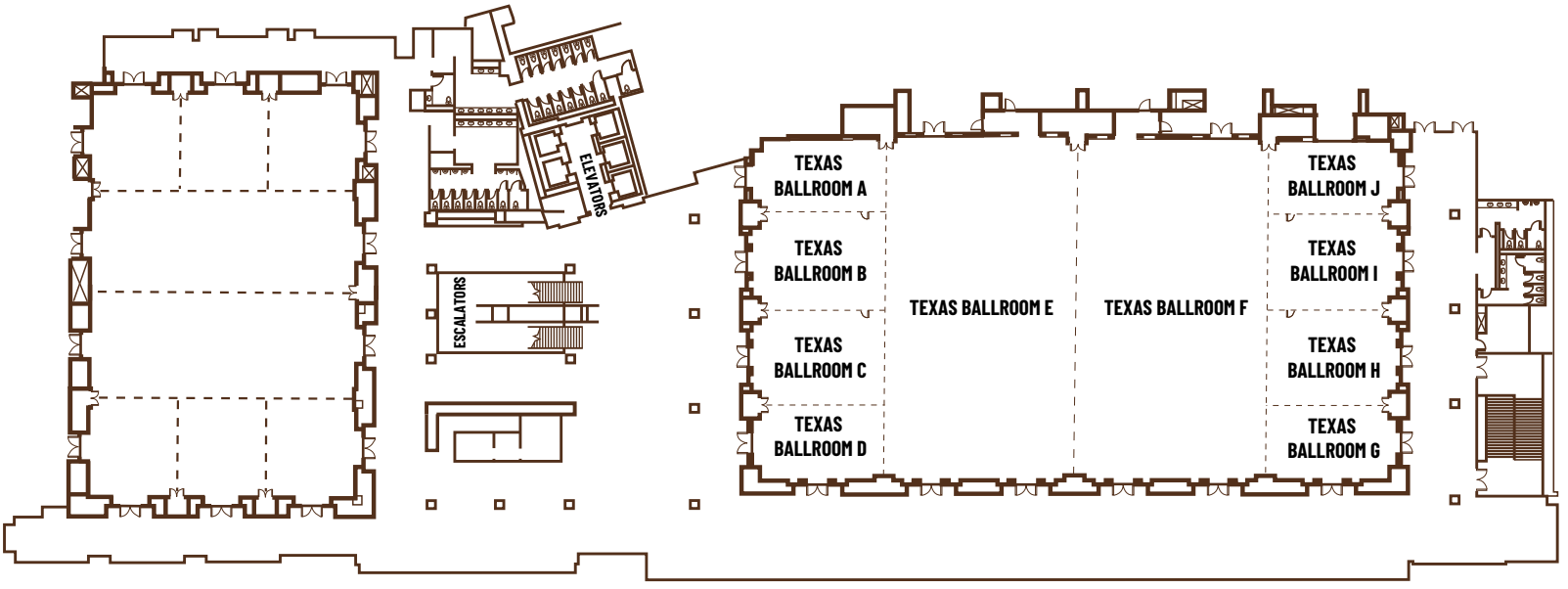
OMNI HOTEL MAP

THIRD LEVEL





SECOND LEVEL



MEETING SUPPORTERS

Thank you to our meeting supporters for their generous contributions.

PLATINUM SUPPORTERS

GOLD SUPPORTERS

SILVER SUPPORTERS

PRACTICAL INFORMATION

Badges

Badges must be worn for access to the conference, including sessions, meetings and the exhibit hall. To replace a lost badge, visit the registration desk. To replace a badge, a $5 charge applies.

Certificates of Attendance

Registered participants can download their certificate of attendance via the virtual meeting platform. If you are a presenter, you will receive an email with a link to download your presentation certificate shortly after the meeting.

Emergencies and First Aid

Call 911 if you have a police, fire or serious medical emergency. We will have emergency Medical Services (EMS) personnel onsite to provide assistance. Don't hesitate to approach any staff member, and they will guide you to the nearest available support.

Hours (CDT)

Coat Check
Concourse, Ground Level
Sunday 7:00–21:30
Monday 7:30–20:30
Tuesday 7:30–19:00
Wednesday 7:30–20:30
Thursday 7:30–17:30

Exhibits
Hall B
Sunday 18:30–21:00
Monday–Wednesday 8:00–17:30

Poster Setup
Exhibit *Hall AB*
Monday–Thursday 7:30–8:00

Poster Take-Down
Exhibit Hall AB
Monday–Wednesday 17:30–17:45
Thursday 15:30–15:45

Registration
Grand Lobby
Sunday 7:00–20:30
Monday–Wednesday 7:30–17:30
Thursday 7:30–15:30

Speaker Ready Room
201 C
Sunday 12:00–18:00
Monday–Wednesday 7:30–17:30
Thursday 7:30–15:30

Lost and Found

Please visit the registration desk for lost and found items.

Accessibility and Inclusion

Designated wheelchair spaces are located at the front of each session room, clearly marked with floor signage. If you need special accommodations while on site, please visit staff at the registration desk. Kindly note that certain accessibility needs may require advance notice.

A dedicated quiet space is available for nursing as well as for anyone who needs a peaceful environment on the second level of the convention center above the 12th Street lobby.

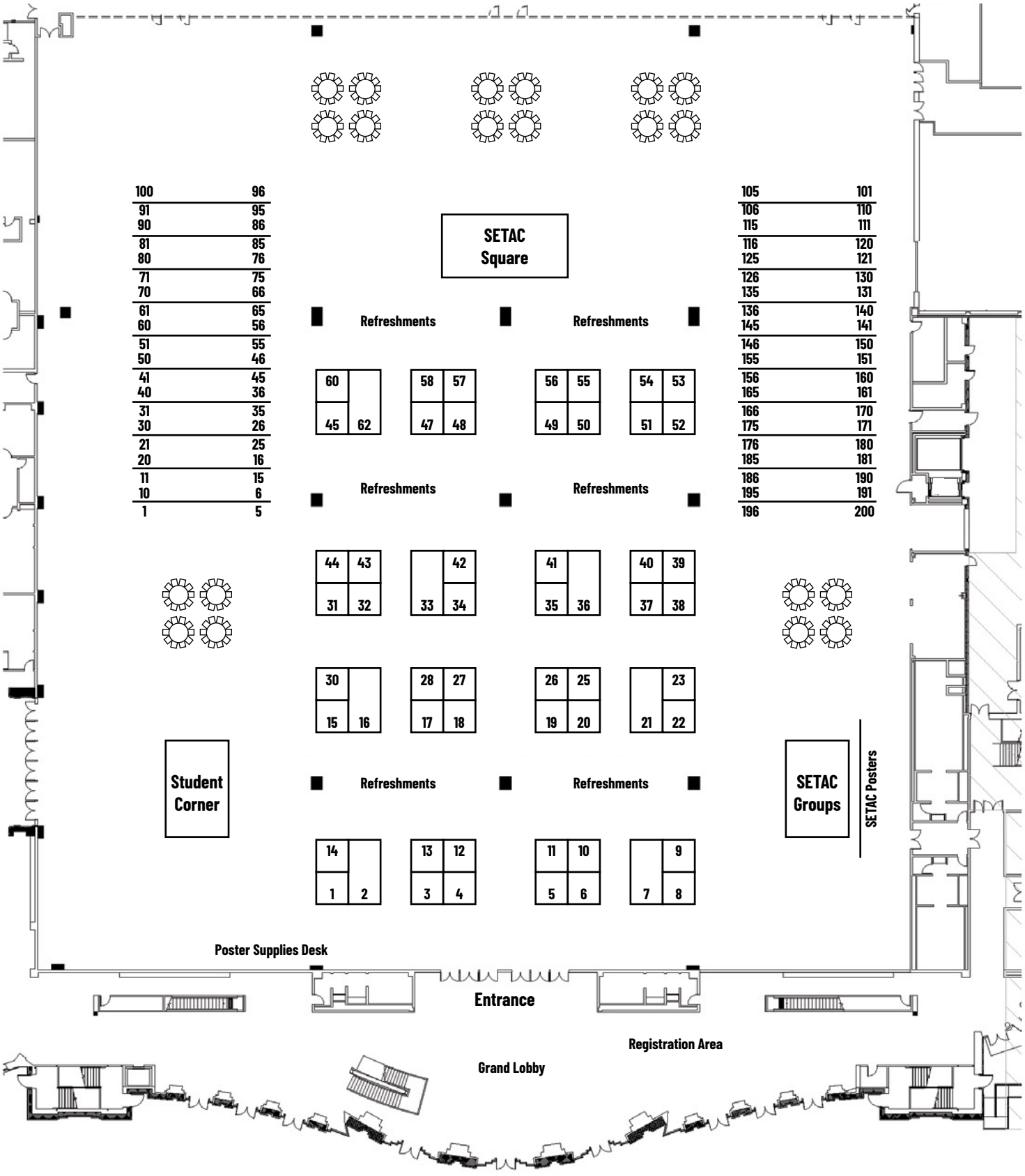
SETAC INCLUSION POLICY

If you experience or witness harassment or inappropriate behavior at the meeting, please:

1. **Act**: If you feel safe doing so, point out, interrupt and redirect.
2. **Report**: Please report any incidents to any SETAC staff member. You can also contact one of the SETAC compliance officers:
   - Email concerns@setac.org.
   - Call Bart Bosveld (he/him) at +32 2 772 72 81 ext. 206 or Tamar Schlekat (she/her) at+1 202 677 3001 ext. 113.

PROBLEM RESOLUTION PROCESS

EXHIBITOR FLOOR PLAN



EXHIBITOR LISTING

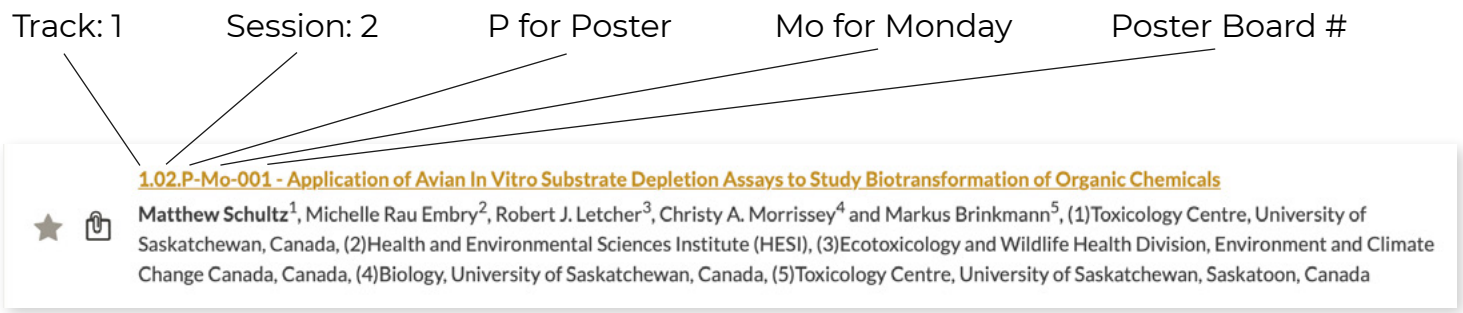
BOOTH	EXHIBITOR
43	A Chemtek Inc.
33	Agilent
10	Aqualytical, LLC
58	Aquanty Inc.
42	Bayer
52	Baylor University
27	BBD BioPhenix SL (BIOBIDE)
25	Bruker
51	Cambridge Isotope Laboratories
34	Compliance Services International (CSI)
45	Cove Environmental
47	EA Engineering, Science and Technology, Inc., PBC
9	eDNA Explorer, Inc.
50	EnviroScience, Inc.
22	ENVIROSTATUS, LLC
16	EPA Office of Research and Development
2	Eurofins Agroscience Services
4	Exponent, Inc.
49	Global Product Compliance (GPC) - Group
40	Gold Standard Diagnostics Horsham
30	Great Ecology
56	Health and Environmental Sciences Institute (HESI)
26	Great Lakes Environmental Center, Inc. (GLEC)
21	iChrom Solutions
53	Institute of Eco-Environmental Forensics, Shandong University, Qingdao, China
19	International Collaboration on Cosmetics Safety (ICCS)
57	Jai Research Foundation (JRF)

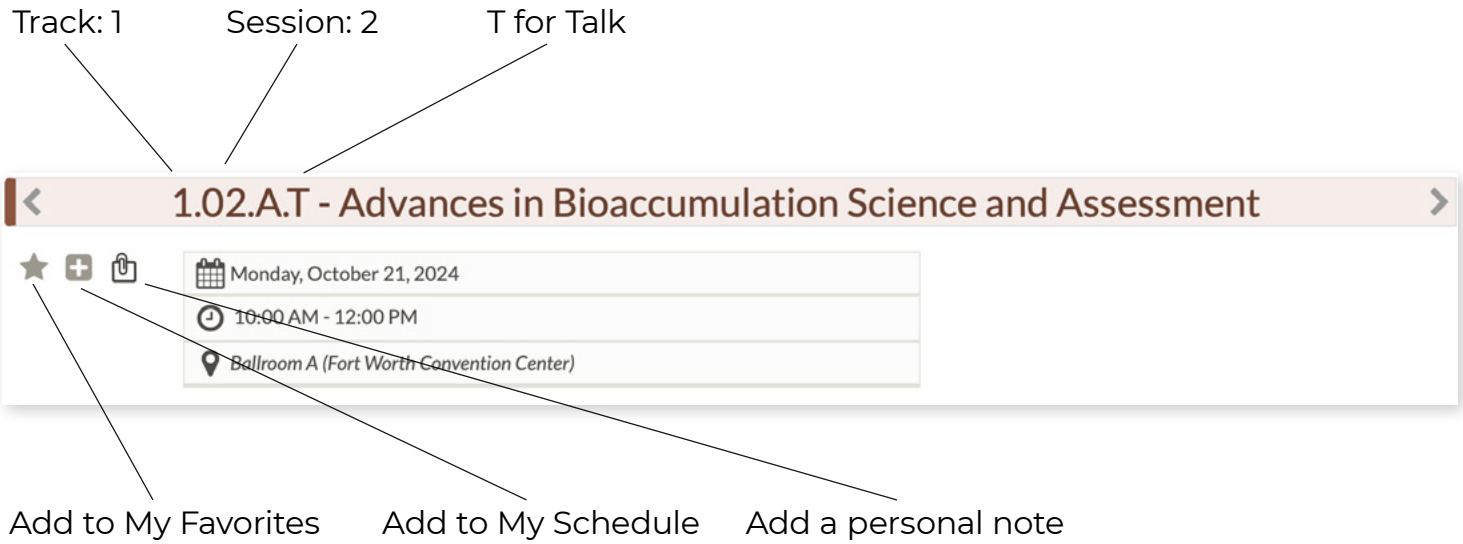
BOOTH	EXHIBITOR
17	Labcorp
20	LabLogic Systems, Inc.
31	Metals Data Center
15	MOBILion Systems
44	Oak Ridge Institute for Science and Education
62	Office of Restoration and Damage Assessment
60	Organomation
12	Personal Care Products Council
8	Phenomenex
54	Primacyt Cell Culture Technology GmbH
13	Ramboll
5	SCIEX
36	SETAC Journals
3	SGS AXYS Analytical Services Ltd.
38	Shimadzu Scientific Instruments
7	Smithers
6	Statera
28	Symbiotic Research, LLC
35	TDI-Brooks International, Inc.
18	Tetra Tech, Inc.
11	Texas Tech University Dept. of Environmental Toxicology
1	UCT
48	ViewPoint Behavior Technology
41	Waters Corporation
37	Wellington Laboratories LLC
39	ZeptoMetrix

SCIENTIFIC PROGRAM

Scientific Program Organization

The scientific program is organized by tracks and sessions. Within each session, there are sub-sessions organized by talks (T), posters (P) and virtual-only presentations (V).





Scientific Program Updates

The printed program book reflects the status of the program as it was on 21 August, which was the print deadline. For the most up-to-date information, please visit the meeting platform.

MEETING PLATFORM

For the most up-to-date program information, visit the meeting platform. All presentations will be recorded and accessible virtually.

ABSTRACT BOOK

Download your copy at setac.org/fortworth.

SETAC NORTH AMERICA
ENDOWMENT FUND

Support the SETAC North America Eugene Mancini Endowment Fund! Established in 2005, the fund helps advance technical, scientific and educational activities. Recent contributions have supported meeting meeting attendance grants for professionals, the SETAC-ACLCA Special Session on Life Cycle Assessment and the Ben Masters plenary on biodiversity.

Contribute today to make an impact!

SETAC.ORG/ENDOWMENTFUND

PUBLISH WITH SETAC JOURNALS

Learn more about the journals in the exhibit hall at booth 36!

setac.org/journals

SUNDAY, 20 OCTOBER

DAILY SCHEDULE (CDT)	LISTED MEETINGS ARE OPEN TO ALL ATTENDEES	
7:00–20:30	Registration	Grand Lobby
7:00–21:30	Coat and Luggage Check	Concourse, Ground Floor
8:00–15:30	SETAC North America Board of Directors Meeting	Sundance 2 (2nd Floor, Omni Fort Worth Hotel)
8:00–17:00	Professional Training Courses (preregistration required)	see list below
12:00–13:00	Lunch Break (on your own)	
12:00–18:00	Speaker Ready Room	201 C
16:00–17:00	International Consortium to Advance Cross Species Extrapolation in Regulation (ICACSER)	Sundance 3 (2nd Floor, Omni Fort Worth Hotel)
16:00–17:00	Newcomers Meet and Greet (sold out)	Ballroom A
18:00–18:30	Opening Ceremony	Ballroom B
18:30–21:00	Opening Reception and Exhibits	Exhibit Hall AB

PROFESSIONAL TRAINING COURSES

MORNING HALF-DAY COURSES | 8:00–12:00		
PT01	Using Freshwater Invertebrates for Toxicity Tests - Study Design, Culturing, Test Methods, Data Interpretation	Texas A (2nd Floor, Omni Fort Worth Hotel)
PT02	Histopathologic Evaluation and Data Interpretation in Fish and Amphibian Endocrine Studies	Texas B (2nd Floor, Omni Fort Worth Hotel)

AFTERNOON HALF-DAY COURSES | 13:00–17:00		
PT05	Non-Targeted Analysis for Decision Making: How Can NTA Work for You?	Texas A (2nd Floor, Omni Fort Worth Hotel)
PT06	Web-based Interspecies Correlation Estimation (Web-ICE) of Acute Toxicity for Chemicals with Limited Data	Texas B (2nd Floor, Omni Fort Worth Hotel)

FULL-DAY COURSES | 8:00–17:00		
PT07	Environmental Risk Assessment Methods for New Chemical Submissions: Tools and Approaches Under TSCA	Texas C (2nd Floor, Omni Fort Worth Hotel)
PT08	Non-Targeted and Targeted PFAS Analysis Using LC-HRMS/MS	Texas D (2nd Floor, Omni Fort Worth Hotel)

MONDAY, 21 OCTOBER

DAILY SCHEDULE (CDT)	LISTED MEETINGS ARE OPEN TO ALL ATTENDEES UNLESS SPECIFIED	
7:30–17:30	Registration	Grand Lobby
7:30–17:30	Speaker Ready Room	201 C
7:30–20:30	Coat and Luggage Check	Concourse, Ground Floor
7:30–8:00	Poster Setup	Exhibit Hall AB
8:00–10:00	Posters, Exhibits and Refreshments – Sponsored by GHD	Exhibit Hall AB
8:30–9:15	Daily Plenary: Nicole Kleinstreuer	Ballroom B
10:00–12:00	Morning Platform Sessions	see p. 20
12:00–13:30	Lunch (on your own, food trucks available in Water Gardens Main Plaza)	
12:00–13:30	SETAC Global Partners Luncheon (by invitation only)	Stockyard 3 (2nd Floor, Omni Fort Worth Hotel)
12:15–13:15	Bayer Sponsored Seminar - Pulling Back the Curtain on NAMs	Ballroom C
13:30–15:30	Afternoon Platform Sessions	see p. 22
13:30–15:30	Meet and Greet with SETAC North America Careers Committee	Exhibit Hall AB (SETAC Groups Area)
15:30–17:30	Posters, Exhibits and Refreshments – Sponsored by GHD	Exhibit Hall AB
16:00–17:00	Persistence Science Interest Group Meeting	201 A
16:00–17:30	Animal Alternatives Interest Group Meeting	Stockyard 3 (2nd Floor, Omni Fort Worth Hotel)
16:30–17:30	Plastics Interest Group Meeting	Sundance 2 (3rd Floor, Omni Fort Worth Hotel)
17:00–18:00	Chemistry Interest Group Meeting	201 B
17:30–18:30	SETAC North America Regional Chapters Leadership Meeting	Stockyard 3 (2nd Floor, Omni Fort Worth Hotel)
17:30–19:00	Nanotechnology Interest Group Meeting	203 A
18:00–20:00	Metals Interest Group Reception	Sundance 1 (3rd Floor, Omni Fort Worth Hotel)
18:00–20:00	Student/Mentor Dinner (preregistration required)	Texas E (2nd Floor, Omni Fort Worth Hotel)
19:00–22:00	Exponent Hosted Reception	Texas H (2nd Floor, Omni Fort Worth Hotel)

MONDAY REFRESHMENTS
BROUGHT TO YOU BY

GHD

thank you!

DAILY PLENARY

8:30–9:15 | Ballroom B

Artificial Intelligence for Toxicology and Beyond: Revolutionizing Risk Assessment

Nicole Kleinstreuer

At the forefront of computational toxicology, artificial intelligence (AI) has emerged as a pivotal tool for risk assessment, predictive modeling, and the development of new approach methodologies in toxicology. In this plenary lecture, Nicole Kleinstreuer, Director of NICEATM, will explore the transformative impact of AI on toxicological sciences. She will examine the shift from empirical to computational methodologies, highlighting the integration of in silico machine learning algorithms with in vitro mechanistic assays and in chemico high-throughput screening data. Kleinstreuer will showcase recent advancements in computational modeling that have enhanced our ability to predict adverse outcomes and biological responses to chemical exposures across human health and ecological risk assessment. She will discuss the challenges of integrating AI into regulatory frameworks, ensuring that the AI revolution in toxicology is both scientifically robust and socially responsible.

Nicole Kleinstreuer is the director of the NTP Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM) and the executive director of the congressionally mandated Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM). NICEATM is the US federal resource for alternatives to animal testing and is part of the National Institute of Environmental Health Sciences (NIEHS). Her work is centered on domestic and international efforts to develop novel testing, modeling and analysis strategies that provide more rapid, mechanistic and human-relevant predictions of potential environmental chemical hazards. She has a Ph.D. in biomedical engineering and postdoctoral training in computational toxicology. Kleinstreuer has adjunct faculty positions at the Yale University School of Public Health and the University of North Carolina at Chapel Hill. She has published more than 140 peer-reviewed publications and won numerous awards, including the 2023 NIEHS Individual Merit Award, the 2022 NIH Director's Award and the 2019 Society of Toxicology Achievement Award.

SOCIAL OFFSET

Contribute to local organizations in Fort Worth that make a positive difference at setac.org/SocialOffset.

MONDAY, 21 OCTOBER

SPECIAL SESSION

10:00–12:00 | 202 AB

8.06.T - SETAC-ACLCA Special Session: Nuts and Bolts of Life Cycle Assessment

Christoph Koffler

The Nuts and Bolts of LCA session will be an informative and practical presentation delivered by LCA expert Christoph Koffler. This session will be ideal for anyone who is interested in learning about the fundamental principles of Life Cycle Assessment and how to apply them in practice. Attendees can expect to gain a solid understanding of the key concepts and terminology used in LCA, as well as an overview of the different stages involved in conducting an LCA study. Christoph Koffler will share his vast experience in the field, providing insights into best practices for data collection and analysis, as well as tips for communicating LCA results effectively to stakeholders. This session is a must-attend for anyone who wants to gain a solid grounding in the basics of LCA and take their skills to the next level.

SPECIAL SESSION

13:30–15:30 | 202 AB

6.05.T - The Trinity River Past, Present, and Future: Management of an Urban Watershed in a Growing City

Louise Stevenson, Bryan Brooks, Marlo Sellin Jeffries and Silvia Zavala

The Trinity River is one of North Texas' most vital resources, holding significant economic, cultural and ecological value to communities in the region. However, the river was not always recognized for its value: Levees were built to protect the city after floods in the early 1900s, and the river was ignored, allowing pollution to accumulate and water quality to decline. In the last half-century, multiple stakeholders have actively worked to renew the river's condition and place in the everyday lives of North Texans by establishing over 125 miles of trails, planting 8,000 trees, and creating new parks in and around the river. The river weaves in and out of rural and urban communities and serves as the "centerpiece of the Fort Worth community;" however, the city and its river face new challenges stemming from Fort Worth's status as the fastest growing city in the country. As the city expands, new emphasis is placed on preserving green and blue spaces, while also meeting the urgent needs of a growing population. This is reflected in Fort Worth Mayor Parker's "Good Natured Initiative," focusing on maintaining green space in the city, Tarrant Regional Water District's decades of investment in green and blue spaces, the non-profit Streams and Valley's Trinity River Strategic Master Plan "CONFLUENCE," and the Trinity River Authority's Basin Planning for responsible water use and reclamation. However, challenges remain for this highly urbanized, effluent-dominated system, shown through fish consumption bans in some areas of the Trinity due to PCB and dioxin concentrations.

In this session, we will invite members of the Forth Worth community representing the various stakeholders working to manage the Trinity River to give presentations and then serve on a panel discussion. The friction between an expanding built environment and the natural environment is not an issue specific to Forth Worth, and we hope to foster a discussion at this year's SETAC meeting that, while focused on the Trinity River and the city of Forth Worth, can serve as a case study applicable to other communities and watersheds.

STUDENT/MENTOR DINNER

18:00–20:00 | Texas E (2nd Floor, Omni Fort Worth Hotel)

Students $10, Mentors $30 | Preregistration Required

Do not miss this opportunity to mingle and dine with a variety of SETAC members. Your participation will strengthen your networks within SETAC and provide a valuable opportunity to discuss scientific topics and career experiences with mentors.

MONDAY MORNING TALKS (T)

	10:00–10:15	10:20–10:35	10:40–10:55
201 A	**The Intersection of Human Health and Environmental Risk Assessment: A One-Health Perspective** | T. Lopez, F. Nilsen		
	5.12.T-01 Beach Monitoring: An Evolving Practice at the Intersection of Environmental and Public Health | **R. Otter**	**5.12.T-02** Microplastics in Marine Mammals: A One-Health Perspective to Inform Human Health and Environmental Risk Assessment | **B. Ertel**	**5.12.T-03** Pathological Effects of Persistent Organic Pollutants in Sentinel Fish Sampled in an Arctic Site Influenced by Military Contamination | **M. Sancho Santos**
201 B	**Treatment and Characterization of Permian Produced Water to Support Re-Use** | A. Redman, H. Puglis, P. Xu, D. Reible		
	5.13.T-01 Challenges and Opportunities for Produced Water from Oil and Gas Operations in the Permian: Setting the Scene for Beneficial Reuse of Treated Produced Water | **A. Redman**	**5.13.T-02** Reuse of Produced Water in Agriculture | **T. Borch**	**5.13.T-03** Beneficial Reuse of Conventional Produced Water: A Denver-Julesburg Case Study | **M. Wiltse**
202 AB	**SETAC-ACLCA Special Session: Nuts and Bolts of Life Cycle Assessment** | C. Koffler		
	Discussion (learn more on page 18)		
202 CD	**Advances in Ecotoxicology of Scleractinian Corals and Other Coral Reef Organisms** | D. Renegar, C. Mitchelmore, C. Hankins		
	2.01.T-01 Developing Standard Toxicity Assays in the Scleractinian Coral Acropora cervicornis | **D. Renegar**	**2.01.T-02** Acute Toxicity Assays with Adult Coral Fragments: A Method for Standardization | **P. Schupp**	**2.01.T-03** Assessment and Prioritization of Aquatic Contaminants of Concern on Florida's Coral Reef | **E. Skelton**
203 A	**Quantitative Non-Targeted Analysis (qNTA): Bridging the Gap Between Characterization and Quantitation** | J. McCord, J. Sobus, A. Kruve		
	4.18.T-01 Longitudinal Assessment of Organic Chemicals and Prioritization of Chemical Tracers in Drinking water from Miami, South Florida by Non-Targeted Analysis | **O. Ogunbiyi**	**4.18.T-02** A Workflow for Defensible Quantitative Non-Targeted Analysis Using the United States Environmental Protection Agency's Non-Targeted Analysis WebApp | **S. Pu**	**4.18.T-03** Model-Based Selection of qNTA Surrogates to Optimize Predictive Accuracy, Uncertainty, and Reliability | **N. Charest**
203 BC	**Mercury Bioaccumulation and Effects on Wildlife: Ecological Pathways, Cycling, and Risk** | S. Janssen, J. Ackerman, M. Chumchal, C. Eagles-Smith		
	4.13.A.T-01 Spatial and Temporal Patterns in Soil Mercury Reservoirs of the United States | **C. Olson**	**4.13.A.T-02** National Assessment of Methylmercury in Adult Amphibians | **K. Smalling**	**4.13.A.T-03** Linking Patterns of Atmospheric Mercury Deposition with Bioaccumulation in Aquatic Ecosystems at a National Scale | **C. Eagles-Smith**
204 AB	**Identifying and Linking Environmental Exposure to Biological Effects** | D. MacMillan, S. Baumann		
	4.11.A.T-01 Structure-Dependent Toxicity of Perfluoroalkyl Substances using Quantitative Adverse Outcome Pathway with Bayesian Network: Safe-by-Design Approach | **H. Kim**	**4.11.A.T-02** Exploring PFAS Exposures In Utero: Streamlining Non-Targeted Analysis of PFAS in Neonatal Dried Blood Spots | **S. Liu**	**4.11.A.T-03** Histopathology and Transcriptomic Results in Zebrafish (Danio rerio) Male Livers from the P and F1 Generations of a PFOS Multi-Generational Exposure | **J. Mylroie**
BALLROOM A	**Advances in Bioaccumulation Science and Assessment** | M. Rojo, K. Johanning, M. Brinkmann		
	1.02.A.T-01 A Comparison of In Vitro Metabolic Clearance of Various Regulatory Fish Species Using Hepatic S9 Fractions | **M. Zercher**	**1.02.A.T-02** An Evaluation of the Potential Impact of Per- and Polyfluoroalkyl Substances (PFAS) to Mink and Otters: Approaches and Considerations | **J. Newsted**	**1.02.A.T-03** Bioconcentration of PFAS and Precursors in Fathead Minnow Tissues Environmentally Exposed to AFFF-Contaminated Waters | **N. Hill**
BALLROOM B	**Understanding the Ecological Effects and Rolling Out Solutions for Tire Road Wear Particles and Related Chemicals** | R. Lane, A. Baldwin, P. Shankar, G. Black		
	4.22.A.T-01 Analysis of Tyre Wear and Other Road-Derived Microplastics Collected from the Urban Roadside via Atmospheric Deposition Sampling | **K. Rowley**	**4.22.A.T-02** Quantifying 6PPD-Quinone in Water Samples from the Sacramento-San Joaquin Delta, 2018–2024 | **G. Black**	**4.22.A.T-03** Analytical Quantification of 6PPD-Quinone in Fish Tissue by LC-MS/MS | **A. Moody**
BALLROOM C	**Wildlife Toxicity: Innovative Approaches for Evaluating Exposure and Effects of Contaminants in Free-Ranging Wildlife and Laboratory Animal Models** | K. Hopkins,–––		
	3.05.A.T-01 Do UV Absorbents Activate Avian Aryl Hydrocarbon Receptor 1 in a Species Dependent Manner? | **R. Koumrouyan**	**3.05.A.T-02** The Role of Animal Energetics on Contaminant Body Burdens and Biomarkers of Health | **S. de Solla**	**3.05.A.T-03** Using Museum Specimens to Document Historical Contamination | **S. Hileman**

1. Environmental Toxicology and Stress Response	2. Aquatic Toxicology, Ecology and Stress Response	3. Wildlife Toxicology, Ecology and Stress Response	4. Chemistry and Exposure Assessment

11:00–11:15	11:20–11:35	11:40–11:55	
The Intersection of Human Health and Environmental Risk Assessment: A One-Health Perspective | T. Lopez, F. Nilsen			
5.12.T-04 The Behavior of Metal Ions Under Various Soil Watering Regimes and Next Steps | **M. Ferguson**	**5.12.T-05** Increasing Understanding of Human Exposure to Polycyclic Aromatic Hydrocarbons by Analyzing Human Blood Serum | **A. Kramer**	**5.12.T-06** Seasonal Variations in Fine Particulate Matter (PM2.5), Black Carbon, and Oxidative Potential: A Tennessee Study | **V. Aminone**	201 A
Treatment and Characterization of Permian Produced Water to Support Re-Use | A. Redman, H. Puglis, P. Xu, D. Reible			
5.13.T-04 Chemical and Toxicological Characterization of Produced Water and Surrounding Surface Water in the Permian Basin | **P. Xu**	**5.13.T-05** Reuse-Oriented Treatment Train for the Beneficial Re-Use of Produced Water (PW): Chemical and Toxicological Characterization of the Effluents | **Y. Tarazona**	**5.13.T-06** Evaluating the Impact of Oil and Gas Wastewater Dumps in the Permian Basin on Arid Soil Biogeochemistry | **D. Akob**	201 B
SETAC-ACLCA Special Session: Nuts and Bolts of Life Cycle Assessment | C. Koffler			
Discussion (learn more on page 18)			202 AB
Advances in Ecotoxicology of Scleractinian Corals and Other Coral Reef Organisms | D. Renegar, C. Mitchelmore, C. Hankins			
2.01.T-04 Anthozoan Responses to Anthracene: A Comparative Investigation of Tropical and Temperate Sea Anemones | **M. Morgan**	**2.01.T-05** Acute Toxicity of an Oil Spill Herding Agent to Atlantic Shallow-Water Corals | **A. Blakeslee**	**2.01.T-06** Developing Standardized Metrics for Analytical and Biological Assessments in Corals | **C. Mitchelmore**	202 CD
Quantitative Non-Targeted Analysis (qNTA): Bridging the Gap Between Characterization and Quantitation | J. McCord, J. Sobus, A. Kruve			
4.18.T-04 Evaluating the Performance of Two qNTA Approaches Using Independent Benchmark Values from Targeted Analysis | **A. Brennan**	**4.18.T-05** Estimating Total PFAS Concentrations in Drinking Water Resources Through Application of qNTA | **H. Whitehead**	**4.18.T-06** Emerging PFAS in Household Exposure Media from the American Healthy Homes Survey II | **J. McCord**	203 A
Mercury Bioaccumulation and Effects on Wildlife: Ecological Pathways, Cycling, and Risk | S. Janssen, J. Ackerman, M. Chumchal, C. Eagles-Smith			
4.13.A.T-04 Comparing Mercury Sources and Bioaccumulation Dynamics Across Lake Huron and Lake Ontario | **G. Armstrong**	**4.13.A.T-05** Sources of Bioavailable Mercury Along the Southern Shoreline of Lake Ontario | **E. Brahmstedt**	**4.13.A.T-06** Building a National-Level Mercury Biomonitoring Program with People and Parks and the Dragonfly Mercury Project | **C. Flanagan Pritz**	203 BC
Identifying and Linking Environmental Exposure to Biological Effects | D. MacMillan, S. Baumann			
4.11.A.T-04 Non-Targeted Metabolomics for Discovering Robust Human Biomarkers | **L. Song**	**4.11.A.T-05** Perfluorinated Alkyl Substances Impact Breast Cancer Cell Proliferation | **B. Tate**	**4.11.A.T-06** Nontarget Prioritization Using Standard Toxicity Assays: A Spatial and Temporal Study of Stream Sediments Across California | **A. Feerick**	204 AB
Advances in Bioaccumulation Science and Assessment | M. Rojo, K. Johanning, M. Brinkmann			
1.02.A.T-04 Competitive Uptake of Three Rare Earth Elements (La, Ce, and Y) by Chlamydomonas reinhardtii in the Context of the Biotic Ligand Model | **L. Pagé**	**1.02.A.T-05** Higher Throughput Screening of Bioaccumulation Potential Using In Vitro and Isolated Perfused Liver Methods | **M. Schultz**	**1.02.A.T-06** Insensitive Environmental and Ecotoxicological Models | **D. Kuo**	BALLROOM A
Understanding the Ecological Effects and Rolling Out Solutions for Tire Road Wear Particles and Related Chemicals | R. Lane, A. Baldwin, P. Shankar, G. Black			
4.22.A.T-04 Laboratory Assessment of 6PPD-Q Exposure in Tolerant and Sensitive Salmonid Species | **D. da Silva**	**4.22.A.T-05** The Impact of 6PPD-Quinone on Aerobic Metabolism and Swimming Performance in Juvenile Lake Trout (Salvelinus namaycush) | **S. Selinger**	**4.22.A.T-06** Lethal and Sublethal Effects of 6PPD-Quinone on Coastal Cutthroat Trout | **P. Shankar**	BALLROOM B
——— B. Hernout, N. Karouna-Renier, J. Sangiovanni			
3.05.A.T-04 Field Measurement of Cesium-137 in Live Passerine Birds Inhabiting Radiological Contamination Areas | **C. Werner**	**3.05.A.T-05** Wildlife Toxicity: Innovative Approaches for Evaluating Exposure and Effects of Contaminants in Free-Ranging Wildlife and Laboratory Animals Models | **C. Meyer**	**3.05.A.T-06** Cognitive Testing of Passerine Birds at the Tar Creek Superfund Site | **A. Triemstra**	BALLROOM C

5. Environmental Risk Assessment	6. Engineering, Remediation and Restoration	7. Policy, Management and Communication	8. Systems Approaches

MONDAY AFTERNOON TALKS (T)

	13:30–13:45	13:50–14:05	14:10–14:25
201 A	**Agriculture and One Health: Toxicology and Ecological Health Risk Assessment of Metals, Pesticides, and Other Agricultural Inputs** | K. Jegede, H. Fajana		
	5.01.T-01 Synergistic Toxicity of Pesticides and Heavy Metals in Apis mellifera L. and Implications for Human Health | **M. Awad**	**5.01.T-02** Uptake and In-Vitro Bioaccessibility of Toxic Metals in Cocoa Beans: Human Health Risks | **M. Dodd**	**5.01.T-03** Pharmaceuticals And Personal Care Products (PPCPs) In The Terrestrial Environment: What The Fuss? | **O. Ojo**
201 B	**Canada's Oil Sands Mining and Dilbit Pipelines** | R. Frank, A. Holloway, T. Paradis		
	2.05.T-01 Bioavailability and Bioaccessibility of Pb in Atmospheric and Aquatic Particles of the Lower Athabasca River Watershed in Alberta, Canada | **F. Barraza**	**2.05.T-02** Non-Target Analysis for Oil Sands Toxicology: Beyond Naphthenic Acids | **T. Leshuk**	**2.05.T-03** An Improved Stable Isotope Approach for Differentiating Processed and Non-Processed Bitumen Residues in the Presence of Natural Groundwaters | **J. Gibson**
202 AB	**The Trinity River Past, Present, and Future: Management of an Urban Watershed in a Growing City** | L. Stevenson, B. Brooks, M. Sellin Jeffries, S. Zavala		
	Introduction	**6.05.T-01** State of the River, State of the City | **M. Parker**	**6.05.T-02** Streams and Valleys' Confluence: The Trinity River Strategic Master Plan | **S. Pierce**
202 CD	**Tools, Methods, and Approaches for Natural Resource Damage Assessment** | S. Allan, J. Morris, D. Rouse, N. Martin		
	6.06.T-01 The Bird Mercury Tool: Derivation of New Toxicity Reference Values and Application to Injury Assessments | **J. Ackerman**	**6.06.T-02** Using Tree Swallows to Assess Injury and Restoration Efficacy for Riparian NRDAR in Montana | **B. Balmer**	**6.06.T-03** Trophic Magnification Model: An Innovative Approach to Predict Tissue Concentrations Based on Sediment Contamination and Trophic Transfer | **F. Bonatesta**
203 A	**The Practicalities of Non-Targeted Analysis to Support Decision Making** | J. McCord, H. Whitehead, G. Black		
	4.20.T-01 EPA's Non-Targeted Analysis WebApp: A Web-Based Software Tool for Production-Level NTA | **A. Chao**	**4.20.T-02** Investigating the Impacts of Sample Replication: A Cost-Benefit Analysis of Non-Targeted Analysis Study Design | **T. Ferland**	**4.20.T-03** Development and Application of Non-Targeted Analysis Workflows, Tools, and Resources for State Investigations of PFAS in Drinking Water Resources | **H. Whitehead**
203 BC	**Mercury Bioaccumulation and Effects on Wildlife: Ecological Pathways, Cycling, and Risk** | S. Janssen, J. Ackerman, M. Chumchal, C. Eagles-Smith		
	4.13.B.T-01 Marine Resource Use Increases Mercury Exposure in Alaskan Wolves | **B. Barst**	**4.13.B.T-02** Implications of Coastal Glacial Retreat for Mercury Export and Accumulation in Near Shore Food Webs | **T. Rivera**	**4.13.B.T-03** Examining Controls on Mercury Methylation and Bioaccumulation Within Everglades National Park | **S. Janssen**
204 AB	**Identifying and Linking Environmental Exposure to Biological Effects** | D. MacMillan, S. Baumann		
	4.11.B.T-01 Selecting Appropriate Biological Matrices for Exposomics: Insights from A Systematic Model-based Investigation | **Y. Li**	**4.11.B.T-02** Organic Contaminants Detected at Illegal Cannabis Grow Operations on Federal Land | **G. Black**	**4.11.B.T-03** Accumulation and Fate of Organic Contaminants in Soils Amended with Fertilizing Residual Materials (FRMs) | **J. Zheng**
BALLROOM A	**Advances in Bioaccumulation Science and Assessment** | M. Rojo, K. Johanning, M. Brinkmann		
	1.02.B.T-01 Organochlorine Pesticide and Polychlorinated Biphenyl Exposure in Greek Children (Rhea Birth Cohort): Indications for Past and Continuing Indirect Exposure to DDT | **A. Myridakis**	**1.02.B.T-02** Parabens, Their Metabolites, and Halogenated Byproducts in Migratory Birds of Prey: A Comparative Study in Texas and North Carolina, USA | **M. Rojo**	**1.02.B.T-03** Predicting Rare-Earth Element Bioaccumulation in Natural Waters; Impact of Natural Organic Matter | **M. Brunet**
BALLROOM B	**Understanding the Ecological Effects and Rolling Out Solutions for Tire Road Wear Particles and Related Chemicals** | R. Lane, A. Baldwin, P. Shankar, G. Black		
	4.22.B.T-01 Sub-Chronic and Acute Toxicity of 6PPD-Quinone in Early Life Stages of Two Salmonid Species | **C. Roberts**	**4.22.B.T-02** Evaluating the Relative Acute Toxicity of PPD Parent Chemicals and Their Transformation Products on Coho Salmon (Oncorhynchus kisutch) | **C. Lawrence**	**4.22.B.T-03** Mechanistic Evaluation of 6PPD-Quinone Toxicity in Fish | **D. Feifarek**
BALLROOM C	**Wildlife Toxicity: Innovative Approaches for Evaluating Exposure and Effects of Contaminants in Free-Ranging Wildlife and Laboratory Animal Models** | K. Hopkins,–––		
	3.05.B.T-01 Associations of Environmental Chemical Mixtures on Growth of Nestling Tree Swallows | **K. Hopkins**	**3.05.B.T-02** Modeling PFAS Bioaccumulation in Terrestrial Food Webs | **J. Zodrow**	**3.05.B.T-03** Do Highly Organohalogen-exposed Ring-billed Gulls Nesting in an Urbanized Environment Have Perturbed Hormones and Energy Metabolism? | **C. Turquois**

1. Environmental Toxicology and Stress Response	2. Aquatic Toxicology, Ecology and Stress Response	3. Wildlife Toxicology, Ecology and Stress Response	4. Chemistry and Exposure Assessment

14:30–14:45	14:50–15:05	15:10–15:25	
Agriculture and One Health: Toxicology and Ecological Health Risk Assessment of Metals, Pesticides, and Other Agricultural Inputs | K. Jegede, H. Fajana			201 A
5.01.T-04 Determining Fungicides' Impact on the Spread of Antibiotic Resistance Genes in Plant-Surface Bacterial Communities | **N. Wieber**	**5.01.T-05** Salinity and Organochlorine Pesticide Contamination in Drinking Water in the Aral Sea Region of Karakalpakstan, Uzbekistan | **M. Steiner**	**5.01.T-06** Withdrawn	
Canada's Oil Sands Mining and Dilbit Pipelines | R. Frank, A. Holloway, T. Paradis			201 B
2.05.T-04 Can the Kynurenine-Tryptophan Ratio Serve as a Marker for AhR Activation in Response to PAC Exposure? | **L. Jamshed**	**2.05.T-05** The Impact of Naphthenic Acid on Rainbow Trout Liver Mitochondrial Reactive Oxygen Species Metabolism | **Z. Kalvani Jahromi**	**2.05.T-06** Assessing the Health of Whooping Crane Migratory Wetlands in the Alberta Oil Sands Region | **L. Mundy**	
The Trinity River Past, Present, and Future: Management of an Urban Watershed in a Growing City | L. Stevenson, B. Brooks, M. Sellin Jeffries, S. Zavala			202 AB
6.05.T-03 Recognizing the Resource: Promoting Biodiversity Through Watershed Stewardship in TRWD's Urbanizing Watersheds | **A. Hoff**	**6.0.T-04** The History of Aquatic Research and Risk Assessment on the Trinity River, Texas | **S. Dyer**	Discussion	
Tools, Methods, and Approaches for Natural Resource Damage Assessment | S. Allan, J. Morris, D. Rouse, N. Martin			202 CD
6.06.T-04 Spills in Streams: Using Benthic Macroinvertebrate Data for Injury Quantification and Restoration Scaling | **S. Ciparis**	**6.06.T-05** Recommended Methods for Developing Tribal Cultural Loss Claims | **S. Kircher**	**6.06.T-06** Best Practices for Streamlined Approaches to NRDAs | **N. Martin**	
The Practicalities of Non-Targeted Analysis to Support Decision Making | J. McCord, H. Whitehead, G. Black			203 A
4.20.T-04 Targeted and Non-Targeted Sampling and LC-MS Analysis of Surface Water for Environmental Contaminants | **M. Sumarah**	**4.20.T-05** Application of Non-Targeted Analyses to Inform the Design of a Statewide Monitoring Program in California | **B. Khan**	**4.20.T-06** Non-Targeted Analysis and Risk-Based Prioritization of Emerging Contaminants in Two Common Effluent Treatment Plants (CETPs) in India | **S. Mukherji**	
Mercury Bioaccumulation and Effects on Wildlife: Ecological Pathways, Cycling, and Risk | S. Janssen, J. Ackerman, M. Chumchal, C. Eagles-Smith			203 BC
4.13.B.T-04 Dietary Transfer of Mercury from Native and Non-native Apple Snails and Daily Mercury Intake Estimates for Everglade Snail Kites in South-Central Florida, USA | **C. Ortega-Rodriguez**	**4.13.B.T-05** Examining Hg Sources and Hydrologic Factors Impacting Hg Bioaccumulation in Invertebrates of Great Salt Lake, Utah | **S. Lopez**	**4.13.B.T-06** Rapid Biological Uptake of Water-Column Methylmercury During Destratification of an Arid Land Reservoir | **J. Willacker**	
Identifying and Linking Environmental Exposure to Biological Effects | D. MacMillan, S. Baumann			204 AB
4.11.B.T-04 Assessing Potential Risks to Insectivorous Birds from Per- and Polyfluoroalkyl Substances on Department of Defense Sites: Exposure Dynamics and Metabolomic Impacts | **N. Fuller**	**4.11.B.T-05** Event Driven Taxonomy (EDT)-Based HRMS Screening Library: Identifying Suspect and Non-Target AhR-Active Contaminants in Sediment | **J. You**	**4.11.B.T-06** Microbial Biotransformation of 6:2 Disubstituted Polyfluoroalkyl Phosphate in Human Fecal In Vitro Suspensions | **S. Peskett**	
Advances in Bioaccumulation Science and Assessment | M. Rojo, K. Johanning, M. Brinkmann			BALLROOM A
1.02.B.T-04 Prioritizing PFAS for Site-Specific Aquatic Life Ecological Risk Assessment in Marine Surface Water | **Z. Pandelides**	**1.02.B.T-05** The Toxicokinetics of 6PPD-Q in Salmonids | **I. Schultz**	**1.02.B.T-06** Trends in Uptake, Bioconcentration, and Critical Body Burdens for a Diverse Suite of Per- and Polyfluoroalkyl Substances Across Three Taxa | **I. Mundy**	
Understanding the Ecological Effects and Rolling Out Solutions for Tire Road Wear Particles and Related Chemicals | R. Lane, A. Baldwin, P. Shankar, G. Black			BALLROOM B
4.22.B.T-04 Comparing the Effects of 6PPD and a Mixture of Atmospheric Transformation Products on Immortalized Chicken and Double-Crested Cormorant Hepatic Cell Lines | **D. Crump**	**4.22.B.T-05** Differences for Effects Between Marine and Freshwater Amphipods Exposed to Tire Wear Particles | **S. Uno**	**4.22.B.T-06** 6PPD-Quinone and 6PPD: Development of Aquatic Life Acute Screening Values by US EPA's Office of Water | **K. Prossner**	
——— B. Hernout, N. Karouna-Renier, J. Sangiovanni			BALLROOM C
3.05.B.T-04 Gastric Lavage is an Imprecise Method for Sampling Ingested Microplastics in a Wild Passerine Bird | **R. Andringa**	**3.05.B.T-05** Isomer Specific Formulations of Anticoagulant Rodenticides May Reduce Risk to Non-target Wildlife | **B. Rattner**	**3.05.B.T-06** Phthalate Metabolite Detection in Blubber of Common Bottlenose Dolphins (Tursiops truncatus) Stranded Near Sarasota Bay, Florida, USA | **M. Knight**	

5. Environmental Risk Assessment	6. Engineering, Remediation and Restoration	7. Policy, Management and Communication	8. Systems Approaches

P-MO | MONDAY POSTER PRESENTATIONS

POSTER SCHEDULE (CDT)		
7:30–8:00	Poster Setup (see page 10 for map of posters)	Exhibit Hall AB
8:00–10:00	Posters, Exhibits and Refreshments	Exhibit Hall AB
12:00–13:30	Lunch Break	
15:30–17:30	Posters, Exhibits and Refreshments	Exhibit Hall AB
17:30–17:45	Posters Take Down	Exhibit Hall AB

Presenters are expected to attend their poster during most of the break and the poster sessions.

Advances in Bioaccumulation Science and Assessment | M. Rojo, K. Johanning, M. Brinkmann

1.02.P-Mo-001 Application of Avian In Vitro Substrate Depletion Assays to Study Biotransformation of Organic Chemicals | **M. Schultz**

1.02.P-Mo-002 Are Current Regulatory log Kow Cut-Off Values Fit-for-Purpose as a Screening Tool for Bioaccumulation Potential in Aquatic Organisms? | **K. Paul**

1.02.P-Mo-003 Bioaccumulation of Microplastics in Predatory Marine Species: Ingestion is Not the Sole Pathway for Trophic Transfer of Pollution | **S. Davis**

1.02.P-Mo-004 Biotransformation Assay Using Precision-Cut Tissue Slice of Common Carp (Cyprinus carpio) | **D. Kawaguchi**

1.02.P-Mo-005 Comparison Between Measured and Estimated Bioconcentration Factors for Polychlorinated Biphenyls at Two USEPA Superfund Sites in Florida and Virginia | **M. Islam**

1.02.P-Mo-006 Demonstration of a Commercially Available Peeper Passive Sampler for PFAS in Sediment | **R. Zajac-Fay**

1.02.P-Mo-007 Development of a Toxicokinetic Model for Maternal-Child Transfer of PFAS | **Y. Zhu**

1.02.P-Mo-008 Exploring Microplastic Uptake by Aquatic Fauna in the Sundarbans Mangrove Ecosystem: A Scientific Study | **M. Siddiquee**

1.02.P-Mo-009 Mechanistic Modeling to Assess the Relevance of Gill Membrane Permeability to Bioaccumulation of Perfluoroalkyl Acids (PFAA) in Fish | **Z. Hu**

1.02.P-Mo-010 Metabolic Activities in Rainbow Trout (Oncorhynchus mykiss) S9 Fractions from Liver and Extrahepatic Organs as an Alternative In Vitro Ecotoxicity Assessment Approach | **D. Runge**

1.02.P-Mo-011 Nano- and Microplastic Particles as Vectors of Exposure for Plastic Additive Chemicals: Modifications to the ACC-HUMAN Food Web Model and Implications for Evaluating Human Health Risk | **T. Gouin**

1.02.P-Mo-012 Occurrence and Maternal Transfer of Per- and Polyfluoroalkyl Substances (PFAS) in Various Sharks | **Q. Mehdi**

1.02.P-Mo-013 Over-Riding log Kow: Understanding Biotransformation Through In Vitro Depletion Assays as a Means of De-/Prioritising Bioaccumulation Testing of Chemicals | **G. Sanders**

1.02.P-Mo-014 PFAS Bioaccumulation in Stocked Brook Trout | **T. Danielson**

1.02.P-Mo-015 Potential for Dietary Accumulations of Chemicals in Common Carp and Their Relationship with Octanol-Water Partition Coefficient | **S. Uno**

1.02.P-Mo-016 The Influence of Bio-Based Fertilizers (BBFs) on the Uptake of Pharmaceuticals by Crops | **Y. Dong**

1.02.P-Mo-017 The Influence of Sediments on the Bioaccumulation of Per- and Polyfluoroalkyl Substances (PFAS) in Great Lakes Benthic Organisms | **L. Votava**

1.02.P-Mo-018 Toxicokinetics of Ionizable Organic Chemicals in the Early Life Stage Zebrafish (Danio rerio) | **L. Zhang**

1.02.P-Mo-019 Trophic Transfer and Dietary Kinetics of Per- and Polyfluoroalkyl Substance Mixtures in Amphibians and Mammalian Consumers | **A. East**

1.02.P-Mo-020 Uncovering the PFAS Complexity: A Powerful IMS-QTOF Workflow for Biota Analysis Combining Targeted and Non-target Approaches | **K. Stup**

1.02.P-Mo-021 Uptake and Bioaccumulation of Per and polyfluoroalkyl Substances (PFAS) in Lower Trophic Levels of Marine Food Webs | **A. Habtemichael**

1.02.P-Mo-022 Bioaccumulation Assessment of Six Siloxanes Using In Vitro Trout S9 Biotransformation Assays | **M. Cantu**

Nano in the Environment: Garnering a Comprehensive Knowledge on Potential Hazards of Nanotechnology | O. Tsyusko, K. Varner, S. Harper

1.16.P-Mo-023 Toxicity of Hydroxyapatite Nanoparticles on Caenorhabditis elegans: a Safety-by Design Approach for Assessing Nitrogen Delivery | **J. Cochran**

1.16.P-Mo-024 Nanoparticle Size Dependent Interactions with Dynamic Pectin Model Plant Cell Walls | **C. Anastasia**

1.16.P-Mo-025 Assessing Toxicity of Nanomaterials (Hexagonal-Boron Nitride and Phosphorene) and Per- and Polyfluoroalkyl Substances (PFAS) Towards Caenorhabditis elegans | **L. Madeo Cortarelli**

1.16.P-Mo-026 Predicting Nanotechnology Exposure the Missing Tiers: A Regulatory Perspective | **K. Paul**

1.16.P-Mo-027 New Submicron IR <500nm Combined with fluorescence for MP/NP Detection | **J. Anderson**

1.16.P-Mo-028 Impact of Wastewater Borne TiO2 NPs on Metal Uptake by Potato Plants Receiving Synthetic Wastewater Irrigation | **A. Mawof**

1.16.P-Mo-029 Toxicokinetics Explain Differential Freshwater Ecotoxicity of Nano-Encapsulated Imidacloprid Compared to Its Conventional Active Ingredient | **F. Wu**

Advances in Ecotoxicology of Scleractinian Corals and Other Coral Reef Organisms | D. Renegar, C. Mitchelmore, C. Hankins

2.01.P-Mo-030 The Dispersant Corexit 9500 and (Dispersed) Oil are Lethal to Coral Endosymbionts | **T. Varasteh**

2.01.P-Mo-031 Contamination Assessment of Coral Reef Habitats of the Virgin Islands National Park | **T. Bargar**

2.01.P-Mo-032 Toxicity of Arsenate and Arsenite to Acropora cervicornis and Orbicella faveolata | **C. Dorman**

2.01.P-Mo-033 A Proposed Standard Laboratory Method for Acute Exposure Toxicity Tests of UV Filters on Scleractinian Coral | **D. Lasseigne**

Canada's Oil Sands Mining and Dilbit Pipelines | R. Frank, A. Holloway, T. Paradis

2.05.P-Mo-034 Assessing the Bioenergetic and Oxidative Impact of Bitumen-Contaminated Water on Mammalian Hepatocytes | **L. Jamshed**

2.05.P-Mo-035 Treatment Mitigation of Oil Sands Process-Affected Water Toxicity: Hybrid Wetland Mesocosm Study | **T. Leshuk**

2.05.P-Mo-036 Biomimetic Extraction and Passive Sampling Tools for Monitoring Oil Sands Process-Affected Water (OSPW) Treatment | **T. Leshuk**

2.05.P-Mo-037 Standardization of the Biomimetic Extraction Using Solid?Phase Microextraction (BE-SPME) Analytical Method | **B. Kelly**

2.05.P-Mo-038 Assessing the Effects of Sulfur-Containing Polycyclic Aromatic Compounds on Estrogen Synthesis and Metabolism in Granulosa Cells | **G. Perono**

Beyond the Deepwater Horizon: Recent Wildlife Petroleum Ecotoxicology Research and the Path Ahead | M. King, C. Goodchild, K. Horak, R. Takeshita

3.01.P-Mo-039 Effects of In Ovo Chrysene and Phenanthrene Exposure on Chicken Embryo Development and Cardiac Function: Is There Evidence for Synergism? | **Y. Pagan-Agosto**

3.01.P-Mo-040 Exposure to Individual Polycyclic Aromatic Compounds Impairs the Cardiac Performance of American Lobster (Homarus americanus) Larvae | **J. Dubiel**

3.01.P-Mo-041 Ecological Disturbance in the Anthropocene: Legacy Effects of Orphaned Wells on Vegetative Community and Metabolic Phenotype of Free-Living Rodents | **J. Warr**

3.01.P-Mo-042 Lingering Oil and Lasting Impacts: Prince William Sound 35 Years After Exxon Valdez | **E. Nichols**

3.01.P-Mo-043 Characterizing Exposure Risks to Resident and Migratory Waterbirds at Oil Sands Liquid Impoundment Facilities in Northern Alberta | **H. Ulmer**

General: Terrestrial Toxicology, Ecology and Stress Response | M. Sellin Jeffries, S. Hughes

3.02.P-Mo-044 Oviposition by Monarch Butterflies onto Clothianidin Contaminated Milkweed Plants | **T. Bargar**

3.02.P-Mo-045 Validation of a Quantitative Polymerase Chain Reaction and Immunoassay to Assess Parasite Abundance and Quantify Stress in Passerines at the Interface of Agrochemical Exposure | **A. Kaskocsak**

3.02.P-Mo-046 The Effects of Different Sample Storage Conditions on Enzyme Immunoassay Results for Measuring Corticosterone in Northern bobwhite (Colinus virginianus) | **H. Suber**

3.02.P-Mo-047 Measuring Stress in Northern Bobwhite (Colinus virginianus) Parasitized by the Eyeworm Oxyspirura petrowi by Quantifying Heat Shock Proteins 60, 70, and 90 | **B. Hames**

3.02.P-Mo-048 Validation of an Immunoassay to Quantify Immunoglobulin Response in Northern Bobwhite Quail (Colinus virginianus) and Scaled Quail (Callipepla squamata) to Parasites on the Microplastic Frontier | **H. Valencia**

3.02.P-Mo-049 Using Anthelmintics to Increase Abundance of Northern Bobwhite (Colinus virginianus) a Socially and Economically Important North American Game Bird: Safety, Efficacy, and Population Response | **J. Leach**

3.02.P-Mo-050 Emerging Contaminants in Neglected Australian Vertebrate Species | **P. Lewis**

3.02.P-Mo-051 Investigating Snakes as Sentinel Species for Per- and Polyfluoroalkyl Substances (PFAS) in two Different Continents | **L. Blackman**

3.02.P-Mo-052 Comparative Reproductive and Developmental Effects in Mice Exposed to a PFAS-Containing AFFF and a PFAS-Free Firefighting Foam | **C. Procell**

3.02.P-Mo-053 Assessment of Ecotoxicological Effects to Earthworms (Eisenia fetida) Exposed to Titanium Carbide Mxenes | **T. Musgrove**

Wildlife Toxicity: Innovative Approaches for Evaluating Exposure and Effects of Contaminants in Free-Ranging Wildlife and Laboratory Animal Models | K. Hopkins, B. Hernout, N. Karouna-Renier, J. Sangiovanni

3.05.P-Mo-054 Two Events of Suspected NSAIDs Poisoning in Several Red Kites (Milvus milvus) and Other Scavengers from Spain: A New Threat for its Conservation | **A. Garcia-Fernandez**

3.05.P-Mo-055 Navigating the Complexity of Bird Life History Traits to Better Evaluate Exposure to Environmental Chemicals | **S. Deglin**

3.05.P-Mo-056 Evaluation of Minimally Invasive Metabolomic Methods for Assessing the Sex and Health of Sturgeons | **D. Ekman**

3.05.P-Mo-057 Investigation of Fecal Microplastic Accumulation, and Associated Changes in Gut Microbiome in Florida Manatees (Trichechus manatus latirostris) | **E. Kintzele**

3.05.P-Mo-058 Per- and Polyfluoroalkyl Substances (PFAS) in Small Cetaceans Used for Human Consumption in St. Vincent and the Grenadines, Eastern Caribbean | **G. Obiyo**

3.05.P-Mo-059 Colonial Waterbirds as Sentinel Species for Long-Term Monitoring of Population, Reproductive, and Immune Effects at Contaminated Great Lakes Sites in Michigan | **K. Grasman**

3.05.P-Mo-060 Evaluation of Per- and Polyfluoroalkyl Substances (PFAS) in Eggs of Higher Trophic Level Birds | **C. McCarthy**

3.05.P-Mo-061 The Ecological Protective Concentration Level (PCL) Database - an Online Tool for Streamlining Ecological Risk Assessments in Texas, USA | **B. Yates**

3.05.P-Mo-062 Consumption of Thiamethoxam Coated Seeds Causes Multilevel Effects to the Passerine Agelaioides Badius | **J. Brodeur**

3.05.P-Mo-063 What Can('t) PCBs Teach Us About PFAS Bioaccumulation? | **C. Ng**

3.05.P-Mo-064 How Could Earlier Phase-out of PCB Production Have Reduced Diabetes Cases in the U.S.? | **L. Li**

3.05.P-Mo-065 In-Depth Analysis of Heavy Metal and Pesticide Presence in Fecal Samples from African Savanna Elephants of Lower Zambezi National Park, Zambia | **K. Watanabe**

21st-Century Challenges in Developing Countries | B. Opeolu, L. Sibali, O. Olatunji, F. Kandie

4.01.P-Mo-066 Challenges in Water Reuse: Pharmaceutical Removal Efficiency in Durban's Wastewater Treatment Plants | **A. Kaium**

4.01.P-Mo-067 Determination of Glyphosate, Aminomethylphosponic Acid (AMPA), and Glufosinate in Drinking Water Using Direct Analysis by LC-MS/MS | **J. Lewis**

4.01.P-Mo-068 Effortless Alkalinity Analysis Enabled by AI and Smartphone Technology, Without the Need for Equipment | **H. Zhang**

4.01.P-Mo-069 Hydrothermal Synthesis of BN-NRGO Composites for Photocatalytic Degradation of PFOA and PFOS | **O. Olatunji**

4.01.P-Mo-070 Small-Scale Mercury Mining on Seram Island, Mollucus Province, Indonesia -Suppling the Small-Scale Gold Mining Industry | **A. Reichelt-Brushett**

4.01.P-Mo-071 Ecological and Human Health Risks due to Potentially Toxic Metals in Major Mining Areas in Ghana | **M. Dodd**

4.01.P-Mo-072 Emerging Contaminants in Philippines Rivers: Addressing the Data Gap in Developing Countries | **P. Byrne**

Advances in Pesticide Application Technologies: Evolving Benefits and Environmental Challenges | M. Hladik, S. Teed, A. Maldonado, D. Snow

4.03.P-Mo-073 A Biological Option for Control of Varroa Mites in Honeybee Hives | **D. Moore**

4.03.P-Mo-074 Watershed Scale Occurrence, Fate and Potential Ecotoxicity Of Pesticide-Treated Seed Residues Resulting from Ethanol Production Waste Product Release | **J. Maclean**

4.03.P-Mo-075 Pesticides in Streams Impacted by a Bioenergy Production Facility Receiving Pesticide Coated Corn Seeds | **M. Hladik**

4.03.P-Mo-076 A New Paradigm in Fungicide Usage and Shelf-Life Extension for Fresh Fruit | **G. Beall**

Data Curation Approaches: Collecting, Organizing, and Validating Chemical Information to Ensure Its Accuracy, Reliability, and Usefulness to Build Qsars in Order to Support Private-Public Regulatory Partnerships | M. Kawa, W. Lee, L. Cassidy

4.07.P-Mo-077 Development of Quantitative Structure Activity Relationship Models for US EPA's Cheminformatics Modules | **T. Martin**

4.07.P-Mo-078 Dataset Curation and Development of a Machine Learning QSAR for the Prediction of Generalized Wastewater Treatment Removal Rates | **M. Beking**

P-MO | MONDAY POSTER PRESENTATIONS

4.07.P-Mo-079 Investigation of a Machine Learning-Assisted Peak Integration Approach for the Analysis of Per- And Polyfluoroalkyl Substances in Environmental Matrices | **R. Luo**

4.07.P-Mo-080 Characterization of Structural Similarity and Mode of Action of Chemicals with High Reproductive Toxicity to Daphnia magna | **H. Watanabe**

Identifying and Linking Environmental Exposure to Biological Effects | D. MacMillan, S. Baumann

4.11.P-Mo-081 Storm Impact on PFAS (Per- and Polyfluoroalkyl Substances) Distribution in Lower Atlantic City Reservoir and Connected Streams in New Jersey | **T. Ariyarathna**

4.11.P-Mo-082 From Fin to Fork: PFAS in Florida Atlantic Estuarine Fishes | **E. Pulster**

4.11.P-Mo-083 Expanding Per- and Polyfluoroalkyl Substances Coverage in Nontargeted Analysis Using Data-Independent Analysis with Q-RAI and IonDecon | **S. Baumann**

4.11.P-Mo-084 Developmental Toxicity Screening of Per- and Polyfluoroalkyl Substances (PFAS) Using a Larval Zebrafish Assay | **K. Britton**

4.11.P-Mo-085 Does PFOS and Mercury Co-contamination Result in Altered RNA Regulation and Post-Translational Endpoints? | **E. Levanduski**

4.11.P-Mo-086 Quantifying DNA Damage in Cells Exposed to Perfluorinated Alkylated Substances (PFAS), Otherwise Known as Forever Chemicals | **B. Hinchcliff**

4.11.P-Mo-087 Rapid Assessment Bioaccumulation Screening: Utilizing Surface Water to Assess Bioaccumulation & Health Outcomes for Emerging Per- & Polyfluoroalkyl Substances Mixtures that Lack Analytical Standards | **J. Bangma**

4.11.P-Mo-088 From Trend to Discovery: Temporal Analysis of Contaminants in Watersheds Using High Resolution Mass Spectrometry | **K. Adams**

4.11.P-Mo-089 Associations Between Exposure to OPEs and Rheumatoid Arthritis Risk Among Adults in NHANES, 2011-2018 | **S. Singh**

4.11.P-Mo-090 INQUIRE - Improving Indoor Air Quality and Health: Identification of Chemical and Biological Determinants, Their Sources, and Strategies to Promote Healthier Homes in Europe | **M. Nipen**

4.11.P-Mo-091 Effects of Pharmaceutical Exposure on Wild Fish Health: A Survey of Red Drum Across Florida Estuaries | **S. Trabelsi**

4.11.P-Mo-092 Assessing the Impact of Increased Levonorgestrel Exposure on Surface Water Pathogen Detection | **D. Kwarkye**

4.11.P-Mo-093 Advancing Harm Reduction Strategies in Ontario: Analysis of Opioid Consumption through Wastewater-Based Epidemiology in the Durham Region | **T. Dow**

Mercury Bioaccumulation and Effects on Wildlife: Ecological Pathways, Cycling, and Risk | S. Janssen, J. Ackerman, M. Chumchal, C. Eagles-Smith

4.13.P-Mo-094 Cormorants and Mink as Mercury Sentinel Animals in an Interior Aquatic Ecosystem | **M. Tjosaas**

4.13.P-Mo-095 Northern Sea Otters (Enhydra Lutris Kenyoni) as Indicators of Changing Mercury Dynamics in Kachemak Bay, Alaska | **N. Hunter**

4.13.P-Mo-096 Spatial and Temporal Trends of Mercury in Landlocked Arctic Char in the Canadian Arctic. Unraveling the Effects of Climate Warming and Local sources | **D. Muir**

4.13.P-Mo-097 Spatial Variability in Mercury Concentrations in Fishes and Crabs in the Matagorda Bay System (Texas, USA) with a Focus on the Alcoa/Point Comfort Superfund Site | **J. Dutton**

4.13.P-Mo-098 Temporal Analysis of Mercury Concentrations in Five Seabird Species of Northwest Greenland | **K. Whitmore**

4.13.P-Mo-099 Mercury and Methylmercury Isotopes Reveal Internal Cycling and Detoxification in Dolphins from the Indian River Lagoon, Florida | **M. Tate**

4.13.P-Mo-100 Mercury and Selenium Concentrations in Greater Amberjack, Great Barracuda, and Cobia in Texas Waters: Risk Assessment and the Need for a Mercury Advisory | **J. Kuntz**

4.13.P-Mo-101 Mercury Bioaccumulation Patterns in Freshwater Fish from Low Productivity Regions Across Florida | **G. Lescord**

4.13.P-Mo-102 Mercury Bioaccumulation, Interactions with Cortisol on Endocrine and Immune Biomarkers, and Maternal Transfer in Elephant Seals | **S. Peterson**

4.13.P-Mo-103 Mercury Concentrations in Biota from the Alcoa/Point Comfort Superfund Site (Lavaca Bay, Texas) | **J. Rehkopf**

4.13.P-Mo-104 Mercury Concentrations in Northwest Greenland Seabird and Sea Duck Eggs | **A. Welch**

Quantitative Non-Targeted Analysis (qNTA): Bridging the Gap Between Characterization and Quantitation | J. McCord, J. Sobus, A. Kruve

4.18.P-Mo-105 Using U.S. EPA Tools for Emerging Contaminant Discovery and Screening-Level Assessment | **J. Sobus**

Chemistry and Exposure AssessmentThe Practicalities of Non-Targeted Analysis to Support Decision Making | J. McCord, H. Whitehead, G. Black

4.20.P-Mo-107 Capacity Building on Non-Target Chemical Analysis for Identifying the Origins of Sudden Environmental Pollution — Japanese Collaborative Trial on Non-Target Screening of Organic Compounds in Water | **H. Matsukami**

4.20.P-Mo-108 Characterizing the Chemical Space of Groundwaters from the Biscayne Aquifer in Miami, Florida Using Multiple Analytical Techniques | **M. VanLandingham**

4.20.P-Mo-109 Characterizing Chemical Space Coverage of Multiple Solid Phase Extraction Methods for Use with Non-Targeted Analysis in Environmental Waters | **L. Brunelle**

4.20.P-Mo-110 Retrospective Non-Targeted Analysis and Suspect Screening of Pesticides in Stored Extracts from Surface Water Surrounding a Closed Ethanol Production Facility | **A. Batt**

4.20.P-Mo-111 Comparing Ecosystem Functionality of Agricultural and Natural Waterways: An NTA Approach | **G. Jones**

4.20.P-Mo-112 Non-Targeted Analysis and Estimated Concentrations of Pesticides in Grab Samples Collected from Surface Water Surrounding a Closed Ethanol Production Facility | **E. Stebel**

Understanding the Ecological Effects and Rolling Out Solutions for Tire Road Wear Particles and Related Chemicals | R. Lane, A. Baldwin, P. Shankar, G. Black

4.22.P-Mo-113 Chronic Exposure to 6PPD-quinone (6PPD-Q) Has Concentration-Dependent Effects on Developing Coho Salmon (Oncorhynchus kisutch) Embryos | **P. Shankar**

4.22.P-Mo-114 Ecotoxicity Evaluation of Tire Particles Using Common Carp | **K. Nakayama**

4.22.P-Mo-115 Rolling Along: State of the Science for Tire Related Chemicals 6PPD and 6PPD-Quinone | **R. Lane**

4.22.P-Mo-116 Microbial Degradation of Tire Waste | **V. Luna**

4.22.P-Mo-117 Optimization of Techniques and Evaluation of Kinetic Parameters for 6PPD-Quinone and Other Tire Wear Chemicals in POCIS | **D. Alvarez**

4.22.P-Mo-118 How Abiotic Factors Influence 6PPD-Quinone Toxicity in Juvenile Brown Trout (Salmo salar) | **A. Eriksson**

4.22.P-Mo-119 Quality and Reliability Evaluation of 6PPD-Quinone Surface Water Occurrence Data and Considerations for Use in Risk Assessment | **S. Kennedy**

4.22.P-Mo-120 Investigating the Prevalence of 6PPD-Quinone and Tire Wear Particles in Southcentral Alaska | **A. Richardson**

4.22.P-Mo-121 Transcriptomic Disruption of Northern Leopard Frog Tadpoles (Lithobates pipiens) by 6PPD-Quinone | **C. Roberts**

Agriculture and One Health: Toxicology and Ecological Health Risk Assessment of Metals, Pesticides, and Other Agricultural Inputs | K. Jegede, H. Fajana

5.01.P-Mo-122 Variation in Concentrations of Trace Metals in Organs of Free Range and Confined Goats Around Mining Areas in South Africa | **A. Dada**

5.01.P-Mo-123 Heavy Metals in Sheep Organs Reared Around Mining Area in South Africa: Implications for Human Health | **O. Oladeji**

5.01.P-Mo-124 Toxicity of Individual and Combined Effect of Crop Protection Safener, Mefenpyr di-Ethyl and Its Co-Herbicide, Fenoxaprop-P-Ethyl, to D. rerio | **O. Femi-Oloye**

5.01.P-Mo-125 Eco-Indicator Sensitivity Distribution (EcoSD): Evaluating Chlorpyrifos Risk on Grassland Soil with a History of Prescribed Fire and Cattle Grazing, with Implication on Ecosystem Health and Services | **H. Fajana**

5.01.P-Mo-126 Assessment of Heavy Metals in Vegetables and Fruits and Their Effect on Health | **M. Saleem**

5.01.P-Mo-127 Toxicity Assessment of the Beta-Adrenergic Receptor Agonist/Antagonist, Lubabegron, to Fathead Minnow using Traditional and Molecular Endpoints | **D. Martinovic-Weigelt**

5.01.P-Mo-128 Assessing Potential for Exposure of Native Bees to Neonicotinoid Soil Residues in Restored Lands | **A. Bellamy**

5.01.P-Mo-129 Short Term Exposure of Triazine Herbicides and Lipopolysaccharides on Various Biochemical Parameters in Adult Mice | **A. Amasiatu**

5.01.P-Mo-130 LC-MS/MS Study of Hydrolysis Kinetics of Mancozeb | **A. Patel**

5.01.P-Mo-131 UPLC-ESI-MS Based Approach for the Quantification of Fungicides, Insecticides, and Plant Growth Regulator in Mangifera indica Using QuEChERS Extraction with d-SPE Clean-Up | **M. Patel**

5.01.P-Mo-132 Contamination Characteristics and Human Health Risk Assessment of Potentially Toxic Elements in Dust from Different Land Use Areas | **M. Dodd**

5.01.P-Mo-133 Environmental and Health Risk Assessments on Mercury in Cocoa Beans (Theobroma cacao) and Agricultural Soil in Artisanal Small-scale Gold Mining (ASGM) areas, Ashanti Region, Ghana | **P. Adu poku**

5.01.P-Mo-134 Rubric to Assess Ecosystem and Health Risks of Agricultural Enhanced Weathering Projects for Carbon Dioxide Removal | **P. Fuchsman**

Between the Guidelines: Common Issues, Pitfalls, and Unwritten Considerations in Ecotoxicology Data Packages | A. Jones, A. Bone

5.04.P-Mo-135 Toxicity of Formulated Plant Protection Products to Rats as a Predictor of Their Toxicity to Birds | **S. Plautz**

Bridging the Gap from Risk Assessment to Risk Management | B. Mulhearn, K. Kalefern

5.06.P-Mo-136 Risk Based Volume Delineation for Remediation | **L. Tibbens**

5.06.P-Mo-137 Prioritizing Organic Pollutants for Shale Gas Exploitation: Life Cycle Environmental Risk Assessments in China and the US | **F. Wu**

5.06.P-Mo-138 Don't Over-Estimate PFAS - Importance of Appropriate Use of Dermal Absorption Factors | **T. House-Knight**

5.06.P-Mo-139 ToxiRiskOptimizer: Automating Endpoint Value Calculations for Comprehensive Early-Stage Ecotoxic Screening | **Y. Li**

Examining Causation in Risk Assessment, Site Management and Damage Assessments for Contaminated Sediment Sites | J. Mcgrath, S. Kane Driscoll, R. Burgess

5.08.P-Mo-140 Comparison of Empirically and Mechanistically Derived Sediment Quality Guidelines for Use as Screening Levels in Risk Assessment | **J. Mcgrath**

5.08.P-Mo-141 Pragmatic Approaches to Causality-Based Refined Screening at Legacy Contaminated Sediment Sites | **K. Fetters**

5.08.P-Mo-142 Using Sediment Toxicity Tests to Develop Remediation Goals for Polyclyclic Aromatic Hydrocarbons | **S. Kane Driscoll**

5.08.P-Mo-143 Guidelines for Selecting Bioaccumulation Models for Nonionic Organic Contaminants when Assessing Risk at Contaminated Sediment Sites | **R. Burgess**

5.08.P-Mo-144 Risk Assessment and Sustainable Remediation for a Hexavalent Chromium Contaminated Site in India | **P. Pradhan**

5.08.P-Mo-145 Influence of Sediment Organic Matter on the Stabilization of Heavy Metals in Sediments Using Activated Carbon | **S. Park**

5.08.P-Mo-146 Health Risk Assessment of Heavy Metals Toxicity via Consumption of Seafood From Selected Markets In Bayelsa State, Nigeria | **K. Patrick-Iwuanyanwu**

General: Environmental Risk Assessment | M. Sellin Jeffries, S. Hughes

5.09.P-Mo-147 Proof of Concept of a Combine Strategy for Endocrine Disruption Evaluation | **A. Muriana**

5.09.P-Mo-148 Use of Site-Specific Bioaccumulation Factors and Models to Estimate Contaminant Levels in Insectivorous Wildlife Food | **V. Reat**

5.09.P-Mo-149 Determining the Exposure Point Concentration for Human and Ecological Exposure: From the Field to the Lab to the Desktop | **D. Getty**

5.09.P-Mo-150 Reviewing Cyanide Aquatic Toxicity Data to Revise National Recommended Ambient Water Quality Criteria | **A. Jacob**

5.09.P-Mo-151 Assessment of Heavy Metal Exposure in Soils of Ihwrekreka Communities, Delta State, Nigeria | **A. Bankole**

5.09.P-Mo-152 Ecological Risks of Heavy Metals Found in Soils at Informal E-Waste Processing Sites in Nigeria | **A. Bankole**

5.09.P-Mo-153 Advancing Antimicrobial Resistance Control: Electro-Oxidation Technology for Wastewater Treatment with Comprehensive Toxicity and Risk Assessment | **T. V**

5.09.P-Mo-154 PFAS Concentrations in Aqueous Environmental Media Unrelated to Releases (Background Conditions) | **N. Podpora**

5.09.P-Mo-155 Per- and Polyfluoroalkyl Substances in Fish Tissues from Downstream Locations of a Department of Energy Site in New Mexico | **S. Gaukler**

5.09.P-Mo-156 Fabrication of H2S/Ethanol Sensor Sheets Based on Nanocomposites of ZnSnO3/NiSnO3 and Layered g-C3N4 | **A. Akhtar**

5.09.P-Mo-157 Assessment of Electroperoxone Treatment Efficiency and Ecotoxicity in Textile Wastewater Remediation | **A. John**

5.09.P-Mo-158 Assessing the Cyclic Siloxanes Monitoring Data in Sediments and Biota from Tokyo Bay and Lake Kasumigaura, Japan | **W. Naito**

5.09.P-Mo-159 A Bitcoin Mining Computer Coolant Fluid Spill – An Emerging "Contaminant"? | **P. Leitman**

The Intersection of Human Health and Environmental Risk Assessment: A One-Health Perspective | T. Lopez, F. Nilsen

5.12.P-Mo-160 Human Health and Ecological Risk Assessment of the Herbicide Flumioxazin for the U.S. Forest Service | **J. Rothrock**

5.12.P-Mo-161 Behavior of Metal Ions Under Various Soil Watering Regimes | **M. Bowersox**

5.12.P-Mo-162 Optimizing Chemical Hazard Assessment Through Integration of Environmental Mobility | **C. McLoughlin**

5.12.P-Mo-163 Explainable Artificial Intelligence Models for Toxicity Prediction Using ToxCast Data in Cross-Species Adverse Outcome Pathway | **J. Jeong**

5.12.P-Mo-164 Integrating One Health into Adverse Outcome Pathways: A Multifaceted Approach to Assessing Developmental and Neurotoxicity of Bisphenol A and Its Alternatives | **K. Kang**

P-MO | MONDAY POSTER PRESENTATIONS

5.12.P-Mo-165 Evaluation of Harmful Heavy Metal Levels in Sediments Accumulated on Urban Roads: Implications for Urban Health and Pollution Management Strategies | **M. Faisal**

5.12.P-Mo-166 Tandem Assessment of Human Exposure and Ecological Exposure Using the PROduction-To-EXposure (PROTEX) Model | **L. Li**

5.12.P-Mo-167 Association Between PM2.5 Pregnancy Exposure and Birth Outcome in Colombia | **J. Márquez**

5.12.P-Mo-168 Optimization of Infrastructure Placement using a novel Disease Burden Reduction Model | **T. Lopez**

Treatment and Characterization of Permian Produced Water to Support Re-Use | A. Redman, H. Puglis, P. Xu, D. Reible

5.13.P-Mo-169 Evaluating Multiple Whole Effluent Toxicity Test Species to Support Application of Treated Produced Water for Beneficial Use | **A. Redman**

5.13.P-Mo-170 Simulation of Mechanical Vapor Compression Desalination for Produced Water Treatment in the Permian Basin | **K. Rasporic**

5.13.P-Mo-171 Evaluating Potential Effects of Produced Water on Plants and a Nitrifying Microbial Community | **H. Puglis**

5.13.P-Mo-172 Non-Targeted Organic Micropollutant Characterization of Permian Basin Produced Water Treated Via Membrane Distillation Processes | **H. Delanka Pedige**

5.13.P-Mo-173 Evaluating Toxicity Induced by Treated Produced Water on Human Cell Lines | **Y. Zhang**

5.13.P-Mo-174 Evaluation of the Toxicity of Produced Water Chemicals Using Nematode-Based Bioassays | **M. Rahman**

5.13.P-Mo-175 Remediation of Produced Water Impacted Soils Using Enhanced Evaporative Flux | **J. Geiger**

Addressing Beneficial Use Impairments at Great Lakes Areas of Concern: Scientific Approaches That Lead to Restoration | M. Mills, D. Walters, A. Pelka

6.01.P-Mo-176 Developing the Best Approach to Using Continuous Monitoring Dissolved Oxygen (DO) Data to Assess the Potential Influence of DO on Remediation and Restoration Efforts at Great Lakes AOC Sites | **E. Yang**

6.01.P-Mo-177 Approaches to Beneficial Use Impairment Removal in the Muskegon Lake Area of Concern | **D. Tazelaar**

6.01.P-Mo-178 Liver Tumor Frequency in Brown Bullhead in Hamilton Harbour Area of Concern | **M. McMaster**

6.01.P-Mo-179 Evaluating Approaches for Assessing the Fish Tumors or Other Deformities Beneficial Use Impairment | **A. Bellamy**

General: Engineering, Remediation and Restoration | M. Sellin Jeffries, S. Hughes

6.02.P-Mo-180 Degradation of Phenol and Sulfamethoxazole with Persulfate and Ozone with Nano-MnO2 - Biochar Composites | **S. Oh**

6.02.P-Mo-181 Environmental Implications of Oxidative Transformation of 6:2 Fluorotelomer Sulfonate by Common Oxidants | **H. Choi**

6.02.P-Mo-182 Decomposition of PFAS Using Fenton-like Systems under Ambient Conditions: Systemic Combination of an Oxidant and a Transition Metal | **H. Choi**

6.02.P-Mo-183 Study on the Decomposition Mechanism of PFAS Via a Silver-Activated Persulfate System Under Ambient Conditions | **N. Felegari**

6.02.P-Mo-184 Development, Optimization and Performance of a Novel Reactor for Acid Mine Drainage Remediation Using Batches of Natural Substrates | **D. Maiga**

6.02.P-Mo-185 Investigation of Hanford Site Historical Per- and Polyfluoroalkyl Substance Records Using Open Semantic Search | **C. Brumbaugh**

6.02.P-Mo-186 Assessment of Microbial Communities in Biologically Activated Carbon Systems Treating Refinery Effluent | **S. Segovia**

6.02.P-Mo-187 Harnessing Biocompatible 3D Graphene-Based Nanocomposite for Polycyclic Aromatic Hydrocarbons Degradation: A Sustainable Approach | **N. Redkar**

6.02.P-Mo-188 Macro-Algae Biocarbon's Membrane for the Remediation of Organic and Inorganic Pollutants in Soil | **R. De Jesus Torres**

6.02.P-Mo-189 Removal of Microplastics from Agricultural Runoff using Biochar: A Column Feasibility Study | **B. Olubusoye**

6.02.P-Mo-190 Wetland Treatment Systems for Municipal Wastewater at a Bourbon Distillery and Potential Value of Incorporating Stillage for Water Treatment Enhancement | **K. Ristola**

6.02.P-Mo-191 Pretreatment of Refinery Wastewater Using Biologically Activated Carbon | **A. Abdulsalam**

6.02.P-Mo-192 Surface Water Quality for a Proposed Two-stage Ditch Program, Upper Cache River Watershed, Arkansas | **M. Kajol**

Tools, Methods, and Approaches for Natural Resource Damage Assessment | S. Allan, J. Morris, D. Rouse, N. Martin

6.06.P-Mo-193 Enhancing the Federal Natural Resource Damage Assessment and Restoration Process Through Bayesian Networks: A Case-Study on the Little Mississinewa River, Indiana | **A. Reed**

6.06.P-Mo-194 From Leslie to Lefkovitch and Beyond: Standardizing the Construction of Matrix Population Models for Quantifying Loss of Ecological Resources | **T. Walker**

6.06.P-Mo-195 Mine the Data Gap: Methods to Bridge Spatio-Temporal or Tissue Data Gaps for NRDA | **A. Stojak**

V | VIRTUAL PRESENTATIONS ASSOCIATED WITH MONDAY SESSIONS

To view virtual-only presentations, visit the meeting platform.

The Intersection of Human Health and Environmental Risk Assessment: A One-Health Perspective | T. Lopez, F. Nilsen

5.12.V-01 Predicted No-effect Concentrations of Down-the-Drain Waterpipe Wastewater Chemicals of Toxicological Concern | **Y. Termeh-Zonoozi**

Mentoring Program

Get Involved in Four Easy Steps:

- Ensure you are a SETAC member at the explorer or full level
- Identify yourself as a mentor on your SETAC profile, or search the membership directory to find a mentor
- Report to SETAC when you've found a match
- Follow the framework outlined in the handbook

Learn more and get started today!

SETAC Career Center

- Jobs and assistantships
- Fellowships and post-docs
- Graduate programs
- Requests for proposals and more

Visit careers.setac.org today!

SETAC®

TUESDAY, 22 OCTOBER

DAILY SCHEDULE (CDT)	LISTED MEETINGS ARE OPEN TO ALL ATTENDEES UNLESS SPECIFIED	
7:20–8:30	Fun Run	Meet at Registration
7:30–17:30	Registration	Grand Lobby
7:30–17:30	Speaker Ready Room	201 C
7:30–19:00	Coat and Luggage Check	Concourse, Ground Floor
7:30–8:00	Poster Setup	Exhibit Hall AB
8:00–10:00	Posters, Exhibits and Refreshments – Sponsored by A4	Exhibit Hall AB
8:30–9:15	Daily Plenary: Ben Masters	Ballroom B
9:00–10:00	American Society of Testing and Materials (ASTM) E50.47 - Biological Effects & Environmental Fate	Sundance 2 (3rd Floor, Omni Fort Worth Hotel)
10:00–12:00	Morning Platform Sessions	see p. 34
12:00–13:30	Lunch (on your own, food trucks available in Water Gardens Main Plaza)	
12:00–13:30	Women in SETAC Luncheon (sold out)	Texas E (2nd Floor, Omni Fort Worth Hotel)
12:15–13:15	International Experiences and Career Development Seminar (preregistration required)	201 A
12:15–13:15	JRF Global Sponsored Seminar - Analytical Approach for Environmental Risk Assessment Studies	203 A
13:30–15:30	Afternoon Platform Sessions	see p. 36
14:30–15:00	North America Student Advisory Council (NASAC) Meeting	Sundance 2 (3rd Floor, Omni Fort Worth Hotel)
15:30–16:30	Immunotoxicology Interest Group Meeting	204 AB
15:30–17:30	Posters, Exhibits and Refreshments – Sponsored by A4	Exhibit Hall AB
17:00–17:30	UV Filters in the Environment: Mixer and Social Networking	Exhibit Hall AB (SETAC Groups Area)
17:00–18:00	Advancement and Application of Alternatives Assessment (A4) Interest Group Meeting	201 B
17:00–18:00	Endangered Species and Cultivated Landscapes Interest Group Meeting	203 A
17:00–18:00	North American Effect Modeling Interest Group Meeting	204 AB
17:00–18:30	The USGS: Delivering Science for a Changing World	Ballroom A
17:30–18:00	Ecotox of Amphibians and Reptiles Interest Group Meeting	201 A
17:30–19:30	Early Career Social (preregistration required)	Texas H (2nd Floor, Omni Fort Worth Hotel)
18:00–19:00	Plants Interest Group Meeting	203 A
18:00–20:00	Chesapeake Potomac Regional Chapter Meeting	Sundance 2 (3rd Floor, Omni Fort Worth Hotel)
19:00–21:00	SETAC Supporters Reception (by invitation)	Texas F (2nd Floor, Omni Fort Worth Hotel)
19:00–21:30	Deep in the Heart - An Evening with Ben Masters	AMC Palace 9 (offsite)

TUESDAY REFRESHMENTS
BROUGHT TO YOU BY

A4 ALLIANCE FOR THE ADVANCEMENT OF ALTERNATIVES ASSESSMENT
SETAC INTEREST GROUP

thank you!

TUESDAY, 22 OCTOBER

DAILY PLENARY

8:30–9:15 | Ballroom B

Using Wildlife Movies for Conservation and Science Communication

Ben Masters

Ben Masters of Fin and Fur Films will show examples of how movies can be a powerful tool for science communication and conservation. He frequently works with research institutes and NGOs to communicate complex ideas to the general public in an entertaining, understandable and relevant way. He will show clips of some of Texas' most remarkable wildlife and ecosystems.

Ben Masters is a filmmaker and writer specializing in wildlife and adventure stories. He is most known for directing "Deep in the Heart: A Texas Wildlife Story," "The River and The Wall" (SXSW 2019 Award Winner), and for producing "Unbranded" (Mountainfilm 2015 Audience Award Winner). Masters studied wildlife biology at Texas A&M University and founded Fin and Fur Films in 2012. He is the author of two books published by Texas A&M University Press and has written for National Geographic and Western Horseman. A proud Texan, Masters loves riding a good horse through new country, filming wildlife stories that haven't been documented before, and using movies to help conserve wildlife and wild places.

DEEP IN THE HEART - AN EVENING WITH BEN MASTERS

sponsored by
SETAC NORTH AMERICA ENDOWMENT FUND

19:00–21:30 | AMC Palace 9 (220 E 3rd St, Fort Worth, TX, 76102)

Free to Attend | Transportation Not Provided

After his plenary presentation, join us later for a screening of "Deep in the Heart," followed by a Q&A with producer Ben Masters.

INTERNATIONAL EXPERIENCES AND CAREER DEVELOPMENT SEMINAR

sponsored by
BASF We create chemistry

12:15–13:15 | 201 A

Free to Attend | Preregistration Required

In the 21st century, international positions are commonplace and enable development of unique skill sets that promote future success. These skills and experiences play key roles in shaping career trajectories in different professional sectors (academia, business and government). This event focuses on how to appropriately leverage international experiences towards the goal of career development.

Panelists from business, academia and government will discuss their international experiences and strategies for job placement and advancement using these insights. The event will focus on three main topics:

- How did international experiences early in your career help you get established?
- What are the best approaches to develop your career in a host country?
- What are some aspects of studying or working internationally that you did not consider at the time that may be beneficial to know prior to pursuing an international position?

SPECIAL SESSION

13:30–15:30 | 202 AB

7.04.T - Contributions of Three SETAC Lone Star Legends: Professors Kenneth L. Dickson, W. Thomas Waller and C. Herb Ward

Bryan Brooks, James Lazorchak and G. Allen Burton

We witnessed the passing of three Long Star Legends of the Society of Environmental Toxicology and Chemistry (SETAC) over the past few months. The story of SETAC cannot be written without the founding contributions of professors Ken Dickson, Tom Waller and Herb Ward. For example, Ken Dickson, a Past SETAC President and Environmental Education Award Winner, cochaired the original Pellston Workshop with John Cairns Jr and Al Maki, which gave rise to the Society, and Herb Ward, who attended the first Pellston Workshop, served as the founding Editor in Chief of Environmental Toxicology and Chemistry. The environmental science, practice and education impacts of these Lone Star Legends are multifaceted and diverse, from providing foundational contributions to the development of ecological risk assessment, whole effluent toxicity, toxicity identification evaluations, real-time biomonitoring, aquatic bioassessment, mesocosms, laboratory to field extrapolation, and the famous Trinity River study, which provided evidence for benefits of dechlorinating effluent discharges, that were ahead of their time, and establishment of environmental education programs, outreach locations and community engagement activities that continue to positively benefit thousands of people each year.

This session aims to examine and learn from the diverse environmental science and engineering, science policy, and education and outreach contributions by professors Ken Dickson, Herb Ward and Tom Waller. Invited experts from different backgrounds will provide keynote presentations that will synthesize the importance of their contributions to the development of SETAC and their long-lasting impacts on the scientific, practice and educational enterprises of environmental science.

THE USGS: DELIVERING SCIENCE FOR A CHANGING WORLD

sponsored by

USGS science for a changing world

17:00–18:30 | Ballroom A

Free to Attend

Every day across the nation and around the world, the U.S. Geological Survey (USGS) provides objective, policy-neutral science that informs decisions on a wide range of complex environmental, natural resource, and public safety challenges. As the science arm of the U.S. Department of the Interior, the USGS brings to bear a uniquely broad mix of transdisciplinary expertise through our workforce and external partners. This USGS Town Hall will highlight recent examples of USGS science and opportunities for undergraduate, graduate and post-doctoral students to work for the USGS and help us deliver actionable information to decision makers.

EARLY CAREER SOCIAL

sponsored by

WELLINGTON LABORATORIES

17:30–19:30 | Texas H (2nd Floor, Omni Fort Worth Hotel)

$30 | Preregistration Required

Come meet other early career SETAC attendees for an evening of networking and fun! If you identify as early career, join us after the poster social Tuesday evening for a chance to make new connections while enjoying some light appetizers and beverages. This is an excellent way meet new colleagues and make collaborations. We will also have some optional activities to break the ice and help you meet and chat with new people.

TUESDAY MORNING TALKS (T)

	10:00–10:15	10:20–10:35	10:40–10:55
201 A	**New Perspectives and Developments in Chemical (Bio)Degradation and Persistence Assessment** | C. Hughes, A. Ott, T. Key, M. Mills		
	4.16.T-01 The Challenge to Test UVCB Biodegradation and Persistence | **H. Birch**	**4.16.T-02** Unveiling the Microbial Defluorination: Enrichment and Metabolic Insights into n:3 Acid Biotransformation | **A. Dey**	**4.16.T-03** River Channel Geometry Controls on Chemical Degradation and Persistence. Insights from a Comparative Field Study | **R. Newbould**
201 B	**Biodiversity Responses to Chemical Pollution: From Species to Services** | B. Perrotta, A. Gray, B. Kunz, J. Isanhart		
	8.02.T-01 Temporal Changes in Phytoplankton Biodiversity and Water Quality in the Lower St. Johns River, Florida | **G. Bielmyer-Fraser**	**8.02.T-02** Interactions Between Arbuscular Mycorrhizal Fungi and Rice | **P. Maestri**	**8.02.T-03** Rice Frogs: Towards Sustainable Methods of Agricultural Productions | **A. Grajal-Puche**
202 AB	**Two-Eyed Seeing: Bridging, Braiding and Weaving Indigenous Ecological Knowledge with Western Science to Inform Science** | E. Ussery, K. Nielsen, V. Palace		
	7.09.T-01 Archaeology, Heritage, and Transdisciplinary Research in the Aleutian Islands, Alaska: Faunal Refuse from Ancestral Unangam Middens Provide Insight to Natural Mercury Dynamics | **J. Avery**	**7.09.T-02** Traditional Marine Resource Consumption Risk-Based Monitoring Program for a Working Harbour | **A. Blanc**	**7.09.T-03** Interweaving Traditional Knowledge and Western Science in the San Francisco Bay Delta | **A. Angel**
202 CD	**Bridging the Gap Between Science Development and Policy, Regulatory, and Technology (PRT) Needs for Complex Substances - Supporting Data-Driven Decision-** ———		
	5.05.T-01 Tripartite Perspectives on Challenges and Opportunities for the Testing and Assessment of Substances of Unknown or Variable Composition, Complex Reaction Products, or Biological Materials (UVCBs) | **S. Deglin**	**5.05.T-02** EU's PMT/vPvM Framework: Prioritization, Regulation, and Industry Responsibility | **G. Bastos Machado**	**5.05.T-03** A Revised Strategy for Monitoring to Inform Management of Emerging Contaminants in San Francisco Bay | **E. Miller**
203 A	**Using Mechanistic Effect Modeling to Support Ecological Risk Assessment in the Context of the Endangered Species Act** | V. Forbes, M. Vaugeois, N. Pollesch		
	Introductory Remarks	**5.14.A.T-02** Bioenergetic Models to Support ERA for Threatened and Endangered Species | **R. Nisbet**	**5.14.A.T-03** Comparison of Stress Responses and Underlying Energetics of Freshwater Mussels Using Life-History Traits and Dynamic Energy Budget Theory | **I. Haberle**
203 BC	**Metals: Current Affairs and Recent Developments** | E. Smith, C. Bergeron, E. Middleton		
	7.06.A.T-01 A Best Practices User's Guide for Sediment Porewater Passive Sampling for Inorganic Constituents of Concern | **J. Conder**	**7.06.A.T-02** Assessment of Heavy Metal Contamination in Sediment and Mussels from Ennore Estuary, India | **P. Mirjankar**	**7.06.A.T-03** Production of Biological Sulfides Leads to Increased Arsenic Dissolution in Sediments from a Potable Aquifer | **K. Millerick**
204 AB	**Bridging the Gap Between the Unknown and the Known for PFAS Analysis** | K. Oetjen, J. Brown, N. Soares Quinete		
	4.05.T-01 Multivariate Forensic Analysis Enables Aqueous Film-Forming Foam Formulation Attribution by Type, Manufacturer, and Year Using 1H and 19F NMR | **L. Carini**	**4.05.T-02** Data Processing Workflow Challenges for Non-targeted Analysis (NTA) of Per- and Polyfluoroalkyl Substances (PFAS) | **J. Brown**	**4.05.T-03** Transport and Transformation of Poly- and Perfluoroalkyl Substances in Aqueous Film-Forming Foam Impacted Soil Under Unsaturated Conditions | **K. Wu**
BALLROOM A	**Cell-Based Approaches for Ecotoxicity Assessments** | M. Minghetti, N. Carmosini, G. Saari, J. Scott		
	1.07.A.T-01 An In Vitro Transcriptomic Point of Departure (tPOD) Approach to Characterize 19 Pesticides in Fish and Human Cell Lines | **N. Basu**	**1.07.A.T-02** In Vitro Models for Evaluating the Toxicity of 6PPD-Quinone and Other Tire Wear Particles | **J. Greer**	**1.07.A.T-03** Metabolic Disruption and Mechanisms of Toxicity Caused by Bisphenol Analogs in Human In Vitro Cell Models | **R. Rifa**
BALLROOM B	**Advances in Environmental Quality Guidelines, Criteria, Objectives and Benchmarks** | J. Cermak, M. Elias, R. Chui		
	1.03.A.T-01 Development of Tributyltin Sediment Quality Guidelines Using Established and Novel Approaches | **J. Cermak**	**1.03.A.T-02** Incorporation of New Approach Methods into Species Sensitivity Distributions for Ecological Risk Assessment and Environmental Quality Guidelines | **F. Pagé-Larivière**	**1.03.A.T-03** A Novel Approach to Developing Water Quality Guidelines for Polycyclic Aromatic Hydrocarbons (PAHs) | **J. Cermak**
BALLROOM C	**Environmental Fate of Polymer** | V. Albright, B. Xiong		
	4.09.T-01 Importance of Polymer Structural Information in Biodegradability Assessments | **V. Albright**	**4.09.T-02** Aerobic Biodegradation of Polymers in Aquatic Environments: High-Throughput Methods and Machine Learning Models | **H. Zhang**	**4.09.T-03** Implementation of a CO2 Evolution Test Design in Seawater Using Natural and Synthetic Polymers | **S. McLaughlin**

1. Environmental Toxicology and Stress Response	2. Aquatic Toxicology, Ecology and Stress Response	3. Wildlife Toxicology, Ecology and Stress Response	4. Chemistry and Exposure Assessment

11:00–11:15	11:20–11:35	11:40–11:55	
New Perspectives and Developments in Chemical (Bio)Degradation and Persistence Assessment | C. Hughes, A. Ott, T. Key, M. Mills			
4.16.T-04 Naphthalene and 2-Methylnaphthalene Biodegradation by Sediment Bacteria in a Tidally Influenced River in the Northeastern US | **W. Moe**	**4.16.T-05** Optimizing Bioaugmentation for Bioremediation of Dilute 1,4-Dioxane Plumes | **J. Mathieu**	**4.16.T-06** Data Miner's Delight: How Bioprospecting Highly Enriched Microbial Cultures can be used to Address Environmental Pollution | **C. Toth**	201 A
Biodiversity Responses to Chemical Pollution: From Species to Services | B. Perrotta, A. Gray, B. Kunz, J. Isanhart			
8.02.T-04 Legacy Effects of a Large, Historic, Pesticide Application Program on Aquatic Benthic Invertebrate Communities | **C. Edge**	**8.02.T-05** PFAS Effects on Organic Matter Processing in Streams | **A. Zachritz**	**8.02.T-06** Diversity, Abundance and Condition Factor of the Prawn Species of the Benin River Prior the Seaport Development | **U. Okeke**	201 B
Two-Eyed Seeing: Bridging, Braiding and Weaving Indigenous Ecological Knowledge with Western Science to Inform Science | E. Ussery, K. Nielsen, V. Palace			
7.09.T-04 Cote First Nation Baseline Health Assessment Focused on the Introduction of Bison to the Community | **K. Jones**	**7.09.T-05** Withdrawn	**7.09.T-06** Withdrawn	202 AB
––– Making in Heath & Environmental Risk Assessment and Management | S. Deglin, C. Davis, M. Beking, S. Coffin			
5.05.T-04 Assessing Chemical Pollution in Surface Waters Arising from Human Consumption: HydroFATE as a User-Friendly Tool | **H. Ehalt Macedo**	**5.05.T-05** Continued Development of Screening Level Models for Metals and Organics in Rivers | **K. Rader**	**5.05.T-06** Target Lipid Model Update and Proposed Refinement of HC5 Calculation Procedure | **C. Fanelli**	202 CD
Using Mechanistic Effect Modeling to Support Ecological Risk Assessment in the Context of the Endangered Species Act | V. Forbes, M. Vaugeois, N. Pollesch			
5.14.A.T-04 Refining Risk Assessment of Chemicals by Integrating Laboratory and Exposure Model Outputs into Effect Modeling | **M. Vaugeois**	**5.14.A.T-05** Toxicity Translation Modeling: Convergent and Divergent Attributes of Five Different Approaches | **N. Pollesch**	**5.14.A.T-06** An Agent-Based Model of Fathead Minnow for Lower and Higher Tiers of Ecological Risk Assessment | **C. Accolla**	203 A
Metals: Current Affairs and Recent Developments | E. Smith, C. Bergeron, E. Middleton			
7.06.A.T-04 Exposure and Effects to the Benthic Community of a Large Western US River Treated with Copper to Eradicate Quagga Mussels | **A. Baldwin**	**7.06.A.T-05** Spatial and Temporal Concentration of Heavy Metals in an Ecologically Important Australian Freshwater Environment, Lake Colac | **U. Nini**	**7.06.A.T-06** An Icy Issue: Investigating the Repercussions of Chronic Nickel Exposure to a Key Arctic Fish Species, the Arctic Char (Salvelinus alpinus) | **C. Stewart**	203 BC
Bridging the Gap Between the Unknown and the Known for PFAS Analysis | K. Oetjen, J. Brown, N. Soares Quinete			
4.05.T-04 Assessing Exposure of Osprey in the Chesapeake Bay and Delaware River Basin to Per- and Polyfluoroalkyl Substances Using Suspect Screening and Non-Targeted Analysis Tools | **Z. Hopkins**	**4.05.T-05** Broad Investigation of PFAS in Songbird Eggs from a Belgian Hotspot by Target Analysis and Untargeted Approaches: Suspect Screening, Non-Target Analysis and Total Oxidizable Precursor Assay | **F. Cappelli**	**4.05.T-06** Unravelling PFAS Precursors in Background Soils Using Non-Targeted Analysis Techniques Pre- and Post-TOP Assay | **H. Joerss**	204 AB
Cell-Based Approaches for Ecotoxicity Assessments | M. Minghetti, N. Carmosini, G. Saari, J. Scott			
1.07.A.T-04 Using Macrophage Cells as a Bioindicator to Evaluate Oil Sands Process Water (OSPW) Toxicity: Contribution of Naphthenic Acids to the Toxic Effects | **S. Paul**	**1.07.A.T-05** Can Cell Lines be Used to Screen Candidate Chemical Lampricides? Exploring the Use of Gill Cell Lines from Rainbow Trout (RTgill-W1) and Lake Sturgeon (LSTGill3) | **N. Carmosini**	**1.07.A.T-06** Screening Pesticides for Estrogenic and (Anti) Androgenic Activity in Support of Endocrine Disruptor Screening Program (EDSP) Revival | **C. Boxberger**	BALLROOM A
Advances in Environmental Quality Guidelines, Criteria, Objectives and Benchmarks | J. Cermak, M. Elias, R. Chui			
1.03.A.T-04 Practical Actions to Help Advance the Use of New Tools and Approaches in Ecological Risk Assessment | **B. Duncan**	**1.03.A.T-05** Weight of Evidence for Water Quality Criteria and Other Benchmarks | **G. Suter**	**1.03.A.T-06** Development of a Chloride Water Quality Guideline Based on Hardness and Consideration for Cation Toxicity | **A. Knafla**	BALLROOM B
Environmental Fate of Polymer | V. Albright, B. Xiong			
4.09.T-04 Critical Review of the Environmental Lifetime of Non-Biodegradable Plastics | **B. Xiong**	**4.09.T-05** Mechanisms of Microplastic Generation and Reactivity in Aqueous Media from Thermal and UV-Oxidized Plastics | **A. Arredondo Navarro**	**4.09.T-06** Quantum Chemically Calculated Abraham Parameters for Quantifying and Predicting Polymer Hydrophobicity | **K. Hickey**	BALLROOM C

5. Environmental Risk Assessment	6. Engineering, Remediation and Restoration	7. Policy, Management and Communication	8. Systems Approaches

TUESDAY AFTERNOON TALKS (T)

	13:30–13:45	13:50–14:05	14:10–14:25
201 A	**New Approaches and Data to Evaluate Environmental Risks of Sunscreens** | C. Mitchelmore, I. Davies, S. Raimondo, S. Belanger		
	5.10.T-01 Defensible Assessments for Evaluating Impacts of UV Filters on the Environment: A Path Forward | **S. Raimondo**	**5.10.T-02** Temporal Variation of UV Filters at a Recreational Beach in Florida, USA | **S. Landeweer**	**5.10.T-03** Toxicity of the UV filter Octocrylene to the Scleractinian Coral Acropora cervicornis | **C. Mitchelmore**
201 B	**Emergent Environmental Issues and Perspectives in Latin America** | A. Bejarano, M. Orozco Medina, P. Ramirez, M. Galar-Martinez		
	1.10.T-01 Bioassays with Allium cepa for the Monitoring of Toxicity in the Groundwater of Yucatan, Mexico | **G. Rodriguez Fuentes**	**1.10.T-02** Neurobehavioral Effects of Danio rerio Larvae Exposed to Water from Madin Dam | **M. Galar-Martinez**	**1.10.T-03** Microplastic Pollution in Groundwater of Two Rural Communities of Tlaxcala, Mexico | **P. Ramirez**
202 AB	**Contributions of Three SETAC Lone Star Legends: Professors Kenneth L. Dickson, W. Thomas Waller and C. Herb Ward** | B. Brooks, J. Lazorchak, G. Burton		
	Introductory Remarks | **B. Brooks**	**7.04.T-02** Discussion | **J. Lazorchak**	**7.04.T-03** Discussion | **T. Norberg-King**
202 CD	**Methods for Assessing Environmental Fate and Effects of Difficult-to-Test Substances** | Y. Chai, W. Backe, A. Brennan, A. White		
	4.14.T-01 Making Difficult-to-Test Substances Less Difficult in Environmental Fate and Effect Studies | **V. Albright**	**4.14.T-02** Challenges and Insights for Assessing Environmental Fate of Poorly Soluble Polymers | **V. Albright**	**4.14.T-03** Precursor Per- and Polyfluoroalkyl Substances: Biotransformation and Poor Exposure Stability May Confound Toxicological Measurements with Sensitive Model Species | **J. Conklin**
203 A	**Using Mechanistic Effect Modeling to Support Ecological Risk Assessment in the Context of the Endangered Species Act** | V. Forbes, M. Vaugeois, N. Pollesch		
	5.14.B.T-01 Linking Pesticide Exposure Landscapes to Demographic Outcomes: A Case Study for Bombus affinis Foundress Queens in Early Foraging Stage | **E. Paulukonis**	**5.14.B.T-02** Ecological Risk Assessment when Species-Specific Data Are Scarce: How Trait-Based Approaches and Modeling Can Help | **V. Forbes**	**5.14.B.T-03** Advantages and Disadvantages of MCnest as a Framework for Ecological Risk Assessment on Listed Birds | **M. Etterson**
203 BC	**Metals: Current Affairs and Recent Developments** | E. Smith, C. Bergeron, E. Middleton		
	7.06.B.T-01 Development of a Biotic Ligand Model Package as a Web Application in R | **K. Croteau**	**7.06.B.T-02** Multilevel Concentration-Response Models Can Improve Ecological Risk Assessment: A Case Study on Effects of Copper to Fish | **R. Hill**	**7.06.B.T-03** Update on the Development of U.S. Environmental Protection Agency's Aquatic Life Ambient Water Quality Criteria (AWQC) for Metals | **C. Bergeron**
204 AB	**Comprehensive Exploration of Immunotoxicity, Disease Susceptibility, and Immunology Across Organisms** | C. Smith, D. Phelps, M. Rodgers, N. Hussain		
	1.08.T-01 Altered Immune Function and Apical Endpoints in Colonial Waterbirds Exposed to Persistent Organic Pollutants | **K. Grasman**	**1.08.T-02** Assessing the Effects of Environmental Stressors on Orca Health - An In Vitro Approach | **J. Hansen**	**1.08.T-03** Marine Medaka (Oryzias melastigma) as a Developmental Immunotoxicity Model for PFAS (Per- and Polyfluoroalkyl Substances) Exposure | **E. DiBona**
BALLROOM A	**Cell-Based Approaches for Ecotoxicity Assessments** | M. Minghetti, N. Carmosini, G. Saari, J. Scott		
	1.07.B.T-01 Dysregulation of Key Hormones Induced by Individual and Mixed PPCPs in Rat Pituitary Cells | **S. Atobiloye**	**1.07.B.T-02** Sensitivity of Fishes to Polycyclic Aromatic Hydrocarbons | **J. Dubiel**	**1.07.B.T-03** Invasive and Native Fish Species Gill Cell Line Authentication | **G. Saari**
BALLROOM B	**Advances in Environmental Quality Guidelines, Criteria, Objectives and Benchmarks** | J. Cermak, M. Elias, R. Chui		
	1.03.B.T-01 Risks of Major Geochemical Ions to Aquatic Communities - Lessons Learned from Laboratory Investigations of Ion Toxicity to Several Aquatic Species | **R. Erickson**	**1.03.B.T-02** Development of a Draft Aquatic Life Criterion for Mercury in the State of Idaho | **J. Beaman**	**1.03.B.T-03** You're killing me: Cautions for Developing Environmental Criteria in Terms of Fish Tissue Concentrations | **C. Mebane**
BALLROOM C	**Assessing Contaminant Effects in Ecosystems with Multiple Stressors** | D. Ostrach, C. Irvine, L. Kapustka		
	2.04.T-01 Forty Years Since the Redbook, a Review of the Development and Future Directions of Ecological Risk Assessment for Multiple Stressors, Endpoints and Management Goals | **W. Landis**	**2.04.T-02** Land Use-Based Mapping of Lethal Stormwater Threats to Wild Coho in Puget Sound | **J. Spromberg**	**2.04.T-03** Nitrogen Isotopic Records of Wastewater Pollution in Cuban Coral Reefs | **L. Hernández**

1. Environmental Toxicology and Stress Response	2. Aquatic Toxicology, Ecology and Stress Response	3. Wildlife Toxicology, Ecology and Stress Response	4. Chemistry and Exposure Assessment

14:30–14:45	14:50–15:05	15:10–15:25	
New Approaches and Data to Evaluate Environmental Risks of Sunscreens | C. Mitchelmore, I. Davies, S. Raimondo, S. Belanger			
5.10.T-04 Estimation of the Short-Term Chronic Marine Toxicity of the Sunscreen Ingredient Octocrylene to the Sea Urchin Arbacia punctulata using the EPA 1008 Method | **I. Davies**	**5.10.T-05** Sampling Design and Model Selection to Evaluate the Exposure of Sunscreen and Cosmetic Ingredients to Marine and Freshwater Ecosystems using the MERCI Modeling Framework | **M. Roberts**	**5.10.T-06** Progress and Challenges in Modelling UV Filter Exposure from Swimmers in Recreational Waters | **D. Versteeg**	201 A
Emergent Environmental Issues and Perspectives in Latin America | A. Bejarano, M. Orozco Medina, P. Ramirez, M. Galar-Martinez			
1.10.T-04 Presence of Current-Use Pesticides in Surface Waters of the Agricultural Pampa Region of Argentina and Accumulation in Fishes | **J. Brodeur**	**1.10.T-05** Endocrine Disruption in Chilean Rivers: Balancing Science and Regulation | **R. Barra**	**1.10.T-06** A New Regulatory Paradigm for Pesticide Registration in Brazil: Comments on Recent Legislative Amendments (Law 14.785/2023) | **A. Cione Buchviser**	201 B
Contributions of Three SETAC Lone Star Legends: Professors Kenneth L. Dickson, W. Thomas Waller and C. Herb Ward | B. Brooks, J. Lazorchak, G. Burton			
7.04.T-04 Discussion | **R. Wenning**	**7.04.T-05** Withdrawn	**7.04.T-06** Discussion | **R. Thompson**	202 AB
Methods for Assessing Environmental Fate and Effects of Difficult-to-Test Substances | Y. Chai, W. Backe, A. Brennan, A. White			
4.14.T-04 Ex-Situ Passive Samplers to Evaluate Bioavailability of Per-/Polyfluoroalkyl Substances (PFASs) in Marine Sediments | **L. Mukhopadhyay**	**4.14.T-05** Solid-phase Reactivity-Directed Extraction (SPREx): A Novel Approach for the Detection of Toxic Electrophiles Produced in Water Treatment Applications | **D. Grace**	**4.14.T-06** Direct Photolysis Studies of Photo Acid Generators: Experimental Challenges and Implications for Environmental Fate and Toxicity | **H. Gadol**	202 CD
Using Mechanistic Effect Modeling to Support Ecological Risk Assessment in the Context of the Endangered Species Act | V. Forbes, M. Vaugeois, N. Pollesch			
5.14.B.T-04 A Pragmatic Prioritization of Endangered Species for Effects Modelling Purposes | **I. Rodea-Palomares**	Panel Discussion | **V. Forbes**	Panel Discussion | **V. Forbes**	203 A
Metals: Current Affairs and Recent Developments | E. Smith, C. Bergeron, E. Middleton			
7.06.B.T-04 Why Isn't Dietary Exposure Considered in Water Quality Criteria Development for Metals? | **W. Adams**	**7.06.B.T-05** Copper Site-Specific Water Quality Criteria for the Pajarito Plateau | **B. Fulton**	**7.06.B.T-06** Integration of Environment, Health, and Sustainability Metrics: Zinc Case Studies | **E. Van Genderen**	203 BC
Comprehensive Exploration of Immunotoxicity, Disease Susceptibility, and Immunology Across Organisms | C. Smith, D. Phelps, M. Rodgers, N. Hussain			
1.08.T-04 Development of a Rapid Immunotoxicity Screening Assay: Identification of Molecular Biomarkers of Innate Immune System Dysfunction | **K. Solomons**	**1.08.T-05** Transcriptional Analysis of the Role of Immune Response Gene (IRG) in the Suppressive Effects of Tert-butylhydroquinone (TBHQ) on Macrophage Activation by LPS and Poly I:C | **A. Whisel**	**1.08.T-06** Spatiotemporal Monitoring of Demonstration Pit Lake Samples Using Cell Based Bioassays | **N. Hussain**	204 AB
Cell-Based Approaches for Ecotoxicity Assessments | M. Minghetti, N. Carmosini, G. Saari, J. Scott			
1.07.B.T-04 Assessing the Cytotoxic and Proliferative Effects of Indole Compounds Synthesized by Bacteria on Six Human Cell Lines | **A. Janiga-MacNelly**	**1.07.B.T-05** Inclusion of Marine Fishes in a Cross-Species Comparison of Relative Sensitivities to Dibenzo-p-dioxins, Dibenzofurans, Polychlorinated Biphenyls and Polycyclic Aromatic Hydrocarbons In Vitro | **C. Collins**	**1.07.B.T-05** Withdrawn	BALLROOM A
Advances in Environmental Quality Guidelines, Criteria, Objectives and Benchmarks | J. Cermak, M. Elias, R. Chui			
1.03.B.T-04 A Critique of Score-Based Data Quality Evaluation | **D. Kuo**	**1.03.B.T-05** Behavior of Different Target Attainment Frequencies for Aquatic Life Criteria: Quantifying the Overall Level of Effect Allowed by the EU-UK Annual Mean Versus USA Upper-Tail Targets | **C. Delos**	**1.03.B.T-06** Water Quality Benchmarks for Human Pharmaceuticals in Freshwater: A US FDA Perspective | **X. Wu**	BALLROOM B
Assessing Contaminant Effects in Ecosystems with Multiple Stressors | D. Ostrach, C. Irvine, L. Kapustka			
2.04.T-04 The Patterns and Risk of Antibiotics and Antibiotic Resistance Genes in a Mountainous River Continuum Concept Along the Rural Agricultural-Urban Gradients | **Q. Zhao**	**2.04.T-05** Combined Effects of Temperature Increases and Salinisation on Freshwater Diatoms | **Y. Le**	**2.04.T-06** Assessing The Impacts Of Metal Exposure In Fathead Minnows Experiencing Hypoxia | **A. Thompson**	BALLROOM C

5. Environmental Risk Assessment	6. Engineering, Remediation and Restoration	7. Policy, Management and Communication	8. Systems Approaches

P-TU | TUESDAY POSTER PRESENTATIONS

POSTER SCHEDULE (CDT)		
7:30–8:00	Poster Setup (see page 10 for map of posters)	Exhibit Hall AB
8:00–10:00	Posters, Exhibits and Refreshments	Exhibit Hall AB
12:00–13:30	Lunch Break	
15:30–17:30	Posters, Exhibits and Refreshments	Exhibit Hall AB
17:30–17:45	Posters Take Down	Exhibit Hall AB

Presenters are expected to attend their poster during most of the break and the poster sessions.

Acquired Pollution Resistance: A Range of Mechanisms from Acclimation to Adaption, and Potential Fitness Costs | C. Matson, B. Clark, J. Choi

1.01.P-Tu-001 Differential DNA Methylation and Metabolomic Profiling of Killifish Populations Adapted to Contaminated Superfund Sites | **J. Kim**

1.01.P-Tu-002 A Statistical Model to Identify Potentially Adapted Populations | **M. Woodyard**

1.01.P-Tu-003 Acute Exposure to the Polychlorinated Biphenyl Mixture Aroclor 1254 Causes Mortality, Growth, but Limited Behavioral Effects in Early Life Stage Zebrafish | **C. Green**

1.01.P-Tu-004 Phenotypic and Molecular Characterization of Newly Discovered Pollution-Adapted Populations of Gulf Killifish (Fundulus grandis) from the Corpus Christi Inner Harbor, Corpus Christi, Texas, USA | **C. Swearingen**

1.01.P-Tu-005 Adaption to Long-term Pollution of Aryl Hydrocarbon Receptor (AhR) Agonists in Mosquitofish Inhabiting An Electronic Waste Recycling Area | **H. Hu**

1.01.P-Tu-006 Combined Use of Traditional TIE Methods and Semi-Quantitative Chemical Scans to Resolve C. dubia Toxicity | **J. Westfall**

Advances in Environmental Quality Guidelines, Criteria, Objectives and Benchmarks | J. Cermak, M. Elias, R. Chui

1.03.P-Tu-007 Addressing Fundamental Questions in Estimating Species Sensitivity Distributions | **Y. Iwasaki**

1.03.P-Tu-008 Evaluating the Alignment Between Proposed Risk Assessments for Microplastics and Ecosystem-Based Mesocosm Experiments | **E. Hataley**

1.03.P-Tu-009 Using Transcriptomic Point-of-Departures to Compare Sensitivity Across Fish Species | **R. Chui**

1.03.P-Tu-010 Aquatic Life Ambient Water Quality Benchmarks for Data-Limited PFAS Chemicals Using New Approach Methods | **M. Elias**

1.03.P-Tu-011 Derivation of Environmental Quality Guidelines for Perfluorooctanoic Acid (PFOA) | **J. Cermak**

1.03.P-Tu-012 Challenges in Estimating Appropriate Screening Values for Potential Direct Toxicity of Trivalent Chromium in Soil | **S. Kruse**

1.03.P-Tu-013 Development of U.S. Environmental Protection Agency Recommended Ambient Water Quality Criteria for Human Health for Per- and Polyfluorinated Substances (PFAS) | **B. Echols**

1.03.P-Tu-014 Sensitivity Analysis of Human Health Sediment Quality Objectives at a Small PCB Impacted Site | **M. Lawrence**

1.03.P-Tu-015 How Well Does Score-Based Data Quality Evaluation Performs on BCF Data? | **D. Kuo**

1.03.P-Tu-016 Evidence for a Combined Ion Mechanism of Major Ion Toxicity to the Mayfly Neocloeon triangulifer | **D. Soucek**

Bioconcentration and Biological Magnification of Emerging Contaminants: Synergism and Antagonism | C. Nwakanma, E. Walamam Mansi, N. Olayinka Ibiyinka, T. Ogbulie

1.05.P-Tu-017 Degradation Potentials of Some Isolated Fungal Species from Soil Around Workshops Located in the Ministry of Works, Aba, Nigeria | **C. Nwakanma**

1.05.P-Tu-018 Cladistic Profiling of Biosurfactant Producing Bacteria Species and the Comparative Functional Activity of the Product on Hydrocarbon Degradation | **T. Ogbulie**

1.05.P-Tu-019 Influence of Salinity and Temperature on PFAS Accumulation and Depuration in Bluegills | **S. Lanasa**

1.05.P-Tu-020 Studies on the Biodegradation of Low-Density Polyethylene by Bacillus Spp. | **F. Uwakwe**

1.05.P-Tu-021 Bioaccumulation and Acute Toxicity of Gammalin 20 on Fingerlings of African Catfish (Clarias gariepinus) | **C. Nwakanma**

1.05.P-Tu-022 Mixture Effects of Per- and Polyfluoroalkyl Substances on Embryonic and Larval Sheepshead Minnows (Cyprinodon variegatus) | **P. Tanabe**

1.05.P-Tu-023 Paspalum vaginatum Extract-Mediated Novel Synthesis of Zinc Oxide Nanoparticles and Assessment of Their Wastewater Degradation and Antibacterial Activity | **H. Anuforo**

Cell-Based Approaches for Ecotoxicity Assessments | M. Minghetti, N. Carmosini, G. Saari, J. Scott

1.07.P-Tu-024 Assessing New-Age Pesticide Chemistries with the RTgill-W1 Cell Line: Correlation to In Vivo Fish Toxicity | **J. Coral**

1.07.P-Tu-025 Comparative Analysis of Molecular Impacts of Short-Chain PFAS Exposure on ABCG2/BCRP Transporter Expression and Localization in Various Human Cell Models | **G. Collier**

1.07.P-Tu-026 Role of Medium Composition on Manganese Cytotoxicity in Rainbow Trout Gill Cells | **G. Baldwin**

1.07.P-Tu-027 Using Cell Painting Methodology to Assess Acute Fish Toxicity in a Fish Gill Cell Line, RTgill-W1 | **T. Lunsman**

1.07.P-Tu-028 Exploring the Applicability of the OECD TG 249 Fish Cell Line Acute Toxicity Assay in Environmental Hazard and Risk Assessment of Cosmetic and Personal Care Product Ingredients | **K. Roush**

1.07.P-Tu-029 Using Cell Painting to Determine PFAS (Polyfluroalkyl Substances) Effect on Lipid Metabolism in Trout Liver Cells (RTL-W1) | **B. Upton**

1.07.P-Tu-030 Alternative Approaches to Animal Testing for Ecotoxicity Assessments: Validating the OECD319 regulations | **V. Remnant**

1.07.P-Tu-031 Evaluating Practicability and Accuracy of OECD 249 Fish Gill Cell Assay by Comparison with In Vivo Acute Fish Toxicity Data for Difficult-to-Test Industrial Chemicals | **D. Becker**

1.07.P-Tu-033 Exposure to "Alternative" Flame Retardants Alters Rat Aortic Smooth Muscle Cell Function In Vitro and Decreases Heart Rate In Ovo | **A. Webb**

1.07.P-Tu-034 Concentration-Response Modeling to Predict Assimilative Capacity of Wastewater Treatment Plant Effluent Estrogenicity | **J. Cavallin**

1.07.P-Tu-035 Effects of Charge, Concentration, Exposure Duration, and Size of Polymethyl Methacrylate Micro/Nanoplastics on Human Liver Cells | **W. Shelver**

Comprehensive Exploration of Immunotoxicity, Disease Susceptibility, and Immunology Across Organisms | C. Smith, D. Phelps, M. Rodgers, N. Hussain

1.08.P-Tu-035 Development of a High-Throughput Phagocytosis Assay for Testing Immunotoxicity of Environmental Chemicals | **N. Barbo**

1.08.P-Tu-036 Per- and Polyfluoroalkyl Substance Impact on Smallmouth Bass Kidney Leukocytes: Immune Function & Transcriptomics | **C. Smith**

1.08.P-Tu-037 Susceptibility of PFAS-Exposure During Critical Windows for RAG+ T-Lymphocyte Maturation | **F. Seemann**

1.08.P-Tu-038 Investigating the Immunotoxicity of Perfluoro-3,6,-Dioxa-4-Methyl-7-Octensulfonic Acid (Nafion Byproduct 1) | **M. Carroll**

1.08.P-Tu-039 Validation of a Small Fish Model for Immunotoxicity Assessments: Bridging the Gap Between Transcriptional Responses and Organismal Health | **C. Wise**

Emergent Environmental Issues and Perspectives in Latin America | A. Bejarano, M. Orozco Medina, P. Ramirez, M. Galar-Martinez

1.10.P-Tu-040 Accumulation of Metals and Metalloids in Aquatic Organisms and Its Implications on Humans in Ecuadorian Mangroves | **K. Ajoy**

1.10.P-Tu-041 Emerging Pollutants in Yucatan's Karstic Aquifer: Pharmaceuticals and Personal Care Products in Cenotes (Sinkholes) | **E. Noreña-Barroso**

1.10.P-Tu-042 Tecolutla River Water Pollution Analysis Using Toxicity Identification evaluation (TIE) | **A. vallejo Rivera**

1.10.P-Tu-043 Scientific Dissemination Strategies in Public Spaces in Latin America | **M. Orozco-Medina**

1.10.P-Tu-044 Environmental Education for Secondary Level in La Piedad, MichoacÃƒÂin | **A. García**

1.10.P-Tu-045 Composition of Microplastics in Wild-Caught Mussels from a Mangrove Ecosystem in Ecuador | **M. Garzon**

1.10.P-Tu-046 Barnacles as Bioindicators of Microplastic Pollution in Mangrove Estuaries | **E. Vega**

1.10.P-Tu-047 Endocrine Disruptors (Perchlorate and Thiocyanate) in Drinking Water: A Case Study in Chile | **R. Calderon**

1.10.P-Tu-048 Bromate an Emerging Environmental Pollutant in Drinking Water and Vegetables: A Case Study in Chile | **R. Calderon**

1.10.P-Tu-049 Bioadsorption of Pb and Cd by the Invasive Aquatic Plant Egeria densa in San Luis PotosÃƒÂ, Mexico | **C. Wong Arguelles**

1.10.P-Tu-050 Occurrence and Contamination Level of Ochratoxin A (OTA) in Spices Marketed in Chile (2016Ã, â€"2020): A Case Study of MerkÃƒÂ©n | **R. Calderon**

1.10.P-Tu-051 Personal Exposure to Flame Retardants and Pesticides in Uganda and Costa Rica Using Silicone Wristbands | **Y. Essandoh**

General: Environmental Toxicology and Stress Response | M. Sellin Jeffries, S. Hughes

1.13.P-Tu-052 Genetics Studies of Xenobiotic Metabolic Enzymes UDP-Glucuronosyltransferase(UGT) and Sulfotransferases (SULT) in Elephants Reveals Unique Feature | **K. Watanabe**

1.13.P-Tu-053 Does AHR1 Genotype Predict Species Sensitivity to PAHs in Birds? | **J. Sangiovanni**

1.13.P-Tu-054 Obesogenic Effects of Bisphenol A by Disrupting Leptin Signaling Pathways in Human Neuronal Cells | **I. Ngoka**

1.13.P-Tu-055 Identifying Misclassified Mutagens to Enhance the Environmental Protection Agency Regional Screening Levels | **D. Stewart**

1.13.P-Tu-056 Assessing Trace Metal Bioaccumulation in Several Fish Species Near A Coal Ash Landfill (Dumfries, VA) | **S. Orledge**

1.13.P-Tu-057 Comparison of Four Common Oral Bioavailability Methods for Measurement of Arsenic, Antimony, Cadmium, and Lead Bioaccessibility in Soil | **G. Walter**

1.13.P-Tu-058 Effects of Palladium (Pd) and Platinum (Pt) Contaminated Sediments on Freshwater Invertebrates Chironomus riparius and Hyallella azteca | **A. Carle**

1.13.P-Tu-059 Impact of Contamination by Polycyclic Aromatic Hydrocarbons and Heavy Metals on Microbial Communities of Spolic Technosols from Montreal, QuÃƒÂ©bec | **S. Ghazouani**

1.13.P-Tu-060 Shotgun Metagenomic Analysis of Microbial Community Profiles and Functions in Petroleum Hydrocarbon-Polluted Soils | **C. Okafor**

1.13.P-Tu-061 Modeling Temperature-Dependent Chronic Toxicity of Thiamethoxam in Chironomids with Realistic Dynamic Exposure Profiles | **M. Vaugeois**

1.13.P-Tu-062 Effects of Glyphosate on Mitochondrial Function and Cell Apoptosis in Human Kidney Cells | **S. Black**

1.13.P-Tu-063 Metabolomics Unveiled: Exploring PFAS Impacts on Honeybees Through Citizen Science | **P. Lewis**

1.13.P-Tu-064 Does Exposure to PFAS-Free Aqueous Film-Forming Foams Impact Growth and Feeding in the Juvenile Hard Clam, Mercenaria mercenaria? | **J. Stewart**

1.13.P-Tu-065 Establishment of Nanomaterial-Induced Adverse Outcome Pathways, Over Multiple Generations of Daphnia for Environmental Nanomaterial Risk Assessment | **L. Bradford**

1.13.P-Tu-066 Towards Comprehensive Understanding and Analysis of Micro- and Nanoplastics Utilizing Libraries Reflecting Environmental Complexity: Cytotoxicity Study of Surface Oxidated Micro- and Nanoplastics | **Y. Haga**

1.13.P-Tu-067 Analyzing Oxidative Stress and Bioactivation in a Humanized Caenorhabditis elegans upon Exposure to the Environmental Pollutant Styrene | **A. Ameyaa-Sakyi**

1.13.P-Tu-068 The Effectiveness of Biopolymer-Based Nanocomposites Against Potential Bacterial Pathogens Isolated from Wastewater Environment | **M. Monapathi**

1.13.P-Tu-069 Cytotaxonomic Studies of Bat Species Inhabiting Nsukka Local Government Area of Enugu State, Nigeria | **E. Okwuonu**

1.13.P-Tu-070 Garcinia Kola Oil Serves as Potent Inhibitor of Dementia of the Cerebral Cortex and Attention Deficit Hyperactivity Disease on Exposure to 7, 12-Dimethylbenz (a) Athracene in Rat Model | **J. Akintunde**

Omics Beyond Transcriptomics: Leveraging Proteomics and Metabolomics to Improve Mechanistic Understanding of Responses to Environmental Stressors | D. Simmons, L. Langan

1.19.P-Tu-071 Accelerate Confidence, Reproducibility, and Transparency in Omics Studies Through Generic Experimental Reporting | **L. Langan**

1.19.P-Tu-072 Demonstrating the Reliability of Metabolomics-Based Chemical Grouping: Towards Acceptable Practice | **P. Leonards**

1.19.P-Tu-073 Optimization of Non-Lethal Fish Epidermal Mucus Collection Methods for Remote Fieldwork and Community Science | **K. Deoraj**

1.19.P-Tu-074 The Effects of Hypoxia on Fathead Minnow Behaviour and 'Omics | **R. Hubley**

Pesticide Risk Assessment and Surrogacy for Pollinators and Non-Target Arthropods | F. Green, E. Peterson, T. Bargar

1.20.P-Tu-075 Advancements and Challenges in Non-Target Arthropod Risk Assessment | **F. Green**

1.20.P-Tu-076 Toxicokinetics of Pesticide Exposure for Peponapis pruinosa with Implications for Exposure Modeling | **T. Purucker**

1.20.P-Tu-077 Monarch Butterfly and Insect-Protected Maize: A Probabilistic Approach for Risk Assessments | **J. Fischer**

1.20.P-Tu-078 Assessing Surrogacy Options in Lepidoptera via Trait-Based Analyses | **P. Glaum**

1.20.P-Tu-079 Differential Toxic Effects of Lambda-Cyhalothrin on the Larval, Pupal, and Adult Life Stages of the Painted Lady Butterfly (Vanessa cardui) | **F. Green**

Assessing Contaminant Effects in Ecosystems with Multiple Stressors | D. Ostrach, C. Irvine, L. Kapustka

2.04.P-Tu-080 Field Testing of the In-Situ Toxicity Identification Evaluation (iTIE) System as a Novel Approach to Stream Restoration Planning | **S. Strauss**

2.04.P-Tu-081 Effects of Acclimation to UV-B on Daphnia magna in PAH Photo-Induced Toxicity Exposures | **K. Creswell**

2.04.P-Tu-082 Exploring the Importance of Dietary-Based Stressors on the Health and Survival of Juvenile Chinook Salmon (Oncorhynchus tshawytscha) in Puget Sound | **M. Driessnack**

2.04.P-Tu-083 Toxicity of Ammonia to Threatened, Endangered, and At-Risk Freshwater Mussels with a Co-stressor of an Elevated Temperature or Metal Mixture | **N. Wang**

2.04.P-Tu-084 How Land Use Influences Aquatic Ecotoxicity | **D. Hof**

2.04.P-Tu-085 Richland Creek, Illinois: Assessment of Land Use Impacts on Microbial Activity, Fecal Contamination, and Pathogen Presence | **S. Watts**

2.04.P-Tu-086 Dealing with Sulfide in Sediments for In-Situ Toxicity Identification Evaluations (iTIE) | **H. Mao**

2.04.P-Tu-087 Using Weight of Evidence as a Conceptual Framework for Assessing Ecological Risk Across Sites | **M. LeFauve**

General: Aquatic Toxicology, Ecology and Stress Response | M. Sellin Jeffries, S. Hughes

2.07.P-Tu-088 Effects of Fine-Grain, Calcium Carbonate Sediment on Two Stony Corals, Montastraea cavernosa and Stephanocoenia intersepta | **C. Hankins**

2.07.P-Tu-089 Investigating Endocrine Disruption from Coastal Pollution in Mytilus edulis Using RNAi | **A. Goncalves**

2.07.P-Tu-090 Wildfire Impacts on Aquatic Ecosystems: Assessing Macroinvertebrate Communities and Metal Concentrations in Impoundments of Northern New Mexico | **J. Montgomery**

2.07.P-Tu-091 Hey You Mussel, Are You Alive? Aquaculture Therapeutants Effect on the Marine Bivalve Mytilus edulis | **D. Asnicar**

2.07.P-Tu-092 Effects of Salinity on the Toxicity and Real-Time Metabolic Rate Responses of Acute Ammonia Exposure to Juvenile Macrobrachium rosenbergii | **E. Mager**

2.07.P-Tu-093 Freshwater Mussel Culturing: Comparison of Fatty Acid Profiles, Stable Isotopes, and Glycogen Levels between Fish-host and In Vitro Cultured Populations | **J. Landaverde**

2.07.P-Tu-094 Environmental Concentrations of Cadmium Alters Metabolic Pathways of Catfish Liver: A Proteomic Approach | **H. Silva de Assis**

2.07.P-Tu-095 Acute and Chronic Toxicity of Copper to a Short-Term Brooding Freshwater Mussel (Truncilla truncata) | **A. Sieja**

2.07.P-Tu-096 Subchronic Effects of Titanium Carbide MXenes on Zebrafish (Danio rerio) | **T. Musgrove**

2.07.P-Tu-097 Interactive Effects of Metals on Mitochondrial Bioenergetics and H2O2 Emission in Permeabilized Fish Cardiac Fibers | **P. Tetteh**

2.07.P-Tu-098 The Effect of Non-Dioxin Like Polychlorinated Biphenyls (NDL-PCBs) (Aroclor 1254) on Calcium (Ca2+) Dependent Signaling Pathways in Zebrafish (Danio rerio) | **B. Ogunleye**

2.07.P-Tu-099 Evaluations of Aqueous Toxicity and Cytotoxicity of Ziram | **N. Kemble**

2.07.P-Tu-100 Modeling Thiamethoxam Effects on Field Populations of Chironomus riparius Using a DEB-IBM-Based Approach | **M. Vaugeois**

2.07.P-Tu-101 Assessment of Hydrogen Peroxide as a Treatment Method for the Degradation of Prochloraz in Freshwater Environments: Implications for Environmental Management | **S. Kerr**

2.07.P-Tu-102 Pesticides Mixture Damage Kidney Architecture, Induce Oxidative-Nitrative Stress, Increase Renal Expression, Instigates Cellular Apoptosis and Impair Swimming Behavior in Goldfish | **E. Cantu**

2.07.P-Tu-103 Developmental Sensitivity to PFOS and PFHxSA in the Mummichog Varies Based on Early Life Stage | **T. Burke**

2.07.P-Tu-104 Short and Long-Chain PFAS Effects on Development and Metabolism of Danio rerio Larvae | **N. Habashi**

2.07.P-Tu-105 PFAS Impacts on Atlantic Blue Crab: Correlation Between Hematodinium perezi and PFAS Levels in the Hemolymph | **M. Salvitti**

2.07.P-Tu-106 Toxicity of PFASs to Fathead Minnows Compared with Other Aquatic Species | **J. Swanson**

2.07.P-Tu-107 Toxicity of PFOS and PFOA to Two Benthic Estuarine Organisms | **P. Key**

2.07.P-Tu-108 Mixture Effects of PFOS and Two Perfluorosulfonic Acids on Larval Sheepshead Minnows | **B. Reheard**

2.07.P-Tu-109 Spatial Distribution of Polyfluoroalkyl Substances in Freshwater Fish in Maine | **I. Shepard**

2.07.P-Tu-110 Toxicity of 10 Priority PFAS to Five Standard Marine Species | **N. Hayman**

2.07.P-Tu-111 Maternal Transfer of Perfluorooctane Sulfonate (PFOS) in the Great Lakes' Rainbow Trouts and Resulting Effects on Embryo Development | **G. Haché**

2.07.P-Tu-112 Effects of Metformin on Wild Fathead Minnows (Pimephales promelas) Using In-Lake Mesocosms in a Boreal Lake Ecosystem | **E. Ussery**

2.07.P-Tu-113 Can Sulforaphane Blunt Depleted Uranium-Induced Metabolic Injury In Vivo? | **L. Gibbons**

2.07.P-Tu-114 Sub-MCL Depleted Uranium Exposure Causes Reduced Mitochondrial DNA Copy Number and Increased Genomic DNA Damage in Zebrafish (Danio rerio) Larvae | **P. Kalaniopio**

2.07.P-Tu-115 Radium-226 Toxicity to the Early Life Stages of the Great Pond Snail Lymnaea stagnalis | **A. Cremazy**

2.07.P-Tu-116 Impact of Anticoagulant Rodenticides on Coho Salmon (Oncorhynchus kisutch): Assessing Lethal and Sublethal Effects | **L. Pavord**

2.07.P-Tu-117 Evaluating the Potential Hazards of Anticoagulant-Containing Bait Pellets to Early Life Stage Pink (Oncorhynchus gorbuscha) and Coho Salmon (O. kisutch) | **M. Driessnack**

2.07.P-Tu-118 Assessment of Trace Metals and Polyfluoroalkyl Chemicals in Sediment, Water, and Fish Tissues Collected from Mattawoman Creek (Charles County, MD) | **E. Gable**

2.07.P-Tu-119 Assessment of the Source, Occurrence, and Fate of Nutrients and Legacy Contaminants in the Odaw River Basin, Accra, Ghana | **H. Schoenfuss**

2.07.P-Tu-120 Bioaccumulation and Toxicity of Field-Collected PFAS-Impacted Sediments | **P. Krupa**

2.07.P-Tu-121 Seasonal and Spatial Sedimentation Trends in the Eleven Point River, Arkansas, USA | **K. Shobowale**

2.07.P-Tu-122 Pathogen Transmission Stage Abundance in the Environment Changes Before, During, and After Disease Outbreaks | **E. Davenport**

2.07.P-Tu-123 A Meta-Analysis: Understanding Effect Levels at the NOEC, LOEC, & MATC in Freshwater Toxicity Tests | **J. Justice**

2.07.P-Tu-124 Composition and Spatial Distribution Of Invasive Aliens and Indigenous Species in Various Vegetation Physiognomies in Akure Forest Reserve, South West, Nigeria | **A. Ayomiposi**

2.07.P-Tu-125 Development of Ecotoxicity Test Methods for Biodegradable Plastics ? ~ The Decomposition Pretreatment Method to Obtain Testing Samples | **Y. Okazaki**

2.07.P-Tu-126 Ecotoxicological Assessment of Hyalella Azteca Exposure to Titanium Carbide MXenes Under Various Environmental Conditions | **T. Musgrove**

2.07.P-Tu-127 The Effects of Cadmium Exposure in the Presence of Climate Change on Embryonic Development in the Seminole Ramshorn Snail (Planorbella duryi) | **J. Gasink**

2.07.P-Tu-128 Using Ecological Speciation and Genome Structure to Reveal Habitat Specific Chemical Risks | **E. DeTemple**

2.07.P-Tu-129 Disparities in Per- and Poly Fluoroalkyl Substances (PFAS) Tolerance and Life History Traits in Simocephalus serrulatus Populations | **J. Morehouse**

Bridging the Gap Between the Unknown and the Known for PFAS Analysis | K. Oetjen, J. Brown, N. Soares Quinete

4.05.P-Tu-130 Automated Targeted and Non-Targeted Analysis for 40,000 PFAS Compounds in Environmental and Food Samples Using HRAM OrbiTrap Technology | **T. Astill**

4.05.P-Tu-131 Ion Mobility Filtering for Non-Targeted Analysis of PFAS from Environmental Samples Collected at a Ski Resort | **L. Hatch**

4.05.P-Tu-132 Utilizing Ion Mobility to Enhance Targeted and Non-Targeted Analysis of Per- and Polyfluoroalkyl Substances (PFAS) from a Landfill Leachate Sample | **N. Meruva**

4.05.P-Tu-133 Submicron IR (O-PTIR) <500nm Used for PFAS Detection in MPs | **J. Anderson**

4.05.P-Tu-134 Forensic Fingerprinting of the Unseen: Revealing the Dark Secrets of PFAS with High-Resolution Ion Mobility | **J. Krone**

4.05.P-Tu-135 Multivariate Forensic Analysis Enables Aqueous Film-Forming Foam Formulation Attribution by Type, Manufacturer, and Year Using LC-QTOF-MS | **L. Carini**

4.05.P-Tu-136 Assessing Trophic Transfer and Movement Trends of Per- and Polyfluoroalkyl Substances in Aquatic and Terrestrial Food Webs | **H. Parsons**

Environmental Fate of Polymer | V. Albright, B. Xiong

4.09.P-Tu-137 Revealing Radical Induced Degradation of Polyacrylamide - A High Resolution Mass Spectrometry Approach | **B. Xiong**

4.09.P-Tu-138 A Weight of Evidence Analytical Approach to Understanding the Chemical Composition of Synthetic Polymers to Aid in the Interpretation of Biodegradation Results | **J. Bozich**

4.09.P-Tu-139 An Experimental Approach to Determining the Movement of Dimethylsilanediol (DMSD) Formed in-situ in Soil | **A. Vogel**

4.09.P-Tu-140 Identifying Polymer-degrading Microbial Groups and those Sensitive to Polymer Exposure under Composting Conditions | **V. Albright**

4.09.P-Tu-141 Limitations and Thresholds of Cationic Charged Guars in OECD Biodegradation Screening Methods | **C. Jantzen**

4.09.P-Tu-142 An Environmental Reference Framework to Inform More Biofriendly Plastics | **M. MacDonell**

4.09.P-Tu-143 Impact of Plastic Waste on the Maritime Cultural Heritage in the Asia-specific Region: Present Status and Ruture Challenges | **B. Bose**

4.09.P-Tu-144 Comparative Study on Photo Catalytically Degradation of Controlled and Leached HBCD Samples from Polystyrene Packing Materials | **M. Balhra**

Methods for Assessing Environmental Fate and Effects of Difficult-to-Test Substances | Y. Chai, W. Backe, A. Brennan, A. White

4.14.P-Tu-145 Considerations for Accurate Sampling, Extraction, and Analysis of Cyclic Volatile Methylsiloxanes (cVMS) in Snow | **M. Nipen**

4.14.P-Tu-146 Beyond PFOS and PFOA: Screening PFASs with Diverse and Challenging Characteristics for Sublethal Toxicity to a Sensitive Aquatic Insect, Chironomus dilutus | **S. Kadlec**

4.14.P-Tu-147 Blood Biomonitoring of Maternal Serum Using an Expanded List of Per- and Polyfluoroalkyl Substances (PFAS) | **A. Renyer**

4.14.P-Tu-148 Sorption of Novel Per- and Polyfluoroalkyl Substances (PFAS) Evaluated Using High Resolution Mass Spectrometry | **I. Real**

4.14.P-Tu-149 Standardized Methods Used to Access Environmental Safety of Polyvinyl Alcohol | **M. Hall**

4.14.P-Tu-150 Development and Evaluation of Novel Passive Samplers using Green Electrospinning Techniques | **D. Blum**

4.14.P-Tu-151 Reduced Uncertainty in Solid-Water Distribution Coefficients for Per- and Polyfluoroalkyl Substances Through Exclusion of Non-equilibrium and Unsaturated Conditions | **W. Longo**

4.14.P-Tu-152 Distinguishing Factors in the Oxidative Potential of Fine Particulates (PM2.5) from Arid Region Using Refined Methodologies | **A. Siddique**

4.14.P-Tu-153 Critical Review of In Vitro Dosing Methods for Petroleum UVCB Substances | **H. Birch**

New Perspectives and Developments in Chemical (Bio)Degradation and Persistence Assessment | C. Hughes, A. Ott, T. Key, M. Mills

4.16.P-Tu-154 Prioritizing the Development of a Standardized International Approach to Assessing the Biodegradability of Cosmetic Formulations | **R. Heisler**

4.16.P-Tu-155 Aerobic Biotransformation and Defluorination of Fluoroalkylether Substances (ether PFAS): Substrate Specificity, Pathways, and Applications | **B. Jin**

4.16.P-Tu-156 Water Soluble Polymer Biodegradation Under Simulated Environmental Conditions | **K. McDonough**

4.16.P-Tu-157 Evaluating Biodegradation of Highly Microbial Inhibitory Materials: Octenidine Case Study | **C. Jantzen**

4.16.P-Tu-159 Reflections on the Role of Environmental Persistence and Considerations Regarding Screening and Prioritization | **T. Gouin**

4.16.P-Tu-160 From the Laboratory to the Field: Biotreatability Study Data Versus Field Outcomes | **S. Dworatzek**

4.16.P-Tu-161 Advancing PFAS Remediation: Insights from In Situ Chemical Oxidation and Biotransformation Studies | **F. Dixit**

4.16.P-Tu-162 A Novel Computer-Aided Method for Searching Chemical Literature for Indicators of Emerging Concern, Including New Information on Health Effects, Persistence, and Bioaccumulation | **K. Bromfield**

4.16.P-Tu-163 When the End Product is Carbon Dioxide: Radiocarbon-Corrected Soil Respiration Methods to Measure Field Contaminant Degradation Rates | **J. Zimbron**

Bridging the Gap Between Science Development and Policy, Regulatory, and Technology (PRT) Needs for Complex Substances - Supporting Data-Driven Decision-Making in Heath & Environmental Risk Assessment and Management | S. Deglin, C. Davis, M. Beking, S. Coffin

5.05.P-Tu-164 Development of a Tiered Approach to Screen Mixture Effects in Consumer Products: A Case Study of Cleaning Products in Korea | **H. Kim**

5.05.P-Tu-165 Plastic Additives and the Regulation of Chemicals of Concern | **J. Lambert**

5.05.P-Tu-166 Automating the Review of Data in the ECOTOXicology Knowledgebase to Support Regulatory Decision-Making | **J. Fetke**

5.05.P-Tu-167 Effect Driven Prioritization of Contaminants in Wastewater Treatment Plants Across China: A Data Mining-Based Toxicity Screening Approach | **H. Li**

5.05.P-Tu-168 The Value of Employing Zebrafish Embryos Applying Different Toxicity Assessments and QSAR Models to Predict Toxicity of Fragrance Constituents | **A. Muriana**

5.05.P-Tu-169 Development of a Pilot Database of Chemical Characterization Information for Substances of Unknown or Variable Composition, Complex Reaction Products or Biological Materials (UVCBs) | **J. Krzykwa**

5.05.P-Tu-171 Applying the Principles of Grouping and Read-Across to Different Lines of Evidence to Support the Development of an Ecotoxicity Testing Strategy for Hydrocarbon UVCBs | **J. Naile**

5.05.P-Tu-172 Application of MOSH/MOAH GCxGC Methods to Support Bioaccumulation Testing of Hydrocarbon UVCBs in Fish | **A. Redman**

5.05.P-Tu-173 Develop a Community-Based Participatory Approach to Evaluate the Dietary Exposure of Per- and Polyfluoroalkyl Substances (PFAS) in an Underrepresented Community | **X. Xu**

P-TU | TUESDAY POSTER PRESENTATIONS

New Approaches and Data to Evaluate Environmental Risks of Sunscreens | C. Mitchelmore, I. Davies, S. Raimondo, S. Belanger

5.10.P-Tu-174 An Acute Ecotoxicological Test Coupled with Transcriptome Analysis of a Sunscreen Ingredient, Oxybenzone Using Coral Acropora tenuis for Ecological Risk Assessment and Molecular Epidemiological Survey | **S. Nishioka**

5.10.P-Tu-175 Probabilistic Emissions Model for UV Filters Released to Recreational Waters During Swim Events | **T. Federle**

Using Mechanistic Effect Modeling to Support Ecological Risk Assessment in the Context of the Endangered Species Act | V. Forbes, M. Vaugeois, N. Pollesch

5.14.P-Tu-176 Development of a Mechanistic Fish Population Model to Assess Indirect Effects of Environmental Chemical Exposure | **P. Glaum**

5.14.P-Tu-177 Formulation of a Freshwater Mussel Population Model for Ecological Risk Assessment Using a Standardized Protocol | **I. Haberle**

Metals: Current Affairs and Recent Developments | E. Smith, C. Bergeron, E. Middleton

7.06.P-Tu-178 Distribution of Trace Metals and Rare Earth Elements in Surface Sediments in the Canadian Arctic: Establishment of Geochemical Baseline | **C. Brice**

7.06.P-Tu-179 Implementing Metal Bioavailability in Australia and New Zealand: The Road to Finalisation | **E. Smith**

7.06.P-Tu-180 Implementing Bioavailability for Metal Water Quality Guidelines in Australia and New Zealand: Collecting and Collating Water Chemistry Data for Guideline Derivation | **E. Smith**

7.06.P-Tu-181 Understanding the Role of Water in the Mining Industry: Metrics, Risks, and Sustainability | **E. Smith**

Two-Eyed Seeing: Bridging, Braiding and Weaving Indigenous Ecological Knowledge with Western Science to Inform Science | E. Ussery, K. Nielsen, V. Palace

7.09.P-Tu-182 Environmental Protection for Indigenous Use - Athabasca Chipewyan First Nation Research and Water Policy "tu bet'a ts'ena (With Water We Live)" | **T. Bebeteidoh**

Biodiversity Responses to Chemical Pollution: From Species to Services | B. Perrotta, A. Gray, B. Kunz, J. Isanhart

8.02.P-Tu-183 Impacts of Insecticide Application on Insect Diversity and Abundance in Cocoa Agroecosystems | **E. Dankyi**

8.02.P-Tu-184 Aquatic Macroinvertebrate Diversity and Water Quality as Indicators of Wetland Health in Natural and Constructed Wetlands of Northeast Arkansas | **H. Wheeler**

8.02.P-Tu-185 Diversity, Abundance and Condition Factor of the Fish Species of Benin River Before the Seaport Development | **U. Okeke**

V | VIRTUAL PRESENTATIONS ASSOCIATED WITH TUESDAY SESSIONS

To view virtual-only presentations, visit the meeting platform.

Emergent Environmental Issues and Perspectives in Latin America | A. Bejarano, M. Orozco Medina

1.10.V-01 Drought Management in Mexico: 2020-2024 | **V. Davydova Belitskaya**

General: Environmental Toxicology and Stress Response | M. Sellin Jeffries, S. Hughes

1.13.V-01 Distribution, Bioaccessibility, and Human Health Implications of Potentially Toxic Elements in Top Soils through Gold Mining in the Obuasi Municipality of Ghana | **M. Dodd**

1.13.V-02 Possible Sources Of Trace Metals In Obese Females Living In Informal Settlements Near Industrial Sites Around Gauteng, South Africa | **G. Lion**

Pesticide Risk Assessment and Surrogacy for Pollinators and Non-Target Arthropods | F. Green, E. Peterson, T. Bargar

1.20.V-01 Relative Sensitivity of Apis mellifera Versus Other Terrestrial Invertebrates | **C. Strauch**

General: Aquatic Toxicology, Ecology and Stress Response | M. Sellin Jeffries, S. Hughes

2.07.V-01 Similarity in Neurotoxicity of Tire Derived 6PPD and 6PPD-Quinone by Chronic Exposure to Environmentally Relevant Concentration in Adult Zebrafish | **H. Jin**

2.07.V-02 Assessing Wildfire Retardant Impacts on Ecological Health: Water Quality and Biodiversity Implications in Southwestern Wetlands | **K. Kollus**

SETAC EUROPE 35TH ANNUAL MEETING

11–15 May 2025 | Vienna, Austria | vienna.setac.org

Innovation for Tomorrow: Progress in Safe and Sustainable Concepts

STRIKE A CHORD WITH FELLOW EXPERTS IN THE CITY OF MUSIC! SUBMIT AN ABSTRACT BY 20 NOVEMBER.


Save the date!
SETAC®
SETAC Latin America 16th Biennial Meeting
26–29 August 2025 | Lima, Peru | setac.org/lima

WEDNESDAY, 23 OCTOBER

DAILY SCHEDULE (CDT)	LISTED MEETINGS ARE OPEN TO ALL ATTENDEES UNLESS SPECIFIED	
7:30–10:00	International Collaboration on Cosmetic Safety Joint Env. DT Meeting	Sundance 2 (3rd Floor, Omni Fort Worth Hotel)
7:30–17:30	Registration	Grand Lobby
7:30–17:30	Speaker Ready Room	201 C
7:30–20:30	Coat and Luggage Check	Concourse, Ground Floor
7:30–8:00	Poster Setup	Exhibit Hall AB
8:00–10:00	Posters, Exhibits and Refreshments	Exhibit Hall AB
8:30–9:15	Daily Plenary: Emily Monosson	Ballroom B
10:00–12:00	Morning Platform Sessions	see p. 48
12:00–13:30	Lunch (on your own, food trucks available in Water Gardens Main Plaza)	
12:00–13:30	Student Noontime Seminar (sold out)	Texas E (2nd Floor, Omni Fort Worth Hotel)
12:30–13:30	SETAC North America Science Committee Meeting	
13:30–15:30	Afternoon Platform Sessions	see p. 50
15:30–17:30	Posters, Exhibits and Refreshments	Exhibit Hall AB
16:30–17:30	Inclusive Diversity Committee Meet and Greet	Exhibit Hall AB (SETAC Groups Area)
16:30–20:00	Discussion: The East Palestine Derailment	Stockyard 3 (2nd Floor, Omni Fort Worth Hotel)
17:00–18:00	Aquatic Toxicity Testing Interest Group Meeting	201 A
17:30–18:30	Bioaccumulation Science Interest Group Meeting	204 AB
17:30–18:30	SETAC Endocrine Disruptor Testing and Risk Assessment (EDTRA) Interest Group Meeting	201 B
17:30–18:30	SETAC North America Board of Directors Meeting	Sundance 2 (3rd Floor, Omni Fort Worth Hotel)
18:00–19:00	Wildlife Toxicity Interest Group Meeting	203 A
18:00–19:30	Gathering of Empowered Minds (GEM) Social	Texas E (2nd Floor, Omni Fort Worth Hotel)
19:00–22:00	Student Trivia and Mixer (preregistration required)	Curfew (offsite)
20:00–22:00	Stockyard Crawl	Billy Bob's Texas (offsite)

WEDNESDAY, 23 OCTOBER

DAILY PLENARY

8:30–9:15 | Ballroom B

Ancient Defenses, Modern Chemicals, a Mismatch for the Ages: How Life Responds to Toxic Chemicals

Emily Monosson

How did the receptors, enzymes and proteins that protect humans from toxic chemicals evolve, and how do they respond to today's new chemicals? While these responses are highly conserved and complex, Emily Monosson aims to introduce these concepts to the public by writing about the evolution of natural and industrial chemicals that affect life and the environment.

Trained as an environmental toxicologist, Monosson has written about science and our impact on the environment and the consequences for wildlife, plants and humans for over a decade. One of her first edited books, "Motherhood the Elephant in the Laboratory: Women Scientists Speak Out," gave voice to women scientists facing the problems of working in traditional scientific institutions as parents and their creative and unique solutions for maintaining a meaningful life in science. A series of books exploring the evolution and responses of life's chemical defense systems followed. From "Evolution in a Toxic World" to "Unnatural Selection" and "Natural Defense," her books focus on how the chemicals we use to manage pests and pathogens often push them instead to evolve resistance, and how we might reduce these selective pressures. She lives in Western Massachusetts and has held an adjunct position at the University of Massachusetts, Amherst, ever since first landing there nearly thirty years ago. Her most recent book, "Blight: Fungi and the Coming Pandemic," has been called sobering, unsettling and "a short, crisp introduction to the possibility of being devoured by fungi." She is a fan of HBO's "Last of Us," though she does not live in fear of becoming a fungal zombie.

SPECIAL SESSION

10:00–12:00 | 202 AB

1.11.T - Environmental Issues in the Gulf of Mexico

Chi Huang, Nin Gan, Asif Mortuza, Kathleen Roark and Kerri Lynn Ackerly

The Gulf of Mexico is a large, complex and productive ecosystem that supports a high biological and ecological diversity, while also supporting a strong economy through commercial fisheries, shipping and trading, tourism, and access to energy resources. However, this marine ecosystem faces multiple environmental challenges from different drivers, including but not limited to non-point source pollution, stormwater and agricultural runoff, accidental spills of hazardous substances, harmful algal blooms, climate change, etc. The session on the Gulf of Mexico is intended to highlight current environmental challenges and solutions specific to this important ecosystem. Presenters will discuss presentations on environmental issues specific to the Gulf of Mexico and their links to environmental toxicology and chemistry. Topics of interest include water quality, aquatic and wildlife eco-toxicology, threats to biodiversity, ecological risk assessment, environmental monitoring, multiple-stressors, among others. This session will also provide an opportunity to assess the state of the knowledge, and it may help to identify priority areas for research and multistakeholder collaboration including fostering a transition to a Blue Economy.

SPECIAL SESSION

13:30–15:30 | 202 AB

7.07.T - SETAC Special Session: Using SETAC's Successes on the 45th Anniversary as a Bridge to the Future

April Reed, Adriana Bejarano, Lawrence Kapustka and Barnett Rattner

In this special session, we bring together a panel representing different sectors, career stages and perspectives, with the goal of sharing their experience with SETAC's past and a vision for its future on SETAC's 45th anniversary. Focusing on SETAC's principles, we hope to tease out lessons learned based what has worked well and what has not, and discuss contemporary challenges that SETAC might face in advancing its mission to promote environmental science and management and potential solutions.

STUDENT TRIVIA AND MIXER

19:00–22:00 | Curfew (350 W 5th St, Fort Worth, TX, 76102)

$40 | Preregistration required | Transportation Not Provided

Come out for a fun night of trivia and getting to know the students of SETAC at Curfew! The night will start out with a mixer accompanied by pizza and refreshments (included in your ticket). Then, trivia participants will form teams to compete alongside friends, new and old, to become this year's trivia champions. Winners will receive SETAC swag as well as bragging rights until next year. Feel free to come for the whole event or stay for the mixer only. We look forward to seeing you there!

SOCIAL OFFSET

Contribute to local organizations in Fort Worth that make a positive difference at setac.org/SocialOffset.

WEDNESDAY MORNING TALKS (T)

	10:00–10:15	10:20–10:35	10:40–10:55
201 A	**Risk Assessment, Remediation, and Restoration: Applying Interdisciplinary Approaches to Creating Successful Remediation and Restoration Projects** | L. McIntosh, M. Roy, M. Mills, D. Walters		
	6.04.T-01 The East Palestine OH Train Disaster - A Continuing Saga of People, Ecosystems, and Places | **B. Vigon**	**6.04.T-02** Biomimetic Extraction with Polydimethylsiloxane as an Indicator of Toxicity of Petroleum Mixtures Before and After Sediment Remediation | **M. Rakowska**	**6.04.T-03** Ecological Restoration of Degraded Peatlands in Sungai Tohor, Sumatra, Indonesia | **C. Lee**
201 B	**Navigating Environmental Assessments for Evaluating Consumer Products and Chemicals of Concern** | A. Gobeil, W. Goodfellow		
	4.15.T-01 A Framework and Case Study in Support of Risk-Based Prioritization of Additives and Polymer-Associated Chemistries (APAC) | **C. Davis**	**4.15.T-02** Safety Assessment of Recycled Plastics: State of the Science and a Case Study | **L. Kristofco**	**4.15.T-03** The Importance of Data in Sustainable Product Formulation | **A. Gobeil**
202 AB	**Environmental Issues in the Gulf of Mexico** | A. Bejarano, K. Armbrust, E. Wirth		
	1.11.T-01 Alterations in Eastern Oyster Crassostrea virginica Shell Formation by the Ocean Acidification Through Dysregulation of Ca2+-Related Signaling Pathways | **C. Huang**	**1.11.T-02** Photodegraded Pyrene and Anthracene Increase Mortality and Induce Stress Responses in Eastern Oyster (Crassostrea virginica) Larvae and Adult Stages | **N. Gan**	**1.11.T-03** Emerging (Nano(Micro)Plastics) and Persistent (Polycyclic Aromatic Hydrocarbons and Polychlorinated Biphenyls) Pollutant Body-Burdens in Oysters and Fish from Matagorda Bay | **A. Mortuza**
202 CD	**All Things Related to Endangered Species Assessment** | T. Blickley, J. Arnie		
	5.02.A.T-01 The Feasibility of Testing Non-Crop Plants to Develop a Refined Risk Assessment for the EPA Herbicide Strategy for Threatened and Endangered Species | **H. Krueger**	**5.02.A.T-02** Using Species Sensitivity Distribution Models and Surrogate Species to Estimate Pesticide Toxicity and Risk to Listed Lepidopteran and Coleopteran Insects | **N. Krishnan**	**5.02.A.T-03** Automated Probabilistic Spatial Co-Occurrence Assessments for Aquatic Endangered Species | **J. Dunne**
203 A	**Understanding Environmental Reactivity: Kinetics, Mechanisms, and Transformation Products** | B. Chandramouli, K. Stroski, G. Mckay, S. Joudan		
	4.21.T-01 The Speciation and Transformation of Complex Phosphorus Species | **T. Li**	**4.21.T-02** Roles of Reactive Oxygen and Nitrogen Species in Transforming Organic Compounds to Nitrogenous Products in Aqueous-Phase Photolysis of Inorganic Nitrogen Species | **D. Minakata**	**4.21.T-03** Combining Sulfidated Zero Valent Iron and Subsurface Bacterial Communities for Enhanced TCE Remediation | **N. Khan**
203 BC	**Stormwater Runoff Impacts, Solutions, and Innovative Research** | K. Rader, K. Schiff, J. McIntyre, S. Hutton		
	2.10.T-01 Time-Course and Latency of Toxicity of 6PPD-Quinone to Three Salmonids and a Centrarchid | **D. Soucek**	**2.10.T-02** Habitat and Life Stage Impact Acute Lethality of 6PPD-Quinone to Coho Salmon | **J. McIntyre**	**2.10.T-03** Tracking 6PPD-Q Concentration Dynamics in Coho Salmon-Bearing Streams Following Rain Events | **M. King**
204 AB	**Spatial and Temporal Analysis of Organic Contaminants in Humans, Wildlife, and the Environment** | A. De Silva, M. Cashman, Y. Liu, T. Guillette		
	4.19.A.T-01 Atmospheric Deposition and Bioaccumulation of Legacy Pollutants in the Great Lakes: A Ten Year Study of Air, Fish, and Herring Gulls, 2010–2020 | **O. Sadik**	**4.19.A.T-02** PFAS Sources to Rivers: A Spatial and Temporal Analysis of Forever Chemicals in the First Industrial River Basin | **P. Byrne**	**4.19.A.T-03** Spatial and Temporal Distributions of PFAS in Galveston Bay, TX, USA | **Y. Liu**
BALLROOM A	**Challenges in PFAS Analyses and Detection** | L. Ispiryan, H. Korb, L. Miller, R. DeMott		
	4.06.A.T-01 Analysis of PFAS in Consumer Products by extraction and LCMSMS | **M. Deible**	**4.06.A.T-02** Escaping the Matrix: Eliminating Matrix Effects in Lipid-rich, Full-Fish Homogenates | **S. Brady**	**4.06.A.T-03** A Straightforward Method for the Extraction, Cleanup, and Quantitative Analysis of 45 PFAS in Whole Fish | **W. Backe**
BALLROOM B	**Exposure and Effects of Micro- and Nanoplastics in the Environment** | T. Hoang, S. Au, S. Harper		
	1.12.A.T-01 Hazards, Accumulation, and Depuration of Synthetic and Natural Fibers Towards Daphnia magna and Physa acuta | **A. Barrick**	**1.12.A.T-02** Comparison of the Environmental Toxicity of Micro, Nano, and Leachate Fractions of Three Rubber Materials to Danio rerio and Daphnia magna | **M. Jackson**	**1.12.A.T-03** Accumulation, Depuration, and Potential Effects of Environmentally Representative Microplastics Towards Daphnia magna | **A. Boardwine**
BALLROOM C	**Linking Molecular Impacts to Organism Health: Empirical and Theoretical Methods to Scale Contaminant Effects** | L. Stevenson, J. Magnuson, C. Murphy		
	1.14.T-01 Early Life Exposure to Endocrine Disruptors: Understanding the Neuro-Endocrine Impact from Metabolome Mapping of Rat Models | **P. Leonards**	**1.14.T-02** Withdrawn	**1.14.T-03** From Molecular to Whole-Organismal Responses of Salmonids to 6PPD-Quinone | **J. Greer**

1. Environmental Toxicology and Stress Response	2. Aquatic Toxicology, Ecology and Stress Response	3. Wildlife Toxicology, Ecology and Stress Response	4. Chemistry and Exposure Assessment

11:00–11:15	11:20–11:35	11:40–11:55	
Risk Assessment, Remediation, and Restoration: Applying Interdisciplinary Approaches to Creating Successful Remediation and Restoration Projects | L. McIntosh, M. Roy, M. Mills, D. Walters			201 A
6.04.T-04 TCEQ Natural Resource Trustee Program and Ecological Service Analysis Under the Texas Risk Reduction Program | **M. Cave**	**6.04.T-05** In Situ Toxicity Identification Evaluation: Prototype Improvements and Field Verifications of a Technology for Detecting Stressor-Causality Linkages | **A. Crane**	**6.04.T-06** Quantifying Specific Discharge and Dissolved-Phased PAH Mass Flux Using Sediment Bed Passive Flux Meters to Optimize Sediment Cap Design for Intertidal Sediments | **D. Lavoie**	
Navigating Environmental Assessments for Evaluating Consumer Products and Chemicals of Concern | A. Gobeil, W. Goodfellow			201 B
4.15.T-04 What's in Nail Products Sold in California? - A Lab Study and Exposure Assessment Using USEtox | **L. Huang**	**4.15.T-05** Evaluating Risks from Cosmetics and Personal Care Products: Use of (in)Appropriate Testing Frameworks | **K. Kulacki**	**4.15.T-06** Development of a Rapid Screening Method for Detection of Hazardous Additives in Textiles | **A. Wicks**	
Environmental Issues in the Gulf of Mexico | A. Bejarano, K. Armbrust, E. Wirth			202 AB
1.11.T-04 Comparing the Interfacial Interactions and Biological Impacts of Legacy PFAS with Next-Generation Replacements in Saltwater | **K. Roark**	**1.11.T-05** Comparative Toxicity of PFAS in Lab-Reared and Wild-Caught Sheepshead Minnow in Estuaries of the Gulf of Mexico | **K. Ackerly**	**1.11.T-06** Comparative Photo-Induced Toxicity of Tire Wear Particle Leachate on Two Fishes in the Gulf of Mexico, Southern Flounder (Paralichthys lethostigma) and Red Drum (Sciaenops ocellatus) | **K. Ackerly**	
All Things Related to Endangered Species Assessment | T. Blickley, J. Arnie			202 CD
5.02.A.T-04 Recent Experiences and Lessons Learned During the Development of Endangered Species Biological Opinions for Insecticides | **M. Kern**	**5.02.A.T-05** Refinements to Use Data Layers (UDLs) Used in Endangered Species Assessments of Pesticides | **L. Insinga**	**5.02.A.T-06** Challenges with Crop Mapping to Support ESA | **G. Hoogeweg**	
Understanding Environmental Reactivity: Kinetics, Mechanisms, and Transformation Products | B. Chandramouli, K. Stroski, G. Mckay, S. Joudan			203 A
4.21.T-04 Disinfection Byproduct Formation, Transformation, and Relative Toxicity in Conventional and Direct Potable Reuse Drinking Waters | **K. Boenisch-Oakes**	**4.21.T-05** Enhanced Adsorption and Hydrolysis of Insensitive Munition Formulation IMX-101 By Pyrogenic Carbonaceous Matter in Range Soils | **N. Seenthia**	**4.21.T-06** Transformation of PFAS in Landfills: Filling Target Gaps and Using the TOP Assay to Understand Fate | **M. Woudneh**	
Stormwater Runoff Impacts, Solutions, and Innovative Research | K. Rader, K. Schiff, J. McIntyre, S. Hutton			203 BC
2.10.T-04 Transport and Fate of 6-PPD Quinone in a Full-Scale Stormwater Bioretention Pond | **V. Deycard**	**2.10.T-05** The Influence of Saltwater Intrusion on PFAS Release from AFFF-Contaminated Aquifer Solids | **H. Yoon**	**2.10.T-06** Stormwater Quality and Quantitative Microbial Risk Assessment in Southern California | **K. Schiff**	
Spatial and Temporal Analysis of Organic Contaminants in Humans, Wildlife, and the Environment | A. De Silva, M. Cashman, Y. Liu, T. Guillette			204 AB
4.19.A.T-04 Withdrawn	**4.19.A.T-05** Spatial and Ecological Factors Driving Differences in PCB Bioaccumulation Between Gulls and Cormorants in the Laurentian Great Lakes | **S. deSolla**	**4.19.A.T-06** Volatile POPs in Air: Assessment of Spatial and Temporal Trends Under the GAPS Network | **A. Saini**	
Challenges in PFAS Analyses and Detection | L. Ispiryan, H. Korb, L. Miller, R. DeMott			BALLROOM A
4.06.A.T-04 Enhanced Passive Sampling Devices for PFAS Monitoring in Surface Water: A Modified Approach based on US EPA Method 1633 | **B. Murtadha**	**4.06.A.T-05** Enhancing PFAS Analysis Efficiency in Solid and Liquid Matrices Using Automated Online SPE and LC-MS/MS: Application to EPA Method 1633 Compound List | **L. Ispiryan**	**4.06.A.T-06** Withdrawn	
Exposure and Effects of Micro- and Nanoplastics in the Environment | T. Hoang, S. Au, S. Harper			BALLROOM B
1.12.A.T-04 Effects of Microplastics on a Freshwater Plankton Food Web in a Whole-Lake Addition Experiment | **M. Milne**	**1.12.A.T-05** Microplastic Translocation in Yellow Perch (Perca flavescens) and the Influence of Particle Size and Shape | **M. Omer**	**1.12.A.T-06** Assessment of Weathering and Fragmentation Rates of Plastic Debris in the Marine Environment | **K. Tanaka**	
Linking Molecular Impacts to Organism Health: Empirical and Theoretical Methods to Scale Contaminant Effects | L. Stevenson, J. Magnuson, C. Murphy			BALLROOM C
1.14.T-04 Copper Toxicity on Chlamydomonas: Combining Bioenergetic Modeling with Omics Data | **F. Pfab**	**1.14.T-05** Multi-Scale Risk Assessment of Thiamethoxam Toxicity to Chironomids in Realistic Environmental Conditions | **M. Vaugeois**	**1.14.T-06** Linking Molecular Impacts to Organism Health: Empirical and Theoretical Methods To Scale Contaminant Effects | **D. Villeneuve**	

5. Environmental Risk Assessment	6. Engineering, Remediation and Restoration	7. Policy, Management and Communication	8. Systems Approaches

WEDNESDAY AFTERNOON TALKS (T)

	13:30–13:45	13:50–14:05	14:10–14:25
201 A	**Biodiversity Metrics for Improved Chemical Management** | A. Ryan, E. Garman, A. Stoler		
	8.01.T-01 Assessing Risks to Biodiversity from Exposure to Chemicals: Findings of an ECETOC Task Force on Biodiversity Definitions, Metrics, and Methodologies | **A. Stoler**	**8.01.T-02** Targeting Umbrella Species to Prioritize Biodiversity in NRDAs | **R. Bergamini**	**8.01.T-03** Documenting the Values of Environmental Mitigation Projects in Transportation and Economic Development | **C. Kaiser**
201 B	**One Health of Planktonic, Pelagic and Benthic Harmful Algal Blooms (HABs): The Detection, Fate, Effects, Monitoring, and Management of Blooms** | A. Wilson, D. Perkins, A. Tatters, J. Lazorchak		
	2.08.T-01 Using Unoccupied Aerial Systems to Monitor Cyanobacterial Blooms Across Seasons | **A. Wilson**	**2.08.T-02** Relative Sensitivity of Cyanobacteria to Copper | **M. Ahmed**	**2.08.T-03** Assessing the Influence of Phosphorus Availability on the Growth and Toxicity Dynamics of Prymnesium parvum | **S. Tabora Sarmiento**
202 AB	**SETAC Special Session: Using SETAC's Successes on the 45th Anniversary as a Bridge to the Future** | A. Reed, A. Bejarano, L. Kapustka, B. Rattner		
	Discussion (learn more on page 47)		
202 CD	**All Things Related to Endangered Species Assessment** | T. Blickley, J. Arnie		
	5.02.B.T-01 Identification of Agricultural Best Management Practices Using Remote Sensing | **A. Jacobson**	**5.02.B.T-02** Evaluating Field-Specific Pesticide Runoff and Erosion Mitigation Need and Mitigation Practice Effectiveness Using the Pesticide Mitigation Assessment Tool (PMAT) | **M. Winchell**	**5.02.B.T-03** Creating More Refined Pesticide Mitigation Areas Informed by Our Familiarity with Species Spatial Data in Support of Carbamate Biological Opinion Development | **D. Christian**
203 A	**Contaminant and Trace Element Biogeochemical Cycling in Aquatic Ecosystems** | D. Walters, J. Gerson, C. Eagles-Smith		
	2.06.T-01 Continental Fluxes of Rare Earth Elements (REEs) to Coastal Ecosystems Across a Wide Geographic Region Varying in Geology and Climate | **M. Lafrenière**	**2.06.T-02** Seasonal and Annual Mercury Exports Across the Physiographically Diverse Subarctic Yukon River Basin | **K. Staniszewska**	**2.06.T-03** Spatiotemporal Trends and Mass Fluxes of PFAS in Major Pan-Arctic Rivers | **F. Haque**
203 BC	**Domestic, Agricultural, Landfill and Industrial Waste: Occurrence, Fate, and Effects of Contaminants** | B. Chandramouli, G. Tetreault, J. Guelfo		
	4.08.T-01 Toward Engineering Microbial Communities for Enhanced Chemical Removal in Wastewater Treatment Systems | **M. Olland**	**4.08.T-02** Probing the Impact Threshold of Perfluoroalkyl substances (PFAS) Mixtures Simulated from Land-Applied Biosolids: A Case Study Using a Soybean Model | **E. Omagamre**	**4.08.T-03** City-Scale Impacts of PFAS from Normal and Elevated Temperature Landfill Leachates on Wastewater Treatment Plant Influent | **M. Ibrahim**
204 AB	**Spatial and Temporal Analysis of Organic Contaminants in Humans, Wildlife, and the Environment** | A. De Silva, M. Cashman, Y. Liu, T. Guillette		
	4.19.B.T-01 Divergent Transport Dynamics of Alkylated Versus Unsubstituted PAHs at the Air-Water and Sediment-Water Interfaces at a Legacy Creosote Site | **I. Moran**	**4.19.B.T-02** Global and Historical Per- and Polyfluoroalkyl Substances (PFAS) Exposure in North Atlantic Right Whales | **M. Badia**	**4.19.B.T-03** Spatial and Temporal Variability of Tar Balls on the Texas Coast | **M. Shields**
BALLROOM A	**Challenges in PFAS Analyses and Detection** | L. Ispiryan, H. Korb		
	4.06.B.T-01 Measurement of Volatile Per- and Poly-Fluoroalkyl Substances from Whole Air and Headspace Using Selected-Ion Flow-Tube Mass Spectrometry | **N. Hoppens**	**4.06.B.T-02** Volatile PFAS: Head Space – Solid Phase Microextraction - GC/MS Analysis with Minimal Sample Preparation | **R. Marfil-Vega**	**4.06.B.T-03** Bridging Methodological Divides: Comparative Analysis of Total Organofluorine Techniques in AFFF-Impacted Water | **F. Dixit**
BALLROOM B	**Exposure and Effects of Micro- and Nanoplastics in the Environment** | T. Hoang, S. Au, S. Harper		
	1.12.B.T-01 The Role of Digestion on the Toxicity and Bioavailability of Micro- and Nano-Plastics in Fish: An In Vitro Approach | **V. Rhodes**	**1.12.B.T-02** Effects of Single or Combined Exposure of Micro/Nanoplastics and Three Anthropogenic Chemicals on Larvae Zebrafish (Danio rerio) | **L. Hermabessiere**	**1.12.B.T-03** Nanoplastic-Induced Behavioral, Reproductive, and Transcriptomic Disruption that Persists into Adulthood of Zebrafish Larvae | **M. Llewellyn**
BALLROOM C	**Distinguishing Mode-of-Action-Specific Toxicity from Non-Specific Effects: An Endocrine Disruption Conundrum** | E. Mihaich, S. Lynn, J. Wolf		
	1.09.T-01 Physiologically and Biochemically Based Potency Thresholds are Essential for Distinguishing Endocrine Modes of Action | **C. Borgert**	**1.09.T-02** Optimising Concentration Setting for In Vivo Endocrine Screening Assays with Aquatic Vertebrates | **C. Mitchell**	**1.09.T-03** Targeted Knockout of Deiodinases to Evaluate Thyroid Disruption | **S. Eytcheson**

1. Environmental Toxicology and Stress Response	2. Aquatic Toxicology, Ecology and Stress Response	3. Wildlife Toxicology, Ecology and Stress Response	4. Chemistry and Exposure Assessment

14:30–14:45	14:50–15:05	15:10–15:25	
Biodiversity Metrics for Improved Chemical Management | A. Ryan, E. Garman, A. Stoler			
8.01.T-04 Current Uses and Future Applications of Environmental RNA for Community-Level Assessments | **M. Giroux**	**8.01.T-05** Assessing Risks to Biodiversity from Exposure to Chemicals: Findings of an ECETOC Task Force on the Regulatory Context | **S. Hughes**	**8.01.T-06** Discussion	201 A
One Health of Planktonic, Pelagic and Benthic Harmful Algal Blooms (HABs): The Detection, Fate, Effects, Monitoring, and Management of Blooms | A. Wilson, D. Perkins, A. Tatters, J. Lazorchak			
2.08.T-04 Using Multiple Linear Regression (MLR) to Optimize Copper Sulfate Pentahydrate Dosages for Controlling Harmful Algal Blooms | **M. McDonald**	**2.08.T-05** Effects of Glyphosate on the Growth and Toxicity of Prymnesium parvum | **S. Tabora Sarmiento**	**2.08.T-06** Comparative Lung Toxicity of Size-Fractionated Cyanobacterial Particulate Matter | **Y. Kim**	201 B
SETAC Special Session: Using SETAC's Successes on the 45th Anniversary as a Bridge to the Future | A. Reed, A. Bejarano, L. Kapustka, B. Rattner			
Discussion (learn more on page 47)			202 AB
All Things Related to Endangered Species Assessment | T. Blickley, J. Arnie			
5.02.B.T-04 Refining Ranges for Endangered Species: Implications for Pesticide Use Limitation Area (PULA) Development and Pesticide Registration | **J. Marton**	**5.02.B.T-05** Developing Localized Solutions for Diverse Cropping Systems in Washington and Oregon: Learnings from a Bottom-Up Approach to Endangered Species Act Pesticide Mitigations | **G. Bahr**	**5.02.B.T-06** Washington and Oregon Development of a Regional ESA Pesticide Program While Working with Agriculture to Develop Localized Mitigation Systems | **G. Bahr**	202 CD
Contaminant and Trace Element Biogeochemical Cycling in Aquatic Ecosystems | D. Walters, J. Gerson, C. Eagles-Smith			
2.06.T-04 Per- and Polyfluoroalkyl Substance (PFAS) Transport in Coastal Watersheds | **N. O'Hern**	**2.06.T-05** Bioaccumulation and Transfer of Per- and Polyfluoroalkyl Compounds in a Contaminated Stream Food Web | **C. Kotalik**	**2.06.T-06** Withdrawn	203 A
Domestic, Agricultural, Landfill and Industrial Waste: Occurrence, Fate, and Effects of Contaminants | B. Chandramouli, G. Tetreault, J. Guelfo			
4.08.T-04 Diffusivity of Landfill Leachate Through Bentomat Clay and Fluorosorb Membrane Liner Material | **K. Rouhi**	**4.08.T-05** Deposition of Per- and Polyfluoroalkyl Substances (PFAS) in Soil Surrounding a Municipal Solid Waste (MSW) Landfill | **A. Timshina**	**4.08.T-06** ACH Water Treatment Residuals and Pyrolyzed Biosolids for Mitigating Perfluoroalkyl Acids Leaching from Biosolids-Amended Soil Columns | **E. Openiyi**	203 BC
Spatial and Temporal Analysis of Organic Contaminants in Humans, Wildlife, and the Environment | A. De Silva, M. Cashman, Y. Liu, T. Guillette			
4.19.B.T-04 Spatial and Temporal Trends in Emerging Organic Contaminants Using Dated Lake Sediment Cores | **A. De Silva**	**4.19.B.T-05** Bioaccumulation of Heterocyclic Aromatic Compounds in a Lake Erie Food-Web | **N. Vitharana**	**4.19.B.T-06** Identification of Halogenated Organic Compounds (HOCs) and DDT+ in Deep Ocean Sediments and Biota from the Southern California Bight Using Nontargeted Chemical Analysis | **M. Stack**	204 AB
Challenges in PFAS Analyses and Detection | L. Ispiryan, H. Korb			
4.06.B.T-04 PFAS in Exterior Building Materials is a Source to the Environment | **M. Diamond**	**4.06.B.T-05** Colloidal Fluorinated Side-Chain Polymer Nanoparticles Are a Significant Source of PFAS Contamination in Textile Wastewater | **P. Faught**	**4.06.B.T-06** Capturing the Full Residual Profile from Fluoropolymer Manufacturing: Ultra Short Chains to Novel Polyfluorinated Residuals | **M. Davis**	BALLROOM A
Exposure and Effects of Micro- and Nanoplastics in the Environment | T. Hoang, S. Au, S. Harper			
1.12.B.T-04 Nanoplastics Inhibit Adipose Tissue Development and Eco-Corona Alters Internalization Pathways in Preadipocytes | **L. Martin**	**1.12.B.T-05** Understanding the Impact of Plastic Additives on Microplastic Toxicity to Ammonia-Oxidizing Bacteria | **M. Walters**	**1.12.B.T-06** Unveiling the Adaptive Potential of Bacillus inaquosorum (EC3005B-F5) for Nanoplastic Degradation and Sustainable Agriculture | **F. Olabemiwo**	BALLROOM B
Distinguishing Mode-of-Action-Specific Toxicity from Non-Specific Effects: An Endocrine Disruption Conundrum | E. Mihaich, S. Lynn, J. Wolf			
1.09.T-04 Combining Eleuthero-Embryo Assays to Identify the Mode of Action of Thyroid Disruptors | **G. Lemkine**	**1.09.T-05** Early Life Stage Amphibian Thyroid Assay (ELSATA); A Thyroid-Focused Alternative to the Larval Amphibian Growth and Development Assay (LAGDA) | **J. Wolf**	**1.09.T-06** Approaches for Differentiating Between Non-Endocrine and Endocrine Modes of Action Causing Adrenocortical Pathologies and Potential Adversity | **S. Levine**	BALLROOM C

5. Environmental Risk Assessment	6. Engineering, Remediation and Restoration	7. Policy, Management and Communication	8. Systems Approaches

P-WE | WEDNESDAY POSTER PRESENTATIONS

POSTER SCHEDULE (CDT)		
7:30–8:00	Poster Setup (see page 10 for map of posters)	Exhibit Hall AB
8:00–10:00	Posters, Exhibits and Refreshments	Exhibit Hall AB
12:00–13:30	Lunch Break	
15:30–17:30	Posters, Exhibits and Refreshments	Exhibit Hall AB
17:30–17:45	Posters Take Down	Exhibit Hall AB

Presenters are expected to attend their poster during most of the break and the poster sessions.

Distinguishing Mode-of-Action-Specific Toxicity from Non-Specific Effects: An Endocrine Disruption Conundrum | E. Mihaich, S. Lynn, J. Wolf

1.09.P-We-001 Development of BRET-Based Human Estrogen Receptor Dimerization Assay for Screening Endocrine-Disrupting Chemicals | **H. Jo**

1.09.P-We-002 The RADAR and REACTIV Assays as Tools for Shedding Light on Steroidogenic Mechanisms | **A. Tindall**

1.09.P-We-003 Thyroid Hormone Disruption of Di-Isononyl Phthalate (DiNP), Bis(2-ethylhexyl) Terephthalate (DEHTP), and Trioctyl Trimellitate (TOTM) in Embryolarval and Adult Zebrafish (Danio rerio) | **Y. Ihn**

1.09.P-We-004 Effects on Zebrafish Length and Pigmentation as an Indicator of Depleted Uranium Impact on Thyroid Hormone Disruption | **C. Altenbach**

1.09.P-We-005 Development of Short-Term Screening Assay System for Detecting Anti-Juvenile Hormone (JH) Activity: JH Receptor Antagonists and JH Biosynthesis Inhibitor | **Y. Oda**

1.09.P-We-006 Cadmium as an Endocrine Disruptor on Freshwater Snail Physella acuta: Gene Expression Analysis of Hormonal Receptors | **A. Mohamed-Benhammou**

Environmental Issues in the Gulf of Mexico | A. Bejarano, K. Armbrust, E. Wirth

1.11.P-We-008 In Vitro Assessment of Thyroid Hormone Agonists on Coastal Fishes Native to Louisiana | **L. Eagon**

1.11.P-We-009 In Vitro Assessment of Sensitivity to Thyroid Hormone Receptor Antagonism Among Native Louisiana Fishes | **V. Boyte**

1.11.P-We-010 Comparing the Impacts of 'Forever Chemicals' on the Development of Sheepshead Minnow and Red Drum | **G. Walsh**

Exposure and Effects of Micro- and Nanoplastics in the Environment | T. Hoang, S. Au, S. Harper

1.12.P-We-011 Can Earthworms Detect and Avoid Plastics in Soils? | **J. Velicogna**

1.12.P-We-012 A Meta-Analysis of Sorption Capacity of Microplastics for Organic Pollutants | **D. Kuo**

1.12.P-We-013 Analysis of High Mass Polycyclic Aromatic Hydrocarbons (PAHs) Extracted from Microplastics Spilled in the Marine Environment | **N. Meruva**

1.12.P-We-014 Assessing the Microplastic Content of Biosolids and Agricultural Fields in Southern Ontario | **N. Letwin**

1.12.P-We-015 Assessment of Microplastics Abundance and Distribution in the Alabama River System | **S. Hashmi**

1.12.P-We-016 Effects of Microplastic Uptake on Amphibian Growth and Development | **A. Felton**

1.12.P-We-017 Effects of Particle Dimensions on Microplastic Toxicity to Marine Invertebrates | **S. Yu**

1.12.P-We-018 Effects of Polyester Microplastic Fibers to Juvenile Chinook Salmon | **N. Klasios**

1.12.P-We-019 Emission and Ecological Risk of Microplastics from Mechanical Recycling of Plastic Waste | **G. Suzuki**

1.12.P-We-020 Growth Inhibition in Common Carp by Dietary Administered Virgin or Recycled Polypropylene Microplastics | **K. Nakayama**

1.12.P-We-021 Isolation and Characterization of Microplastics from Cosmetics and Its Effects on Artemia salina | **G. Saha**

1.12.P-We-022 Leaching Behaviors of Antioxidants from Low-Density Polyethylene Microplastics in Pure Water Under Simulated Solar-UV Irradiation | **Z. Li**

1.12.P-We-023 Micro- and Nanoplastic Contamination in Tiger Shark (Galeocerdo cuvier) Blood from the North Atlantic and South Pacific Oceans | **K. Munno**

1.12.P-We-024 Microplastic Characterization and Screening by Combining DART and High-Resolution Mass Spectrometry | **K. Stup**

1.12.P-We-025 Modeling Uptake and Depuration Kinetics of a Heterogeneous Mixture of Nanoplastics in Daphnia magna | **C. Hietpas**

1.12.P-We-026 Photochemical Degradation of Polypropylene Microplastics: Effects on the Sorption Behavior for Atrazine in Seawater | **M. Wu**

1.12.P-We-027 Reconciling the Origin of Nanoplastics and Their Characteristics | **T. Yang**

1.12.P-We-028 Simple Detection of Polystyrene Nanoparticles and Effects in Freshwater Mussels; Method Development and In Situ Application to Urban Pollution | **F. Gagne**

1.12.P-We-029 Sorption Behavior of Cd(II) onto PVC and PET Microplastics in Synthetic Soft Water and Synthetic Sea Water | **D. Thennakoon**

1.12.P-We-030 Sublethal Effects of Microplastics Exposure on Freshwater Amphipods, Hyalella azteca | **C. Oguayo**

1.12.P-We-031 The Acute Toxicity of Microplastics Co-Exposed with a Nano Copper Pesticide on Daphnia magna and Caenorhabditis elegans | **K. Arthur**

1.12.P-We-032 The Role of Surface Chemistry on Nanoparticles Uptake and Toxicity in Fish Intestinal Cells | **J. Scott**

1.12.P-We-034 Toxicokinetic Investigation of Weathered Iridium-Labeled Microplastics and Their Impacts on the Metabolic State of the Sub-Arctic Bay Mussel | **B. DiMento**

1.12.P-We-035 Tracking Micro- and Nanoplastic Uptake in Basil Plants | **C. Anastasia**

1.12.P-We-036 Combined Effects of Microplastic Fibers from Disposable Face Mask Leachate and Graphene Oxide Nanoparticles on Microalgae Scenedesmus Obliquus: Analysing the Effects of Heavy Metals | **S. Das**

1.12.P-We-038 Fate of Microplastics in Conventional Drinking Water Treatment Facilities | **K. Forsythe**

Linking Molecular Impacts to Organism Health: Empirical and Theoretical Methods to Scale Contaminant Effects | L. Stevenson, J. Magnuson, C. Murphy

1.14.P-We-040 A Quantitative Adverse Outcome Pathway for Embryonic Exposure of Fishes to Polycyclic Aromatic Hydrocarbons Leading to Decreased Fecundity at Adulthood | **J. Doering**

1.14.P-We-041 Not Another Gene-Network Hairball! Leveraging Chemical-Gene Interaction Data to Better Understand and Identify Genomic Responses to PFAS Exposure | **D. Bertolatus**

1.14.P-We-043 Unraveling PFOS's Subtle Impact in Smallmouth Bass Using Both Traditional Toxicology and Omics-Based Endpoints | **E. Pulster**

1.14.P-We-044 Histone Methylation-Mediated Reproductive Toxicity and Multigenerational Effects of Environmental Chemicals in C. elegans: Epigenetic Adverse Outcome Pathway (AOP) and Cross-species Extrapolation | **J. Kim**

1.14.P-We-045 Advancing Ecotoxicological Studies: Utilizing New Approach Methodologies to Diminish Avian Testing and Enable Cross-Species Extrapolation | **M. Vaugeois**

1.14.P-We-046 Effects of Carbamazepine to Early Life Stage Zebrafish (Danio rerio): Transcriptomics to Behavior | **J. Magnuson**

1.14.P-We-047 New Approaches Improve Ecological Risk Assessment by Incorporating Omics into Bioenergetic Models: A Case Study of Daphnia Exposed to a Coal Ash Mixture | **L. Stevenson**

Aquatic Mixtures: Characterizing Chemical Composition and Estimating Hazard | A. Biales, T. Purucker, D. Bencic

2.03.P-We-048 Development of Mathematical New Approach Methods to Assess Chemical Mixtures | **R. Broughton**

2.03.P-We-049 Role of Alkylated Polycyclic Aromatic Hydrocarbons in Mixture Toxicity from a Legacy Creosote Site | **I. Moran**

2.03.P-We-050 Toxicity Assessment of Three Rare Earth Elements (La, Gd, Y) in Single and Binary Mixture Exposures to Two Benthic Organisms (Chironomus riparius, Hyalella azteca) | **M. Lefranc**

2.03.P-We-051 Metagenomics Analysis of the Microbial Diversity and Quantitative Co-Relationship to the Pharmaceutical and Pesticide Compounds in Different Seasons in Alabama River, Montgomery | **M. Khabir**

2.03.P-We-052 PFAS-Free Alternatives: Tools to Avoid Regrettable Substitutions | **M. Ibrahim**

2.03.P-We-053 Evaluating Interactive Effects of PFAS Mixtures on Aquatic Organisms | **S. Kadlec**

2.03.P-We-054 Use of Transcriptomic Points of Departure to Assess the Toxicity of Environmental Chemical Mixtures in Early Life Stage Copper Redhorse | **A. Marshall**

Contaminant and Trace Element Biogeochemical Cycling in Aquatic Ecosystems | D. Walters, J. Gerson, C. Eagles-Smith

2.06.P-We-055 Silver Nanoparticles as a Potential Driver of Mercury Transformation in Water | **P. Oladoye**

2.06.P-We-056 Exploring the Diurnal Variations in Dissolved Elemental Mercury Distribution from Surface Water to Sediment-Water Interface in Wetlands | **S. Ogunsola**

2.06.P-We-057 Comparative Study of Analytical Methods to Estimate the Reliable Conditional Stability Constants of Mercury-Dissolved Organic Matter Binding | **M. Oladipo**

2.06.P-We-058 Assessing the Presence, Concentration, and Biological Uptake of Trace Metals and PFAS Near the Dahlgren Naval Support Facility (Dahlgren, Virginia) | **J. Gasink**

2.06.P-We-059 Trifluoroacetic Acid (TFA) Still Dominates in Great Lakes Aquatic Ecosystems | **C. Xia**

2.06.P-We-060 Fate and Transport of Experimentally Added Microplastics in the Water Column of a Whole Lake | **F. Nuamah**

2.06.P-We-061 Selenium Impacts on Methylmercury Retention Across Mayfly Life Stages Depend on Dietary Methylmercury Exposure Levels | **D. Walters**

2.06.P-We-062 Defining Subsidy-Stress Gradients for Metals and Relevance for US Surface Waters | **T. Schmidt**

One Health of Planktonic, Pelagic and Benthic Harmful Algal Blooms (HABs): The Detection, Fate, Effects, Monitoring, and Management of Blooms | A. Wilson, D. Perkins, A. Tatters, J. Lazorchak

2.08.P-We-063 Evaluating the Tolerance of Harmful Algal Blooms to Copper Sulfate Pentahydrate | **A. Hennessey**

2.08.P-We-064 Development of Effective Herbicides Mixtures to Address Microcystis in Aquaculture Ponds | **A. Barrick**

2.08.P-We-065 Caenorhabditis elegans as a Model of Nematode Tolerance on a Diet of Toxic Microcystis aeruginosa | **J. Balson**

2.08.P-We-066 A Chemical Forensics Approach to Fingerprinting Cyanobacterial Gradients in Ross Island Lagoon, Portland, Oregon | **A. De Caro**

2.08.P-We-067 Evaluation of Biotechnology for the Detection of Microcystin Producing Harmful Algal Blooms in the Stones River in Central Tennessee, USA | **A. Hetrick**

2.08.P-We-068 Harmful Benthic Cyanobacteria in Streams and Rivers: USEPA Research to Inform Methods for Risk Assessment | **J. Lazorchak**

Paint Microplastics: Sources, Fate, and Ecotoxicological Effects in Aquatic Ecosystems | Z. Diana, M. Milne, C. Rochman

2.09.P-We-069 Developing a Method to Extract, Detect and Quantify Small Antifouling Paint Particles in Sediments Using Accelerated Solvent Extraction and Pyrolysis-Gas Chromatography-Mass Spectrometry | **G. De la Torre**

2.09.P-We-070 Introducing the Paint Library Of Plastic Particles (PLOPP) for FTIR: a Tool for Improving the Identification of Paint Microplastics | **Z. Diana**

2.09.P-We-071 The Environmental Fate of Marine Paints: A Study in Metal and Polymeric Particle Release | **G. Santos**

2.09.P-We-072 Visualization of Barnacle Plate Morphology in Response to Petroleum- and Non-Petroleum-Based Materials using Microcomputed Tomography (?CT) | **B. Mitchell**

2.09.P-We-073 Microplastics from Paints Taste Like Food | **D. Rittschof**

2.09.P-We-074 Development of a Green Synergistic Amphiphilic Antibiofouling Solution | **S. Lewis**

2.09.P-We-075 Painting by the Numbers: Quantifying Paint Particles and Other Microplastics in Roadway Adjacent Salt Marshes Subject to Nuisance Flooding | **J. Weinstein**

2.09.P-We-076 Construction Projects: A Substantial Point Source of Microplastic Pollution of Land and Water | **A. Crimston**

Stormwater Runoff Impacts, Solutions, and Innovative Research | K. Rader, K. Schiff, J. McIntyre, S. Hutton

2.10.P-We-077 Particle Size-Based Assessment of Stormwater Control Measures to Limit Sediment Recontamination of Hydrophobic Organic Contaminants | **C. Gomez-Avila**

2.10.P-We-078 Characterizing Stormwater Runoff from Various Land Uses in Heavily Urbanized South Florida Watersheds | **C. Heath**

2.10.P-We-079 Developing Analytical Protocols for 6PPD-Q in Natural Seawater | **J. Lloyd**

2.10.P-We-080 Best Management Practices for 6PPD-Quinone Stormwater Mitigation: Systematic Review | **S. Hutton**

2.10.P-We-081 Evaluating the Effects of 6PPD, 6PPD-Quinone, and Four Potential Alternatives on Rainbow Trout (Oncorhynchus mykiss). | **P. Arth**

2.10.P-We-082 Chitosan Has the Potential to Improve Water Quality Without Negative Effects on the Stony Coral, Porites lobata | **C. Hankins**

2.10.P-We-083 Wipes Versus Pipes: The Trouble with Wet Wipes When Stormwater Runoff Causes Overflow in Combined Sewer Systems | **S. Hansra**

2.10.P-We-084 Leveraging Multi-Omics Analyses to Explore the Toxicity of Urban Road Runoff Contaminants in Juvenile Salmonid Species | **M. Jackson**

2.10.P-We-085 Monitoring and Modeling Microplastics in Southern California Stormflow to Optimize Monitoring Techniques | **O. Fadare**

2.10.P-We-086 Metal Speciation in Stormwater Control Measures to Limit Sediment Recontamination of Heavy Metals | **H. Zhou**

Challenges in PFAS Analyses and Detection | L. Ispiryan, H. Korb

4.06.P-We-087 Trace Metals and Microplastics in Legedadi Drinking Water Treatment Plant of Addis Ababa, Ethiopia | **S. Tekle**

4.06.P-We-088 Method Performance Using Dual WAX/GCB and GCB/WAX Formats for PFAS Analysis Using EPA Method 1633 | **R. Jack**

4.06.P-We-089 Column Chemistry Considerations for Full Coverage of Sample Matrices and Analyte Ranges in PFAS LC-MS/MS Workflows | **R. Jack**

4.06.P-We-090 A Multifaceted Evaluation of Stability and Extraction Methods Targeting Novel PFAS within Complex Biological Matrices | **N. Hill**

4.06.P-We-091 Per- and Polyfluoroalkyl Substances (PFAS): Validation of Methodology for the Determination of Residues in Fruit, Fruit Processed Commodities and Fish Tissues | **S. Tate**

4.06.P-We-092 Monitoring Produced Gases from PFAS Removal Technologies Using Thermal Desorption Coupled to Gas Chromatography/Mass Spectrometry | **C. Llewellyn**

4.06.P-We-093 LC-MS/MS Robustness: a Real-World Case Study of PFAS Testing | **K. Adams**

4.06.P-We-094 Extending Standard Methods for Universality: A Case Study on EPA 1633 in Drinking Water | **B. Chandramouli**

4.06.P-We-095 Distribution and Modeling of Fluorotelomer Alcohols and Perfluorinated Carboxylic Acids in Soils | **D. Kim**

4.06.P-We-096 A Method Development Study to Comparatively Measure Diverse PFAS in Wet and Freeze-Dried Sediment | **M. McNamara**

4.06.P-We-097 Assessment of Types and Levels of Per- and Polyfluoroalkyl Substances (PFAS) in Electronic Waste | **J. Ocheje**

4.06.P-We-098 Total Fluorine Analysis in Textiles and Leather Treatment Products, and Carpets as a Tool for Screening PFAS | **B. Neupane**

4.06.P-We-099 Comprehensive Analysis of Side-Chain Fluorinated Polymers in Stain Repellent Products | **R. Ramamurthy**

4.06.P-We-100 Identifying Perfluorocarboxylic Acids in Common Consumer Items and Their Relation to Fluorinated High Density Polyethylene Plastic Packaging | **A. Williams**

Domestic, Agricultural, Landfill and Industrial Waste: Occurrence, Fate, and Effects of Contaminants | B. Chandramouli, G. Tetreault, J. Guelfo

4.08.P-We-101 PAH Characterization of an Offshore Industrial Dumpsite | **K. Lemkau**

4.08.P-We-102 Chemical Speciation of Trace Metals and Microplastics Presence in Biosolids for Land Application | **A. Sanchez Garcia**

4.08.P-We-103 Environmental Transport of Per- Polyfluoroalkyl Substances (PFAS) from Biosolid-Amended Soils | **A. Doria Manzur**

4.08.P-We-104 Quantification of Organic Fluorine in Landfill Leachate Using Combustion Ion-Chromatography and Inductively Coupled Plasma Mass Spectrometry | **G. Cogollo Carcamo**

4.08.P-We-105 Elucidating the Environmental Impact of Neutral PFAS in Waterproofing Sprays in the Japanese Market | **S. Takagi**

4.08.P-We-106 Assessing Perfluoroalkyl Substances (PFAS) in Aquatic Ecosystems in the Grand River, Ontario | **G. Tetreault**

4.08.P-We-107 The Ins and Outs of Per- and Polyfluoroalkyl Substances in the Great Lakes: The Role of Atmospheric Deposition | **M. Venier**

4.08.P-We-108 Optimizing an Alternating Water Source Scheme: Minimizing Plant Accumulation of Emerging Contaminants from Treated Wastewater Irrigation | **R. Yates**

4.08.P-We-109 The Presence, Concentration, and Potential Ecological Impacts of Trace Metal Contaminants in the James River Near Multiple Anthropogenic Contamination Sources (Bremo Bluff, VA) | **S. Orledge**

4.08.P-We-110 Wastewater Treatment Wetlands: Microplastic Source or Sink? | **R. Kozloski**

4.08.P-We-111 Effects of Soil Amendments on PPCPs Mobility in Soil and Uptake by Potatoes Grown Under Wastewater Irrigation | **A. Mawof**

4.08.P-We-112 Land Application of Biosolids: Bioaccumulation of Unregulated Organic Chemicals (UOCs) in Vegetables | **A. Braun**

4.08.P-We-113 Activated Charcoal from Residual Biomass of Astrocaryum Aculeatum and Its Potential for Removal of Aquatic Contaminants | **B. Dias Pinheiro**

4.08.P-We-114 Removal of Phenol from Wastewater Using Luffa Cylindrica Fibers in a Packed Bed Column: Optimization, Isotherm and Kinetic Studies | **A. Egbemhenghe**

General: Chemistry and Exposure Assessment | M. Sellin Jeffries, S. Hughes

4.10.P-We-115 Immunoaffinity Magnetic Beads for Microcystins Capture and Concentration in Biological Samples | **B. Polyak**

4.10.P-We-116 Benthic Mat Sample Matrix Extraction Kit for Laboratory and Field-Based Analysis of Algal Toxins | **B. Polyak**

4.10.P-We-118 Towards Fully Integrated Hydrological Fate and Transport Modeling for Plant Protection Products: Incorporating Groundwater, Tile Drainage and Runoff | **M. Callaghan**

4.10.P-We-119 Occurrence of 111 Human Pharmaceuticals in River Water in Japan | **N. Kobayashi**

4.10.P-We-120 Spatial and Temporal Assessment of Chemical and Bacterial Contaminants in Coastal Waters of Charleston, SC, USA | **B. Shaddrix**

4.10.P-We-121 Exploring the Impact of Chlorine Oxidation and Temperature Dependent Reaction Rates on the Atmospheric Lifetimes and Concentrations of Volatile Methyl Siloxanes in CESM | **C. Brunet**

4.10.P-We-122 A Novel Cyclosiloxane Extraction and Analysis Method in Human Serum | **Y. Wang**

4.10.P-We-123 Enhanced Evaluation of Long-Range Transport of Cyclic Volatile Methylsiloxanes | **J. Kim**

4.10.P-We-124 Monitoring Emerging Contaminants in Soil and Household Dust Samples in the Miami-Dade, Florida Region | **L. Cappelini**

4.10.P-We-125 Evaluating Heavy Metals Exposure in the Stool and Indoor Dust Samples of Children | **O. Dina**

4.10.P-We-126 Development and Validation of Analytical Method for Determination of Nitrogen/Protein Content of Pumpkin Seed Extract by Dumas Nitrogen Analyser | **A. Raithatha**

4.10.P-We-127 Comparative Speciation of Arsenic Species in Grain-Fed and Grass-Fed Beef | **S. Li**

4.10.P-We-128 Assessment of Trace Metal Exposure from Ingestion of Play Surface Materials | **W. Murphy**

4.10.P-We-129 Abiotic Factors Influence on the Stability of Antimycin-A in Water | **B. Lada**

4.10.P-We-130 Fate and Risk Assessment of Emerging Disinfection Byproducts in Textile Industry Dye Effluent | **A. PB**

4.10.P-We-131 Derivation of Dilution Factors for 1st Tier Exposure Assessment in Asian Region Using a Chemical Exposure Analysis Model with High Spatio-Temporal Resolution | **M. Okada**

4.10.P-We-132 Development of Adverse Outcome Pathways (AOPs) for Chemical-Induced Autoimmune Response | **M. Nguyen**

4.10.P-We-133 The Impact of Weight Loss on Dimethylbenz[A]Anthracene-Induced Hepatic Damage in Female Mice | **I. Inyang**

4.10.P-We-134 Airborne Gunshot Residue Outdoor Exposure Assessment | **S. Smith**

4.10.P-We-136 Biota Ingestion Rate Updates to EPA's Preliminary Remediation Goal (PRG) and Dose Compliance Concentration (DCC) Calculators for Use in Risk Assessment at Radioactively Contaminated Superfund Sites | **K. Manning**

4.10.P-We-137 Integrating Tribal Biota into EPA's Preliminary Remediation Goal (PRG) and Dose Compliance Concentration (DCC) Online Tools for use in Risk Assessment at Radioactively Contaminated Superfund Sites | **K. Manning**

4.10.P-We-138 Ecotoxicity of Water-Soluble Synthetic Film (III) | **N. Tatarazako**

4.10.P-We-139 Per- and Polyfluoroalkyl Substances (PFAS) in Urban Watersheds Across California | **B. Khan**

4.10.P-We-140 Non-Targeted and Total Fluorine Assessment of Per-and Polyfluoroalkyl Substances (PFAS) in Previously Detected Florida Surface Water Hotspots | **T. Sinkway**

4.10.P-We-141 Development and Application of Silicone Band Passive Sampler Rate Constants for Per- and Polyfluoroalkyl Substances (PFAS) for Use in Coastal Ecosystems | **E. Pisarski**

4.10.P-We-142 Mass Balance Estimates of Perfluorooctane Sulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA) in a Simulated Saltmarsh Ecosystem | **S. Crescent**

4.10.P-We-143 Identifying Novel Alternatives to PFAS-Containing Aqueous Film-Forming Foams: Summary of Multi-Taxa Toxicity Tests with Birds, Reptiles, Fish, and Aquatic Invertebrates | **N. Fuller**

4.10.P-We-144 Are Brood X Periodical Cicadas (Magicicada spp.) a Source of PFAS to the Terrestrial Environment? | **R. Casey**

4.10.P-We-145 Compatibility of Serum and Plasma in Legacy and New/Replacement Per- and Polyfluoroalkyl Substances Measurement Using Automated Ultra High-Performance Liquid Chromatography Tandem Mass Spectrometry | **S. Gao**

4.10.P-We-146 Assessment of Legacy and Emerging Per- and Polyfluoroalkyl Substances (PFAS) in AC and Engine Filters in Vehicles | **J. Arnold**

4.10.P-We-147 Enhancing Compound Identification and Exposure Assessment with a Novel Software Application for Managing Libraries | **A. McEachran**

4.10.P-We-149 Collection and Curation of Externally Shareable High Resolution Mass Spectrometry Spectral Libraries to Aid in Identification of Environmental Contaminants | **L. Krajewski**

4.10.P-We-150 Toxicity Assessment of Energetics Using Benchmark Dose Modelling Software | **M. Bohannon**

4.10.P-We-151 Development and Application of Structural Activity Groups for Chemical Classification and Clustering as a Non-animal Method for Safety Assessment | **H. Moustakas**

4.10.P-We-152 Chemical Similarity and Read-Across: With Great Power Comes Great Responsibility | **K. Paul**

4.10.P-We-153 Effect of Feature Set Reduction on the External Prediction Accuracy of Toxicity Models | **T. Martin**

4.10.P-We-154 Saagar - An Extensible Set of Descriptors for Chemistry-Aware Structure Similarity and Bioactivity Similarity | **V. Gombar**

Navigating Environmental Assessments for Evaluating Consumer Products and Chemicals of Concern | A. Gobeil, W. Goodfellow

4.15.P-We-155 Profiling the Potential Environmental Hazards of Coolant Chemicals using Computational Approaches | **D. Venugopal**

4.15.P-We-156 Analysis of Environmental Hazards of Personal Care Product Ingredients Utilizing U.S. Market Data from EWG's Skin Deep | **H. Lin**

4.15.P-We-157 Evaluation of Fire Fighter Station Wear for Flame Retardants | **S. Takaku-Pugh**

4.15.P-We-159 Systemic Toxicity Screening of Real-life Mixtures in Consumer Products: An Effect Directed Analysis | **H. Kim**

4.15.P-We-160 Integration of ToxCast Bioassays to Hazard Assessment by Comparison of Human Equivalent Doses with In Vivo Data: Case Study with Phthalates in Consumer Products | **K. Kang**

4.15.P-We-161 Human Hazard Characterization of Active Substances in Biocidal Products Using the Weight of Evidence (WoE) Approach | **J. Kim**

4.15.P-We-162 Inadvertent Polychlorinated Biphenyls (PCBs) in Consumer Products: Source Testing | **X. Liu**

4.15.P-We-163 PCBs in School Air: Widespread Emissions of Airborne PCBs from Building Materials in 99 Schoolrooms in Vermont | **J. Hua**

4.15.P-We-164 Novel Silicone-Based Passive Emissions Sampler (Si-PES) Measures Emissions of Polychlorinated Biphenyls (PCBs) from Concrete Immediately Adjacent to PCB Containing Materials in a School | **L. Montabon**

Spatial and Temporal Analysis of Organic Contaminants in Humans, Wildlife, and the Environment | A. De Silva, M. Cashman, Y. Liu, T. Guillette

4.19.P-We-165 Characterizing PFAS Environmental Behavior Using a Passive Sampler Toolkit | **J. Becanova**

4.19.P-We-166 A Four-Hundred-Year-Old Record of Wildfire and Industrial Emissions in the James Bay Region of Northern QuÃƒÂ©bec | **J. Ahad**

4.19.P-We-167 Influence of Climate and Local Sources on Long Term Trends of Perfluorinated Alkyl Substances and Brominated Flame Retardants in Landlocked Arctic Char in the Canadian Arctic | **D. Muir**

4.19.P-We-168 Source Apportionment of Heterocyclic Aromatic Compounds in Sediments in Lake Ontario | **N. Vitharana**

4.19.P-We-169 Temporal Study of the Relationship Between Polycyclic Aromatic Compounds in Seabird Eggs and Shipping Traffic in the Canadian Arctic | **E. Liebzeit**

4.19.P-We-170 Per- and Polyfluoroalkyl substances in Three Beluga Whale Populations in the Canadian Arctic | **M. Bedi**

4.19.P-We-171 Spatial and Temporal Distribution of Per-and Polyfluoroalkyl Substances in House Sparrows in an Industrialised Urban Environment | **M. Gillings**

4.19.P-We-172 Distribution of Environmental Monitoring of PFAS in South Korea (2021–2022) | **Y. Kwon**

4.19.P-We-173 Novel Intradermal Microdialysis as an Efficient Method to Assess Dermal Exposure: A Case Study on Fire Fighters | **A. Qadeer**

4.19.P-We-174 Understanding the Extent of PFAS Contamination in Red Drum (Sciaenops ocellatus) Across 9 Florida Estuaries | **A. Distrubell**

4.19.P-We-175 Application of Passive Sampling for Characterizing Spatial and Temporal Variation of Persistent, Mobile, and Toxic Substances in Aquatic Environment | **Y. Jeong**

4.19.P-We-176 Ambient PFAS Concentrations in the United States: A Literature Review | **P. Krupa**

4.19.P-We-177 Distribution Characteristics of Pentachlorobenzene in the Environmental Atmosphere and Soil | **S. Hwangbo**

Understanding Environmental Reactivity: Kinetics, Mechanisms, and Transformation Products | B. Chandramouli, K. Stroski, G. Mckay, S. Joudan

4.21.P-We-178 Effects of Temperature, Water Depth, and Ferrous/Ferric Ions on the Indirect Photolysis of Dimethylsilanediol (DMSD) in Water | **A. Vogel**

4.21.P-We-179 Catalyst or Oxidant? Exploring the Interplay of MnO2 and Oxygen in the Early-Stage Abiotic Humification Under Alkaline Air Conditions | **Y. Gao**

4.21.P-We-181 Non-Traditional Routes to Identify Significant Photodegradates from Halauxifen-Methyl Photolysis Study | **R. Bhandari**

P-WE | WEDNESDAY POSTER PRESENTATIONS

All Things Related to Endangered Species Assessment | T. Blickley, J. Arnie

5.02.P-We-182 Non-Agricultural Use Data Layers: Options and Methodologies for Supporting ESA Overlap Analysis | **J. LaRoe**

5.02.P-We-183 Effectiveness of Tree Lines as Pesticide Drift Barrier in Agricultural Landscapes | **S. Gupta Vakil**

5.02.P-We-184 AMMPS: A Web-Based Tool for Managing Endangered Species Data to Support Pesticide Risk Assessment | **A. Frank**

5.02.P-We-185 Uncertainties in Non-Target Terrestrial Plant Risk Assessments | **C. Habig**

5.02.P-We-186 Assessing Risks Posed by Down-the-Drain Pesticides to California Endangered Species | **J. Rice-Boayue**

5.02.P-We-187 Sensitivity of Alabama Freshwater Gastropod Species to Nickel Exposure | **S. Parham**

Risk Assessment, Remediation, and Restoration: Applying Interdisciplinary Approaches to Creating Successful Remediation and Restoration Projects | L. McIntosh, M. Roy, M. Mills, D. Walters

6.04.P-We-188 Ecological Risk Assessment, Risk Management, and Restoration: The New Jersey Approach | **B. Yates**

6.04.P-We-189 Methods for Sampling Fish Gut Microbiomes | **K. Hines**

6.04.P-We-190 Assessing the Robustness of Statistical Models in Evaluating PCB Exposure Trends in Fish Amid Variable Lipid Content | **Y. Wang**

Biodiversity Metrics for Improved Chemical Management | A. Ryan, E. Garman, A. Stoler

8.01.P-We-191 Assessing Risks to Biodiversity from Exposure to Chemicals - Findings of an ECETOC Task Force on Current and Future Research Directions | **J.D. Ludwigs**

8.01.P-We-192 Is Environmental DNA-Based Assessment Effective in the Upstream-Downstream Comparison of Macroinvertebrate Communities in a Metal-Contaminated River? | **Y. Iwasaki**

Urban Streams: From Contaminants to Restoring Lost Ecosystem Services | J. Steevens, B. Brooks

8.07.P-We-193 Nitrogen Source Apportioning in the Tampa Bay Watershed Using Organic Chemical Tracers | **K. Troxell**

8.07.P-We-194 A Novel Tool for In-Stream Continuous Water Quality Monitoring | **A. Sieja**

8.07.P-We-195 Integrated Tools for Urban Stream Assessment: Evaluating Habitat for Mussel Restoration | **J. Steevens**

8.07.P-We-196 Monitoring PFAS in the Delaware River and Tributaries to Reduce Loading and Ease Burdens on Drinking Water Systems | **J. Conkle**

8.07.P-We-197 Environmental Fate of SSRIs in Urban Environments that Receive Municipal Wastewater Effluents | **P. Gillis**

What Is Regenerative Agriculture and How Can Soil Health Be Improved in Agricultural Landscapes? | K. Coady, X. Yang

8.08.P-We-198 Assessing the Suitability of Alternative Organic Matter Materials for Peat Replacement in Standard Artificial Soil Formulations | **H. Adams**

8.08.P-We-199 In-Situ Soil Stabilization and Solidification for PFAS at Source Zones | **T. Guillette**

V | VIRTUAL PRESENTATIONS ASSOCIATED WITH WEDNESDAY SESSIONS

To view virtual-only presentations, visit the meeting platform.

Challenges in PFAS Analyses and Detection | L. Ispiryan, H. Korb, L. Miller

4.06.V-01 Evaluation and Comparison of Extraction Efficiencies for Four PFAS Extraction Methods in Four Aquatic Organisms | **J. Donaldson**

SETAC Africa 12th Biennial Meeting/

SETAC 9th World Congress

29 September – 3 October 2025 | Johannesburg, South Africa

Sustainable Development in a Changing World: Integrating Environmental Science, Policy and Practice.

Learn more at **setac.org/Johannesburg** and save the date!


SETAC
SETAC North America
46th Annual Meeting
SAVE THE DATE!
16–20 NOVEMBER 2025 | PORTLAND, OREGON | SETAC.ORG/PORTLAND

THURSDAY, 24 OCTOBER

DAILY SCHEDULE (CDT)	LISTED MEETINGS ARE OPEN TO ALL ATTENDEES UNLESS SPECIFIED	
7:30–15:30	Registration	Grand Lobby
7:30–15:30	Speaker Ready Room	201 C
7:30–17:30	Coat and Luggage Check	Concourse, Ground Floor
7:30–8:00	Poster Setup	Exhibit Hall AB
8:00–10:00	Posters and Refreshments	Exhibit Hall AB
10:00–12:00	Morning Platform Sessions	see p. 62
12:00–13:30	Lunch (on your own, food trucks available in Water Gardens Main Plaza)	
12:00–13:30	Program Committee Luncheon (by invitation)	Stockyard 3 (2nd Floor, Omni Fort Worth Hotel)
13:30–15:30	Afternoon Platform Sessions	see p. 64
15:30–16:30	Closing Reception and Remarks	Ballroom A

JOIN US FOR THE CLOSING AND RAFFLE

15:30–16:30 | Ballroom A

Attend for a chance to win a free registration to next year's meeting in Portland, Oregon!

Join us as we wrap up the annual meeting for refreshments for the first half hour then followed by a high-level summary of key moments and lessons learned. We'll also unveil the Best Presentation Award winners from the meeting. Finally, get a sneak peek at the exciting plans for the SETAC North America 46th Annual Meeting in Portland, Oregon. Attendees of the Closing can enter a raffle for a chance to win a free registration to next year's meeting! Must be present to win.

MAKE A DIFFERENCE. DONATE TODAY!

SETAC North America has partnered with SocialOffset to offer meeting attendees the opportunity to contribute to vetted organizations that make a positive difference in people's lives in Fort Worth.

Join us in making a difference to local charities that support these issues:

- Environmental Justice
- LGBTQ+ Youth
- Hunger Relief
- Health Justice

The Board of Directors is challenging the membership to raise $4,500 to support the local community. Donate any amount at setac.org/SocialOffset!

SETAC

SOCIAL OFFSET

SPECIAL SESSION

10:00–12:00 | Ballroom B

4.04.T - SETAC-A4 Special Session: Alternatives Assessment: An Evolving Landscape of Methods, Practice and Policy Supporting the Informed Substitution of Hazardous Substances

Lauren Heine, Margaret Whittaker and Colleen McLoughlin

Alternatives assessment was born in the 1990s when scientists and regulators in Europe and in the United States began to advance substitution as an important risk management strategy for chemicals prioritized as being of concern to the health of workers, the public and the environment. Alternatives assessment has come of age and is an established approach to help identify, compare and select safer substitutes to chemicals of concern in specific applications or functions. It is widely accepted as a best practice for avoiding regrettable substitutions – when replacements for known toxic substances are subsequently determined to be toxic themselves. Yet with age comes new opportunities and needs. Alternatives assessment is entering into the next phase of its development, given new challenges that require adaptations to existing assessment methodologies and practices. In addition, use of alternatives assessment in policy is at a stage where we can take stock and improve upon its inclusion in regulatory and non-regulatory strategies. This session will engage the SETAC community on several alternatives assessment methods, practice and advances in policy application that are beginning to take shape. This session is designed to be discussion-oriented so that the alternatives assessment field can benefit from learnings and insights from professionals in attendance regarding the study of engineered nanomaterials, environmental justice, sustainability considerations, product certification and policy design.

SPECIAL SESSION

13:30–15:30 | 202 AB

7.01.T - Combating Misinformation-Disinformation in Environmental Science: Potential Opportunities and Responsibilities for Scientists

Patrick Guiney, Timothy Canfield and William Goodfellow

The spread of misinformation on scientific topics, epidemics and pandemics has become a major concern, worsened by the internet, social media and now, AI; however, rigorous scientific scrutiny can help combat these false claims. Scientists can counter misinformation by sharing well-founded, accurate information. This session, building on last year's, aims to equip scientists with practical tools to assess misinformation, understand how to address it, and effectively communicate corrective information. Case studies will highlight examples of misinformation and methods for determining when and how to address inaccuracies. The session will also explore how to identify experts to help tackle misinformation and discuss effective strategies for crafting key messages that resonate with audiences. A panel discussion will focus on addressing intentional or accidental misinformation in science communication and appropriate responses.

THURSDAY MORNING TALKS (T)

	10:00–10:15	10:20–10:35	10:40–10:55
201 A	**Microbial Metagenomics: An Emerging Tool for Predictive Ecotoxicology** | J. Bisesi, K. Thompson, C. Martyniuk, J. Donaldson		
	1.15.T-01 Establishing a Framework for Quantifying the Impacts of Environmental Stress on Marine Microbial Communities | **M. Thomas**	**1.15.T-02** Characterizing the Interplay of Gut Microbes and Mercury Exposures in Two Malagasy Populations | **Z. Hu**	**1.15.T-03** Chemical Stress and Nutrients Profile Select Below-Ground Microbial Assemblages Associated with Picea mariana in Impacted Subarctic Mining Sites | **C. Obieze**
201 B	**Behavioral Endpoints and Methods as a Line of Evidence in Regulatory Toxicity Testing** | M. Bertram, L. Zink, W. Goodfellow, J. Lazorchak		
	1.04.T-01 EthoCRED: A Framework to Guide Reporting and Evaluation of the Relevance and Reliability of Behavioural Ecotoxicity Studies | **M. Bertram**	**1.04.T-02** Towards a "Behavioral Best Practice": Engineering and Experimental Considerations in Developing Behavioral Assays, an Example Using Hypoxic Response in the Pond Snail | **L. Zink**	**1.04.T-03** A Zebrafish-Based Platform for Dissecting the Etiologies of Chemical-Induced Stress Behavioral Alterations | **A. Abdelmoneim**
202 AB	**Overcoming Risk Communication Challenges: Strategies to Create Real Behavior Change for Better Communication** | R. Zajac-Fay, S. Sager, M. Beal, J. Clarkson		
	7.08.T-01 Confirmation Bias and the Proliferation of Erroneous Research and Publication Bias | **S. de Solla**	**7.08.T-02** Enhancing Collaboration Through the Development of a Network Analysis | **L. Renauer**	**7.08.T-03** Enhancing Climate Resilience - Creating Strategy from the Community Perspective | **D. Henshel**
202 CD	**Advancing Aquatic Toxicity Test Methods: Developments in Testing and Data Analysis of Toxicity Test Methods for Effluents, Sediments, and Receiving Waters** | –––		
	2.02.T-01 A New ToxMate Effect-Based Behavioural Test for Micropollutant Toxicity Assessment in Effluents | **G. Ruck**	**2.02.T-02** Standardization of Acute and Short-term Chronic Methods for Whole Effluent and Receiving Water Toxicity Using the Mayfly, Neocloeon triangulifer | **J. Lazorchak**	**2.02.T-03** Wastewater Management Strategies: What Happens if Your Water Quality Becomes "Too Good"? | **W. Goodfellow**
203 A	**Omics Approaches for Assessing Chemical Hazard and Toxicological Response** | D. MacMillan, L. Everett, W. Henderson, T. Purucker		
	1.18.T-01 Insights from Nontargeted Metabolomics into Chlorpyrifos-Induced Neurodevelopmental Toxicity | **K. Kirkwood-Donelson**	**1.18.T-02** Evaluating Individual Perfluoroalkyl Substances and Mixtures with an Integrated Acute Toxicity, Metabolism, Behaviour and Transcriptomics Assay in Zebrafish Embryos | **J. O'Brien**	**1.18.T-03** Sperm Epigenome as an Indicator of Modified Offspring Brain Development | **F. Seemann**
203 BC	**Let's Talk About Snakes, Baby! (And Frogs, Lizards, Salamanders, and Turtles, Too...)** | J. Marton, C. Aubee, C. Godard		
	3.04.T-01 Exploring Options for Pesticide Risk Assessment for Aquatic and Terrestrial Life Stages of Amphibians | **L. Weltje**	**3.04.T-02** Assessing the Health of Wood Frogs and Boreal Wetlands in the Athabasca Oil Sands Region of Northern Alberta | **L. Mundy**	**3.04.T-03** In Vitro Toxicity of PFOA, Crude Oil, and Other Organic Contaminants in Sea Turtles | **C. Godard**
204 AB	**Advanced Monitoring and Assessment Approaches for Improved Treatment of Contaminants of Emerging Concern and PFAS in Wastewater** | S. Glassmeyer, G. Ruck, M. Modiri, M. Mills		
	4.02.A.T-01 Moving Towards a Comprehensive Open-Source Software and Data-Visualization Platform for General Non-Targeted Analysis using LC-HRMS2: Application to Various Waste Streams | **J. Koelmel**	**4.02.A.T-02** Analysis of Potentially Unrecognized Fluorine-Containing Compounds in Environmental Samples using LC-MS and 19F NMR | **Y. Liang**	**4.02.A.T-03** Advanced Micropollutant and Emerging Contaminant (CEC) Treatment Assessment with Real-Time Wastewater Surveillance | **G. Ruck**
BALLROOM A	**Practical, Effective, and Informative Monitoring and Risk Assessment Strategies for Macro- and Microplastics** | L. Thornton Hampton, E. Hataley, C. Rochman, K. Somers		
	8.05.A.T-01 Advancing Frameworks for Monitoring and Assessing the Ecological Risks of Microplastics in the Laurentian Great Lakes | **E. Hataley**	**8.05.A.T-02** Leveraging Existing Monitoring Efforts to Determine the Extent and Magnitude of Macro- and Microplastic Contamination in the Southern California Bight | **L. Thornton Hampton**	**8.05.A.T-03** Microplastic Monitoring Development in the Chesapeake Bay Watershed | **B. Murphy**
BALLROOM B	**SETAC-A4 Special Session: Alternatives Assessment: An Evolving Landscape of Methods, Practice and Policy Supporting the Informed Substitution of Hazardous** –––		
	4.04.T-01 Alternatives Assessment 101 | **L. Heine**	**4.04.T-02** Nanomaterials: Methods and Practice Needs to Get Ahead of Potential Regrettable Substitutes | **M. Jacobs LeFevre**	**4.04.T-03** Addressing Environmental Justice Considerations in Alternatives Assessment | **X. Zhou**
BALLROOM C	**Not Just Another NAM: Integrated, Intelligent, and Iterative Approaches to Ecological Risk Assessment** | J. Krzykwa, K. Connors, W. Hunter		
	1.17.T-01 Data-Driven Decision Making Using Advanced High-Throughput Environmental Risk Assessment of Fragrance Materials | **A. Lapczynski**	**1.17.T-02** Detours on the Road to Next Generation Ecological Risk Assessment - Pitstops and Potholes Encountered in Addressing Avian Toxicity Data Gaps | **P. DeLeo**	**1.17.T-03** Design of a Machine Learning Enabled In Silico Workflow for the Proposal of New Bio-Based Agrochemicals | **G. Devineni**

1. Environmental Toxicology and Stress Response	2. Aquatic Toxicology, Ecology and Stress Response	3. Wildlife Toxicology, Ecology and Stress Response	4. Chemistry and Exposure Assessment

11:00–11:15	11:20–11:35	11:40–11:55	
Microbial Metagenomics: An Emerging Tool for Predictive Ecotoxicology | J. Bisesi, K. Thompson, C. Martyniuk, J. Donaldson			201 A
1.15.T-04 Beyond the Name: Functional Changes Implicate the Microbiome in a Broad Array of Metabolic Changes in Diverse Ecosystems | **K. Thompson**	**1.15.T-05** Microbial Risk Assessment: Spatio-Temporal Dynamics of Fecal Indicator Bacteria and Source Tracking with a Novel Rodent Mitochondrial Marker | **R. Bridgemohan**	**1.15.T-06** Perfluorononanoic Acid (PFNA) Modulates the Gut-Brain Axis in Adult Zebrafish | **L. Garrett**	
Behavioral Endpoints and Methods as a Line of Evidence in Regulatory Toxicity Testing | M. Bertram, L. Zink, W. Goodfellow, J. Lazorchak			201 B
1.04.T-04 Withdrawn	**1.04.T-05** Utilizing Multiple Behavioral Endpoints to Identify Negative Control Chemicals in a Larval Zebrafish Behavior Assay | **B. Knapp**	**1.04.T-06** Effects of Methylmercury Exposure on Complex Behaviors in Fathead Minnows (Pimephales promelas) | **V. Srinivasan**	
Overcoming Risk Communication Challenges: Strategies to Create Real Behavior Change for Better Communication | R. Zajac-Fay, S. Sager, M. Beal, J. Clarkson			202 AB
7.08.T-04 Comprehensive Resources for Microplastics Messaging: What Utilities Need to Know | **A. Beciragic**	Panel Discussion	Panel Discussion	
——— C. Flinders, T. Norberg-King, J. Bouldin, D. Soucek			202 CD
2.02.T-04 Maternal Age of Ceriodaphnia dubia Effects on EPA WET Testing Consistency | **S. Webb**	**2.02.T-05** C.dubia Chronic Toxicity Testing Interlaboratory Study Data Variability and Performance Metrics | **C. Irvine**	**2.02.T-06** Uncertainties in Estimating Low Effect Concentrations in Aquatic Toxicity Tests | **R. Erickson**	
Omics Approaches for Assessing Chemical Hazard and Toxicological Response | D. MacMillan, L. Everett, W. Henderson, T. Purucker			203 A
1.18.T-04 Transcriptomic Assessment of Fathead Minnow Brains Following Nitrate Exposure | **S. Kohno**	**1.18.T-05** Transcriptomic-Based Points of Departure for Algae (Raphidocelis subcapitata) Exposed to 22 PFAS for 24-hours | **K. Flynn**	**1.18.T-06** Transcriptomic Point of Departure for Ecological Risk Assessment: Standardized Reanalysis of Publicly Available Toxicogenomic Datasets for Fish | **F. Pagé-Larivière**	
Let's Talk About Snakes, Baby! (And Frogs, Lizards, Salamanders, and Turtles, Too...) | J. Marton, C. Aubee, C. Godard			203 BC
3.04.T-04 Bioaccumulation and Metabolic Impact of Environmental PFAS Residue on Wild-Caught Urban Wetland Tiger Snakes (Notechis scutatus) | **D. Lettoof**	**3.04.T-05** Predicting the Sensitivity of Reptiles to Dioxin-Like Chemicals: A Quantitative Adverse Outcome Pathway Approach | **C. Collins**	**3.04.T-06** Mystery in the Marsh: Uncovering Hidden Herps with eDNA | **J. Stanford**	
Advanced Monitoring and Assessment Approaches for Improved Treatment of Contaminants of Emerging Concern and PFAS in Wastewater | S. Glassmeyer, G. Ruck, M. Modiri, M. Mills			204 AB
4.02.A.T-04 Polystyrene Microplastics Reduce Sulfamethoxazole Filtration Efficacy in Fe-Mn Modified Biochar Columns | **J. Huang**	**4.02.A.T-05** Withdrawn	**4.02.A.T-06** Identification of Potential Groundwater Transport Pathways and Coastal Contaminant Migration from a Terrestrial Waste Disposal Area: Naval Harbor Case Study | **J. Guerrero**	
Practical, Effective, and Informative Monitoring and Risk Assessment Strategies for Macro- and Microplastics | L. Thornton Hampton, E. Hataley, C. Rochman, K. Somers			BALLROOM A
8.05.A.T-04 Harmonization of Microplastic Analysis in Europe, the Development of Reference Material | **H. Liu**	**8.05.A.T-05** Leveraging Organismal Traits to Predict Microplastics Environmental Concentrations Within the Context of Quantitative Risk Assessment | **D. Asnicar**	**8.05.A.T-06** The RSVP Tool - Representative Sample Volume Predictions for Monitoring Microplastics | **R. Cross**	
Substances | L. Heine, M. Whittaker, C. McLoughlina			BALLROOM B
4.04.T-04 Connecting Alternatives Assessment and "Safe and Sustainable by Design" | **C. McLoughlin**	**4.04.T-05** Using Product Certifications Standards: Benefits and Challenges for the Assessment of Hazard, Social Impacts and Sustainability | **M. Whittaker**	**4.04.T-06** Alternatives Assessment in Regulatory Policy: Current Landscape and Lessons Learned | **C. Rudisill**	
Not Just Another NAM: Integrated, Intelligent, and Iterative Approaches to Ecological Risk Assessment | J. Krzykwa, K. Connors, W. Hunter			BALLROOM C
1.17.T-04 PrecisionTox: Developing New Approach Methods (NAMs) for Chemical Safety Testing that Use Phylogenetic Relationships to Predict Interspecies Differences in Toxicity Pathways | **J. Shaw**	**1.17.T-05** A 24-hour Transcriptomic Assay with Rainbow Trout Alevins: Comparisons with Fish Acute and Chronic Toxicity Data | **N. Basu**	**1.17.T-06** Quantification of Steroid Hormones in Fish Holding Tank Water as a Method for the Non-Invasive Detection of Endocrine Disruption | **E. Kennedy**	

5. Environmental Risk Assessment	6. Engineering, Remediation and Restoration	7. Policy, Management and Communication	8. Systems Approaches

THURSDAY AFTERNOON TALKS (T)

	13:30–13:45	13:50–14:05	14:10–14:25
201 A	**Community-Based Participatory Research Approaches in Environmental Toxicology and Monitoring** | H. Poynton, V. Hernandez Talavera, A. Kolok		
	7.02.T-01 A Community-Science Approach to Characterizing Seasonal and Spatial Variation in Exposure to Drinking Water Disinfection Byproducts | **J. Unrine**	**7.02.T-02** BRAIDED Food Security: Indigenous, Community-Led Mercury Monitoring in Traditional Foods | **V. Padula**	**7.02.T-03** Community-Based Participatory Research Approach to Rebuild Trust in Ecological Risk Assessment in Vieques, PR | **V. Hernandez Talavera**
201 B	**Establishment of a Science-Policy Panel to Contribute Further to the Sound Management of Chemicals, Waste, and Pollution Prevention** | M. Bloor, M. Embry, A. Bejarano, T. Gouin		
	8.03.T-01 Withdrawn	**8.03.T-02** Withdrawn	**8.03.T-03** Withdrawn
202 AB	**Combating Misinformation-Disinformation in Environmental Science: Potential Opportunities and Responsibilities for Scientists** | P. Guiney, T. Canfield, W. Goodfellow		
	7.01.T-01 An Introduction to Combating Mis- and Disinformation in Science | **P. Guiney**	**7.01.T-02** The Role of Professional Research Librarians in the Curating of Scientific Research Outputs, the Peer Review Process, and Science Communication in the Age of Artificial Intelligence Applications | **M. Von Hendy**	**7.01.T-03** Case Studies From the Endocrine Disrupter Area of Science | **E. Mihaich**
202 CD	**Preparing for an Environmental Emergency Response: Disaster Risk Assessment Lessons Learned from the Field** | A. Maldonado, E. Reátegui-Zirena, N. Paden		
	6.03.T-01 Ambient Air Monitoring Following Natural Disasters in Texas | **S. Lange**	**6.03.T-02** Derivation and Application of Comparison Values and Action Levels for Use During Mobile Air Monitoring of Natural Disasters or Industrial Accidents | **D. McCant**	**6.03.T-03** ArcGIS for Public Health Emergency Response: The Agency for Toxic Substances and Disease Registry's Comprehensive Disaster and Readiness Toolkit (CDART) | **C. Poulet**
203 A	**Ensuring Scientific Integrity: Strategies for Assessing Study Reliability and Bias in Ecotoxicology** | S. Kennedy, J. Olker, S. Au		
	7.03.T-01 Applications of the Semi-Automated Study Quality Assessment and Reporting Evaluation (SQuARE) Tool for Evaluating Dataset Quality and its Use Across Diverse Scientific Domains | **S. Vliet**	**7.03.T-02** A Systematic Literature Review of Fish Short Term Reproduction Assay (FSTRA) Studies | **S. Lynn**	**7.03.T-03** Identification and Curation of Ecological Toxicity Data for Per- and Polyfluoroalkyl Substances (PFAS) Using the ECOTOXicology Knowledgebase Protocols | **J. Olker**
203 BC	**Bayesian Networks in Environmental Risk Assessment and Management** | W. Landis, J. Carriger, J. Moe, M. Cains		
	5.03.T-01 Amphibian Ecological Risk Assessment Using Bayesian Networks | **J. Awkerman**	**5.03.T-02** Utilizing Bayesian Networks for Safe-by-Design of Chemicals in Consumer Products: Quantitative Adverse Outcome Pathway-Based Approach | **J. Jeong**	**5.03.T-03** Multiple Prenatal Outdoor Exposures are Associated with the Infant Gut Microbiota: An Investigation with Bayesian Networks | **Y. Zhang**
204 AB	**Advanced Monitoring and Assessment Approaches for Improved Treatment of Contaminants of Emerging Concern and PFAS in Wastewater** | S. Glassmeyer, G. Ruck, M. Modiri, M. Mills		
	4.02.B.T-01 An Expanded PFAS Toolkit for Waste Occurrence and Treatment Monitoring | **B. Chandramouli**	**4.02.B.T-02** Advanced Monitoring and Assessment Approaches for Improved Treatment of Contaminants of Emerging Concern and PFAS in Wastewater | **M. Guerra de Navarro**	**4.02.B.T-03** Per- and Poly-fluoroalkyl Substances Fate During Wastewater Treatment | **M. Mills**
BALLROOM A	**Practical, Effective, and Informative Monitoring and Risk Assessment Strategies for Macro- and Microplastics** | L. Thornton Hampton, E. Hataley, C. Rochman, K. Somers		
	8.05.B.T-01 Eco-Corona-Based Characterization of Environmentally Weathered Microplastics Using Ultra-Performance Liquid Chromatography, FTIR Spectra and Unsupervised Machine Learning Algorithms | **O. Fadare**	**8.05.B.T-02** Microplastics Composition and Loadings to Lake Ontario from an Urban Creek via Different Sampling Approaches | **R. Akhbarizadeh**	**8.05.B.T-03** Unraveling the Characteristics and Risk of Microplastics in Tokyo Bay's Surface Water and Sediment | **W. Naito**
BALLROOM B	**Evolving Safety Assessments of Biological-Based Crop Protection Products: Progress of the OECD's Expert Group Biopesticides** | L. Ortego, S. Borges		
	5.07.T-01 Importance of Biopesticides in Modern Agriculture and the Role of Natural Products | **C. Cantrell**	**5.07.T-02** Progress of the OECD Expert Group on Biopesticides in Identifying and Addressing the Testing and Risk Assessment Challenges of Biological-Based Crop Protection Products | **S. Borges**	**5.07.T-03** Re-evaluating Pathogenicity and Infectivity for MCPA's in Ecotoxicity Testing | **H. Krueger**
BALLROOM C	**Case Studies Using Molecular Tools and New Approach Methodologies for Assessing Toxicity in Non-Model Species** | C. Lavelle, J. Bisesi, W. Henderson, C. Vulpe		
	1.06.T-01 Transcriptomic Responses of Zebrafish Following Dietary Exposure to the Short Chain PFAS Perfluorohexanoic Acid (PFHxA) | **J. Donaldson**	**1.06.T-02** Multi-Omics Integration for In silico Biomarker Discovery and In Vivo Verification Using a Zebrafish (Danio rerio) Stoichiometric Metabolic Model | **D. Hala**	**1.06.T-03** Developing a Crustacean Embryo Toxicity Assay for Screening Environmental Contaminants | **I. Polunina-Proulx**

1. Environmental Toxicology and Stress Response	2. Aquatic Toxicology, Ecology and Stress Response	3. Wildlife Toxicology, Ecology and Stress Response	4. Chemistry and Exposure Assessment

14:30–14:45	14:50–15:05	15:10–15:25	
Community-Based Participatory Research Approaches in Environmental Toxicology and Monitoring | H. Poynton, V. Hernandez Talavera, A. Kolok			201 A
7.02.T-04 Community Based Participatory Research in Large Scale Environmental Monitoring Programs: Think Globally, Act Locally | **A. Kolok**	**7.02.T-05** Development of a Community-Centered Harmful Algal Bloom Monitoring Strategy for the Sacramento-San Joaquin Delta | **T. Lee**	Discussion	
Establishment of a Science-Policy Panel to Contribute Further to the Sound Management of Chemicals, Waste, and Pollution Prevention | M. Bloor, M. Embry, A. Bejarano, T. Gouin			201 B
8.03.T-04 Withdrawn	**8.03.T-05** Withdrawn	**8.03.T-06** Withdrawn	
Combating Misinformation-Disinformation in Environmental Science: Potential Opportunities and Responsibilities for Scientists | P. Guiney, T. Canfield, W. Goodfellow			202 AB
7.01.T-04 The Antidote for Mis and Dis Information | **C. Borgert**	**7.01.T-05** How Miscommunications Can Persist for Decades in Our Scientific Literature | **S. Ciparis**	Panel Discussion	
Preparing for an Environmental Emergency Response: Disaster Risk Assessment Lessons Learned from the Field | A. Maldonado, E. Reátegui-Zirena, N. Paden			202 CD
6.03.T-04 Guide for Public Health Response to Cyanobacterial Harmful Blooms in Recreational Fresh Water of Texas | **E. Lawrence**	**6.03.T-05** Lessons Learned from a Rapid Response to Invasive Quagga Mussel in the Snake River, Idaho | **N. Paden**	**6.03.T-06** Lessons Learned from Fluorotelomer-Based Aqueous Film-Forming Foam (AFFF) Use During Emergency Response | **D. McCue**	
Ensuring Scientific Integrity: Strategies for Assessing Study Reliability and Bias in Ecotoxicology | S. Kennedy, J. Olker, S. Au			203 A
7.03.T-04 Meta-Analysis of the Ecotoxicological Data for Per- and Polyfluoroalkyl Substances (PFASs) in Freshwater Environments | **T. Yang**	**7.03.T-05** The Toxicity of Microplastics Explorer 2.0 - Are We Moving The Needle Forward On Microplastics Toxicity Research? | **L. Thornton Hampton**	Discussion	
Bayesian Networks in Environmental Risk Assessment and Management | W. Landis, J. Carriger, J. Moe, M. Cains			203 BC
5.03.T-04 Classifying Metal Soil Concentrations with Bayesian Networks: Urban Background in the Southeastern United States | **J. Carriger**	**5.03.T-05** A Bayesian Network Modeling Application for Prescribed Fire Spatial Planning in the Southeastern United States | **S. Nepal**	**5.03.T-06** Eliminating the Barriers to the Broader Adoption of Bayesian Networks in Environmental Assessment and Management | **W. Landis**	
Advanced Monitoring and Assessment Approaches for Improved Treatment of Contaminants of Emerging Concern and PFAS in Wastewater | S. Glassmeyer, G. Ruck, M. Modiri, M. Mills			204 AB
4.02.B.T-04 Occurrence of Per- and Polyfluoroalkyl Substances in Wastewater Treatment Plants Serving Rural Communities | **M. Rauhauser**	**4.02.B.T-05** Transformation of Per-and Polyfluoroalkyl Substances During On-site Septic System Treatment | **S. Glassmeyer**	**4.02.B.T-06** Fate of PFAS at a Dedicated Land Disposal Field After Four Decades of Biosolids Application | **R. Alvarez Ruiz**	
Practical, Effective, and Informative Monitoring and Risk Assessment Strategies for Macro- and Microplastics | L. Thornton Hampton, E. Hataley, C. Rochman, K. Somers			BALLROOM A
8.05.B.T-04 Beyond the Surface: An In-Depth Study of Plastic Pollution in Ghana's Coastal Hotspots | **P. Sakyi-Djan**	**8.05.B.T-05** Trash Traps As Monitoring Tools To Measure Baselines, Trends, and Upstream Sources of Plastic Pollution | **H. De Frond**	Discussion	
Evolving Safety Assessments of Biological-Based Crop Protection Products: Progress of the OECD's Expert Group Biopesticides | L. Ortego, S. Borges			BALLROOM B
5.07.T-04 Review of Non-Target Insect (Honey Bees) Test Methods for Assessing Effects of Microbial Pesticides; Methods What Works and What Are the Challenges | **M. Patnaude**	**5.07.T-05** Difficulties in Effective Microbial-Based Product Testing on Apis mellifera (L.) in the Laboratory | **J. Zuber**	**5.07.T-06** Improving Aquatic Toxicity Tests with MCPA - How, When, and at What Levels to Test | **H. Krueger**	
Case Studies Using Molecular Tools and New Approach Methodologies for Assessing Toxicity in Non-Model Species | C. Lavelle, J. Bisesi, W. Henderson, C. Vulpe			BALLROOM C
1.06.T-04 Mechanisms Underlying Differential Species Sensitivity to Polycyclic Aromatic Hydrocarbons in Birds | **J. Sangiovanni**	**1.06.T-05** Cross-Species Molecular Docking Method to Support Predictions of Species Susceptibility to Chemical Effects | **P. Schumann**	**1.06.T-06** Bio-QSARs Unlock a New Level of Predictive Power for Machine Learning-Based Ecotoxicity Predictions by Exploiting Chemical and Biological Information | **M. Vaugeois**	

5. Environmental Risk Assessment	6. Engineering, Remediation and Restoration	7. Policy, Management and Communication	8. Systems Approaches

P-TH | THURSDAY POSTER PRESENTATIONS

POSTER SCHEDULE (CDT)		
7:30–8:00	Poster Setup (see page 10 for map of posters)	Exhibit Hall AB
8:00–10:00	Posters and Refreshments	Exhibit Hall AB
12:00–13:30	Lunch Break	
15:30–15:45	Posters Take Down	Exhibit Hall AB

Presenters are expected to attend their poster during most of the break and the poster sessions.

Behavioral Endpoints and Methods as a Line of Evidence in Regulatory Toxicity Testing | M. Bertram, L. Zink, W. Goodfellow, J. Lazorchak

1.04.P-Th-001 Examining the Role of Particulate Matter Exposure on Autism Spectrum Disorder-Like Behaviors in Developing Zebrafish | **S. Victoria**

Case Studies Using Molecular Tools and New Approach Methodologies for Assessing Toxicity in Non-Model Species | C. Lavelle, J. Bisesi, W. Henderson, C. Vulpe

1.06.P-Th-002 Updating Algal Models in US EPA's Web-based Interspecies Correlation Estimation (Web-ICE) Toxicity Extrapolation Tool | **S. Nelson**

1.06.P-Th-003 The Mysid Shrimp as a Model for Endocrine Disruption Screening: Identification of Transcriptomic Biomarkers | **D. Allen**

1.06.P-Th-004 Effects of Mixtures on Gene Expression and Enzymatic Activity on the Freshwater Gastropod Physella acuta | **A. Mohamed-Benhammou**

1.06.P-Th-005 Modeling Synthetic Progestin Binding to Fathead Minnow Steroid Hormone Receptors | **M. Overturf**

1.06.P-Th-006 The Multispecies Ovary Tissue Histology Electronic Repository (MOTHER): A Resource for Evaluating Adverse Effects | **K. Watanabe**

1.06.P-Th-007 Rapid and Predictive Assessment of Developmental and Reproductive Toxicity Using C. elegans as a New Approach Methodology | **S. Mondal**

Not Just Another NAM: Integrated, Intelligent, and Iterative Approaches to Ecological Risk Assessment | J. Krzykwa, K. Connors, W. Hunter

1.17.P-Th-008 Towards One Health: Case Studies to Develop & Test an Integrated Animal-Free Next Generation Human and Environmental Safety Framework for Cosmetics | **A. Ott**

1.17.P-Th-009 Setting the Bar: Characterizing Variability Across Standard Acute Fish Toxicity Assays | **K. Connors**

1.17.P-Th-010 Evaluation of the Mode of Action (MoA) of Chemicals Based on Time-to-Death Data Obtained from Fish Embryo Acute Toxicity (FET) Test | **H. Yamamoto**

1.17.P-Th-011 Increasing Regulatory Recognition for the RTgill-W1 Fish Cell Line Acute Toxicity Assay - A Regional View of the Application of the OECD 249 | **G. Sanders**

1.17.P-Th-012 Screening for Endocrine Bioactivity Potential of Tobacco Product Chemicals Including Flavor Chemicals | **M. Kaltcheva**

1.17.P-Th-014 Environmental Chemical Impacts on Reproduction and Development by Evaluating Both the Embryotoxicity and Reprotoxicity in Zebrafish | **A. Muriana**

Omics Approaches for Assessing Chemical Hazard and Toxicological Response | D. MacMillan, L. Everett, W. Henderson, T. Purucker

1.18.P-Th-015 Comparing the Ecological Effects of Fluorinated and Fluorine-Free Aqueous Film-Forming Foams (AFFF) with Metabolomics | **C. Christen**

1.18.P-Th-016 Lipidomic and Transcriptomic Analyses of Livers from Rats Treated with Increasing Concentrations of Perfluoro-3-Methoxypropanoic Acid (MOPA) | **D. MacMillan**

1.18.P-Th-017 Histological and Transcriptomic Effects of Contaminated Richelieu River Water on Early Life Stages of the Endangered Copper Redhorse (Moxostoma hubbsi) | **N. Decelles**

1.18.P-Th-018 Transcriptomic Points of Departure Derived for Diverse Chemicals from High Throughput Assays Using Larval Fathead Minnows | **C. Baettig**

1.18.P-Th-019 Assessment of Data Rich Chemicals Using Larval Midge (Chironomus dilutus) High Throughput Transcriptomics Methodology | **G. Casciano**

1.18.P-Th-020 Transcriptomic Points of Departure in Pimephales promelas from Whole Versus Targeted Transcriptome Sequencing | **M. Nash**

1.18.P-Th-022 Using the Pimephales promelas EcoToxChip to Understand Perturbed Molecular Pathways Across Species Following Exposure to Chlorantraniliprole | **M. Jensen-Brickley**

1.18.P-Th-023 New Insights into Benzotriazole Stabilizer Mediated Toxicity (UV-327) in Rainbow Trout (Oncorhynchus mykiss) | **A. Eriksson**

Advancing Aquatic Toxicity Test Methods: Developments in Testing and Data Analysis of Toxicity Test Methods for Effluents, Sediments, and Receiving Waters | C. Flinders, T. Norberg-King, J. Bouldin, D. Soucek

2.02.P-Th-024 Machine Learning-Based Water Quality Prediction for Biological Early Warning System Using In-Situ Daphnia magna Behavior Data | **T. Jeong**

2.02.P-Th-025 Challenges with Toxicity Identification Evaluation (TIE) Manipulations on Steel Mill Wastewater | **K. Custer**

2.02.P-Th-026 Method Development for an In Situ, Effects-Based Monitoring Tool Using Lab-Grown Algae Deployed in Dialysis Membrane Devices | **J. Stewart**

2.02.P-Th-027 Effects of Incubation in River Water Contaminated by Agricultural Runoff on Zebrafish (Danio rerio) Embryo Tail Coiling Activity | **H. Marchand**

2.02.P-Th-028 Standardization of USEPA Short-term Chronic Methods for Evaluating Whole Effluent and Receiving Water Toxicity Using a Freshwater Mussel (Fatmucket, Lampsilis siliquoidea) | **N. Wang**

Integration of 21st Century Approaches to Wildlife Risk Assessment for Pesticides in North America | T. Bean, C. Morrissey, C. Hart

3.03.P-Th-029 Accounting for Uncertainty in Pesticide Risk Assessments for Wildlife: Approaches at Different Tiers | **D. Moore**

3.03.P-Th-030 The History and Future of MCnest for Pesticide Risk Assessment | **M. Etterson**

3.03.P-Th-031 Exploring Avian Toxicity Data for Pesticides in the ECOTOX Database | **A. Bone**

3.03.P-Th-032 Estimating the Exposure of Pesticide Residues in Nectar and Pollen to Bee Pollinators | **S. Levine**

3.03.P-Th-033 Species Sensitivity, Biological Significance Thresholds and Factors to Consider for Future Assessment of Effects of Pesticides on Avian Reproduction | **D. Temple**

3.03.P-Th-034 Aerial eDNA Ã, â€" A New Approach to Identify and Monitor Species in Farmland | **S. Ramirez**

3.03.P-Th-035 Availability and Attractiveness of Treated Seed to Wildlife after Corn and Soybean Planting Events | **J. Belden**

3.03.P-Th-036 Neonicotinoid Exposure in Migrating and Resident Birds: Testing Hypotheses at a High-Volume Spring Stopover Site in Coastal Texas | **M. Anderson**

Let's Talk About Snakes, Baby! (And Frogs, Lizards, Salamanders, and Turtles, Too...) | J. Marton, C. Aubee, C. Godard

3.04.P-Th-037 Ammonium: Anuran Nemesis or Environmental Niche? Investigating the Impacts of Aqueous Ammonium on Frog Biodiversity and Distribution in New Jersey and New York Wetlands | **L. Lockett**

3.04.P-Th-038 Per- and Polyfluoroalkyl Substances (PFAS) Exposure in Wild Populations of Amphibians from the Adirondack Mountains, NY | **J. Tennant**

3.04.P-Th-039 Using Omics-Based Ecosurvellience Approaches to Assess Pollution Impact in Toads | **D. Lettoof**

Advanced Monitoring and Assessment Approaches for Improved Treatment of Contaminants of Emerging Concern and PFAS in Wastewater | S. Glassmeyer, G. Ruck, M. Modiri, M. Mills

4.02.P-Th-040 Modification of Activated Carbon for Enhanced Treatment of Per- and Polyfluoroalkyl Substances: A Focused Review | **A. Egbemhenghe**

4.02.P-Th-041 Target, Suspect and Non-Target Screening of Per- and Polyfluoroalkyl Substances (PFASs) in Wastewater Treatment Plant Effluents in South Korea | **K. Zoh**

4.02.P-Th-042 An On-Site, On-Demand Approach for PFAS Removal from Freshwater Using 3D Printed Natural Materials | **M. Ballentine**

4.02.P-Th-043 Screening Private Well Water and Tap Water in Rural Missouri and Illinois Communities for PFAS and Heavy Metals | **J. Dimpor**

4.02.P-Th-044 Assessment of RO Concentrate and UF Backwash Impact on Biological Reactors in WWTPs: Enabling Safe Direct Potable Reuse Waste Stream Sewer Disposal | **S. Ajiboye**

4.02.P-Th-045 Method Development and Validation for the Analysis of Emerging Organic Contaminants (EOCs) in Water | **M. Mendoza Manzano**

4.02.P-Th-046 Harnessing the Power of Mass Spectrometry and Automation to Reduce Sample Size, Sample Preparation Time and Increase Laboratory Efficiency | **L. Hatch**

Legacy and Emerging Pollutants in the Environment: Current Trends in the Developing World | B. Opeolu, N. Mokgalaka, P. Chikere

4.12.P-Th-047 Potentially Toxic Elements Contamination and Risk Assessment in Paddy Soil-Rice System in a Semi-Deciduous Forest Zone of Ghana | **M. Dodd**

4.12.P-Th-048 Uptake of Toxic Metals in Cocoa Beans: Human Health Risks | **E. Frimpong**

4.12.P-Th-049 A Shift in Usage Patterns of Per- and Polyfluoroalkyl Substances (PFASs) in South China: Evidence from a Six-year Biomonitoring Using Oysters in the Pearl River Estuary During 2015-2020 | **X. Wu**

4.12.P-Th-050 Spatial Profiling of Environmental Contaminants in the Lesser Himalayan Lakes of Pakistan | **R. Malik**

4.12.P-Th-051 Occurrence of Microplastics in River Water in Southwestern Nigeria | **S. Oluberu-Bakare**

4.12.P-Th-052 Trace Minerals Potential Human Health Risks Assessment through Consuming Common Food Spices in Ado Ekiti, Southwest, Nigeria | **J. Olusola**

Point-of-Use Drinking Water Exposome and Potential Human-Health Effects | K. Smalling, P. Bradley

4.17.P-Th-053 Predicting Occurrence of Per- and Polyfluoroalkyl Substances (PFAS) in Groundwater at the Depths of Drinking Water Supplies | **K. Smalling**

4.17.P-Th-054 Occurrence of Short- and Ultra-Short Chain PFAS in Drinking Water from Flanders (Belgium) and Implications for Human Exposure | **F. Cappelli**

4.17.P-Th-055 Analysis of Per- and Polyfluoroalkyl Substances in Nebraska Drinking Water | **S. Tucker**

4.17.P-Th-056 Spatial Distribution and Correlation of Per- and Polyfluoroalkyl Substances (PFAS) in Drinking Water from Miami-Dade and Palm Beach in South Florida | **C. Cuchimaque**

4.17.P-Th-057 Mixed Contaminant Exposure in Tapwater and Potential Human-Health Implications in Disadvantaged Communities: A Case Study in California | **K. Smalling**

4.17.P-Th-058 Shared Challenge: Private, Public, and Bottled Drinking Water Contaminant Mixtures | **P. Bradley**

4.17.P-Th-059 Drinking-Water Exposome Research: Exposures and Risk in a PFAS Impacted Groundwater Community | **P. Bradley**

Bayesian Networks in Environmental Risk Assessment and Management | W. Landis, J. Carriger, J. Moe, M. Cains

5.03.P-Th-060 Hierarchical Clustering and Bayesian Networks for Assessing Chemical Mixture Risks to Community-Level Endpoints | **J. Carriger**

5.03.P-Th-061 A Demonstration of Counterfactual Analysis of Wildfire Outcomes: Risk Reduction of a Catastrophic Fire from Fuels Treatment Performance | **J. Carriger**

5.03.P-Th-062 Implementing a Socio-Environmental Cluster Analysis Using Bayesian Profile Regression to Assess Community Vulnerability to Per- and Polyfluoroalkyl Substances (PFAS) Exposure | **S. Santiago Borrés**

Environmental Risk AssessmentEvolving Safety Assessments of Biological-Based Crop Protection Products: Progress of the OECD's Expert Group Biopesticides | L. Ortego, S. Borges

5.07.P-Th-063 Adaptation of the Daphnia magna Reproduction Test: Experience Gained from Testing Bacterial Biocontrol Agents | **B. Karaoglan**

5.07.P-Th-064 Considerations for Analytical Verification of Microbial Products in Different Test Systems | **C. Boagni**

5.07.P-Th-065 Environmental Evaluation of the Biostimulant Methylobacterium symbioticum | **K. Anderson**

Probing Linkages at the Land-Water Interface to Quantify Contaminant Fluxes and Insectivore Exposure | B. Perrotta, M. Hannappel, G. Beaubien, M. Chumchal

5.11.P-Th-066 Insect-Mediated Mercury Flux at the Great Lakes AOC site - Muskegon Lake | **A. Plummer**

5.11.P-Th-067 You are What and Where You Eat: Spatial Patterns in Spider Diets and MeHg Concentrations Around Human-Made Ponds | **M. Hannappel**

5.11.P-Th-068 Effects of Body Size and Season on Total and Methyl Mercury Concentrations in Orb-Weaving Spiders | **M. Chumchal**

5.11.P-Th-069 Seasonality Affects Mercury, Lipid, and Stable Isotope Concentrations: Implications for the Use of Tetragnathid Spiders as Biosentinels | **J. Landaverde**

5.11.P-Th-070 Mercury (Hg) Concentrations of Spiders from Greenland: Potential as Sentinels of Hg Contamination in High Arctic Lentic Systems and Risk to Arachnivorous Birds | **B. Strang**

5.11.P-Th-071 Riparian Consumers Offer New Insights into Metal Exposure in the Mining Impacted Clark Fork River, Montana | **T. Schmidt**

5.11.P-Th-072 Mixed Pesticide Exposure Results in Transport of Neonicotinoid Insecticides into Riparian Food Webs and Alterations to Insect and Spider Microbiome Communities | **B. Perrotta**

P-TH | THURSDAY POSTER PRESENTATIONS

When 'Off the Shelf' Isn't Good Enough: An Exploration of Higher-Tier Studies in Environmental Risk Assessment | A. Jones, A. Samel

5.15.P-Th-073 What Can Twenty Years of Headwater Stream Monitoring Tell Us About Chemical Presence in the Environment and the Effects on Watershed Conditions | **J. Trask**

5.15.P-Th-074 A Higher-Tier Field Spray Drift Bioassay Concept to Evaluate Herbicidal Effects to Non-target Plants | **D. Moore**

5.15.P-Th-075 Effect Factors for the Freshwater Ecotoxicity Impact of Poly Lactic Acid in Life Cycle Assessment | **M. Rodriguez**

Community-Based Participatory Research Approaches in Environmental Toxicology and Monitoring | H. Poynton, V. Hernandez Talavera, A. Kolok, T. Libunao

7.02.P-Th-076 Applying Community-Based Participatory Research to Ecotoxicology | **H. Poynton**

7.02.P-Th-077 Assessment of Metal Accumulation in Blue Land Crabs (Cardisoma guanhumi) as Bioindicators of Environmental Pollution on Vieques Island, Puerto Rico | **V. Alvarez Carrillo**

7.02.P-Th-078 Evaluation of Youth Participatory Science Program on Groundwater Quality Management | **S. Brock-Contreras**

7.02.P-Th-080 Assessing Environmental Health Literacy and Air Quality Concerns in the Mississippi Delta | **A. Smith**

Ensuring Scientific Integrity: Strategies for Assessing Study Reliability and Bias in Ecotoxicology | S. Kennedy, J. Olker, S. Au

7.03.P-Th-081 Trends in Quality and Risk Assessment Applicability of Microplastic Ecotoxicity Studies | **S. Kennedy**

General: Policy, Management and Communication | M. Sellin Jeffries, S. Hughes

7.05.P-Th-082 Adapting Systematic Review Data to the Adverse Outcome Pathway Framework: Annotating Non-Mammalian In Vitro and In Vivo Androgen Receptor Data | **P. Ceger**

7.05.P-Th-083 Probabilistic Risk Assessment: An Underutilized Tool for Human Health and Environmental Regulatory Criteria Development | **C. Flinders**

7.05.P-Th-084 Emerging Trends in Grouping Chemicals for Regulatory and Toxicological Purposes | **C. Hogan**

7.05.P-Th-085 Benefits and Drawbacks Associated with Implementation of Longevity Plans in Colorado to Support Site-Specific Water Quality Standards | **A. Romero**

7.05.P-Th-086 The Awareness and Inclusion of Environmental Education in High Schools Curriculum: A Current Piecemeal Approach | **J. Olowoyo**

7.05.P-Th-087 EPA GIS Tool Application for Displaying Water Chemistry and Freshwater Aquatic Life Criteria Values for Metals (MetALiCC - MAP) - An Update | **L. Cruz**

Practical, Effective, and Informative Monitoring and Risk Assessment Strategies for Macro- and Microplastics | L. Thornton Hampton, E. Hataley, C. Rochman, K. Somers

8.05.P-Th-088 Priorities to Inform Microplastics Management, Monitoring, and Research: A California Case Study | **E. Miller**

8.05.P-Th-089 EUROpean Quality Controlled Harmonization Assuring Reproducible Monitoring and Assessment of Plastic Pollution (EUROqCHARM) | **H. Liu**

8.05.P-Th-090 Risk Assessment of Microplastics and Comparison of Species Sensitivity Distribution Methods | **S. Hutton**

8.05.P-Th-091 Occurrence of Microplastics in Biscayne Bay, Florida: Characteristics and Analytical Methods | **M. Ogudo**

8.05.P-Th-092 Microplastic Distribution during the Ice and Ice-Free Period in a Rural Headwater Lake, Muskoka, Ontario | **B. Welsh**

8.05.P-Th-093 Raman, SEM/EDS and ICP-OES Instrumentation for Investigating Adsorption Capacity of Airborne Microplastics on Heavy Metals in Coastal Cities of Portsmouth, UK and Lagos, Nigeria | **P. Odika**

8.05.P-Th-094 Accurate High Throughput Microplastics Characterization on Aluminium-Coated Filter Using the Agilent 8700 Laser Direct Infrared (LDIR) Chemical Imaging System | **W. Alwan**

LATE-BREAKING SCIENCE POSTERS

Late-breaking science posters start with P-Th-101 on Thursday. For a list of presentations, visit the meeting platform.

V | VIRTUAL PRESENTATIONS ASSOCIATED WITH THURSDAY SESSIONS

To view virtual-only presentations, visit the meeting platform.

General: Policy, Management and Communication | M. Sellin Jeffries, S. Hughes

7.05.V-01 Breaking Boundaries: Harnessing New Approach Methodologies for Effective Chemical Safety Evaluation | **G. Bastos Machado**

7.05.V-02 Enhancing Environmental Awareness Through AI-Enhanced Virtual Reality (VR) Simulations for Adult Learners in Southeast Nigeria | **A. Nwoye**


SETAC NORTH AMERICA
OCT.
2024
FORT
WORTH


SETAC NORTH AMERICA
OCT.
2024
FORT
WORTH

MEETING POLICIES

SETAC provides open, safe forums for the purpose of exchanging ideas and information on the study, analysis and solution of environmental problems, the management and regulation of natural resources, promotion of scientific research and the development of strong environmental education.

Cell Phones

Out of courtesy to our speakers and attendees, we require that all cell phones be turned off during sessions and meetings.

Photo Release

Photographs will be taken during the SETAC North America annual meeting. By registering for this meeting, you agree to allow SETAC to use your photo in any SETAC-related publication or website.

Presentation Recording and Photographing

SETAC embraces a set of values, which include transparency, integrity and civil dialogue. As part of our commitment to be an open and transparent society, we encourage meeting attendees to capture and share the research being presented as long as they do so in a respectful manner, honor the intellectual property of the presenter, and they provide appropriate attribution.

While the default assumption is to allow for open discussion of and access to scientific content of presentations at SETAC events, please respect a presenter's request to refrain from photographing or disseminating the contents of their talk or poster. Presenters may have various reasons for opting out, such as guarding intellectual property or not wanting preliminary data disseminated while they are seeking feedback from peers. In this case, presenters are encouraged to use the no recording or copying icon on their slides or posters to discourage content copying.

Professional Conduct

Participants in SETAC activities are expected to adhere to the highest standards of integrity and professionalism and comply with all SETAC policies, including SETAC Participant Policies and the SETAC Code of Conduct. Learn more at www.setac.org/policies.

Reporting Harassment or Other Violations

Individuals who become aware of potential breaches of SETAC policies and its practices are encouraged to report concerns so that SETAC can address and correct inappropriate conduct and actions through SETAC's Problem Resolution SOP. SETAC is committed to open communication and will endeavor to protect individuals reporting issues from any reprisals or victimization consistent with the SETAC Whistleblower Policy.

SETAC reserves the right to remove an individual who does not adhere to the SETAC policies from the event without warning or refund, prohibit attendance at future SETAC meetings, workshops or other SETAC-sponsored events, and notify the individual's employer.

If you experience or witness harassment or inappropriate behavior at the meeting, please:

1. **Act**: If you feel safe doing so, point out, interrupt, and redirect.
2. **Report**: Please report any incidents to any SETAC staff member. You can also contact one of the SETAC compliance officers:
   - Email concerns@setac.org.
   - Call Bart Bosveld (he/him) at +32 2 772 72 81 Ext. 206, or Tamar Schlekat (she/her) at+1 202 677 3001 Ext. 113.

PROBLEM RESOLUTION PROCESS

IBERA

International Board of
Environmental Risk Assessors

The World's First Global Certification
Program for Environmental Risk Assessors

IBERA-CERTIFICATION.ORG

SOCIETY OF ENVIRONMENTAL TOXICOLOGY AND CHEMISTRY

Avenue des Arts 53
1000 Brussels, Belgium
T 32 2 772 72 81
E setaceu@setac.org

712 H Street NE, Suite 1889
Washington, DC 20002, USA
T 202 677 3001
E setac@setac.org