PROGRAM BOOK

SETAC NORTH AMERICA 44TH ANNUAL MEETING

12–16 November 2023 | Louisville, KY, USA

"One Environment. One Health."

SETAC®

NORTH AMERICA PARTNERS

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Visit us at the registration desk during the meeting, or contact setac@setac.org.

Louisville
SETAC NORTH AMERICA 44TH ANNUAL MEETING

Welcome to Louisville!

On behalf of SETAC, we are thrilled to welcome you to the SETAC North America 44th Annual Meeting in Louisville, Kentucky. The purpose of the meeting is to advance SETAC's mission by promoting environmental science and management.

In designing the conference, we fully embraced the theme of the meeting, One Environment, One Health. Our plenary speakers' presentations focus on issues that impact humans and the ecosystem alike, and the scientific sessions broadly represent the collaborative approach that is needed to address environmental challenges under the one health paradigm.

While planning the meeting, we based decisions on SETAC values. Sessions were developed in a manner characterized by transparency and scientific integrity. To make a positive impact in the local community, we partnered with SocialOffset and supported local organizations that promote equity and environmental justice. As always, sustainability was on our mind while planning. To lower the meeting footprint, we opted for sustainable choices whenever possible and encourage our attendees to do so as well. We are proud to host this event at the LEED-certified Kentucky International Convention Center, which exemplifies our commitment to environmental responsibility. 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

Tisha King-Heiden
SETAC North America
Board President

Content

VIRTUAL PLATFORM

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

PROGRAM COMMITTEE AND STAFF

PROGRAM COMMITTEE

- **John Wise (Co-Chair)**, *University of Louisville*
- **Craig Voros (Co-Chair)**, *Great Lakes Environmental Center*
- **Angela Schmidt (Co-Chair)**, *U.S. Army Corps of Engineers*
- Sandra Wise, *University of Louisville*
- J. Calvin Kouokam, *University of Louisville*
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- Kelly McFarlin, *ExxonMobil Biomedical Sciences, Inc.*
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- Jeff Steevens, *U.S. Geological Survey*
- Scott Lynn, *U.S. Environmental Protection Agency*
- Sara Vliet, *U.S. Environmental Protection Agency*
- Robin Sternberg, *U.S. Army Corps of Engineers*
- Louise Stevenson, *Oak Ridge National Laboratory*

SETAC STAFF

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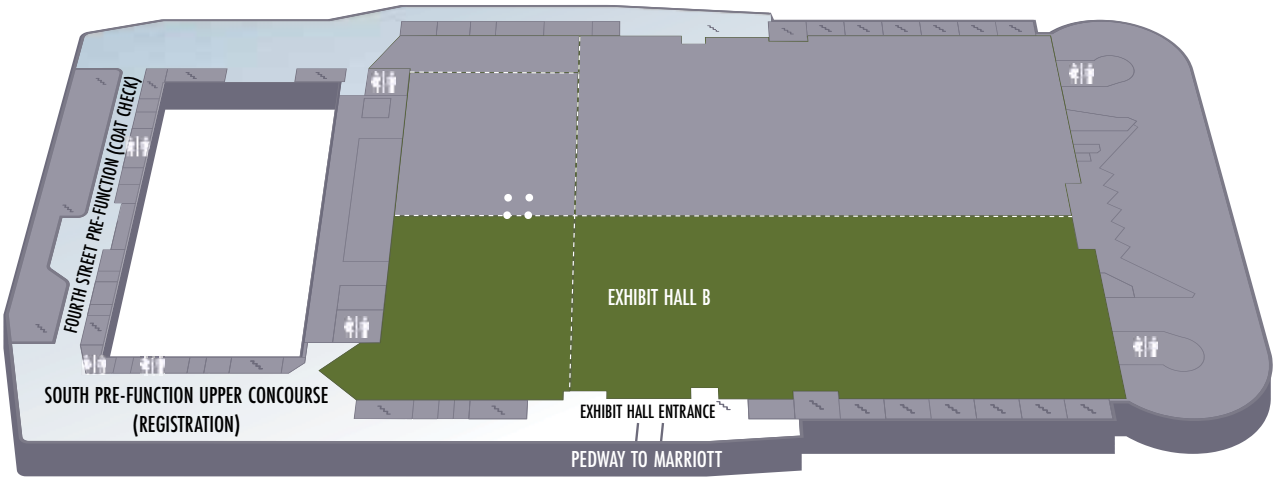
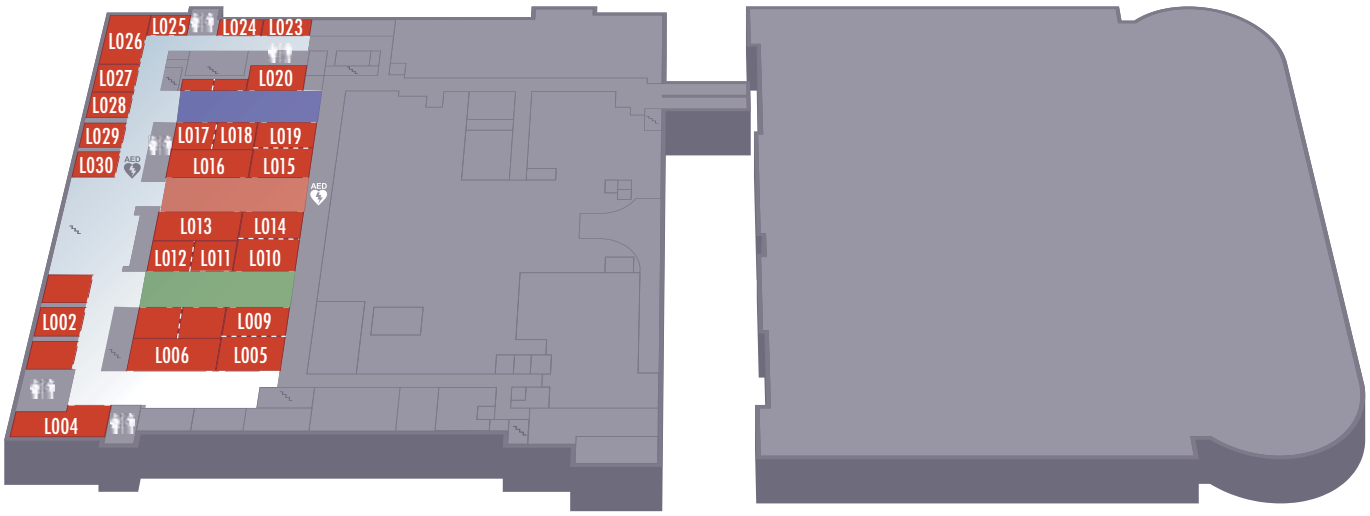
CONVENTION CENTER MAP

Upper Concourse



Main Concourse (ground level)

Lower Concourse



GLOBAL PARTNERS

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

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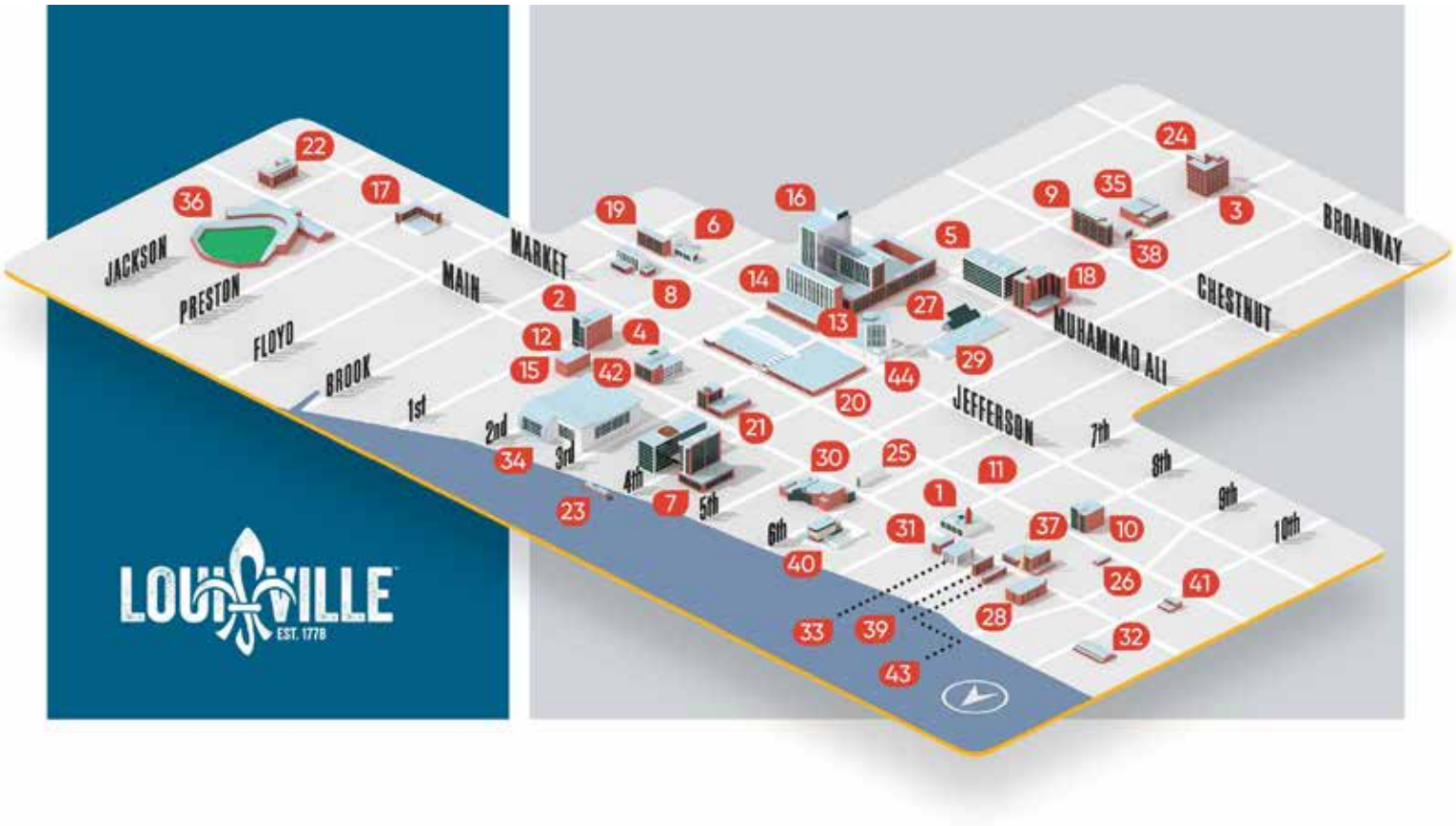
Visit us at the registration desk during the meeting, or contact Barbara Koelman at barbara.koelman@setac.org.

LOCAL AREA MAP



Downtown Hotels and Attractions

Hotels & KICC

1. 21c Museum Hotel
2. Aloft Hotel
3. Brown Hotel
4. Courtyard by Marriott Downtown
5. Embassy Suites Downtown
6. Fairfield Inn & Suites Downtown
7. Galt House Hotel & Suites
8. Hampton Inn Downtown
9. Hilton Garden Inn Downtown
10. Holiday Inn Express
11. Homewood Suites
12. Hotel Distil
13. Hyatt Regency Louisville
14. Marriott Louisville Downtown
15. Moxy
16. Omni Hotel
17. Residence Inn by Marriott
18. Seelbach Hilton
19. Springhill Suites
20. KICC

Attractions

21. Actors Theatre of Louisville
22. Angel's Envy
23. Belle of Louisville
24. Brown Theatre
25. Evan Williams Bourbon Experience
26. Flame Run
27. Fourth Street Live!
28. Frazier History Museum
29. Jim Beam Urban Stillhouse
30. Kentucky Center for the Performing Arts
31. Kentucky Museum of Art and Craft
32. Kentucky Peerless Distillery
33. Kentucky Science Center
34. KFC Yum! Center
35. Louisville Palace
36. Louisville Slugger Field
37. Louisville Slugger Museum & Factory
38. Mercury Ballroom
39. Michter's Distillery
40. Muhammad Ali Center
41. Old 502 Winery/Falls City Brewery
42. Old Forester Distillery
43. Sons of the American Revolution (SAR) Geneological Library
44. Louisville Visitors Center

MEETING SUPPORTERS

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GLEC Great Lakes Environmental Center

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.

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

Contact SETAC staff at the registration desk or call the convention center's Department of Public Safety (DPS) at (502) 595-4362. DPS will immediately respond to the location of an incident. Notify any Emergency Medical Services (EMS) personnel that may be onsite or contact 911 if immediate emergency service is required.

Hours (EST)

Coat Check
Fourth St. Pre-function Upper Concourse
Sunday 7:00–21:30
Monday 7:00–20:30
Tuesday 7:00–19:00
Wednesday 7:00–20:30
Thursday 7:00–17:30

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

Poster Setup
Hall B
Monday–Thursday 7:00–8:00

Poster Take-Down
Hall B
Monday–Wednesday 17:30–17:45
Thursday 16:30–16:45

Registration
South Pre-function Upper Concourse
Sunday 7:00–20:30
Monday–Wednesday 7:00–17:30
Thursday 7:00–15:30

Speaker Ready Room
L012
Monday–Wednesday 7:00–17:30
Thursday 7:00–15:30

Lost and Found

Please visit the registration desk for lost and found items.

Accessibility Needs

If you require special consideration in order to ensure your full participation in this meeting, please see a staff person at the registration desk. Please note, advance notice is necessary to arrange for some accessibility needs.

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

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 email concerns@setac.org.

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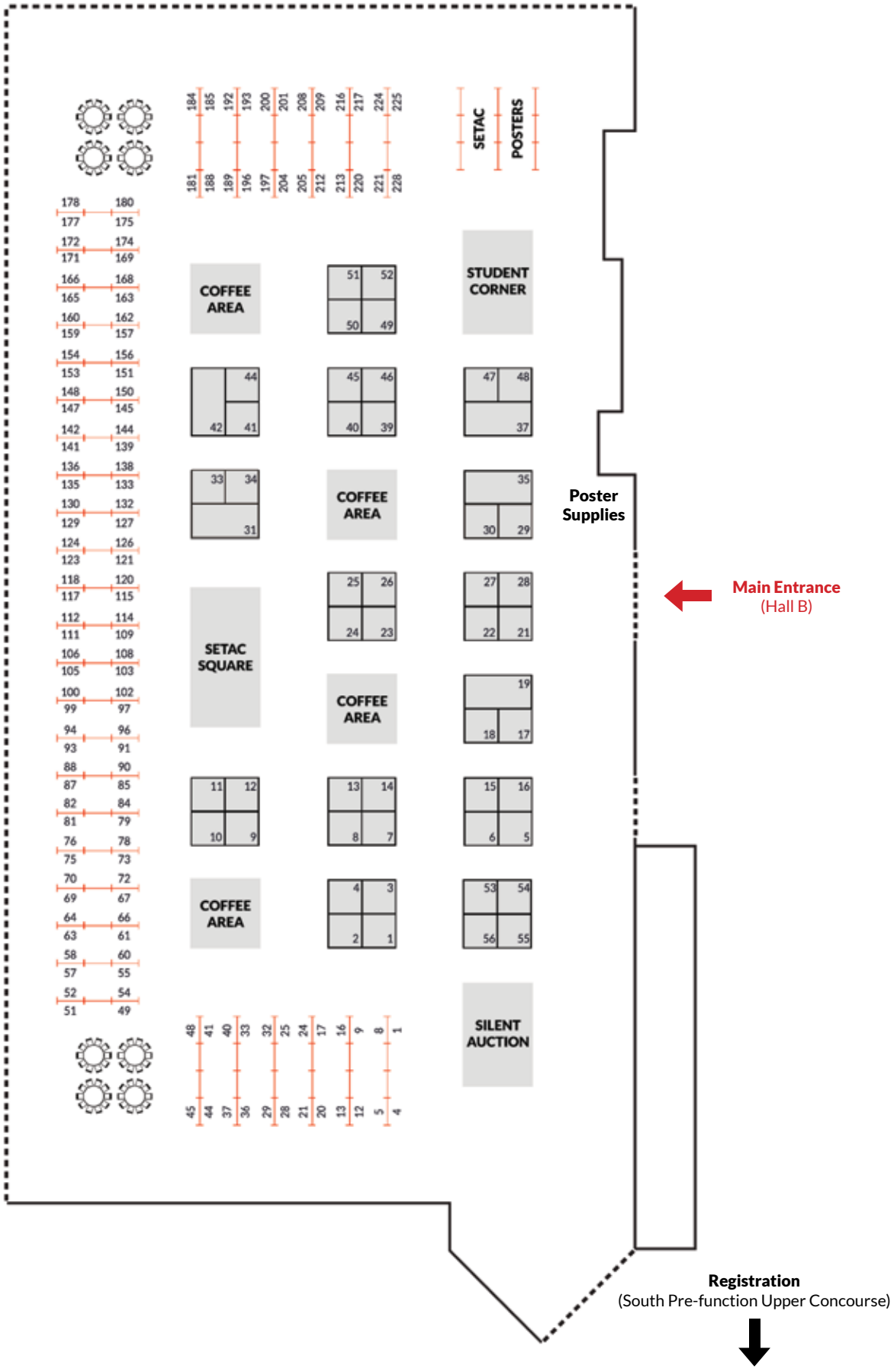
EXHIBITOR FLOOR PLAN



EXHIBITOR LISTING

BOOTH	EXHIBITOR
31	Agilent
9	American Society of Testing and Materials
5	AquaBioTech Group
47	Aqualytical, LLC
39	Bayer
8	Baylor University
56	Bruker Scientific
26	Cambridge Isotope Laboratories, Inc.
28	Compliance Services International (CSI)
53	EA Engineering, Science, and Technology, Inc.
3	EcoAnalysts
10	Eco-Environment & Health, Nanjing Institute of Environmental Sciences
18	EcoToxChip Project
37	Eurofins Agroscience Services, LLC
41	Experimental Pathology Laboratories, Inc.
29	Exponent, Inc.
50	Geosyntec Consultants
30	Great Lakes Environmental Center, Inc. (GLEC)
35	iChrom Solutions
6	INDIGO Biosciences, Inc.
16	JRF Global
34	Labcorp
44	LabLogic Systems, Inc.
12	Loligo Systems

BOOTH	EXHIBITOR
56	Microplastics Advanced Research and Innovation Initiative
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48	Ramboll
11	Ricardo
15	Royal Society of Chemistry
27	SCIEX
46	SciPinion LLC
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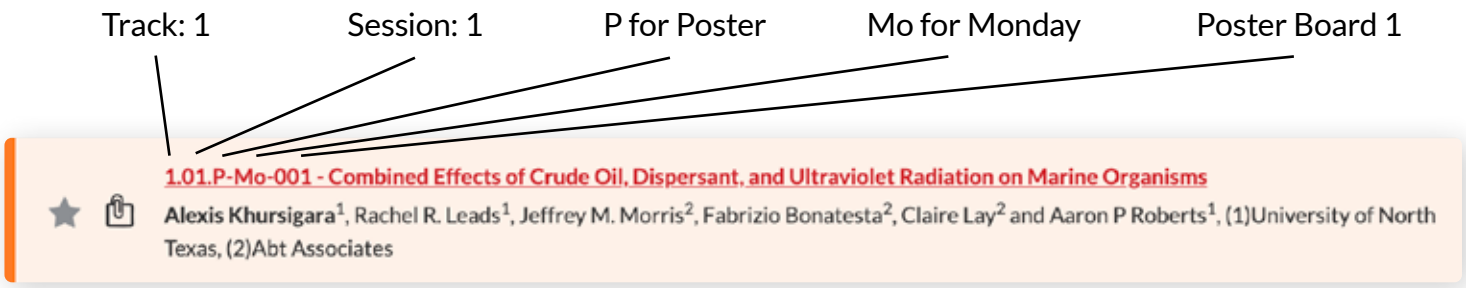
17	SGS AXYS Analytical Services Ltd.
4	Shimadzu Scientific Instruments
33	SiREM Lab
19	Smithers
21	Statera Environmental
1	Symbiotic Research & Genesis Midwest
23	TDI-Brooks
40	Teledyne Leeman Labs
7	Tetra Tech, Inc.
24	Texas Tech University Dept. of Environmental Toxicology
42	U.S. EPA, Office of Research and Development
45	ViewPoint Behavior Technology
54	Waterborne Environmental, Inc.
13	Waters Corporation
14	Wellington Laboratories
2	Zantiks Ltd

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 program book reflects the status of the program as it was on 4 October, which was the print deadline. For the most up-to-date information, please visit the virtual platform.

VIRTUAL PLATFORM

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

ABSTRACT BOOK

Download your copy at louisville.setac.org.

SETAC North America
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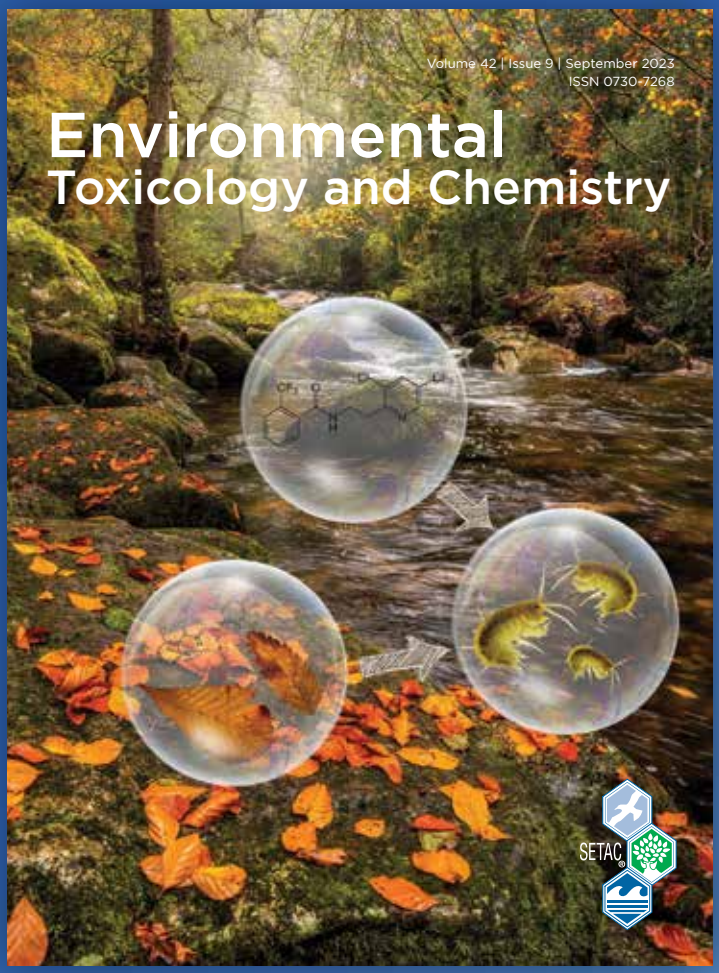

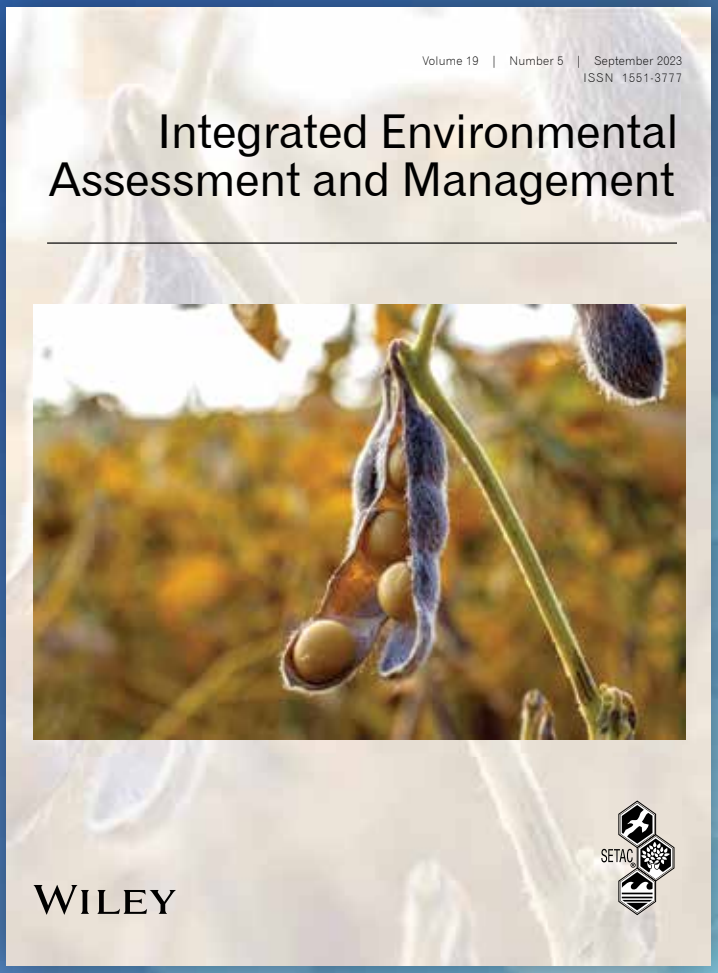

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SUNDAY, 12 NOVEMBER

DAILY SCHEDULE	LISTED MEETINGS ARE OPEN TO ALL ATTENDEES	
7:00–20:30	Registration	South Pre-function Upper Concourse
7:00–21:30	Coats and Luggage Check	Fourth Street Pre-function
8:00–17:00	Professional Training Courses	see list below
8:00–16:00	SETAC North America Board of Directors Meeting	L013
12:00–13:00	Lunch Break (on your own)	
17:30–18:30	Opening Ceremony	Ballroom C
18:30–21:00	Opening Reception	Exhibit Hall B

PROFESSIONAL TRAINING COURSES

FULL-DAY COURSES | 8:00–17:00		
PT01	ASTM Sediment Guidance Training	L024
PT03	Application of Bioinformatics for Species Extrapolation	L025
PT04	The Endocrine System: Global Perspectives on Testing Methods and Evaluation of Endocrine Activity	L028
PT06	Non-Targeted PFAS Analysis Using GC and LC-HRMS/MS	L027

AFTERNOON HALF-DAY COURSES | 13:00–17:00		
PT07	Writing Your Science for the Public and How to Share It	L023

MONDAY, 13 NOVEMBER

DAILY SCHEDULE	LISTED MEETINGS ARE OPEN TO ALL ATTENDEES	
7:00–17:30	Registration	South Pre-function Upper Concourse
7:00–17:30	Speaker Ready Room	L012
7:00–20:30	Coat and Luggage Check	Fourth Street Pre-function
7:00–8:00	Poster Setup	Exhibit Hall B
8:00–9:00	Morning Poster Session and Networking	Exhibit Hall B
8:00–9:00	First-Time Attendee Breakfast (sold out)	M100/M103
8:00–17:30	Exhibits and Silent Auction	Exhibit Hall B
9:00–9:45	Daily Plenary: Aruni Bhatnagar, University of Louisville	Ballroom C
10:00–12:00	Morning Platform Sessions	see p. 18
12:00–13:00	ET&C and IEAM Editors and Editorial Board Meeting	L020
12:00–13:30	Lunch (on your own)	
12:00–13:30	Careers in Transition Lunchtime Seminar (preregistration required)	M107
12:00–13:30	SETAC Partners Luncheon	L026
12:45–13:45	Informational Session: Global Certification Program for Environmental Risk Assessors (IBERA)	L016
13:30–15:30	Afternoon Platform Sessions	see p. 20
15:30–17:30	Afternoon Poster Session and Networking	Exhibit Hall B
16:00–17:00	SETAC North America Regional Chapters Leadership Meeting	L020
16:00–17:00	SCIEX Sponsored Seminar: Investigating the Interconnections of the PFAS Life Cycle	L005/L009
16:00–17:00	Bayer Sponsored Seminar: What Is Regenerative Ag? How Can SETAC Play a Role?	L015/L019
16:30–17:30	Interest Group Summit	L013
18:00–20:00	Metals Interest Group Reception	L004
18:00–20:00	Student/Mentor Dinner (preregistration required)	M100/M103

DAILY PLENARY

The Impact of the Natural Environment on Cardiovascular Health

9:00–9:45 | Ballroom C

In this presentation, Aruni Bhatnagar, University of Louisville, will review evidence linking natural environmental factors such as climate, circadian rhythms, and geography with cardiovascular health and disease risk. Bhatnagar also will discuss the health effects of living in areas of high surrounding greenery and how increasing urban greenspaces may help improve public health and mitigate the effects of climate change.

Bhatnagar is Professor of Medicine and Distinguished University Scholar at the University of Louisville. He is the Director of the Christina Lee Brown Enviroment Institute and Co-Director of the American Heart Association Tobacco Regulation Center. He is a leading expert studying the effects of air pollution on heart disease. In this area, his research interests span from studying how different inhaled pollutants affect the risk of heart disease to the beneficial effects of urban greenspaces. Working with investigators at the University of Louisville and collaborators across the world, he has spearheaded the development of the new field of Environmental Cardiology, which links the risk of heart disease to natural, social and personal environments. His work has shown that most of the risk of chronic diseases could be linked to environmental conditions, social structures and lifestyle choices. In particular, he has found that living in greenspaces decreases exposure to air borne chemicals and pollutants and that it decreases the risk of developing chronic diseases such as cancer and heart disease.

NETWORKING EVENTS

Careers in Transition Lunchtime Seminar

12:00–13:30 | M107 | Preregistration Required

sponsored by

BAYER

It is never too late to pivot your career to something new or more suitable for your interests and skills. It can be intimidating to pursue a new direction and determine which job will help you achieve your long-term career goals. Join us for a lunchtime seminar where we give an overview of things to consider for early career and mid-career transitions. In a panel discussion with SETAC members with experience in different sectors and major career transitions, we cover the considerations, obstacles and opportunities involved with changing sectors or moving laterally within an organization. Whether you are earlier or established in your career, there is something valuable for everyone to help take your career to the next level. Come with your career questions for the Q+A with the panelists.

Student/Mentor Dinner

18:00–20:00 | M100/M103 | Students $10, Mentors $30

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 members.

MONDAY, 13 NOVEMBER

SPECIAL SESSION

	10:00–10:15	10:20–10:35	10:40–10:55
L006	**Placing Tools in the Hands of Decision-Makers: Novel Computational Approaches for Improved Understanding of Chemical Safety** | C. LaLone, M. Embry, N. Basu		
	4.24.T-01 Assessing coastal contamination: The Coastal Pollution Data Explorer | **A. Morozova**	**4.24.T-02** EAS-E Suite: Bridging Research and Application for Chemical Assessments and Sustainability | **A. Sangion**	**4.24.T-03** EcoToxXplorer: a web-based platform for comprehensive toxicogenomics data analysis | **N. Basu**

MORNING TALKS (T)

	10:00–10:15	10:20–10:35	10:40–10:55
Ballroom A	**Exposure and Effects of Micro- and Nanoplastics in the Environment** | T. Hoang, S. Au, S. Harper		
	2.06.T-01 Microplastic Fibers Enhance Copper Uptake in the Ribbed Marsh Mussel (Geukensia demissa) | **R. Cohen**	**2.06.T-02** Developmental phenotypic, transcriptomic, and multigenerational consequences of exposure to nanoplastics in zebrafish | **D. Meyer**	**2.06.T-03** Alterations to Organismal Behavior due to Micro- and Nanoplastic Exposures | **A. Barrick**
Ballroom B	**One Health of Planktonic, Pelagic and Benthic Harmful Algal Blooms (HABs): The Detection, Fate, Effects, Monitoring and Management of Blooms** | A. Wilson, D. Hill, D. Perkins, A. Tatters		
	2.08.T-01 Analysis of the Sub-lethal Impacts of Karenia brevis at a High Concentration in Hard Clams [Mercenaria campechiensis] | **J. Donaldson**	**2.08.T-02** Withdrawn	**2.08.T-03** Microcoleus (Cyanobacteria) from Streams in California: Growth and Anatoxin-a Production in Laboratory Culture Conditions | **S. Brown**
Ballroom C	**Analysis of Pharmaceuticals, Pesticides and Other Chemicals in Environmental Matrices to Support One Health** | A. Ye, K. Johnson-Couch, Q. Shi, W. Hunter		
	4.03.A.T-01 Combination of targeted and non-targeted screening for bisphenol and related unknowns in human milk: a method to improve current human milk biomonitoring | **Z. Chi**	**4.03.A.T-02** Withdrawn	**4.03.A.T-03** Screening of Organic Corrosion Inhibitors, Industrial Antioxidants and their Transformation Products in Snow and Surface Water: Identification and Chemometric Evaluation | **J. Osagu**
Ballroom D	**New Approach Methodologies, Enhanced Strategies and Best Practices for Identifying and Evaluating Endocrine System Adverse Effects** | E. Mihaich, J. Wolf , S. Lynn		
	1.06.T-01 Evaluation of regulatory in vivo endocrine assays in fish and amphibians: current status and future needs | **C. Mitchell**	**1.06.T-02** The Rapid Estrogen ACTivity In Vivo (REACTIV) assay and the Rapid Androgen Disruption Activity Reporter (RADAR) assay OECD TG251 | **G. Lemkine**	**1.06.T-03** Adaptation of Sperm Quality Characterization Methods to Assess Reproductive Health of Male Mummichog (Fundulus heteroclitus) | **S. Malik**
Ballroom E	**Advanced Non-Target Analysis, Bioassays/Biosensors and Assessment Tools to Monitor and Respond to Emerging Threats in Wastewater Management** | S. Glassmeyer, D. Barcelo, V. Yargeau, D. Fatta-Kassinos		
	4.01.T-01 Impact in Soil and Biosolids Extraction Methods on Nontarget Organic Contaminant Analysis | **Y. Choi**	**4.01.T-02** Data science enhanced non-targeted analysis for characterization of exposome: move beyond structural elucidation | **S. Samanipour**	**4.01.T-03** Trace Organic Contaminant Removal from Municipal Wastewater by Styrenic-Cyclodextrin Polymers | **Z. Lin**
L005/L009	**Mechanistic Effect Modeling to Support Ecological Risk Assessment: Moving Between Ecological Scales With Limited Datasets** | V. Forbes, N. Pollesch, M. Vaugeois		
	5.03.T-01 An Evolving View of Quantitative Adverse Outcome Pathways and their Application | **D. Villeneuve**	**5.03.T-02** Mixtures with Limited Experimental Data – Filling Data Gaps using Read-Across or Estimations | **C. Coley**	**5.03.T-03** What is a toxicity translator? | **M. Etterson**
L010/L014	**Natural Resource Damage Assessment: Injury Determination in Multi-Contaminant, Multi-Stressor Systems** | S. Allan, C. Laetz, M. Steinhoff, A. Merten		
	6.02.T-01 Discussion - Injury determination in multi-contaminant, multi-stressor systems | **S. Allan**	**6.02.T-02** Growth of Pacific staghorn sculpin (Leptocottus armatus) is reduced at contaminated sites in the Lower Duwamish River, Washington | **C. Laetz**	**6.02.T-03** Dietary Exposure to Environmentally Relevant Levels of Chemical Contaminants Reduces Growth and Survival in Juvenile Chinook Salmon | **T. Collier**
L015/L019	**Assessing Wildfire and Organic Stressor Effects on Aquatic Ecosystems** | M. Hornberger, D. Miranda, E. Tomaszewski, A. Rand		
	2.11.T-01 Post-fire sediment deposition and associated geochemistry threaten water quality | **E. Tomaszewski**	**2.11.T-02** Critical Drivers of Post-Wildfire Water Quality and Biological Impairment in the Gallinas Creek New Mexico Watershed | **M. Hornberger**	**2.11.T-03** Extent and Pathways of Per- and Polyfluoroalkyl Substances (PFAS) Bioaccumulation and Biomagnification in Mid-Atlantic Stream Food Webs Impacted by Firefighting Foams | **M. Kurz**

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

SPECIAL SESSION

11:00–11:15	11:20–11:35	11:40–11:55	
Placing Tools in the Hands of Decision-Makers: Novel Computational Approaches for Improved Understanding of Chemical Safety | C. LaLone, M. Embry, N. Basu			
4.24.T-04 ExpressAnalyst: A Unified Platform for RNA-seq Analysis in Non-Model Species | **J. Ewald**	**4.24.T-05** Species Extrapolation using the Sequence Alignment to Predict Across Species Susceptibility (SeqAPASS) Tool | **P. Schumann**	**4.24.T-06** The EnviroTox Platform: Update & Applications | **M. Embry**	L006

MORNING TALKS (T)

11:00–11:15	11:20–11:35	11:40–11:55	
Exposure and Effects of Micro- and Nanoplastics in the Environment | T. Hoang, S. Au, S. Harper			
2.06.T-04 Comparison of Species Sensitivity Distribution Methods for Risk Assessment of Microplastics | **S. Hutton**	**2.06.T-05** Role of environmental weathering on micro- and nano- plastics surface reactivity: implications on sorption of legacy pollutants and bioaccumulation and toxic in fish intestinal cells. | **M. Minghetti**	**2.06.T-06** Unveiling the Fate of Nanoplastics: Coupling Accelerator Mass Spectrometry and Radiolabeling for Ultra-Sensitive Toxicokinetic Analysis at ppt Levels | **M. Al-Sid-Cheikh**	Ballroom A
One Health of Planktonic, Pelagic and Benthic Harmful Algal Blooms (HABs): The Detection, Fate, Effects, Monitoring and Management of Blooms | A. Wilson, D. Hill, D. Perkins, A. Tatters			
2.08.T-04 Multi-year investigation of benthic cyanobacteria accumulations in stormwater ponds | **C. Kapczynski**	**2.08.T-05** Development of In Situ, Near-Real-Time Cyanobacterial Monitoring Using Digital Microscopy and Artificial Intelligence | **I. Mrdjen**	**2.08.T-06** Management Perceptions on Minimizing Harmful Algal Bloom Impacts | **S. Goodrich**	Ballroom B
Analysis of Pharmaceuticals, Pesticides and Other Chemicals in Environmental Matrices to Support One Health | A. Ye, K. Johnson-Couch, Q. Shi, W. Hunter			
4.03.A.T-04 Transition of Reference Methods for Dioxins, PCBs and Pesticides to Triple Quadrupole Mass Spectrometry (GC-MS/MS) for Better Exposure Measurement | **B. Chandramouli**	**4.03.A.T-05** Method Development for the Extraction and Analysis of Unregulated Organic Compounds in Soil and Biosolids | **R. Alvarez Ruiz**	**4.03.A.T-06** Targeted Analysis of a Complex Mixture of Unregulated Organic Chemicals (UOCs) in Biosolids | **N. Dennis**	Ballroom C
New Approach Methodologies, Enhanced Strategies and Best Practices for Identifying and Evaluating Endocrine System Adverse Effects | E. Mihaich, J. Wolf , S. Lynn			
1.06.T-04 Supporting Use of New Approach Methodologies for Endocrine Disrupting Chemicals through Development of Adverse Outcome Pathways | **G. Ankley**	**1.06.T-05** Fixed-Stage Termination: Debating the Attributes and Pitfalls in Amphibian-Based Endocrine Disruption Testing | **D. Fort**	**1.06.T-06** Assessing the Predictive Value of Thyroid in vitro Screening Assays Through Comparisons to Observed Impacts in vivo | **S. Eytcheson**	Ballroom D
Advanced Non-Target Analysis, Bioassays/Biosensors and Assessment Tools to Monitor and Respond to Emerging Threats in Wastewater Management | S. Glassmeyer, D. Barcelo, V. Yargeau, D. Fatta-Kassinos			
4.01.T-04 Operational Invertebrate Behaviour Videotracking for Chemical Identification and Real-Time Wastewater Surveillance and Management | **G. Ruck**	**4.01.T-05** Non-targeted Analysis to Identify Unknowns and Prioritize Monitoring of Emerging Contaminants in San Francisco Bay | **E. Miller**	**4.01.T-06** Combination of proteins, small-molecule and microbiological characterization for a holistic understanding of wastewater based epidemiological studies | **D. Barcelo**	Ballroom E
Mechanistic Effect Modeling to Support Ecological Risk Assessment: Moving Between Ecological Scales With Limited Datasets | V. Forbes, N. Pollesch, M. Vaugeois			
5.03.T-04 Developing an interactive tool to support ecological risk assessment for fish populations | **N. Pollesch**	**5.03.T-05** Using traits-based approaches to inform population modeling of threatened and endangered species. | **V. Forbes**	**5.03.T-06** Use of a plant community model to simulate ecosystem services of importance for indirect effects on Endangered Species | **I. Rodea-Palomares**	L005/L009
Natural Resource Damage Assessment: Injury Determination in Multi-Contaminant, Multi-Stressor Systems | S. Allan, C. Laetz, M. Steinhoff, A. Merten			
6.02.T-04 Site Specific Mixed Metal and Polycyclic Aromatic Hydrocarbon Toxicity Models Using Field Collected Sediments and Laboratory Bioassays | **J. Morris**	**6.02.T-05** Exposure to Contaminants in Sediments from the Portland Harbor Superfund Site Reduces Growth and Survival in Benthic Invertebrates: An Analysis of Historical Sediment Toxicity Data | **K. Lieb**	**6.02.T-06** Approaches and Case Studies for Assessing Injuries at Legacy NRDA Sites with Environmental Justice Considerations | **N. Martin**	L010/L014
Assessing Wildfire and Organic Stressor Effects on Aquatic Ecosystems | M. Hornberger, D. Miranda, E. Tomaszewski, A. Rand			
2.11.T-04 The Effect of Wildland Fire-fighting Chemicals on the Reproductive Success of an Aquatic Invertebrate | **H. Puglis**	**2.11.T-05** Lipid profiling in aquatic organisms: Does field exposure to per- and polyfluoroalkyl substances (PFAS) affect oxylipin stress markers? | **A. Rand**	**2.11.T-06** Concentration Dependency of PFOS Update by Benthic Algae | **A. Zachritz**	L015/L019

MONDAY, 13 NOVEMBER

SPECIAL SESSION

	13:30–13:45	13:50–14:05	14:10–14:25
L006	**User Showcase: How do the U.S. EPA's New Approach Methodologies (NAMs) Training Pilot Program and NAMs Tools Advance Research and Decision Making?** | E. Mutlu, C. Baghdikian, S. Vandyke, J. Daniel		
	8.04.T-01 What is 'U.S. EPA's NAMs Training Pilot Program'? | **E. Mutlu**	**8.04.T-02** Using EPA environmental exposure and ecotoxicity estimation tools to inform decisions regarding vertebrate animal testing and potential ecological risk. | **P. DeLeo**	**8.04.T-03** Integrated Research to Advance New Approach Methods for Environmental Health Protection | **K. Saili**

AFTERNOON TALKS (T)

	13:30–13:45	13:50–14:05	14:10–14:25
Ballroom A	**Shedding Light on Tire Wear Microplastics, From Transport and Fate to Toxicity and Management** | B. Beckingham, E. Miller, J. McIntyre, S. Brander		
	4.19.T-01 Best Practices in the Analysis of 6PPD-Quinone | **M. Woudneh**	**4.19.T-02** Occurrence of 6PPD-Q in Aquatic Biota from Puget Sound, WA | **J. Gates**	**4.19.T-03** Investigating the Effects of car tire additives to a fresh water amphipod | **H. Obanya**
Ballroom B	**Fate and Effects of PFAS in Coastal Ecosystems** | M. DeLorenzo, B. Clark, E. Wirth, A. Robuck		
	2.07.T-01 Withdrawn	**2.07.T-02** PFAS in estuarine fishes collected along the Atlantic coast of Florida | **E. Pulster**	**2.07.T-03** Developing Bivalves as Biomonitors of Per- and Polyfluoroalkyl Substances (PFAS) in Coastal Ecosystems | **S. Jones**
Ballroom C	**Analysis of Pharmaceuticals, Pesticides and Other Chemicals in Environmental Matrices to Support One Health** | A. Ye, K. Johnson-Couch, Q. Shi, W. Hunter		
	4.03.B.T-01 Assessing Manatee Exposure to Current-Use Pesticides | **M. Gross**	**4.03.B.T-02** Investigating micropollutant partitioning in five environmental and biological matrices collected in replicate artificial streams | **D. Pulgarin Zapata**	**4.03.B.T-03** Occurrence of Seed Treatment Pesticides in Tadpoles and Songbird Eggs | **M. Hladik**
Ballroom D	**Fate and Effects of Metals: Biogeochemical Perspective** | K. Rader, R. Carbonaro		
	4.09.T-01 Controls on porewater Pb in the floodplains and lateral lakes of the Lower Coeur d'Alene Basin in the Bunker Hill Superfund Site | **A. Wade**	**4.09.T-02** Selenium Bioaccumulation in a Riverine Aquatic Ecosystem: Nonsupport for the Lentic/Lotic risk paradigm | **C. Mebane**	**4.09.T-03** Dolomite Amendment, pH Neutralization, and Metal (loid) Immobilization in stormwater Bioretention Beds | **A. Al-Amin**
Ballroom E	**Bayesian Networks in Environmental Risk Assessment and Management** | W. Landis, J. Carriger, J. Moe, M. Cains		
	5.02.T-01 Probabilistic Risk of Chemical Mixtures: Relative and Cumulative Risk of Pesticides Within Freshwater Biological Communities | **J. Moe**	**5.02.T-02** The Relative Contributions of Contaminants to Environmental Risk in the Upper San Francisco Estuary | **E. Sharpe**	**5.02.T-03** Bayesian Network Model of Mercury Exposure to Aquatic Ecosystems of the Mackenzie Watershed | **U. Jermilova**
L005/L009	**Advances in the Photo-Induced Toxicity of Environmental Contaminants** | R. Leads, A. Khursigara, M. Alloy, J. Morris		
	1.01.T-01 Recommendations for advancing test protocols examining the photo-induced toxicity of petroleum and polycyclic aromatic compounds | **M. Alloy**	**1.01.T-02** What's Light Got to Do With It? The Combined Impacts of Malathion and Ultraviolet Radiation on Early Life Stage Zebrafish and Purple Urchin | **F. De Castro**	**1.01.T-03** Photo-induced Toxicity of Tire Wear Particle Leachate on Early Life Stage Estuarine Fishes | **K. Ackerly**
L010/L014	**Canada's Oil Sands and Dilbit** | A. Holloway, M. Donner		
	2.03.T-01 Search for Novel Non-Halogenated and Halogenated Heterocyclic Aromatic Compounds in the Canadian Environment | **N. Vitharana**	**2.03.T-02** Current Water and Sediment Quality in the Lower Athabasca River Region: An Approach to Setting a Reference Condition | **M. Thompson**	**2.03.T-03** Withdrawn
L015/L019	**Identifying and Linking Environmental Exposure to Biological Effects** | A. Chao, D. MacMillan, S. Baumann		
	4.12.T-01 Using High Resolution LC-MS and GC-MS and Nontargeted Analysis to Identify Potential Mammary Gland Carcinogens in California Drinking Water | **G. Black**	**4.12.T-02** Non-targeted analysis (NTA) and in-vitro high-throughput screening approaches for the evaluation of polymer additives and transformation products sources in drinking water | **M. Marques dos Santos**	**4.12.T-03** Identification of Toxic Contaminants in California Sediments using Nontargeted analysis and Hyalella azteca Toxicity Tests | **A. Feerick**

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

SPECIAL SESSION

14:30–14:45	14:50–15:05	15:10–15:25	
User Showcase: How do the U.S. EPA's New Approach Methodologies (NAMs) Training Pilot Program and NAMs Tools Advance Research and Decision Making? | E. Mutlu, C. Baghdikian, S. Vandyke, J. Daniel			
8.04.T-04 Chemistry data delivery from the US-EPA Center for Computational Toxicology and Exposure to support environmental chemistry | **A. Williams**	**8.04.T-05** Discussion 1 of 2	**8.04.T-06** Discussion 2 of 2	L006

AFTERNOON TALKS (T)

14:30–14:45	14:50–15:05	15:10–15:25	
Shedding Light on Tire Wear Microplastics, From Transport and Fate to Toxicity and Management | B. Beckingham, E. Miller, J. McIntyre, S. Brander			
4.19.T-04 Life Stage and Environmental Conditions Affect Toxicity of 6PPD-Quinone to Coho Salmon | **G. Foster**	**4.19.T-05** Toxicity of 6PPD-quinone across fishes of commercial, cultural, and ecological importance | **M. Brinkmann**	**4.19.T-06** Investigating the Modes of Action for 6PPD-Quinone Toxicity in Salmonids | **J. Greer**	Ballroom A
Fate and Effects of PFAS in Coastal Ecosystems | M. DeLorenzo, B. Clark, E. Wirth, A. Robuck			
2.07.T-04 PFAS-related developmental immunotoxicity using Marine Medaka (Oryzias melastigma) as a model | **E. DiBona**	**2.07.T-05** Toxicity of 10 Per- and Polyfluoroalkyl Substances (PFAS) to Five Standard Marine Species | **N. Hayman**	**2.07.T-06** Derivation of Marine Surface Water Criteria for Perfluorooctanesulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA) for the Protection of Aquatic Life and Wildlife | **G. Long**	Ballroom B
Analysis of Pharmaceuticals, Pesticides and Other Chemicals in Environmental Matrices to Support One Health | A. Ye, K. Johnson-Couch, Q. Shi, W. Hunter			
4.03.B.T-04 Outdoor Law Enforcement Training Exposure Assessment | **S. Smith**	**4.03.B.T-05** Target and Suspect Per- and Polyfluoroalkyl Substances in Fish from an AFFF-impacted Waterway | **L. Carini**	**4.03.B.T-06** Safe Use of Treated Wastewater: Effects of Irrigation Alternation on Contaminants of Emerging Concern Accumulation in Vegetables | **Q. Shi**	Ballroom C
Fate and Effects of Metals: Biogeochemical Perspective | K. Rader, R. Carbonaro			
4.09.T-04 Microbial Communities: The Unsung heroes in The Biogeochemical Cycling of Trace Metals in Constructed Wetlands | **Z. Elhaj Baddar**	**4.09.T-05** Development and Application of a Unit World Model for Flowing Waters | **K. Rader**	**4.09.T-06** Ecological Risk Classification of Inorganic Substances | **R. Dalton**	Ballroom D
Bayesian Networks in Environmental Risk Assessment and Management | W. Landis, J. Carriger, J. Moe, M. Cains			
5.02.T-04 Regional scale ecological risk assessment incorporating Bayesian Networks to characterise the risk of multiple stressors to social and ecological endpoints of the Limpopo River Basin, southern Africa. | **G. O'Brien**	**5.02.T-05** Withdrawn	**5.02.T-06** Integration of Climate Change into the Multiple Stressor Risk Assessment for the Yakima River, Washington, USA | **W. Landis**	Ballroom E
Advances in the Photo-Induced Toxicity of Environmental Contaminants | R. Leads, A. Khursigara, M. Alloy, J. Morris			
1.01.T-04 Lethal and Sub-Lethal Effects of the Photo-Enhanced Toxicity of Diluted Bitumen and Conventional Heavy Crude Oil on Hyalella azteca and Wild Fathead Minnows (Pimephales promelas). | **S. Michaleski**	**1.01.T-05** The mitigating effect of photodegradation (direct and indirect) on the photoenhanced toxicity of organic chemicals. | **A. Redman**	**1.01.T-06** Determining the Impact of Ultraviolet Light on the Toxicity of Individual Polycyclic Aromatic Compounds and Crude Oil to American Lobster Larvae (Homarus americanus) | **D. Philibert**	L005/L009
Canada's Oil Sands and Dilbit | A. Holloway, M. Donner			
2.03.T-04 Assessing Naphthenic Acid Fraction Components: Metabolic Reprogramming of Rat Hepatocytes | **L. Jamshed**	**2.03.T-05** Solar Photocatalytic Detoxification of Oil Sands Process-Affected Waters | **T. Leshuk**	**2.03.T-06** Development and testing of a mechanistic model for wetland treatment of neutral and polar organic contaminants in oil sands process-affected water | **A. Cancelli**	L010/L014
Identifying and Linking Environmental Exposure to Biological Effects | A. Chao, D. MacMillan, S. Baumann			
4.12.T-04 Using High-Resolution Gas Chromatography-Mass Spectrometry to Discover Byproducts of Potential Health Concern in Community Water Supplies Impacted by Polycyclic Aromatic Hydrocarbons | **T. Young**	**4.12.T-05** Exploring Novel Passive Sampling Devices (SPATTs) for Non-Target PFAS Assessment and Data Visualization | **J. Dodds**	**4.12.T-06** Toxicity of Automobile Spray Paints Could Transcend to Occupational Health Hazards in Unexposed Second Generation Offspring | **I. Onwurah**	L015/L019

Poster Schedule

Setup: 7:00–8:00 (see p. 10 for map of posters)
Take down: 17:30–17:45

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

Morning Poster Session: 8:00–9:00
Lunch Break: 12:00–13:30
Afternoon Poster Session: 15:30–17:30

Late-Breaking Science Posters

Late-breaking science posters start with P-Mo-206 on Monday. For a list of presentations, please visit the virtual platform.

Advances in the Photo-Induced Toxicity of Environmental Contaminants | R. Leads, A. Khursigara, M. Alloy, J. Morris

1.01.P-Mo-001 Combined Effects of Crude Oil, Dispersant, and Ultraviolet Radiation on Marine Organisms | **A. Khursigara**

1.01.P-Mo-002 Factors affecting photo-induced thin oil sheen toxicity in a model early life stage (ELS) fish (Danio rerio) | **R. Leads**

1.01.P-Mo-003 Surface Water Stressors and a Mechanism of Avoidance in Pelagic Fish Embryos | **C. Pasparakis**

1.01.P-Mo-004 Reduced Survival Rate of Juvenile and Larval Eastern Oyster (Crassostrea virginica) and Changes in Cardiac Activity of Cell Cultures Exposed to Photodegraded Anthracene Suggest Phototoxic Effects | **N. Gan**

New Approach Methodologies, Enhanced Strategies and Best Practices for Identifying and Evaluating Endocrine System Adverse Effects | E. Mihaich, J. Wolf, S. Lynn

1.06.P-Mo-005 Lessons learnt from three years of applying the XETA test guideline | **G. Lemkine**

1.06.P-Mo-006 A Portfolio Screening and Prioritization Framework for Endocrine Disruption | **T. Verslycke**

1.06.P-Mo-007 Toxicokinetic-Toxicodynamic Modeling of the Xenopus laevis Thyroid Axis Using a Subset of Data-rich Reference Chemicals | **J. Haselman**

1.06.P-Mo-008 The Development of Non-Lethal Methods for the Identification of Endocrine Disruption in Fishes | **E. Kennedy**

Extrapolation Across Scales: Using Data and Models To Connect Molecular Data and Individual Level Responses | L. Stevenson, C. Murphy, R. Nisbet

1.09.P-Mo-009 The Matrix, Reinterpreted | **M. Etterson**

1.09.P-Mo-010 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**

1.09.P-Mo-013 Development of a neurobehavior adverse outcome pathway in larval fish to facilitate cross-species extrapolations and assess population risk | **C. Murphy**

1.09.P-Mo-014 Overview of data and models to connecting data and individual level responses | **R. Nisbet**

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

1.12.P-Mo-015 Integration of In Silico New Approach Methods (NAMs) to Guide Focused Testing and Inform Pesticide Toxicity Across Species – Case Study with Chlorantraniliprole | **M. Jensen**

1.12.P-Mo-016 Enhancing a machine learning approach to predict species sensitivity | **M. Vaugeois**

1.12.P-Mo-017 Visualizing Blood Flow Through the Embryonic Heart Using Optical Coherence Tomography in Chick Embryos Exposed to Various Environmental Contaminants | **C. Goodchild**

1.12.P-Mo-018 Role of Toxicokinetics in Determining Species Sensitivity to Polycyclic Aromatic Hydrocarbons in Birds | **J. Sangiovanni**

1.12.P-Mo-019 Effects of PFAS on model vs. non-model species: A case study on the impacts of perfluorohexanoic acid on zebrafish and largemouth bass | **J. Donaldson**

Investigating the Ecological Effects of Nanoplastics in Aquatic Environments | S. Kane Driscoll, A. Parks, R. Burgess

1.15.P-Mo-020 Establishing Ecotoxicology Testing Strategies for Comprehensive Governance of Micro(nano)plastics | **A. Barrick**

1.15.P-Mo-021 Developmental Exposure of Zebrafish to Nanoplastics Affects Cardiovascular Structure and Function but Does Not Disrupt Blood Brain-Barrier Permeability | **J. Pitt**

1.15.P-Mo-022 Modification of a Fast, Accessible Microplastics Screening Method and its Implementation on Cahaba River Water Samples | **J. Forakis**

1.15.P-Mo-023 Toxicity of Microplastics Explorer (ToMEx) 2.0 | **L. Thornton Hampton**

Canada's Oil Sands and Dilbit | R. Frank, A. Cancelli, A. Holloway, M. Donner

2.03.P-Mo-024 Measuring the environmental fate of naphthenic acids in wetlands using Polar Organic Chemical Integrative Samplers | **A. Cancelli**

2.03.P-Mo-025 Source Apportionment of Polycyclic Aromatic Compounds in Air at Surface-Mining and In-Situ Mining Areas in the Alberta Oil Sands Region | **J. Schuster**

2.03.P-Mo-026 Response factors of alkylated phenanthrenes and impacts on data quality | **N. Vitharana**

2.03.P-Mo-027 Effects of Physical Removal of Residual Oil on Shoreline Environments Previously Treated with Non-Invasive Remediation Methods | **L. Timlick**

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

2.06.P-Mo-028 Trends in Microplastics (MPs) Indoor Settling in the Winter and Summer Months | **S. Akanyange**

2.06.P-Mo-029 Copper Adsorption to Microplastics and Natural Particles in Seawater: A Comparison of Kinetics, Isotherms, and Bioavailability | **C. Chen**

2.06.P-Mo-030 Toxicity of aged and non-aged polyethylene microplastics toward the estuarine bivalve Scrobicularia plana | **A. Barrick**

2.06.P-Mo-031 The First Volunteer Research of Distributions of Microplastics greater than 1 in Global Oceans by a Japanese Giant Ship Company | **Y. Kameda**

2.06.P-Mo-032 Effects Of Microplastics Containing Additives On Blue Mussel (Mytilus edulis): Study Of The Ageing And The Sorption Of Polyaromatic Hydrocarbons As Influencing Factors | **A. Zalouk**

2.06.P-Mo-033 The Application of Tannic Acid-Coated Magnetite Nanoparticles for Recovery of Microplastics From the Water System | **A. Sacko**

2.06.P-Mo-034 Effects of Polylactic Acid (PLA) microplastics on reproduction, antioxidant defense cellular energy production-related genes in Daphnia magna | **G. An**

2.06.P-Mo-035 Interstate Technology Regulatory Council (ITRC) Microplastics Outreach Toolkit | **J. Lazorchak**

2.06.P-Mo-036 First Quantification of Nanoplastic Bioaccumulation and Tissue Distribution in fish at Sub-ppm Exposure Levels: The Role of Intrinsic Labelling | **M. Al-Sid-Cheikh**

2.06.P-Mo-037 Ingestion and Trophic Transfer of Microplastics through Aquatic to Terrestrial Organisms | **T. Hoang**

2.06.P-Mo-039 Employing spICP-MS to measure uptake, distribution, and toxicity of a heterogenous mixture of nanoplastics in zebrafish Embryo-Larvae | **E. Schniederjan**

2.06.P-Mo-040 Sublethal Impacts of Field-Collected Microplastics with Biofilms, Perfluorooctane Sulfonate, and Suspended Sediments on Benthic Invertebrates | **B. Dabney**

2.06.P-Mo-041 Comparative toxicity of different micro- and nanoplastics obtained from human consumer products on human cell-based models | **A. Janiga-MacNelly**

2.06.P-Mo-042 Fiber Length Influences Microplastic Ingestion by the Zooplankton Daphnia magna | **C. Simon**

Fate and Effects of PFAS in Coastal Ecosystems | M. DeLorenzo, B. Clark, E. Wirth, A. Robuck

2.07.P-Mo-044 Biomonitoring of emerging PFAS in wildlife and domestic animals in North Carolina | **J. Bangma**

2.07.P-Mo-045 Partitioning, Bioaccumulation and Bioavailability Evaluation Using Passive Samplers of Sediment-spiked PFAS aged for up to eight weeks | **G. Lotufo**

2.07.P-Mo-046 Bioaccumulation and Toxicity of Field-collected PFAS-impacted Sediment to Leptocheirus plumulosus and Chironomus dilutus | **P. Krupa**

2.07.P-Mo-047 Developmental Toxicity Across a Suite of Structurally Diverse Per- and Polyfluoroalkyl Substances (PFAS) in Mummichog (Atlantic Killifish) | **Y. Rericha**

2.07.P-Mo-048 Evaluating the influence of PFAS structure on behavior in early life stage mummichog (Fundulus heteroclitus) | **T. Burke**

2.07.P-Mo-050 Ecotoxicological Assessment of Multi-stressors Perfluorooctanesulfonate (PFOS) and Temperature in Two Estuarine Fish Species | **A. Thornton**

2.07.P-Mo-051 Evaluation of Ex-Situ Passive Samplers to Measure Bioavailable Per-/Polyfluoroalkyl Substance (PFAS) Concentrations in Marine Sediments | **L. Mukhopadhyay**

2.07.P-Mo-052 Sublethal Impacts of Perfluorooctane Sulfonic Acid (PFOS) Exposure on Acropora tenuis Coral Larvae | **K. Costa**

2.07.P-Mo-053 Unravelling The Complexity Of Per- And Polyfluoroalkyl Substances (PFAS) Contamination In Marine Organisms | **A. Zalouk**

2.07.P-Mo-054 PFAS Exposure in Orca (Orcinus orca) Food Sources | **S. Brady**

2.07.P-Mo-055 Assessment Of The Bioaccumulation And The Effects Of Per- And Polyfluoroalkyl Substances (PFASs) On Blue Mussel (Mytilus edulis): A Biochemical And Lipidomic Approach | **A. Zalouk**

2.07.P-Mo-056 Mixture effects of PFOS and PFOA on embryonic and larval sheepshead minnows (Cyprinodon variegatus) | **P. Tanabe**

2.07.P-Mo-058 Per- and Polyfluoroalkyl Substances (PFAS) in Aquaculture Feeds and Dietary Exposure to and from Aquaculture Fish | **K. Martin**

2.07.P-Mo-059 All PFAS and no pearls: preliminary findings of per- and polyfluoroalkyl acids in Great Bay bivalves | **C. Gardiner**

2.07.P-Mo-060 Determining transport of PFAS from airfields and urban centers to the near-shore marine environment in Oahu, Hawaii | **D. Alvarez**

2.07.P-Mo-061 National Mussel Watch Program: A national perspective of PFAS contamination in US coastal waters from 2015 – 2021 | **L. Swam**

2.07.P-Mo-062 Prevalence of PFAS Compounds in Commercial Alaska Fish | **A. Pait**

2.07.P-Mo-064 Chronic Exposure of Larval Grass Shrimp (Palaemon pugio) to Four Per- and polyfluoroalkyl Substances | **P. Key**

2.07.P-Mo-065 Exploring Coastal Foam as a Novel Exploratory Matrix for PFAS | **J. Bowden**

2.07.P-Mo-066 Predicting PFAS bioaccumulation in a complex assemblage of freshwater fish: do we need to consider fish physiology and ecology? | **K. Kraskura**

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

2.08.P-Mo-068 Quantifying Exposure of Amphibians to Toxic Cyanobacteria across Michigan's Inland Lakes | **B. Friday**

2.08.P-Mo-069 Enhanced Structural Elucidation of Microcystins by Electron-Activated Dissociation (EAD) | **K. Adams**

2.08.P-Mo-070 Comparison of Two Invertebrates Sensitivity to Algaecide and Cyanotoxin at Elevated Surface Water Temperatures | **S. Goodrich**

2.08.P-Mo-071 Microcystin Levels in Water, Sediment, and Invertebrates from the Stones River in Central Tennessee, USA | **J. Landaverde**

2.08.P-Mo-072 Occurrence of Microcystin-LR Photoisomerization Products in a Shallow Eutrophic Lake | **B. Wei**

2.08.P-Mo-073 Evidence Map and Synthesis of Ecological Toxicity of Cyanotoxins using ECOTOXicology Knowledgebase Systematic Protocols | **J. Olker**

2.08.P-Mo-074 Efficacy of Algaecides for the Preventative Management of Overwintering Cyanobacteria in Sediments | **A. Calomeni**

2.08.P-Mo-075 Acute and chronic toxicity of microcystin to four standard toxicity test organisms using lysates from large cultures of Microcystis aeruginosa. | **J. Lazorchak**

2.08.P-Mo-076 In Ovo Exposure to Cylindrospermopsin, but Not Microcystin, Reduces Chick Embryonic Growth and Metabolic Rate. | **C. Goodchild**

2.08.P-Mo-078 Development and validation of analytical methods for measuring diverse cyanotoxins in complex matrices using automated solid phase extraction, isotope dilution LC-MS/MS | **T. Sanan**

Assessing Wildfire and Organic Stressor Effects on Aquatic Ecosystems | M. Hornberger, D. Miranda, E. Tomaszewski, A. Rand

2.11.P-Mo-079 CVOCs kinetics and adsorption studies on selective macrocyclic adsorbents for advanced groundwater bioremediation | **E. Abaie**

Bridging Ecotoxicology and Risk Assessment for Aquatic and Terrestrial Plants | J. Arnie, D. Olszyk, M. Glascott

3.05.P-Mo-081 Comparison of Mercury (Hg) Bioaccumulation with Mono- and Mixed- Lemna minor and Spirodela polyrhiza Cultures | **B. Spencer**

3.05.P-Mo-082 LED v. Fluorescent Lighting Systems for the culturing and testing of Raphidocelis subcapitata under OCSPP 850.4500 and OECD 201 | **M. Teets**

3.05.P-Mo-083 Higher-Tier Non-Target Plant Bioassays for Compost Risk Assessment | **C. de Perre**

3.05.P-Mo-085 Options for Refining Non-Target Terrestrial Plant Testing and Risk Assessment from Pesticide Uses | **C. Habig**

3.05.P-Mo-086 The Use of Remote Sensing in Assessing Risk to the Terrestrial Plant Community at Large Sites | **J. Holder**

General: Wildlife Toxicology, Ecology and Stress Response | C. Voros, A. Schmidt, J. Wise

3.06.P-Mo-088 Cytotoxicity and Oxidative Stress Induced by the Water-Soluble Fraction of Agricultural Soils: Evidence from South Africa | **R. Pieters**

3.06.P-Mo-089 Environmental DNA Analysis: Evaluating Arsenic Toxicity through Allonychiurus kimi (Collembola) | **Y. Won**

3.06.P-Mo-090 Refined parameters for bumblebee microcolony dietary exposure tests | **E. Danby**

3.06.P-Mo-091 The mealworm dietary exposure lifecycle test: a potential model system in environmental risk assessments. | **E. Danby**

3.06.P-Mo-092 Evaluation of Avian Dietary Consumption Rates | **W. Adams**

3.06.P-Mo-093 Caenorhabditis elegans as a biological sandbox for evaluating the effectiveness of RNA interference as a biocide | **C. Lowrie**

Advanced Non-Target Analysis, Bioassays/Biosensors and Assessment Tools to Monitor and Respond to Emerging Threats in Wastewater Management | S. Glassmeyer, D. Barcelo, V. Yargeau, D. Fatta-Kassinos

4.01.P-Mo-094 Interagency Coordination Team on Non-Targeted Analysis and Environmental Biomonitoring | **S. Glassmeyer**

4.01.P-Mo-095 The Role of Sorption in the Fate of Organic Contaminants in Onsite Wastewater Treatment Systems | **R. Smolinski**

4.01.P-Mo-096 Characterizing Variability in Wastewater Effluent and its Effects on Wastewater Reuse for Irrigation | **S. Nason**

4.01.P-Mo-097 Evaluating Predictive Relationships Between Estimated Percent Accumulated Wastewater and Bioactive Contaminant Loading to Surface Waters Receiving Wastewater Treatment Effluents | **K. Santana Rodriguez**

Analysis of Pharmaceuticals, Pesticides and Other Chemicals in Environmental Matrices to Support One Health | A. Ye, K. Johnson-Couch, Q. Shi, W. Hunter

4.03.P-Mo-100 Oxidative Stress Induced in Hyalella azteca Exposed to Non-Steroidal Anti-Inflammatory Drugs | **N. Khadgi-Sonnenberg**

4.03.P-Mo-101 Soil Sorption of Biosolids-borne Unregulated Organic Chemicals | **A. Braun**

4.03.P-Mo-102 Simultaneous Determination of Spirotetramat, Clethodim, and Their Metabolites Using Liquid Chromatography-Tandem Mass Spectrometry | **H. Jeong**

4.03.P-Mo-103 Future requirements for Regulatory testing of mixtures and UVCBs | **E. Danby**

4.03.P-Mo-104 Occurrence, Distribution, and Ecological Risk Assessment of Phthalate Esters in the Surface Water of the St. Lawrence River and Estuary in Canada | **A. Ben Chaaben**

4.03.P-Mo-105 Analysis of Contaminant Residues in Honey Bee Hive Matrices | **D. Glinski**

4.03.P-Mo-106 Assessment of Baseline Bioaccessible Pesticide Loads in the Sacramento Deep Water Ship Channel | **C. La**

4.03.P-Mo-107 Transformation and Metabolism of 6PPD and 6PPD-quinone in Different Soils Conditions | **D. Shen**

4.03.P-Mo-110 Using Lampricide and Sea Lamprey (Petromyzon marinus) to Study the Effects of Temperature on Phenol Toxicity | **D. Mitrovic**

Fate and Effects of Metals: Biogeochemical Perspective | K. Rader, R. Carbonaro

4.09.P-Mo-113 Distribution of Rare Earth Elements in the Food Web of Two French Estuaries | **A. Zalouk**

4.09.P-Mo-114 Bioavailability Evaluation of a European Monitoring Database | **E. Middleton**

4.09.P-Mo-115 Long-Term Effects of Copper and Zinc on Microbial Community Structures in Constructed Wetlands | **Z. Elhaj Baddar**

4.09.P-Mo-116 Spectroscopic Studies of Interaction Between Hg(II) and AgNPs in the Dark | **P. Oladoye**

4.09.P-Mo-117 A Predictive Model Created to Understand How Specific Water Quality Characteristics Govern the Association of Microplastics and Cadmium in Freshwater Systems | **L. Zink**

4.09.P-Mo-118 Variation of mercury-dissolved organic matter stability constants: complexation of mercury(II) with 2-Aminothiophenol using ultraviolet spectroscopic and isothermal titration calorimetric techniques | **M. Oladipo**

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

4.12.P-Mo-120 A pull-down assay coupled to non-target analysis as a tool for the identification of thyroid hormone disrupting chemicals from complex environmental mixtures | **P. Mikusova**

4.12.P-Mo-121 Assessing Dried Blood Spot and Foam Tip Devices for PFAS Detection and Quantitation | **G. Kudzin**

4.12.P-Mo-122 Anthropogenic Compounds found in Placental Tissue | **S. Baumann**

Shedding Light on Tire Wear Microplastics, From Transport and Fate to Toxicity and Management | B. Beckingham, E. Miller, J. McIntyre, S. Brander

4.19.P-Mo-124 Time-course of Physiological Changes in Brook trout (Salvelinus fontinalis) During Exposure to Lethal Concentrations of 6PPD-quinone | **D. Philibert**

4.19.P-Mo-125 Analysis of 6PPD-Q and other rubber-derived chemicals (TRCs) in fish bile and plasma | **D. da Silva**

4.19.P-Mo-126 Chronic effects of dietary administered tire particles in common carp | **K. Nakayama**

4.19.P-Mo-127 Effects to marine amphipod exposed to particles and their dissolved components derived from new or used tires | **S. Uno**

4.19.P-Mo-128 Gaining Traction: The Investigation of Alternatives to 6PPD and Their Toxicity to Coho Salmon (Oncorhynchus kisutch) | **C. Lawrence**

4.19.P-Mo-129 Rolling Out Guidance: What Environmental Officials Need to Know About 6PPD and 6PPD-quinone | **R. Lane**

4.19.P-Mo-130 When the Rubber Meets the River: An Assessment of 6PPD-Quinone Acute and Sublethal Toxicity on San Francisco Bay Delta Species of Conservation Concern | **J. Lang**

Advances to Address Challenges in Non-targeted Analysis for Environmental Risk Assessment | N. Soares Quinete, R. Marfil-Vega, J. Brown, G. Black

4.23.P-Mo-132 Examining Chemical Space Coverage of Solid Phase Extraction Methods on Environmental Waters for Use With Non-Targeted Analysis Methods | **L. Brunelle**

4.23.P-Mo-133 Application of non-targeted and suspect screening workflows on surface and drinking water samples using reverse phase and HILIC chromatography | **A. Batt**

4.23.P-Mo-134 Profiling PFAS removal efficiency in drinking water treatment using a non-targeted analysis approach | **Y. Feng**

4.23.P-Mo-135 Analysis of Volatile PFAS in Soil Using High Resolution GC/MS and an Accurate Mass PFAS Library | **S. Baumann**

4.23.P-Mo-137 Hydrophilic Lipophilic Balanced Retainability in the Context of Chemical Space | **A. Feerick**

Placing Tools in the Hands of Decision-Makers: Novel Computational Approaches for Improved Understanding of Chemical Safety | C. LaLone, M. Embry, N. Basu

4.24.P-Mo-139 Evaluation of Evidence for Enhancing Biological Pathway Conservation Across Species Generated Using a Combination of Computational New Approach Methodologies | **P. Schumann**

General: Chemistry and Exposure Assessment | C. Voros, A. Schmidt, J. Wise

4.26.P-Mo-143 Characterization of Chemical Hazards and Environmental Risks Associated with In-water Hull Cleanings | **Z. Soon**

4.26.P-Mo-144 Computational Fluid and Particle Dynamics Modeling for Repeated Inhalation Exposure Assessment with OpenFOAM | **K. Yokoo**

4.26.P-Mo-146 Reasonable Maximum Exposure in Environmental Risk Assessment – Multiple Interpretations and Apparent Spontaneous Expansion | **F. Ramacciotti**

4.26.P-Mo-147 Development of Passive Sampler Rate Constants in Silicone Bands for Environmental Monitoring | **E. Pisarski**

4.26.P-Mo-148 Towards standardization of the Biomimetic extraction using solid-phase microextraction (BE-SPME) analytical method | **T. Reddington**

4.26.P-Mo-149 A Half-Cell Reaction Approach for pH Calculation using a Solid-State Chloride Ion-Selective Electrode with a Hydrogen Ion-Selective Ion-Sensitive Field Effect Transistor | **S. Gonski**

4.26.P-Mo-150 Fluorine contamination in soils at landfill of phosphate-gypsum wastes: A new analytical protocol, evaluation of mobility, and risk assessment | **S. Oh**

4.26.P-Mo-151 Synthesis of Radiolabelled Industrial Chemicals, Drugs and Crop Protection Products from Carbon-14 Building Blocks | **E. Danby**

4.26.P-Mo-152 Effective Predictive Domain: The Hidden but Powerful Risk Assessment Variable | **S. Townsend**

4.26.P-Mo-153 Statewide Mapping of Per-and Polyfluoroalkyl Substances (PFAS) in Florida Drinking Water | **T. Sinkway**

4.26.P-Mo-154 Assessment of Multiple Passive Sampler Techniques for the Determination of Organic Contaminants in Coastal Waters | **B. Shaddrix**

4.26.P-Mo-155 Achieving More Accurate PCBs Structural Assignment Using Gas Chromatography and Mass Spectrometry "Ortho Effects" for all PCB Congeners | **L. Osemwengie**

4.26.P-Mo-156 Detection of Exposure to Naturally Occurring Toxins by Liquid Chromatography High Resolution Mass Spectrometry | **B. Hettick**

4.26.P-Mo-157 Sediment Contaminants and Toxicity in CA Watersheds: Perspectives from 15 years of Monitoring Data | **B. Khan**

4.26.P-Mo-158 Identification of DDT+ in Southern California Bight deep ocean sediment and biota by nontargeted analysis | **M. Stack**

4.26.P-Mo-159 Modulation of Host-guest Complexation of PFAS with pH Ionizable-cyclodextrin Derivatives | **R. Restrepo**

4.26.P-Mo-160 Pesticides Screening on Surface Water and Soil along the Mekong River in Cambodia | **P. Ngin**

4.26.P-Mo-162 Pesticide Screening in Urban Creeks and Ponds in Gainesville, FL | **P. Wilson**

4.26.P-Mo-163 Validation of rare congener PCB Performance Reference Compound (PRC) method for equilibrium concentration determination of hydrophobic organic chemicals in sediment porewater | **A. Sweett**

4.26.P-Mo-165 New Reference Materials for Per- and Poly-Fluorinated Alkyl Substances and Other Contaminants | **J. Kucklick**

4.26.P-Mo-166 Modeling the Kinetics of Organic Carbon-Water Partitioning of Volatile Methylsiloxanes and Environmental Implications | **J. Kim**

4.26.P-Mo-167 Quantifying exposures assessed using wearable passive samplers: characterizing the sampling behavior of airborne contaminants using Fresh Air wristbands | **E. Lin**

4.26.P-Mo-168 The Effects of Study Design Decisions on Fish Bioaccumulation Factors for Perfluoro-n-octanesulfonic Acid (PFOS) | **C. Flinders**

4.26.P-Mo-169 Monitoring Hydrophobic Organic Contaminant Concentration Changes Across Seasons in the Anacostia River Watershed | **N. Lombard**

4.26.P-Mo-170 Using Refinements in Ion Chromatography to Shorten Run Times for the Determination of Perchlorate in Drinking Water | **C. Shevlin**

4.26.P-Mo-171 Assessment of Polychlorinated Biphenyl Emissions from the Portland Harbor Superfund Site into the Atmosphere | **A. Slade**

4.26.P-Mo-172 Comprehensive Analysis of Phthalates and Phthalate Alternatives Using Gas Chromatography Mass Spectrometry with Real World Sample Demonstration | **K. Adams**

4.26.P-Mo-173 Should we assess the P&M chemicals from a perspective of the "hazard" or "exposure"? | **Z. Zhang**

4.26.P-Mo-174 Comparison of Methods for PCB Analyses for Biota Monitoring in a Regulatory Context | **A. Pinkney**

4.26.P-Mo-175 Investigating Wildfire Smoke Composition and the Movement of Parent and Alkylated PAHs Between Air and Soil Before, During, and After a Wildfire to Understand Potential Human Exposure | **K. O'Malley**

Bayesian Networks in Environmental Risk Assessment and Management | W. Landis, J. Carriger, J. Moe, M. Cains

5.02.P-Mo-176 Bayesian Network Models of Socio-Ecological River Systems to Determine Sustainability Requirements and Manage Multiple Stressors | **G. O'Brien**

5.02.P-Mo-177 A Modular Approach to Risk Assessment with Structural Models | **J. Carriger**

5.02.P-Mo-178 Bayesian Networks as Flexible and Comprehensive Tools for Use in the Natural Resource Damage Assessment Process | **A. Reed**

5.02.P-Mo-179 Ecological Risk Assessment Using a Bayesian Network Relative Risk Model (BN-RRM) for Microplastics in the Upper San Francisco Bay Region | **C. Kuhn**

5.02.P-Mo-180 Assessing Pollinator Decline Associated Risks to Endangered Plant Populations using Bayesian Networks | **N. Snyder**

Assessing Risks of Using Resource Extraction Byproducts and Waste | L. Racz, K. Richardson

5.09.P-Mo-183 Evaluating treated produced water from the Permian for potential beneficial reuse opportunities | **A. Redman**

5.09.P-Mo-184 Assessing Risks of Using Resource Extraction Byproducts and Waste | **L. Racz**

5.09.P-Mo-185 Radiation Exposures from the Beneficial Use of Alumina Production Residue | **W. Rish**

5.09.P-Mo-186 Assessing Sustainable Applications of Electric Arc Furnace Steel Slag as Construction Aggregate: Applications of Probabilistic Risk Assessment and Physiologically-based Pharmacokinetic Modeling | **L. Racz**

5.09.P-Mo-187 Towards a Transparent & Reproducible Framework for Risk Assessment and Evaluation of Produced Water for Beneficial Reuse | **C. Davis**

Emerging Techniques for Evaluating Ecological Risk at Contaminated Sites | A. DeBofsky, M. Jankowski, M. Giroux, J. Reichman

5.10.P-Mo-188 An R-based Matrix Population Model Library Optimized for Risk Assessment | **T. Walker**

5.10.P-Mo-189 CSM-based Sediment Remediation Strategies without Published State Standards | **N. Hastings**

5.10.P-Mo-190 Addressing Uncertainties in Oral Bioavailability of Chemical Contaminants | **Z. Zhang**

5.10.P-Mo-191 Toxicity evaluations to marine benthic organisms exposed to road dust collected in Kanazawa city, Japan | **S. Uno**

5.10.P-Mo-192 Photocatalytic Degradation of Per- and Polyfluoroalkyl Substances (PFAS) in Landfill Leachate Using 3D Printed TiO2 Composite Tiles | **A. McQueen**

5.10.P-Mo-193 Characterization of molecular and apical effects of legacy contaminated groundwater on early life stages of fathead minnows | **M. Hecker**

5.10.P-Mo-194 Modeling PFAS Bioaccumulation Uncertainty Using Monte Carlo Methods | **M. Batchelder**

PFAS Regulatory Investigations – Actions and Lessons Learned | J. McCord, L. Libelo, M. Solter

6.03.P-Mo-195 Non-Targeted Analysis of Emerging PFAS in Site Investigations | **J. McCord**

6.03.P-Mo-196 PFAS Legal Enforcement Tools | **J. Speir**

6.03.P-Mo-197 Extraction Efficiency and Partitioning of Fluorotelomer Alcohols in Soils | **D. Kim**

6.03.P-Mo-198 PFAS Risk Assessment for a Defence Military Training Base | **C. McCarthy**

6.03.P-Mo-200 PFAS and EPA Clean Water Act Enforcement and Compliance Inspections | **L. Kardeman**

Policy, Management and Communication | C. Voros, J. Wise, A. Schmidt

7.10.P-Mo-202 Comparison of Aquatic Life Protective Values Developed for Pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Clean Water Act (CWA) | **C. Bergeron**

7.10.P-Mo-203 Evaluating Impacts to the U.S. Department of Defense (DoD) Mission from Changing Regulations and Toxicity Values for Vanadium and Cobalt | **E. Williams**

7.10.P-Mo-204 Integrated Approach for Testing and Assessment (IATA) for Bioaccumulation | **M. Embry**

7.10.P-Mo-205 Surface Water Quality Criteria for PFAS: Variation in International Approaches and Risk Management Challenges | **B. Ruffle**

Virtual-Only Presentations

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

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

1.12.V-021 Enhancing a machine learning approach to predict species sensitivity | **M. Vaugeois**

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

2.06.V-003 A bioassay-based assessment of the potential ecological risks of microplastics in the Diep River (Milnerton), Western Cape, South Africa. | **A. Khan**

Analysis of Pharmaceuticals, Pesticides and Other Chemicals in Environmental Matrices to Support One Health | A. Ye, K. Johnson-Couch, Q. Shi, W. Hunter

4.03.V-007 Spatial distribution, temporal trend, and risk assessment of cyclic volatile methylsiloxanes in Tokyo Bay catchment basin, Japan | **Y. Horii**

Shedding Light on Tire Wear Microplastics, From Transport and Fate to Toxicity and Management | B. Beckingham, E. Miller, J. McIntyre, S. Brander

4.19.V-012 Within and Across Generational Effects of Tire Wear Micro- and Nanoparticles in the Model Estuarine Species Fish Menidia Beryllina | **C. Raguso**

Advances to Address Challenges in Non-targeted Analysis for Environmental Risk Assessment | N. Soares Quinete, R. Marfil-Vega, J. Brown, G. Black

4.23.V-020 Non-Target Screening of Organohalogen Compounds in Archived Tilapia Samples from Several Asian Countries | **T. Nguyen**

Placing Tools in the Hands of Decision-Makers: Novel Computational Approaches for Improved Understanding of Chemical Safety | C. LaLone, M. Embry, N. Basu

4.24.V-022 Modeling temperature-dependent chronic toxicity of thiamethoxam in chironomids using a DEB-based TKTD model | **M. Vaugeois**

4.24.V-023 Simulating life-cycle toxicity of thiamethoxam in Chironomus riparius with realistic dynamic exposure profiles and variable temperatures using a moving-time-window approach | **M. Vaugeois**

Mechanistic Effect Modeling to Support Ecological Risk Assessment: Moving Between Ecological Scales With Limited Datasets | V. Forbes, N. Pollesch, M. Vaugeois

5.03.V-017 A multi-tiered risk assessment of exposure of aquatic invertebrates to Thiamethoxam using data-driven tools | **M. Vaugeois**

Mentoring Program

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2. Identify yourself as a mentor on your SETAC profile, or search the membership directory to find a mentor
3. Report to SETAC when you've found a match
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Learn more and get started today!

TUESDAY, 14 NOVEMBER

DAILY SCHEDULE	LISTED MEETINGS ARE OPEN TO ALL ATTENDEES	
7:00–17:30	Registration	South Pre-function Upper Concourse
7:00–17:30	Speaker Ready Room	L012
7:00–19:00	Coat and Luggage Check	Fourth Street Pre-function
7:00–8:00	Poster Setup	Exhibit Hall B
7:00–8:00	Endangered Species and Cultivated Landscapes Interest Group	L028
7:30–9:00	SETAC South-Central Regional Chapter	L013
8:00–9:00	ASTM International Subcommittee E50.47 – Biological Effects and Environmental Fate	L016
8:00–9:00	Carolinas SETAC	L017/L018
8:00–9:00	Morning Poster Session and Networking	Exhibit Hall B
8:00–17:30	Exhibits and Last Day to Bid in the Silent Auction	Exhibit Hall B
9:00–9:45	Daily Plenary: Richard Harrison, Ohio River Valley Water Sanitation Commission	Ballroom C
10:00–12:00	Morning Platform Sessions	see p. 30
12:00–13:30	Lunch (on your own)	
12:00–13:30	Women in SETAC Luncheon (sold out)	M107
12:30–13:30	Science Committee	L013
13:30–15:30	Afternoon Platform Sessions	see p. 32
13:30–15:30	Persistence Assessment Tool (PAT) Training	L016
13:30–15:30	UNEP's Science-Policy Panel to Contribute Further to the Sound Management of Chemicals and Waste and to Prevent Pollution	L006
14:30–15:30	North America Student Advisory Council	L027
15:30–17:30	Afternoon Poster Session and Networking	Exhibit Hall B
15:30–17:30	Metals Interest Group – Cooperative Research and Development Agreement	L017/L018
16:00–17:30	Sediments Interest Group	L016
16:30–17:30	SETAC Publications Symposium	L005/L009
17:00–18:00	Wildlife Toxicology Interest Group	L006
17:00–18:00	Chemistry Interest Group	L028
17:00–18:00	SETAC North America Senior Resources Affinity Group	L011
17:00–18:30	Global Plants Interest Group	L013
17:00–18:30	Global Soils Interest Group	L027
17:30–19:30	Early Career Social (sold out)	L004

DAILY PLENARY

Preserving Basin Waters for Beneficial Uses: Ensuring Public Health

9:00–9:45 | Ballroom C

In this presentation, Richard Harrison will provide an overview of why the Ohio River Valley Water Sanitation Commission (ORSANCO) was created in 1948 to address historic water pollution challenges in the Ohio River and its tributaries. It will explain how ORSANCO operates across numerous state and federal jurisdictional boundaries to fulfil its Compact Mission. ORSANCO is uniquely positioned through extensive collaboration with its numerous partners to complete complex scientific program work and studies to monitor and assess the Ohio River and its tributaries and to provide a platform for its member states to collaborate to fulfill its mission in an effective and efficient manner.

In addition to providing a broad description of its scientific program work, this presentation will highlight two recent examples of ORSANCO's program work. This will include an overview of ORSANCO's recent PFAS Project to assess the ambient PFAS levels in the Ohio River. It will also provide a recap of ORSANCO and its partners' recent successful response to the Norfolk Southern, East Palestine Train Derailment Spill and its impact on the Ohio River.

Richard Harrison is the Executive Director of the ORSANCO, the water pollution control agency for the Ohio River and its tributaries. An interstate agency, ORSANCO represents the states of Illinois, Indiana, Kentucky, Ohio, New York, Pennsylvania, Virginia, West Virginia and the federal government. Harrison was previously Vice President of Engineering, Distribution & Production at Northern Kentucky Water District. Harrison is a Past President and 25 year member of the Covington Rotary Club. He earned a Bachelor of Science in Civil Engineering from the University of Kentucky and is a Licensed Professional Engineer in the State of Kentucky.

NETWORKING EVENTS

Women in SETAC | Angelique Johnson

12:00–13:30 | M107 | SOLD OUT, Lunch Included

sponsored by 3M

Angelique Johnson will deliver a talk that will empower individuals to define "the business of you" and unlock their personal power to increase equity in the sciences. Through interactive activities, participants will learn how to define their individual vision and mission, assess the often overlooked assets they have at their disposal (cultural, intellectual, social, human, etc.), and create a plan to leverage those assets to increase equity in STEM for Women.

Early Career Social

17:30–19:30 | L004 | SOLD OUT

sponsored by WELLINGTON LABORATORIES

Join other early career SETACers on Tuesday evening after the poster session for a chance to make new connections while enjoying some light appetizers and beverages.

TUESDAY, 14 NOVEMBER

MORNING TALKS (T)

	10:00–10:15	10:20–10:35	10:40–10:55
Ballroom A	**Water Quality Criteria: Modeling Aquatic, Sediment and Soil Toxicity based on Mechanistic Chemical Interactions. Session honoring Dominic Di Toro** | A. Redman, K. Boone, D. Mount, J. Mcgrath		
	5.07.A.T-01 Equilibrium Partitioning and its Application to Non-Ionic Organic Contaminants in Sediments | **D. Mount**	**5.07.A.T-02** Equilibrium Partitioning (EqP) In Review: Metals - A Tribute to Dominic Di Toro | **W. Adams**	**5.07.A.T-03** Lessons from an Electrical Engineer in Advancing Models to Support Water Quality Management decisions | **T. Parkerton**
Ballroom B	**Pharmaceuticals in the Environment - A One Health Perspective - Part A** | B. Burruss, K. Beckhorn, S. Snyder, J. Laurenson		
	5.05.A.T-01 Incorporating Farm Management Practices to Support Simplified Environmental Assessment of Veterinary Drugs | **M. Fleming**	**5.05.A.T-02** Withdrawn	**5.05.A.T-03** Psychoactive drugs in non-target species – neurotoxicity of venlafaxine in zebrafish (Danio rerio) embryos | **K. Brotzmann**
Ballroom C	**Microplastics on the Planet: Input Sources, Transport Pathways and Eco-Environmental Impacts** | E. Zeng, R. Hale, C. Wong		
	4.16.A.T-01 Withdrawn	**4.16.A.T-02** Effects of different aging treatments on the adsorption of lindane and alachlor by polystyrene particles | **R. Cai**	**4.16.A.T-03** Sea anemones extract tin from polyvinyl chloride preproduction pellet consumption | **Z. Diana**
Ballroom D	**Environmental Fate of Organic Contaminants: Kinetics, Mechanisms, Transformation Products and Application of High-Resolution-Accurate Mass Methods** | S. Joudan, A. Brennan, C. McDonough, K. Stroski		
	4.06.T-01 Natural and Bio-stimulated Removal of Nitrotriazolone in Contrasting Freshwater Sediment Systems Using Stable Isotope Tracers | **T. Ariyarathna**	**4.06.T-02** Improving the Robustness of Persistence Assessments in Surface Water – Sources of Variability and New References Substances in the OECD 309 Test Guideline | **C. Hughes**	**4.06.T-03** Evaluating Droplet-Accelerated Chemistry for the UV-Photooxidative Remediation of PFAS | **R. Weatherholt**
Ballroom E	**Advancing Aquatic Toxicity Test Methods: Developments in Culturing, Testing and Data Analysis of Toxicity Test Methods** | T. Norberg-King, S. Clark, J. Bouldin, D. Soucek		
	2.01.T-01 Evaluation of Potential Alternatives in Marine Toxicity Testing: Comparing the Sensitivity and Feasibility of Three Alternatives | **D. Allen**	**2.01.T-02** Advancing In Vitro Fish Alternatives for Regulatory Effluent Toxicity Testing: Perspective On Optimization And Incorporation Into Current WET Guidelines. | **J. Scott**	**2.01.T-03** Interlaboratory Studies of the Ceriodaphnia dubia Chronic Test Method: The California Experience II | **D. Greenstein**
L005/L009	**Point-of-Use Drinking Water Exposome and Potential Human-Health Effects** | P. Bradley, K. Smalling, E. Medlock Kakaley		
	4.17.T-01 Drinking-Water Exposome Research: Northern Plains Nations | **P. Bradley**	**4.17.T-02** Cumulative Health Risk Assessment of Home Well Water Consumption, Crow Reservation, Montana | **J. Doyle**	**4.17.T-03** Community-based participatory research methods to understand spatial and seasonal variation in drinking water disinfection byproducts in eastern Kentucky | **J. Unrine**
L010/L014	**Complexity of the Immune System and Challenges on the Applicability of Immunotoxicology to Risk Assessment** | J. Corrales, D. Phelps, T. Sabo-Attwood		
	1.05.T-01 Lethal and Sublethal Effects of 6PPD-quinone on Coastal Cutthroat Trout | **P. Shankar**	**1.05.T-02** Modulation of Immune-relevant Transcriptional Profiles in Fish Tissues after Largemouth Bass Virus Infection | **T. Sabo-Attwood**	**1.05.T-03** Utilizing machine learning to automate analysis of white blood cell profiles in largemouth bass (Micropterus salmoides) and smallmouth bass (Micropterus dolomieu) | **J. Leet**
L015/L019	**Surrogacy in Endangered Species Pesticide Risk Assessment: Strategies for Testing and Conceptual Applications** | A. Krueger, T. Blickley, J. Steevens		
	5.06.T-01 Addressing Surrogacy Challenges using Bioinformatics with Special Focus on Endangered Species | **C. LaLone**	**5.06.T-02** Methodologies to Identify Surrogate Species Representative of Threatened and Endangered Species | **T. Lunsman**	**5.06.T-03** Endangered Species Evaluation Methods for a dsRNA Pesticide Product | **S. Teed**

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

MORNING TALKS (T)

11:00–11:15	11:20–11:35	11:40–11:55	
Water Quality Criteria: Modeling Aquatic, Sediment and Soil Toxicity based on Mechanistic Chemical Interactions. Session honoring Dominic Di Toro | A. Redman, K. Boone, D. Mount, J. Mcgrath			Ballroom A
5.07.A.T-04 The Role of Physiological Data in the Development of the Biotic Ligand Model and its Successors | **C. Wood**	**5.07.A.T-05** The Role of Environmental Chemistry in Models of Aquatic, Sediment, and Soil Toxicity. | **D. Di Toro**	**5.07.A.T-06** Reflections on Developing Useful Models of Aquatic, Sediment, and Soil Toxicity | **D. Di Toro**	
Pharmaceuticals in the Environment - A One Health Perspective - Part A | B. Burruss, K. Beckhorn, S. Snyder, J. Laurenson			Ballroom B
5.05.A.T-04 Effect of Soil Amendments on Mobility and Plant Uptake of PPCPs in Sandy Soil Irrigated with Wastewater. | **A. Mawof**	**5.05.A.T-05** New Approach Methodologies for the Ecological Assessment of Pharmaceuticals: An Overview of Recent Developments | **G. Ankley**	**5.05.A.T-06** Risk Assessment and Biological Effects of Pharmaceuticals Discharged via a Wastewater Treatment Plant in the Marine Environment | **D. Schlenk**	
Microplastics on the Planet: Input Sources, Transport Pathways and Eco-Environmental Impacts | E. Zeng, R. Hale, C. Wong			Ballroom C
4.16.A.T-04 Benthic Fallout: Quantifying Microplastic Accumulation in Rockfish Across Coastal California | **J. Colby**	**4.16.A.T-05** Microplastics and Plastic-Associated Contaminants in the Canadian Arctic Snow | **A. Granados Galvan**	**4.16.A.T-06** Assessing Environmental Fate of Floodwater-Associated Tire Road Wear Particles along Roadway-Salt Marsh Interfaces | **D. Norton**	
Environmental Fate of Organic Contaminants: Kinetics, Mechanisms, Transformation Products and Application of High-Resolution-Accurate Mass Methods | S. Joudan, A. Brennan, C. McDonough, K. Stroski			Ballroom D
4.06.T-04 Identification of Biotransformation Products in Rats Exposed to 6:1 Fluorotelomer Alcohol | **A. Brennan**	**4.06.T-05** LC-MS/MS Characterization and Automated Data Analysis of Biological Transformation Products of Per- and Polyfluoroalkyl Substances (PFAS) | **S. Liu**	**4.06.T-06** A portable database infrastructure for per- and polyfluorinated alykl substances high resolution accurate mass data | **J. Ragland**	
Advancing Aquatic Toxicity Test Methods: Developments in Culturing, Testing and Data Analysis of Toxicity Test Methods | T. Norberg-King, S. Clark, J. Bouldin, D. Soucek			Ballroom E
2.01.T-04 Improving the Laboratory Proficiency Processes for Whole Effluent Toxicity (WET) Test Methods | **T. Norberg-King**	**2.01.T-05** Adapting Whole Effluent Toxicity Testing Methods to Highly Variable Effluents- Challenges Presented by Discharges to Receiving Waters | **S. Zavala**	**2.01.T-06** Withdrawn	
Point-of-Use Drinking Water Exposome and Potential Human-Health Effects | P. Bradley, K. Smalling, E. Medlock Kakaley			L005/L009
4.17.T-04 Advances in Predicting Occurrence of Per- and Polyfluoroalkyl Substances (PFAS) in Groundwater Used for Drinking Water | **A. Tokranov**	**4.17.T-05** Contaminant Exposures and Estrogen Receptor Agonism Vary Strongly Within Community Drinking Water Systems and Across Bottled Water Sources | **T. Young**	**4.17.T-06** Per- and Polyfluoroalkyl Substances in United States Tapwater | **K. Smalling**	
Complexity of the Immune System and Challenges on the Applicability of Immunotoxicology to Risk Assessment | J. Corrales, D. Phelps, T. Sabo-Attwood			L010/L014
1.05.T-04 Developmental Immunotoxicity of Novel and Emerging Per- and Polyfluoroalkyl Substances | **D. Phelps**	**1.05.T-05** Per- And Polyfluoroalkyl Substances (PFAS) Impact Macrophage Function in vitro | **A. Connors**	**1.05.T-06** Bioactivity Assessment of Environmental Waters Using Immune Cell Lines | **N. Hussain**	
Surrogacy in Endangered Species Pesticide Risk Assessment: Strategies for Testing and Conceptual Applications | A. Krueger, T. Blickley, J. Steevens			L015/L019
5.06.T-04 Withdrawn	**5.06.T-05** Surveys of Agricultural Field-Edge Milkweed Habitats to Refine the Insect-Control Maize Risk Assessment for Monarch Butterfly | **J. Fischer**	**5.06.T-06** Endangered Species Pesticide Risk Assessment: Opportunities and Implications for Surrogacy | **A. Krueger**	

TUESDAY, 14 NOVEMBER

AFTERNOON TALKS (T)

	13:30–13:45	13:50–14:05	14:10–14:25
Ballroom A	**Water Quality Criteria: Modeling Aquatic, Sediment and Soil Toxicity based on Mechanistic Chemical Interactions. Session honoring Dominic Di Toro** | A. Redman, K. Boone, D. Mount, J. Mcgrath		
	5.07.B.T-01 Application of a Mixture-based Biotic Ligand Model for Development of Sediment Remedial Goals for Metals | **R. Gensemer**	**5.07.B.T-02** A Simple Narcotic Toxicity Model Extended to Complex Environmental Toxicity Issues | **J. Mcgrath**	**5.07.B.T-03** Target Site Model: Predicting Aquatic Toxicity of Organic Compounds with Various Modes of Action | **K. Boone**
Ballroom B	**Pharmaceuticals in the Environment - A One Health Perspective - Part B** | K. Johnson-Couch, M. McArdle, W. Hunter		
	5.05.B.T-01 Combatting Antimicrobial Resistance in Europe: Strategies and Regulatory Actions for the Environment | **K. Westphal-Settele**	**5.05.B.T-02** Developing a National Scale Monitoring Program for Antimicrobial Resistance in Surface Waters | **A. Franklin**	**5.05.B.T-03** Analysis of the Prevalence of Antibiotic Resistant (AR) Bacteria, AR Genes, and Antibiotic Residues in a Mixed-Use Watershed | **J. Frye**
Ballroom C	**Microplastics on the Planet: Input Sources, Transport Pathways and Eco-Environmental Impacts** | E. Zeng, R. Hale, C. Wong		
	4.16.B.T-01 Microplastic Extraction Methods in Complex Water Samples- Effects on Aged and Pristine Microplastics | **R. Akhbarizadeh**	**4.16.B.T-02** Laser-Based Spectroscopy for Automated Identification of Microplastics | **L. Tisinger**	**4.16.B.T-03** Insight into the Eco-corona formation and interaction of environmentally weathered microplastics using Fourier transform infrared spectroscopy (FTIR) and spectra pattern recognition techniques. | **O. Fadare**
Ballroom D	**Measurement Challenges and How to Tackle Them: Per and Polyfluoroalkyl Substances (PFAS) and Other Contaminants of Emerging Concern (CEC)** | J. Bangma, H. Korb, L. Ispiryan, J. Reiner		
	4.14.T-01 Using Cheminformatics Approaches to Develop a Structure Searchable Database of Analytical Methods | **A. Williams**	**4.14.T-02** Improved Automated Sample Preparation for Persistent Organic Pollutants using Parallel Gas Assisted Accelerated Solvent Extraction and Automated Solvent Concentration | **C. Shevlin**	**4.14.T-03** Exploring the use of DLLME cleanup approach in the detection of EPA 1633 PFAS target list in mulch, clam tissue and sediment samples. | **H. Nyoni**
Ballroom E	**Characterization of Complex Mixtures With New Approach Methodologies** | A. Biales, D. Bencic, T. Purucker		
	1.03.T-01 AI bridged bioactivity, structure and HRMS to decipher nontarget toxicants in complex mixtures | **J. You**	**1.03.T-02** The use of previous chemical analysis datasets and predictive molecular level toxicity signature workflows in aquatic toxicity testing: a case study of the Dallas Metroplex | **E. Schniederjan**	**1.03.T-03** Biomimetic extraction with Polydimethylsiloxane as a robust and sensitive method for determination of toxicity of petroleum mixtures in non-amended and amended sediments | **A. Redman**
L005/L009	**Advances in Human Biomonitoring** | C. Huset, J. Park		
	4.02.T-01 Standard Reference Materials for Quality Assurance Measurements of Contaminants of Emerging Concern | **J. Reiner**	**4.02.T-02** Self-Collected PFAS Blood Test using Volumetric Microsampling Performs Well Compared to the Traditional Serum Approach in a Community with Elevated Exposures | **C. Carignan**	**4.02.T-03** Trace analysis of PFAS in dried blood spots and liquid whole blood | **E. Lin**
L010/L014	**Healthy Environment - Indigenous Knowledge System (IKS) Informed Management of Environmental Contaminants** | M. Olsgard, S. Fernandes, G. Oberg, T. Canfield		
	7.03.T-01 How might we begin decolonizing chemicals management in Canada? | **E. Eronen**	**7.03.T-02** Loxiwe Lok'wali: From Our Past To Inform Our Future: Indigenous Science and Technologies | **G. Woodburn**	**7.03.T-03** Discussion - Indigenous Knowledge System (IKS) Informed Management of Environmental Contaminants | **M. Olsgard**
L015/L019	**New Developments in Pesticide Labeling and Risk Mitigation** | A. Nickelson, B. McGaughey, E. Arnold		
	7.05.T-01 National Marine Fisheries Service (NMFS) Approach to Mitigating the Effects of Pesticides | **R. DeWitt**	**7.05.T-02** State and SFIREG Roles in Shaping Effective Pesticide ESA Mitigation, Education, and Regulation | **G. Bahr**	**7.05.T-03** Endangered Species Act: Actions by the Weed Science Society of America to Provide Science-Based Information to Regulators | **B. Chism**

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

AFTERNOON TALKS (T)

14:30–14:45	14:50–15:05	15:10–15:25	
Water Quality Criteria: Modeling Aquatic, Sediment and Soil Toxicity based on Mechanistic Chemical Interactions. Session honoring Dominic Di Toro | A. Redman, K. Boone, D. Mount, J. Mcgrath			Ballroom A
5.07.B.T-04 Development and Applications of Phototoxic Target Lipid Model (PTLM) to Predict Photo-enhanced Toxicity of PAHs and Petroleum | **S. Marzooghi**	**5.07.B.T-05** EqP: Evaluation of Biota Sediment Accumulation Factors (BSAFs) for PCBs and PCCD/Fs in New York-New Jersey Harbor | **K. Farley**	**5.07.B.T-06** Development of Linear Free Energy Relationships (LFERs) for Predicting Speciation of Cobalt Organic Metal Salts (OMS) | **R. Carbonaro**	
Pharmaceuticals in the Environment - A One Health Perspective - Part B | K. Johnson-Couch, M. McArdle, W. Hunter			Ballroom B
5.05.B.T-04 Reducing health risks posed by tetracycline-resistant Aeromonas hydrophila under oxytetracycline stress in a One Health framework | **T. Lu**	**5.05.B.T-05** Withdrawn	**5.05.B.T-06** Profiles Of Selected Antibiotic Residues and Resistomes in Urban Aquatic Systems Of Lusaka, Zambia Using High-Throughput Quantitative PCR Analysis | **P. Kairigo**	
Microplastics on the Planet: Input Sources, Transport Pathways and Eco-Environmental Impacts | E. Zeng, R. Hale, C. Wong			Ballroom C
4.16.B.T-04 Development of a Device for the One-pot Isolation and Digestion of Microplastics | **M. Ross**	**4.16.B.T-05** Withdrawn	**4.16.B.T-06** Quantifying Microfiber Emissions from Clothes Dryers | **M. Arienzo**	
Measurement Challenges and How to Tackle Them: Per and Polyfluoroalkyl Substances (PFAS) and Other Contaminants of Emerging Concern (CEC) | J. Bangma, H. Korb, L. Ispiryan, J. Reiner			Ballroom D
4.14.T-04 Per- and Polyfluoroalkyl Substances (PFAS) Interferences in Food Matrices | **B. Ng**	**4.14.T-05** Evaluating the effects of storage temperature and holding time on per- and polyfluoroalkyl substances in fish plasma | **Z. Hopkins**	**4.14.T-06** Analyzing PFAS via Online Solid-Phase Extraction Coupled with LC-MS/MS: Application to EPA Method 1633 Compound List | **L. Ispiryan**	
Characterization of Complex Mixtures With New Approach Methodologies | A. Biales, D. Bencic, T. Purucker			Ballroom E
1.03.T-04 Effects of Paper Mill Effluent on the Reproductive Axis of the Bullhead Minnow, Pimephales vigilax | **A. DeLoache**	**1.03.T-05** Multigenerational Transcriptomic Changes and Isoform Usage Resulting from Chronic Exposure to Contaminant Mixture Associated with Agricultural Land Use. | **M. See**	**1.03.T-06** Toxicity identification evaluation for hydraulic fracturing flowback and produced water during shale gas exploitation in China: Evidence from tissue residues and gene expression | **F. Wu**	
Advances in Human Biomonitoring | C. Huset, J. Park			L005/L009
4.02.T-04 Screening and Quantitation of Environmental Pollutants in Serum Using Ultra–high Performance Liquid Chromatography/Tandem Mass Spectrometry | **C. Chen**	**4.02.T-05** Non-Invasive Monitoring of Human Exposure to Environmental Contaminants – Combining Different Personal Passive Samplers with Indoor Air Measurements | **S. Abel**	**4.02.T-06** Implications of Climate Change for Dietary Mercury Exposure in High Latitude Subsistence Communities | **K. Nielsen**	
Healthy Environment - Indigenous Knowledge System (IKS) Informed Management of Environmental Contaminants | M. Olsgard, S. Fernandes, G. Oberg, T. Canfield			L010/L014
7.03.T-04 Withdrawn	**7.03.T-05** Indigenous Engagement to Inform Subsistence Human Health Risk Assessment and Focus Remedial Planning | **A. Blanc**	**7.03.T-06** Derivation of Water Quality Guidelines for the Protection of Indigenous Use | **M. Olsgard**	
New Developments in Pesticide Labeling and Risk Mitigation | A. Nickelson, B. McGaughey, E. Arnold			L015/L019
7.05.T-04 The PULA Path - From Likely Jeopardy to Product Registration | **C. Priest**	**7.05.T-05** Prioritization of Resources for Assessing Potential Pesticide Risk and Mitigations for Federally Listed Threatened and Endangered Species | **M. Kern**	**7.05.T-06** Withdrawn	

Poster Schedule

Setup: 7:00–8:00 (see p. 10 for map of posters)
Take down: 17:30–17:45

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

Morning Poster Session: 8:00–9:00
Lunch Break: 12:00–13:30
Afternoon Poster Session: 15:30–17:30

Late-Breaking Science Posters

Late-breaking science posters start with P-Tu-223 on Tuesday. For a list of presentations, please visit the virtual platform.

Characterization of Complex Mixtures With New Approach Methodologies | A. Biales, D. Bencic, T. Purucker

1.03.P-Tu-001 An Avian 3D Spheroid Hepatic Cell Assay for Monitoring Bioactivity Related to Naphthenic Acid Contamination in Wetlands Near Tailings Ponds in the Athabasca Oil Sands Region | **L. Van Raalte**

1.03.P-Tu-002 Using Transcriptomic Points of Departure (tPODs) to Assess the Toxicity of Oils in Atlantic Cod (Gadus morhua) Larvae | **J. Head**

1.03.P-Tu-003 Identification of causative toxicants in river waters using bioassays with alga and daphnid and multiple-component chemical analysis | **H. Watanabe**

Complexity of the Immune System and Challenges on the Applicability of Immunotoxicology to Risk Assessment | J. Corrales, D. Phelps, T. Sabo-Attwood

1.05.P-Tu-004 Identifying Chemical Hazards in Aquatic Systems: Validation of a Small Fish Model to Screen for Immunotoxic Chemicals | **M. Sellin Jeffries**

1.05.P-Tu-005 Assessing Changes in Gene Expression and Immune Function during Immune Aging in the Medaka Model (Oryzias latipes) | **E. DiBona**

1.05.P-Tu-006 Investigating How Per- and Polyfluoroalkyl Substances (PFAS) Suppress Neutrophil Function | **E. Hepworth**

Advanced Omics Applications in Systematic Precision Toxicology | W. Huang, C. Lavelle, W. Henderson, A. Biales

1.08.P-Tu-008 Leveraging Multi-omics to Elucidate Mechanistic Pathways Associated with Developmental Exposures to Perfluorooctane Sulfonate (PFOS) and Perfluorohexane Sulfonate (PFHxS) in Mummichog | **Y. Rericha**

1.08.P-Tu-009 Fathead Minnow Omics Resources for Comprehensive Toxicological Assessment | **W. Huang**

1.08.P-Tu-010 Multi-omics assessment of toxicological responses of fathead minnows to 17-ethynylestradiol (EE2) exposure | **W. Huang**

1.08.P-Tu-011 Bottom-up Proteomics Analysis for Adduction of the Broad Spectrum Herbicide Atrazine to Mammalian Histone Proteins | **R. Letcher**

1.08.P-Tu-012 Cmap-ES: Connectivity Mapping with Enrichment and Semantic Analysis | **R. Wang**

1.08.P-Tu-013 High-Throughput Transcriptomic-based Points of Departure for Data Poor Chemicals Detected in the Great Lakes Basin | **J. Cavallin**

1.08.P-Tu-014 High Throughput Transcriptomic-based Points of Departure Across Modes of Action in Larval Fathead Minnow (Pimephales promelas) | **K. Flynn**

1.08.P-Tu-015 Stress biomarker associations with phthalate ester exposure in two species of captive delphinids | **L. Lemos**

1.08.P-Tu-016 Multi-omics Analysis Pipeline for Toxicological Exposure Data Integration and Visualization | **O. Torano**

1.08.P-Tu-017 Delving into the Depths: Illuminating the Microbial Landscape in Abu Dhabi's Wastewater through High-Resolution WGS-based Taxonomic Profiling | **V. Kusuma**

1.08.P-Tu-018 Screening for emerging contaminants in soil, dust, and food in Miami area using Non-Targeted Analysis and Chemometrics: Implications to Children's Health and Risk Assessment | **L. Cappelini**

1.08.P-Tu-019 Targeted and untargeted metabolomics for deriving benchmark doses (BMDs) in fathead minnows | **W. Henderson**

1.08.P-Tu-020 Exploring the Developmental Proteome and Life-stage Specific Sensitivities of Larval Zebrafish to a Model Toxicant | **A. Henke**

1.08.P-Tu-021 Gene Expression-Based Dose Response Analysis of Short-Term Rat and Fathead Minnow Exposures to Two Metal Sulfates Indicates Chronic Chemical Potency | **L. Wehmas**

1.08.P-Tu-023 Metabolomics study of effects of pollutant mixture released from grafted adipose tissues on organs of mice | **S. Li**

1.08.P-Tu-024 EE2-induced Differential Isoform Usage in Fathead Minnows | **J. Fetke**

Cell-Based Approaches for Ecotoxicity Assessments | M. Minghetti, R. Lavado

1.10.P-Tu-025 Assessing the Bioactivity of Surface Waters with Metabolomics Using Multiple Cell Lines | **D. Ekman**

1.10.P-Tu-026 Effects of short-chain per- and polyfluoroalkyl substances (PFAS) on toxicologically relevant gene expression profiles in a liver-on-a-chip model | **R. Lavado**

1.10.P-Tu-027 Metabolic disruption and mechanisms of toxicity caused by bisphenol analogs in human in vitro cell models | **R. Rifa**

1.10.P-Tu-028 Know Your Chemical, Know Your System – Why In Vitro Disposition and Bioavailability Matter | **A. Sangion**

1.10.P-Tu-030 Assessing the Toxicity of the Lampricide 4-nitro-3-(trifluoromethyl) phenol (TFM) with Gill Cell Lines from Rainbow Trout and Lake Sturgeon using OECD Test Guideline 249 | **N. Carmosini**

1.10.P-Tu-031 Combined effects and toxicological interactions of short-chain per- and polyfluoroalkyl substances (PFAS) binary mixtures in human kidney cells (HEK-293) | **A. Mockros**

1.10.P-Tu-032 Antimycin-a Rainbow Trout Gill Cell (RTGill-W1) Cytotoxicity Compared to Whole Organism Toxicity | **G. Saari**

1.10.P-Tu-033 Cytotoxicity and transcriptomic points of departure for 19 environmentally relevant pesticides on multiple human and fish cell lines | **K. Mittal**

1.10.P-Tu-035 In Vitro Cytotoxicity Assays Using RTgill-W1 Cells for Toxicity Identification and Reduction Evaluation (TIE/TRE) Strategies for Wastewater and Ambient Water Analysis | **J. Scott**

Advancing the Use of Behavioral Endpoints and Methods in Assessments of Environmental Contaminants. | M. Bertram, C. Flinders, M. Saaristo, D. Sullivan

1.13.P-Tu-036 Frontiers in Quantifying Wildlife Behavioural Responses to Chemical Pollution | **M. Bertram**

1.13.P-Tu-037 EthoCRED: A Framework to Guide Reporting and Evaluation of the Reliability and Relevance of Behavioural Ecotoxicity Studies | **M. Bertram**

1.13.P-Tu-038 Choosing the right organism for use in sediment avoidance behavior tests; how other behaviors affect this choice. | **R. Yeardley**

1.13.P-Tu-039 Behavioral Impacts of Three Acute Phthalate Exposures on Larval Fathead Minnows | **M. Bell**

1.13.P-Tu-040 Plastic leachates stimulate chemosensory responses in sea anemones | **Z. Diana**

1.13.P-Tu-043 Selection Preference in Hyalella azteca: A Behavioral Assay for Ecotoxicology | **S. Nutile**

1.13.P-Tu-044 Behavioral Endpoints as Lines of Evidence: Current Use in Regulations and Considerations for Assessment of Toxicity | **A. Steele**

1.13.P-Tu-045 Linking conventional- and behavioural endpoints: impact of sediment-associated pharmaceuticals in deposit-feeders | **H. Selck**

Detection, Toxicity and Environmental Risk of Sunscreens, Cosmetic Products and OTC Drugs | C. Mitchelmore, I. Davies

1.14.P-Tu-046 Spatial and temporal relationships of organic UV filter concentrations in seawater from The Florida Keys, USA. | **C. Mitchelmore**

1.14.P-Tu-047 Thyroid disrupting potential and related toxicological effects of BEMT in embryo-larval zebrafish (Danio rerio) | **Y. Park**

1.14.P-Tu-048 Distributions of UV Absorbents in the Surface Water of Habitats for the Endangered St. Lawrence Estuary Beluga and Southern Resident Killer Whale in Canada | **A. Ben Chaaben**

1.14.P-Tu-049 Trophodynamics of Organic UV Filters, Benzotriazole UV Stabilizers and Aromatic Secondary Amines in the Food Web of the St. Lawrence Estuary Belugas | **A. Trinquet**

1.14.P-Tu-050 Understanding the Behavior of Common Ultraviolet Filtering Compounds Under Simulated Environmental Conditions | **C. Coleman**

1.14.P-Tu-052 Freshwater Environmental Safety Assessment of UV filters in the United States | **E. Burns**

1.14.P-Tu-053 Occurrence of Organic UV filters in Coastal Waters and the Coral Acropora cervicornis from the Florida reef tract | **D. Renegar**

1.14.P-Tu-054 Investigating Sunscreen Rinse-off: in vivo and in vitro Differences of Formula Attributes and the Implications for Environmental Emissions of UV Filters | **A. Carrao**

1.14.P-Tu-055 The Development of the MERCI Modeling Framework to Evaluate the Exposure of Sunscreen and Cosmetic Ingredients to Marine and Freshwater Ecosystems | **M. Roberts**

Advantages of Using Lab- and Field-Collected Invertebrates and Fish in Ecotoxicology: Challenges and Opportunities | S. Arnott, C. Barata, B. Kefford, J. Lazorchak

1.16.P-Tu-057 Establishing Gladioferens pectinatus as Regional Indicator Species for New Zealand | **A. Barrick**

1.16.P-Tu-058 Mercury quantification in freshwater sediments from an agricultural population in northern Colombia using Caenorhabditis elegans as a toxicity model organism. | **B. Palacio**

1.16.P-Tu-059 Assessing Invertebrate Community Level Resistance to Insecticides in the San Francisco Bay Delta | **I. Polunina**

Advancing Aquatic Toxicity Test Methods: Developments in Culturing, Testing and Data Analysis of Toxicity Test Methods | T. Norberg-King, S. Clark, J. Bouldin, D. Soucek

2.01.P-Tu-061 Toxicity Identification and Evaluation (TIE) for Ammonia Contaminated Sediment and Metabolomics-Based Effect-Directed Assessment (EDA) using Glyptotendipes Tokunagai | **R. Singh**

2.01.P-Tu-062 Developing a Novel Dietary Toxicity Test with the Freshwater Amphipod, Hyalella azteca | **J. Fischer**

2.01.P-Tu-063 The first 30 years of sediment bioaccumulation testing with Lumbriculus variegatus: a meta-analysis. | **W. Mehler**

2.01.P-Tu-065 Distributions of oxygenated PAHs in sediments of Japanese coastal areas and their risk evaluations with toxicities in fish embryos | **S. Uno**

2.01.P-Tu-066 Evaluation Method of Ecotoxicity for Biodegradable Plastics | **Y. Okazaki**

2.01.P-Tu-067 Testing Effluent Samples From Canadian Pulp And Paper Mills Using The Standard Ceramium tenuicorne ISO Test Method And Canadian Add-On Procedure | **M. Gallant**

Freshwater Salinization: Causes, Effects and Working Towards Solutions | P. Gillis, D. Soucek, C. Wood, B. Humeniuk

2.12.P-Tu-069 Measuring Intraspecific Variation in Tolerance to Road Salt for Daphnia Populations Sampled Along Spatial Gradients in Lake Chloride Levels | **B. Limkilde**

2.12.P-Tu-070 Toxicity Study for Supporting Louisiana State Water Quality Standards for Chloride and Sulfate | **N. Wang**

2.12.P-Tu-071 The Physicochemical Characterization of Natural Dissolved Organic Carbons (DOCs) and Their Physiological Effects in Pacific sanddab (Citharichthys sordidus) as a Function of Salinity. | **C. Morris**

2.12.P-Tu-072 Evaluating Response of Several Freshwater Species to Major Ion Mixtures: Inferences Regarding Toxic Mechanisms, Exposure Metrics, and Integrative Assessment | **R. Erickson**

2.12.P-Tu-073 Evaluating Response of Several Freshwater Species to Major Ion Mixtures: Interspecies Comparisons Regarding Toxicity Mechanisms and Effects of Background Water | **R. Erickson**

2.12.P-Tu-074 Effect of NaCl on Feeding Behaviors of D. magna and H. azteca | **P. Kohler**

2.12.P-Tu-075 The Interactive Effects of Major Ions, Dissolved Organic Carbon and pH on the Electrical Responses of the Gill in Rainbow Trout (Oncorhynchus mykiss) | **C. Morris**

2.12.P-Tu-076 A Critical Review of Laboratory Toxicity Data for Species Sensitivity Distributions of Chloride Salts in Freshwater | **B. Humeniuk**

Novel Methods and Approaches for Assessing Effluents and Ambient Water Toxicity | C. Flinders, W. Goodfellow, T. Hoang, J. Lazorchak

2.13.P-Tu-077 Standardization of Acute and Short-term Chronic Methods for Whole Effluent and Receiving Water Toxicity Using the Mayfly, Neocloeon triangulifer. | **P. Weaver**

2.13.P-Tu-078 Effects of Aging on Acute Toxicity of Candidate Fluorine-Free AFFF Replacement Formulations. | **D. Moore**

2.13.P-Tu-080 Application of an Effect-based Method, the Water Cytotoxicity Test, for Water Quality Monitoring in Alberta, Canada | **B. Moe**

2.13.P-Tu-081 Embryotoxicity of Chlorpyrifos on Gastrulation, Segmentation, and Hatching in Clarias gariepinus (Burchell, 1822) | **P. Opute**

2.13.P-Tu-082 Chlorantraniliprole and cyantraniliprole toxicity to the standard surrogate species Daphnia magna and a native cladoceran Simocephalus vetulus | **S. Eckard**

General: Aquatic Toxicology, Ecology and Stress Response | J. Wise, C. Voros, A. Schmidt

2.14.P-Tu-084 Red Drum Hematological and Biochemical Health Relative to Pharmaceutical Exposure Across Florida Estuaries | **S. Trabelsi**

2.14.P-Tu-086 The Role of Hydrogen Peroxide As Seed Priming for Spring Barley Plant (Hordeum Vulgare L.) Resistance to Different Abiotic Stressors | **T. Omotosho**

2.14.P-Tu-087 Are Pollutants Breaking Reproductive Barriers and Facilitating Fish Hybridization? - A Case Study | **W. Ramírez-Duarte**

2.14.P-Tu-088 Characterizing the Distributions and Bioavailability of Per- and Polyfluoroalkyl Substances on the Savannah River Site, a National Environmental Research Park | **E. Webb**

2.14.P-Tu-089 Effects of Warming and Hyposalinity On The Blue Mussel (Mytilus edulis) : A Multi-Scale Approach | **A. Zalouk**

2.14.P-Tu-090 Binning Data to Support Derivation of Aquatic Life Ambient Water Quality Benchmarks for Data-Limited Perfluorinated Sulfonic and Carboxylic Acids | **M. Elias**

2.14.P-Tu-091 Impact of Dissolved Organic Carbon and Divalent Cations on Per- and Polyfluoroalkyl Substances Bioaccumulation in Freshwater Algae | **X. Yun**

2.14.P-Tu-092 Thyroid and Sex Hormone Disrupting Effects of DEHTP in Embryo-Larval and Adult Male Zebrafish (Danio rerio) | **Y. Ihn**

2.14.P-Tu-093 Pre and post remediation and restoration analysis of benthic macroinvertebrate size spectra in the Upper Arkansas River, Colorado | **T. Beach**

2.14.P-Tu-094 Evaluations of Ziram toxicity to non-target invertebrate and fish species | **N. Kemble**

2.14.P-Tu-095 Assessment Of The Effects Of Cadmium, Samarium And Gadolinium On The Blue Mussel (Mytilus edulis): A Biochemical And Lipidomic Approach | **A. Zalouk**

2.14.P-Tu-096 Impacts of Chronic Nickel Exposure on the Growth of Native Crayfish (Faxonius virilis) | **A. Moore**

2.14.P-Tu-097 Long-term Trends of Pyrethroid-driven Toxicity in California Watersheds | **B. Khan**

2.14.P-Tu-098 Bioaccumulation of Rare Earth Elements Nd, Pr, and Y, Individually and in Mixtures to Daphnia magna | **C. Do**

2.14.P-Tu-099 Don't Blame the Nano: Nano Ink Toxicity to Daphnia pulex | **M. Ballentine**

2.14.P-Tu-101 Grazing effects of an obligate herbivore fish species on periphyton biomass in a stream mesocosm study | **C. McKernan**

2.14.P-Tu-102 Exposure to Di-(2-propylheptyl)-phthalate (DPHP) Causes Thyroid Disruption in Zebrafish | **S. Park**

2.14.P-Tu-104 Ecotoxicity of Water-Soluble Synthetic Film | **N. Tatarazako**

2.14.P-Tu-106 Spatial and Temporal Variability of Per- and Polyfluoroalkyl Substances (PFAS) in Environmental Media and Biota Along an AFFF-Impacted Stream Gradient | **A. Brown**

2.14.P-Tu-109 Gaining Insight on the Effects Anticoagulant Rodenticides have on Aquatic Species by Establishing Lethality and Sub-lethality Curves for Coho Salmon (Oncorhynchus kisutch) | **L. Pavord**

2.14.P-Tu-110 Acute Toxicity of 4,4'-DDE, Bifenthrin, and Fipronil to Juvenile Chinook Salmon (Oncorhynchus tshawytscha) Using Whole Body Residues | **K. Knaub**

2.14.P-Tu-111 Wetland Spiders as Monitors of Contaminant Export from Industrially Impacted Wetlands | **D. Fletcher**

2.14.P-Tu-114 Development of a Response Spectrum Framework for Bifenthrin and Fipronil Using Internal Body Residues in Juvenile Chinook Salmon (Oncorhynchus tshawytscha) | **K. Knaub**

2.14.P-Tu-115 Characterizing Fluoxetine Metabolism in Four Fish Species Using Michaelis-Menten Enzyme Kinetics | **P. van den Hurk**

2.14.P-Tu-116 Food web structures in Lake Superior revealed by stable isotopes help to trace bioaccumulation pathways of PCBs | **L. Hazra**

2.14.P-Tu-118 An Evaluation of Aquatic Receptor Sensitivities to Novel Fluorine-Free Firefighting Foam Versus Short Chain PFAS AFFF Products | **M. Hudson**

2.14.P-Tu-120 Unintended Consequences of Stream Restoration: Iron Ecotoxicity in Regenerative Stream-water Conveyance Systems | **M. Gaesser**

2.14.P-Tu-121 Changes in Carbon and Nitrogen Stable Isotopes and Fatty Acid Biomarkers in Various Life Stages of the Laboratory Mayfly (Neocloeon triangulifer) | **A. Plummer**

2.14.P-Tu-122 Evaluating Microcystin in Water and Fish Tissue from Four Reservoirs in the Georgia Piedmont, USA | **J. Smith**

2.14.P-Tu-123 Effect of ion-exchanger to inorganic chemicals using Daphnia magna | **T. Abe**

2.14.P-Tu-126 An evaluation of the toxicity of chemical mixtures in aquatic environment; integration of Ostracodtoxkit Ftm bioassay toxicity, hepatotoxicity and oxidative stress in albino rats | **A. Onwurah**

2.14.P-Tu-127 Congruency of environmental DNA (eDNA) metabarcoding approach to conventional fish communities assessments in low order streams | **G. Tetreault**

2.14.P-Tu-128 An Evaluation of Alternative Approaches to Fish Testing to Meet the Needs for the National Pollutant Discharge Elimination System (NPDES) Permitting Program: An Industry Perspective | **K. Harber**

2.14.P-Tu-129 Using a probabilistic approach in an ecological risk assessment PFAS food-web based model | **K. Parakal**

2.14.P-Tu-130 Freshwater Insect-Mediated Polychlorinated Biphenyl Transfer from Freshwater and Terrestrial Ecosystems | **P. Blum**

2.14.P-Tu-131 Mercury Contamination of Wolf Spiders from Northwest Greenland | **B. Strang**

2.14.P-Tu-132 Current Contaminant Concentrations of Blue Crab (Callinectes sapidus) from New York State Waters | **J. Bourque**

Advances in Human Biomonitoring | C. Huset, J. Park

4.02.P-Tu-133 Contamination assessment and potential human health risks of heavy metals in urban soils from Grand Forks, North Dakota, USA | **M. Saleem**

4.02.P-Tu-134 Disproportionate Health Risks of PM2.5 in Bishkek, Kyrgyzstan | **J. Madykova**

4.02.P-Tu-136 Assessing Aquatic and Human Health Risks Associated With Metal Occurrence in the Syr Darya and the Shardara Reservoir, Kazakhstan | **D. Allen**

4.02.P-Tu-137 The Environmental Health Burden of Pesticides: A National (United States) Assessment. | **A. Kolok**

4.02.P-Tu-138 Risk evaluation of toxic effects of pool water; protein oxidation in experimental rats and extrapolation to exposed children. | **A. Onwurah**

Environmental Fate of Organic Contaminants: Kinetics, Mechanisms, Transformation Products and Application of High-Resolution-Accurate Mass Methods | S. Joudan, A. Brennan, C. McDonough, K. Stroski

4.06.P-Tu-141 Degradation Kinetics of Veterinary Antibiotics and Estrogenic Hormones in a Claypan Soil | **A. Moody**

4.06.P-Tu-142 Advances in PFAS Analysis: Exploring the use of DLLME cleanup and LC HRAM for the analysis of EPA 1633 PFAS target list in clam tissue, mulch, and sediment extracts. | **H. Nyoni**

4.06.P-Tu-144 Ion Mobility Enabled Workflow for Standard-Free and Non-Targeted Identification of PFAS in Water Samples | **S. Putnam**

Measurement Challenges and How to Tackle Them: Per and Polyfluoroalkyl Substances (PFAS) and Other Contaminants of Emerging Concern (CEC) | J. Bangma, H. Korb, L. Ispiryan, J. Reiner

4.14.P-Tu-145 Development of an Analytical Method for Simultaneous Determination of PFAS in Japanese Drinking Water by Liquid Chromatography/Tandem Mass Spectrometry | **N. Kobayashi**

4.14.P-Tu-146 Which Side are You On? The Interesting Partitioning Behavior of Ionic Per- and Polyfluoroalkyl Substances in Octanol/Water Systems. | **W. Backe**

4.14.P-Tu-147 Verification of Free Chemical Concentration in 96-well Plate-based High throughput testing of Per- and Polyfluoroalkyl Substances (PFAS) | **A. Kasparek**

4.14.P-Tu-148 Canadian Building Materials are Significant Sources of Per- and Polyfluoroalkyl Substances (PFASs) to the Environment | **M. Liu**

4.14.P-Tu-149 Enrichment of PFAS in the Surface Microlayer of Water Bodies Does Not Cause Significant Bias in Bulk Water Samples | **S. Roark**

4.14.P-Tu-150 Enabling State Adoption of Non-Targeted Analysis (NTA) to Address Pressing Public Health Needs: Maryland, Minnesota, and California Leading the Way | **H. Whitehead**

4.14.P-Tu-151 Development of A Solid-Phase Extraction Method to Distinguish Inorganic and Organic Fluorine and to Separate Ultrashort from Longer Chain PFAS | **Y. Jin**

4.14.P-Tu-152 Assessment of PFAS in fluorinated polymers applied to firefighting gear | **P. Fraught**

4.14.P-Tu-153 Development of A Sensitive Method for Determination of Per and Polyfluoroalkyl Substances (PFAS) in Biosolids Leachates | **J. Ocheje**

4.14.P-Tu-154 Techniques to Determine Total PFAS and Fluorine Mass Balance in Biological Samples: A Review | **N. Perera**

4.14.P-Tu-155 Characterization of dissolved and colloidal PFAS in textile manufacturing wastewater impacting North Carolina drinking water sources | **P. Faught**

4.14.P-Tu-156 Temporal variability of PFAS precursors in wastewater treatment processes | **J. Van Buren**

4.14.P-Tu-157 Super Critical Water Oxidation Coupled with Colorimetric Fluoride Detection for Total Organic Fluorine Analysis in Environmental Samples | **H. Teed**

Microplastics on the Planet: Input Sources, Transport Pathways and Eco-Environmental Impacts | E. Zeng, R. Hale, C. Wong

4.16.P-Tu-158 Quantifying Suspended Microplastics in the Water Column with the Urbanized Patapsco River, Maryland | **O. Bradley**

4.16.P-Tu-159 Bioactivity of Microplastic Containing Environmental Debris and Laboratory Produced Plastic Particle Mimetics | **S. Morgan**

4.16.P-Tu-160 Effect of Microplastic on the Interspecific Competition between Exotic and Domestic Species of Daphnia | **C. Kim**

4.16.P-Tu-161 Establishing a high efficiency and practical method for analysis of microplastics in various matrices. | **W. Lao**

4.16.P-Tu-162 Effects of Microplastic Ingestion on Dengue Virus Serotype 2 Infection and Dissemination in Aedes aegypti and Aedes albopictus Mosquitoes | **G. McConnel**

4.16.P-Tu-163 Microplastics in Gomti and Saryu Riverine Systems, India: A Baseline Assessment Study | **A. Kumar Mishra**

4.16.P-Tu-164 Determining the Drivers of Spatial and Seasonal Microplastic Characteristics in Narragansett Bay, Rhode Island Surface Water | **S. Davis**

4.16.P-Tu-165 Non-Targeted Analysis of Organic Chemical Contaminants on Microplastics | **S. Landeweer**

4.16.P-Tu-166 Impacts of Microplastics on Nitrogen Cycling in Ammonia-Oxidizing Bacteria and Wastewater Activated Sludge Communities | **M. Walters**

4.16.P-Tu-167 Determining the Presence and Impacts of Microplastic Fibers in Crassostrea virginica, the Eastern Oyster | **A. Pouv**

4.16.P-Tu-168 Microplastic and Nanoplastic Risks in Dredged Sediments: From Databases to Strategic Responses | **J. Wilkens**

4.16.P-Tu-169 Microplastics in Your Microgreens? Assessing How Microplastics Impact Agriculture, Soil Function, and Plants | **R. Zajac-Fay**

4.16.P-Tu-171 Variation in Microplastic Distribution in a Background Headwater Lake, Canada During the Ice and Ice-free Period | **B. Welsh**

Point-of-Use Drinking Water Exposome and Potential Human-Health Effects | P. Bradley, K. Smalling, E. Medlock Kakaley

4.17.P-Tu-172 Drinking-Water Exposome Research: Bottled Water | **P. Bradley**

4.17.P-Tu-173 Drinking-Water Exposome Research: Private-Wells in an Intensive Agricultural Landscape | **P. Bradley**

4.17.P-Tu-174 Exposures and Potential Health Implications of Contaminant Mixtures in Public-Supply Drinking Water | **K. Smalling**

4.17.P-Tu-175 Effects-based bioassay screening approaches applied to residential tapwater to inform consumer point-of-use decisions | **E. Medlock Kakaley**

4.17.P-Tu-177 Cumulative Health Risk Assessment of Private Well Water Consumption across Montana | **M. Eggers**

4.17.P-Tu-178 Disinfection By-Product Formation Potential in Drinking Water: Variability at the Household Level and Impact of Source Type | **B. Anderson**

Assessing Chemicals of Concern in the Laurentian Great Lakes and Their Tributaries | D. Ager, M. Venier, B. Crimmins, B. Ulrich

4.22.P-Tu-179 Looking Back at 40 Years of Per- and Polyfluoroalkyl Substances in Great Lakes Fish | **S. Balgooyen**

4.22.P-Tu-180 Leveraging Invasive Mussel Contaminant Survey Data for Stepwise Prioritization of Chemicals of Potential Concern in the Great Lakes Basin | **N. Fuller**

4.22.P-Tu-181 PFAS Mass Budget in the Great Lakes | **C. Xia**

4.22.P-Tu-182 Characterizing the Prevalence of Bisphenols, Alkylphenols, Neonicotinoids, and Polycyclic Aromatic Hydrocarbons in Lake Superior Tributaries | **S. Elliott**

4.22.P-Tu-183 Using multiple taxa to evaluate perfluoroalkyl substances (PFAS) in the Grand River, Ontario, a tributary of Lake Erie | **A. De Silva**

4.22.P-Tu-184 Method Development of Passive Samplers for the Analysis of Persistent, Mobile, and Toxic (PMT) Substances in Canadian Waters | **E. De Oliveira**

4.22.P-Tu-185 Evaluating the Prevalence of Per- and Polyfluoroalkyl Substances in Lake Superior Tributaries and Estimating Potential Bioeffects Using Risk-Based Screening Techniques | **M. Pronschinske**

4.22.P-Tu-186 U.S. EPA Great Lakes Fish Monitoring and Surveillance Program: Recent Trends of PCB and PBDE Congener Profiles in Top-Predator Fish | **B. Lenell**

4.22.P-Tu-187 Risk-Based Dcreening of Individual PFAS and PFAS Mixtures in Great Lakes Tributaries with Relations to Land Cover and Wastewater Effluent | **D. Alvarez**

Developments in the Era of Big Data and Artificial Intelligence in the Field of Environmental Fate and Exposure Modeling | T. Gouin, L. Li, A. Markus

4.25.P-Tu-188 Refining environmental exposure assessments for consumer-use down-the-drain ingredients using spatially resolved datasets and surface water flow modeling: Focus on Europe | **R. Heisler**

4.25.P-Tu-189 Fate and Persistence Estimation & Simulation Tool (F-PEST): A Comprehensive Tool for Assessing the Fate, Persistence, and Long-Range Transport of Organic Chemicals | **A. Sangion**

4.25.P-Tu-190 Using Machine Learning to Understand the Biodegradation of Polycyclic Aromatic Hydrocarbons in Sediment | **L. Rodenburg**

4.25.P-Tu-191 The Molecular Composition of Water-Soluble Organic Matter Improves Predictions of Potential Soil Respiration at the Continental-Scale | **C. Shi**

Pharmaceuticals in the Environment - A One Health Perspective | B. Burruss, K. Beckhorn, S. Snyder, J. Laurenson

5.05.P-Tu-192 Activities of the Federal Interagency Workgroup on Pharmaceuticals in Water | **S. Glassmeyer**

5.05.P-Tu-193 Reexamining US FDA's Environmental Screening Levels for Human Pharmaceuticals: Trends and Emerging Issues | **X. Wu**

5.05.P-Tu-194 Limitations of Using Quantitative Structure-Activity Relationship (QSAR) models to Predict Organic Carbon Water Partition Coefficient (Koc) for Complex Active Pharmaceutical Ingredients (APIs) | **W. Hoque**

5.05.P-Tu-195 MSC OK? – Minimum Selective Concentrations (MSCs) For the Assessment of AMR in the Environment | **K. Westphal-Settele**

5.05.P-Tu-196 Using Fish Toxicokinetics and Mammalian Toxicity Data to Evaluate the Risk for Fish Reproductive Toxicity by a Pharmaceutical | **M. Lee**

5.05.P-Tu-197 Use Pharmaceutical PNECs with Caution | **N. Parke**

5.05.P-Tu-223 Environmental Safety Assessment of Data-Poor Pharmaceuticals Using Read-Across | **I. Bamgbose**

Surrogacy in Endangered Species Pesticide Risk Assessment: Strategies for Testing and Conceptual Applications | A. Krueger, T. Blickley, J. Steevens

5.06.P-Tu-198 The Importance of Accurate Field Metabolic Rate Estimates in the Endangered Species Assessment Process | **C. Priest**

5.06.P-Tu-199 Establishing Protective Neonicotinoid Sediment Toxicity Thresholds For Aquatic Insects Through a Combination of Field and Laboratory Studies | **C. Sweeney**

5.06.P-Tu-200 Hazards of Anticoagulant Rodenticides to Early Life Stages of Pacific Salmon | **M. Driessnack**

5.06.P-Tu-201 Are There Opportunities to Reduce in vivo Avian Toxicity Tests Using Species Surrogacy? A Case Study Using Multiple Lines of Evidence for Cross-Species Extrapolations | **A. Bone**

Water Quality Criteria: Modeling Aquatic, Sediment and Soil Toxicity based on Mechanistic Chemical Interactions. Session honoring Dominic Di Toro | A. Redman, K. Boone, D. Mount, J. Mcgrath

5.07.P-Tu-202 Predicting Abraham Solute Parameters using Quantum Chemical Solvation Models | **A. Sigman-Lowery**

5.07.P-Tu-203 Extension of TLM and PETROTOX to characterize toxicokinetics of hydrocarbons and oils | **A. Redman**

5.07.P-Tu-204 Modeling the Partitioning of Anionic Carboxylic and Perfluoroalkyl Carboxylic and Sulfonic Acids to Octanol and Membrane Lipid | **T. Torralba**

5.07.P-Tu-205 Occam's Razor – Simplifying Toxicity Estimation for Neutral and Ionizable Surfactant compounds and Mixtures Using the Target Lipid Model & Abraham pp-LFER Descriptors | **C. Davis**

Addressing the Sustainability and Impact of Aquaculture from a One Health Perspective | A. Miglino, S. Mohandas, P. Gaunt

5.08.P-Tu-207 Environmental Considerations for Drugs Used in Aquaculture | **A. Miglino**

5.08.P-Tu-208 Water Quality Benchmarks for New Animal Drugs | **K. Johnson-Couch**

5.08.P-Tu-209 How a Prey Fish Can Cause Reproductive Failure in Its Predator: Discovery of De Novo Thiaminase I Synthesis in Fish | **C. Richter**

5.08.P-Tu-210 Thiamine Supplementation Improves Survival and Body Condition of Hatchery-Reared Steelhead (Oncorhynchus mykiss) in Oregon | **F. Rowland**

5.08.P-Tu-211 A National Approach to Aquaculture Research and Sustainable Seafood Using a One Health Approach | **J. Whaley**

5.08.P-Tu-212 Mussel Propagation and Conservation Research at the USGS Columbia Environmental Research Center | **J. Kunz**

Healthy Environment - Indigenous Knowledge System (IKS) Informed Management of Environmental Contaminants | M. Olsgard, S. Fernandes, G. Oberg, T. Canfield

7.03.P-Tu-213 Weaving Indigenous Knowledges and Western Sciences in Ecotoxicology: A Regional Perspective from the Alberta Oil Sands | **A. Wilcox**

7.03.P-Tu-214 Advancing Indigenous sovereignty, self-determination, and sustainability in Ohio through a regenerative approach. | **J. Lazorchak**

New Developments in Pesticide Labeling and Risk Mitigation | A. Nickelson, B. McGaughey, E. Arnold

7.05.P-Tu-215 An Introduction and Strategies in Washington State regarding New and Forthcoming Pesticide Product Label Changes | **A. Nickelson**

Consumer Products and Chemicals of Concern: Navigating a Changing Regulatory Landscape | W. Goodfellow, A. Folcik

7.07.P-Tu-217 End of Life Repercussions for Cosmetics and PCPs: Are the Appropriate Decision Frameworks Being Used? | **K. Kulacki**

7.07.P-Tu-218 Unwrapped: Implications of Regulatory Restrictions on Recycling and Additives in Plastic Packaging | **A. Steele**

Advancements in Life Cycle Assessment (LCA) | C. Koffler, A. Baroth

8.02.P-Tu-219 Safe and Rapid Development of Miniaturized Sensors Through Life Cycle Analysis, Hazard Assessment, and Environmental Resilience Approach: A Public-Private Effort | **J. Boyda**

8.02.P-Tu-220 Identification of phages in Wastewater samples in Abu Dhabi, UAE | **T. Cardoso**

8.02.P-Tu-222 Challenges of integrating environmental risk with life cycle analysis | **L. Kapustka**

V | VIRTUAL PRESENTATIONS ASSOCIATED WITH TUESDAY SESSIONS

Virtual-Only Presentations

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

Advanced Omics Applications in Systematic Precision Toxicology | W. Huang, C. Lavelle, W. Henderson, A. Biales

1.08.V-002 Environmental ribotoxic insult compromises dysbiotic gut aging in worms and mammals | **Y. Moon**

Cell-Based Approaches for Ecotoxicity Assessments | M. Minghetti, R. Lavado

1.10.V-027 Assessment of cytotoxic and genotoxic response in Allium fistulosum root cells exposed 24h to lindane, chloroform and chlorpyrifos in environmental concentrations in water. | **M. Gómez Maldonado**

General: Aquatic Toxicology, Ecology and Stress Response | J. Wise, C. Voros, A. Schmidt

2.14.V-004 A Neotropical Fish Exposed to Zinc: Increasing Temperature Modifies Effects on Plasma Parameters | **V. Bezerra**

Microplastics on the Planet: Input Sources, Transport Pathways and Eco-Environmental Impacts | E. Zeng, R. Hale, C. Wong

4.16.V-011 Microplastics in Pelagic Fish and Surface Water from the St. Lawrence River, Montreal, Canada | **E. Michon**

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WEDNESDAY, 15 NOVEMBER

DAILY SCHEDULE	LISTED MEETINGS ARE OPEN TO ALL ATTENDEES	
7:00–17:30	Registration	South Pre-function Upper Concourse
7:00–17:30	Speaker Ready Room	L012
7:00–20:30	Coat and Luggage Check	Fourth Street Pre-function
7:00–8:00	Poster Setup	Exhibit Hall B
7:30–Until	Fun Run	Meet at Registration
8:00–9:00	Morning Poster Session and Networking	Exhibit Hall B
8:00–9:30	Animal Alternatives Interest Group	L013
8:00–17:30	Last Day to Visit Exhibits	Exhibit Hall B
9:00–9:45	Daily Plenary: Natasha DeJarnett, White House Council on Environmental Quality	Ballroom C
9:00–10:00	Aquatic Toxicity Testing Interest Group	L020
10:00–11:00	Ecotox of Amphibians and Reptiles Interest Group	L017/L018
10:00–12:00	Morning Platform Sessions	see p. 42
11:00–13:00	International Consortium to Advance Cross Species Extrapolation in Regulation	L013
12:00–13:30	Lunch (on your own)	
12:00–13:30	Student Seminar (sold out)	M107
12:30–13:30	Careers Committee	L016
13:30–15:00	Future Directions of Mercury Monitoring: Identifying Priority Ecosystems and Performing Effectiveness Evaluations	L017/L018
13:30–15:30	Afternoon Platform Sessions	see p. 44
14:00–16:00	Frazier History Museum and Bourbon Tasting (sold out)	Meet at Registration
15:30–17:30	Afternoon Poster Session and Networking	Exhibit Hall B
16:30–17:30	SETAC North America General Assembly	Ballroom A
17:00–18:00	Wildlife Toxicology Interest Group	L013
17:30–18:00	Chesapeake Potomac Regional Chapter	L016
17:30–19:30	Nanotechnology Interest Group	L006
17:30–19:30	Inclusive Diversity Committee Social Gathering of Empowered Minds (preregistration required)	L004
18:00–22:00	Student Trivia and Mixer (preregistration required)	Bourbon Barrel Loft

DAILY PLENARY

Advancing Environmental Justice: The Justice40 Initiative and the Climate and Economic Justice Screening Tool

9:00–9:45 | Ballroom C

The Biden-Harris Administration is advancing our nation's most ambitious climate, clean energy, conservation, and environmental justice agenda in history. Dr. Natasha DeJarnett, Deputy Director for Environmental Justice Data and Evaluation at the White House Council on Environmental Quality, will discuss the Administration's Justice40 Initiative and the Climate and Economic Justice Screening Tool (CEJST). During her session, she will explain how the CEJST is used by Federal agencies to identify and help disadvantaged communities that are marginalized by underinvestment and overburdened by pollution, as measured by various environmental, climate, health, and other indicators, along with an associated socioeconomic indicator.

Natasha DeJarnett (she/her) is the Deputy Director for Environmental Justice Data and Evaluation at the White House Council on Environmental Quality. Most recently, DeJarnett served as an assistant professor in the Christina Lee Brown Environmental Institute at the University of Louisville Division of Environmental Medicine, researching the health impacts of extreme heat exposure and environmental health disparities.

NETWORKING EVENTS

Student Seminar

12:00–13:30 | M107 | SOLD OUT, Lunch Included

sponsored by
COLGATE-PALMOLIVE

Marlo Jeffries is an Associate Professor and Biology Department Chair at Texas Christian University in Fort Worth, Texas. In this lunchtime seminar, she will discuss developing the skills and experiences needed to land an academic job and the role meaningful engagement in professional societies such as SETAC can play in that type of development.

ASSEMBLIES

SETAC North America General Assembly

16:30–17:30 | Ballroom A

The Annual General Assembly is the perfect opportunity to get involved in our society, connect with the board, and learn about what SETAC is doing to advance our mission. During this event, you'll have the chance to hear directly about the current state of the society, exciting new projects on the horizon, and provide input into the society's direction. Whether you're a long-time member or new to our society, this event promises to be an enriching experience. Be a part of the conversation and help us chart the course for an even more remarkable journey ahead.

WEDNESDAY, 15 NOVEMBER

MORNING TALKS (T)

	10:00–10:15	10:20–10:35	10:40–10:55
Ballroom A	**The Bourbon Effect: Chemistry, Sustainability and Life Cycle Analysis of Kentucky Bourbon and Other Spirits** | J. Young, I. Meaza, J. Steevens, A. Schmidt		
	8.01.T-01 Three Cheers: Chemical Case Studies at Buffalo Trace Distillery | **J. Medley**	**8.01.T-02** Spirit in Barrel Maturation - The "Maturome": An OMICS Approach Towards the Holistic Understanding of a Complex Engine | **G. Spudding**	**8.01.T-03** Studying the DNA of Whiskey Through Colloids and Interfacial Monolayers | **S. Williams**
Ballroom B	**Environmental Fate of Polymers** | Y. Chai, V. Albright III		
	4.07.T-01 Withdrawn	**4.07.T-02** Multi-laboratory Investigation on Intra and Inter-laboratory Reproducibility of Polymer Biodegradation Assessments Applying Respirometric Methods | **K. McDonough**	**4.07.T-03** Accelerating Polymer Biodegradation Through the Use of Adapted Sludge in an OECD 302B Inherent Biodegradability Test | **V. Albright**
Ballroom C	**Methods and Data for Cumulative Impact Assessment in the Context of Environmental Justice** | W. Rish, C. Frey		
	5.04.T-01 An Integrated Approach to Cumulative Impact Assessment in Support of Projects and Actions within Delineated Environmental Justice Areas | **C. Menzie**	**5.04.T-02** Exploring a Community Adjustment Factor: Epidemiological Data for Cumulative Impact and Risk Assessment | **M. Fox**	**5.04.T-03** Linkage Between Allostatic Load from Non-Chemical Stressors and Susceptibility to Environmental Chemical Exposure: State of the Science Review | **W. Klaren**
Ballroom D	**Stormwater Runoff Impacts and Potential Solutions** | K. Rader, J. McIntyre, K. Schiff		
	2.09.T-01 Predicted Aquatic Exposure Effects from a National Urban Stormwater Study | **P. Bradley**	**2.09.T-02** Microplastic Emissions via Stormwater Runoff | **M. Ross**	**2.09.T-03** Particle Size-Based Evaluation of Effectiveness and Performance of Stormwater Management Systems to Limit Sediment Recontamination of Polycyclic Aromatic Hydrocarbons (PAHs) From Stormwater Runoff | **C. Gomez-Avila**
Ballroom E	**Linking Molecular, Cellular, Tissue and Organ Level Effects to Apical Endpoints in Wildlife Toxicology** | T. Bean, B. Rattner, B. Hernout		
	3.03.T-01 Predicting Avian Toxicity of Pesticides- Where are we at and where should we go? | **A. Bone**	**3.03.T-02** Reproducibility of Transcriptomics Experiments; Performance of Japanese quail EcoToxChips in a Multi-lab Ring Test | **J. Head**	**3.03.T-03** Toxicity of Acetaminophen in Bird Species: Induction and Activity of Phenol-type UDP-glucuronosyltransferases | **P. van den Hurk**
L005/L009	**Environmental Forensics** | N. Rose, G. Johnson		
	4.08.T-01 Untargeted Mass Spectrometry for Analysis of Chemical Trends in Municipal Wastewater Before, During, and After the 2022 World Athletic Championships | **G. Jones**	**4.08.T-02** Time Series Analysis of Non-target Chemicals and Related Environmental Processes in a Small Stream | **C. Shi**	**4.08.T-03** Sources of Polychlorinated Biphenyls to Upper Hudson River Water Post-Dredging | **L. Rodenburg**
L010/L014	**Metals: Application of Models and Bioavailability Measures – Recent Developments** | E. Smith, C. Bergeron, C. Cooper, R. Gensemer		
	7.04.T-01 Development of Multiple Linear Regression Models to Support Updating U.S. Environmental Protection Agency's Aquatic Life Ambient Water Quality Criteria (AWQC) for Metals | **C. Bergeron**	**7.04.T-02** Bioavailability and Toxicity Models of Copper to Freshwater Life: The State of Regulatory Science | **C. Mebane**	**7.04.T-03** Assessing the Bioavailability of Metals in Waters Impacted by Mining Waste Around the Tar Creek Superfund Site | **S. Herriage**
L015/L019	**QSAR Models and Tools in Environmental Toxicology and Chemistry** | L. Cassidy, M. Kawa, W. Lee		
	4.18.T-01 OPERA: Open-Source QSAR Models for Regulatory Support | **K. Mansouri**	**4.18.T-02** EPI SuiteTM Models and Applicability Domains: Cozying up With Confidence and Exploring Estimates on the New Website | **L. Cassidy**	**4.18.T-03** Addressing uncertainty in chemical partitioning properties and prospects for improvement | **T. Brown**

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

MORNING TALKS (T)

11:00–11:15	11:20–11:35	11:40–11:55	
The Bourbon Effect: Chemistry, Sustainability and Life Cycle Analysis of Kentucky Bourbon and Other Spirits | J. Young, I. Meaza, J. Steevens, A. Schmidt			
8.01.T-04 Sustainability, Climate Change and Bourbon | **S. DeBolt**	**8.01.T-05** Wetland Treatment Systems for Treating Wastewater and Bourbon Stillage | **K. Ristola**	**8.01.T-06** A Sustainable and Profitable Approach for Handling Stillage From Distilleries | **J. Satyavolu**	Ballroom A
Environmental Fate of Polymers | Y. Chai, V. Albright III			
4.07.T-04 A Novel Approach to Analysis of Water-Soluble Polymer Degradation Chemistry by High Resolution Mass Spectrometry: Understanding Polyacrylamide Degradation via Enhanced Non-Target Workflow | **P. Keyes**	**4.07.T-05** Environmental Fate of Water-Soluble Polyvinyl Alcohol (PVOH) | **J. Menzies**	**4.07.T-06** Speeding it up: Biodegradation of Poly(lactic acid) at Mesophilic Conditions by Biostimulation | **P. Mayekar**	Ballroom B
Methods and Data for Cumulative Impact Assessment in the Context of Environmental Justice | W. Rish, C. Frey			
5.04.T-04 EPA's Ecological Research to Advance the Science of Cumulative Impacts | **C. Frey**	**5.04.T-05** National Aquatic Resource Surveys (NARS) Data for Addressing Impacts and Risk | **A. Nahlik**	**5.04.T-06** Improving Cumulative Impact Assessment in Fenceline Communities: A Case Study in Southeastern Pennsylvania | **A. Chiger**	Ballroom C
Stormwater Runoff Impacts and Potential Solutions | K. Rader, J. McIntyre, K. Schiff			
2.09.T-04 Effectiveness and Performance Evaluation of Stormwater Management Systems in Limiting Sediment Recontamination of Heavy Metals | **H. Zhou**	**2.09.T-05** Nutrient, Metal, and Polycyclic Aromatic Hydrocarbon Fate and Transport in Intermittent Flow Stormwater Management: Sorbent Media Effects | **E. McKenzie**	**2.09.T-06** Exploring the Acute Cardiometabolic Impact of 6PPD-Quinone on Juvenile Salmonids: A Comparative Analysis | **S. Selinger**	Ballroom D
Linking Molecular, Cellular, Tissue and Organ Level Effects to Apical Endpoints in Wildlife Toxicology | T. Bean, B. Rattner, B. Hernout			
3.03.T-04 Associations Between Persistent Organic Pollutants, Altered Immune Function, and Apical Endpoints in Colonial Waterbirds of the Great Lakes | **K. Grasman**	**3.03.T-05** Considerations for Selecting Assays Relevant to Wildlife for Ecological Risk Assessments: the Role of Toxicology, Ecology, and Assumptions. | **M. Johnson**	**3.03.T-06** Critique of lower-level toxicological response measurements with linkage to apical effects for wildlife ecological risk assessments | **B. Rattner**	Ballroom E
Environmental Forensics | N. Rose, G. Johnson			
4.08.T-04 Exploring the effectiveness of PCA, t-SNE and UMAP for analyzing PCB Fingerprints: A case study on Portland Harbor Superfund Site, Oregon, USA | **M. Dereviankin**	**4.08.T-05** Differentiating Between Three OCDD-Dominant Dioxin/furan Fingerprints in Soil and Sediment of the Lower Roanoke River. | **G. Johnson**	**4.08.T-06** Predicting the Concentrations and Temporal Changes of Volatile Methyl Siloxanes in Dense Urban Areas | **C. Brunet**	L005/L009
Metals: Application of Models and Bioavailability Measures – Recent Developments | E. Smith, C. Bergeron, C. Cooper, R. Gensemer			
7.04.T-04 Withdrawn	**7.04.T-05** Use of Toxicity Identification Evaluation, Bioavailability Modeling, and Benthic Macroinvertebrate Assessment to Evaluate Aquatic Life use at a Former Mine Site | **S. Roark**	**7.04.T-06** Development of Multiple Linear Regression Models for Predicting Chronic Iron Toxicity to Aquatic Organisms under Different Water Quality Conditions | **W. Adams**	L010/L014
QSAR Models and Tools in Environmental Toxicology and Chemistry | L. Cassidy, M. Kawa, W. Lee			
4.18.T-04 How confidently can current Quantitative Structure-Property Relationships and Empirical Relationships evaluate chemical properties to the myriad of chemicals in commerce? | **Z. Zhang**	**4.18.T-05** Development of species-specific alcohol ether sulphate and alcohol sulphate QSARs for use in species sensitivity distributions | **K. Connors**	**4.18.T-06** In Silico Molecular Docking Simulations and Affinities for the Metabolism of Methoxylated Polybrominated Diphenoxybenzenes by Human CYP1B1, 3A4, 1A1/4, and Herring Gull CYP1A4/5 Enzyme Proteins | **R. Letcher**	L015/L019

WEDNESDAY, 15 NOVEMBER

SPECIAL SESSION

	13:30–13:45	13:50–14:05	14:10–14:25
L006	**Advances to Address Challenges in Non-targeted Analysis for Environmental Risk Assessment** | N. Soares Quinete, R. Marfil-Vega, J. Brown		
	4.23.T-01 Target and Nontarget Screening of Psychoactive and Lifestyle Substances: An Exploratory Study to Support the New York State Wastewater Surveillance Network | **T. Zeng**	**4.23.T-02** Withdrawn	**4.23.T-03** FluoroMatch Suite Software: Advancing Non-Targeted Analysis for the Comprehensive Detection and Identification of PFAS and Polymers | **J. Koelmel**

AFTERNOON TALKS (T)

	13:30–13:45	13:50–14:05	14:10–14:25
Ballroom A	**Fate of Plastics in the Environment: Towards Unifying Laboratory Experiments, Field Observations and Modeling** | J. Hu, M. Duhaime, C. Davis		
	4.10.T-01 Processes of Environmental Plastic Weathering and Biodegradation in Natural Systems | **J. Choi**	**4.10.T-02** Specific Surface Degradation Rates of Non-Biodegradable Plastics: What We Know and Implications for Future Degradation Studies | **S. Ziemann**	**4.10.T-03** Seasonal Variability of Microplastics in Hamilton Harbour: Do Season Affect the Microplastics Distribution in Hamilton Harbour? | **B. Nayebi**
Ballroom B	**A Frog, a Snake, and an Ecotoxicologist Walk Into a Pond (or, Advances in Ecotoxicology and Risk Assessment of Amphibians and Reptiles)** | J. Marton, J. Brodeur, C. Godard, P. Henry		
	3.01.T-01 Impact on Anuran Metamorphosis of Neonicotinoid and Anthranilic Diamide Insecticides | **J. Brodeur**	**3.01.T-02** Biochemical and behavioral effects in amphibians exposed to herbicides and microplastics | **O. Cruz-Santiago**	**3.01.T-03** Discussion
Ballroom C	**Risk Communication: Strategies and Platforms that Work for New and/or Complex Risk Management Needs** | M. Beal, R. Zajac-Fay, S. Sager, J. Clarkson		
	7.06.T-01 Scientific dissemination projects through fairs, forums and festivals | **M. Orozco-Medina**	**7.06.T-02** Withdrawn	**7.06.T-03** Trauma-Informed Risk Communication and Community Engagement | **A. Hertzberg**
Ballroom D	**Chemicals in Domestic, Agricultural and Industrial Waste: Occurrence, Fate and Use as Tracers** | B. Chandramouli, S. Gewurtz, D. Price, J. Young Wise		
	4.05.T-01 Withdrawn	**4.05.T-02** Investigating Per- and Polyfluoroalkyl Substances (PFAS) in Food-Waste Compost: Sources, Fate, and Implications for Land Application | **A. Timshina**	**4.05.T-03** Per- and Polyfluoroalkyl Substances (PFAS) Fate and Transport following Long-term Application of Biosolids | **L. Peter**
Ballroom E	**Collaborative Oil Pollution Research: Successes and Opportunities** | A. Bejarano, H. Dettman, D. French-McCay		
	1.04.T-01 From Molecules to Morphology: A Multidisciplinary Investigation of the Toxicity of Hydrocarbon Oxidation Products in Pacific Herring Embryos | **M. Harsha**	**1.04.T-02** Sensitivity of Six Species of Atlantic Scleractinian Corals to Petroleum Hydrocarbons | **D. Renegar**	**1.04.T-03** Quantifying Sediment Biodegradation Rates of Hydrocarbons: A Collaboration Between Industry and Academia | **K. McFarlin**
L005/L009	**Can You See What I See: Taking A Look at Nanoparticle Environmental Interactions** | K. Varner, G. Cobb III, O. Tsyusko, E. Petersen		
	4.04.T-01 The Effect of Nanoparticle Surface Charge on Microalgal Growth and Morphology | **E. McKeel**	**4.04.T-02** Aquatic Toxicity of Nano Tin Oxide to Ceriodaphnia dubia, Daphnia pulex, Hyalella azteca, and Chironomus dilutus | **L. May**	**4.04.T-03** Transcriptomic Response in Caenorhabditis elegans Exposed to the Multiple Stressors Zinc Oxide Nanoparticles and Soil-borne Pathogen, Klebsiella pneumoniae | **J. Cochran**
L010/L014	**Assessing Contaminant Effects in Ecosystems with Multiple Stressors** | D. Ostrach, L. Kapustka, C. Irvine		
	2.02.T-01 Identification and Prioritization of Stressors at a Groundwater Upwelling Site | **E. Nichols**	**2.02.T-02** Beyond the Culverts: Investigating how stormwater toxicity, metapopulation dynamics and habitat may influence coho salmon abundance after passage barrier removal. | **J. Spromberg**	**2.02.T-03** Assessing Remediation and Restoration Effectiveness in the Upper Arkansas River, Colorado | **W. Clements**
L015/L019	**Approaches for Teaching Environmental Toxicology & Chemistry** | A. Harwood, S. Nutile, A. Simpson, C. Singleman		
	7.01.T-01 Failure leads to Success: How to use the Design-Make-Play framework in a variety of class settings to enhance learning | **C. Singleman**	**7.01.T-02** Decreasing Barriers to STEM Education through a Do it yourself (DIY) Laboratory Courses | **H. Poynton**	**7.01.T-03** From Failed Citizen Science to a Long-Term Undergraduate Research Program in Aiken, SC | **S. Harmon**

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

SPECIAL SESSION

14:30–14:45	14:50–15:05	15:10–15:25	
Advances to Address Challenges in Non-targeted Analysis for Environmental Risk Assessment | N. Soares Quinete, R. Marfil-Vega, J. Brown			
4.23.T-04 Using High-Resolution Mass Spectrometry DOM Characterization to Drive Nontarget Analysis of Groundwater at a Historic Crude Oil Spill Site in Bemidji, Minnesota | **G. Black**	**4.23.T-05** The Chemical Space Tool: Mapping and Visualization to Characterize Chemical Spaces | **C. Lowe**	**4.23.T-06** Chemical space of exposome: where are we and how far we can go? | **S. Samanipour**	L006

AFTERNOON TALKS (T)

14:30–14:45	14:50–15:05	15:10–15:25	
Fate of Plastics in the Environment: Towards Unifying Laboratory Experiments, Field Observations and Modeling | J. Hu, M. Duhaime, C. Davis			
4.10.T-04 The Migration of Polycyclic Aromatic Compounds in Plastics | **S. Sambanthan**	**4.10.T-05** Leveraging Physiology & Behavior to Better Understand Exposure, Uptake, & Elimination of Micro- and Nanoplastics (MNP) in Pelagic & Benthic Species within the Context of Quantitative Risk Assessment | **B. de Jourdan**	**4.10.T-06** Relevance & Reliability of Environmental Sampling Data for Use in Quantitative Risk Assessment – Towards Developing Best Practices & Guidance in Sampling & Reporting | **T. Gouin**	Ballroom A
A Frog, a Snake, and an Ecotoxicologist Walk Into a Pond (or, Advances in Ecotoxicology and Risk Assessment of Amphibians and Reptiles) | J. Marton, J. Brodeur, C. Godard, P. Henry			
3.01.T-04 Withdrawn	**3.01.T-05** Assessment of Heavy Metal Contamination in Amphibians from Otofure Dumpsite, Edo State, Nigeria | **O. Edo-Taiwo**	**3.01.T-06** US Endangered Species Risk Assessment- What Do We Do About Amphibians and Reptiles? | **J. Marton**	Ballroom B
Risk Communication: Strategies and Platforms that Work for New and/or Complex Risk Management Needs | M. Beal, R. Zajac-Fay, S. Sager, J. Clarkson			
7.06.T-04 Misinformation and Disinformation in Risk Communication: Reflections from East Palestine OH | **M. Nye**	**7.06.T-05** From Uncertainty to Action: Enhancing Public Understanding of PFAS Risks in Colorado | **K. Richardson**	**7.06.T-06** Per and Polyfluoroalkyl Substances (PFAS) Research and Remediation Podcast Series | **T. Guillette**	Ballroom C
Chemicals in Domestic, Agricultural and Industrial Waste: Occurrence, Fate and Use as Tracers | B. Chandramouli, S. Gewurtz, D. Price, J. Young Wise			
4.05.T-04 Fate and Transport of Emerging Contaminants Entering, Leaving, and Flowing Past Wastewater Treatment Plants in Central Kentucky | **T. Messer**	**4.05.T-05** Per-and Polyfluoroalkyl Substances in Onsite Wastewater Treatment Systems | **R. Smolinski**	**4.05.T-06** PFAS in Canadian Municipal Wastewater Treatment Systems: Results from 12 Years of Monitoring by Environment and Climate Change Canada | **S. Gewurtz**	Ballroom D
Collaborative Oil Pollution Research: Successes and Opportunities | A. Bejarano, H. Dettman, D. French-McCay			
1.04.T-04 Freshwater Sediment Toxicity Evaluation from Meso-Scale Spill Tests of Diluted Bitumen and Conventional Crude | **W. Mehler**	**1.04.T-05** Bridging The Gap Between Laboratory and Field Observations – the Deepwater Horizon Oil Spill as a Case Study | **M. Grosell**	**1.04.T-06** Building Field Effects Models from Toxicity Studies - One Compound at a Time | **D. French-McCay**	Ballroom E
Can You See What I See: Taking A Look at Nanoparticle Environmental Interactions | K. Varner, G. Cobb III, O. Tsyusko, E. Petersen			
4.04.T-04 Field Scale Agricultural Applications of Nanopesticides for Fate, Transport, and Impact to Nutrient Cycling | **W. Rud**	**4.04.T-05** Impacts of Functionalized Polystyrene Nanoplastics on Morphology of Rainbow Trout Gill Epithelial Cells | **L. Diaz**	**4.04.T-06** Epigenetic Changes in Caenorhabditis elegans after Multigenerational Exposure to Pristine and Transformed Silver Nanoparticles | **O. Tsyusko**	L005/L009
Assessing Contaminant Effects in Ecosystems with Multiple Stressors | D. Ostrach, L. Kapustka, C. Irvine			
2.02.T-04 Water quality and ecological integrity of the mine impacted transboundary Kootenai River Basin. | **S. Eldridge**	**2.02.T-05** The Integration of Microplastics and Nanoplastics into Large Scale Multiple Stressor Ecological Risk Assessments using San Francisco Bay and the Delta Region as a case study. | **W. Landis**	**2.02.T-06** Assessing the Ecological Impact of Aquatic Pollution in a Rural Environment | **J. Brodeur**	L010/L014
Approaches for Teaching Environmental Toxicology & Chemistry | A. Harwood, S. Nutile, A. Simpson, C. Singleman			
7.01.T-04 Application of Specification Grading in a Risk Assessment Course | **A. Harwood**	**7.01.T-05** Learning By Doing: Incorporating a Laboratory Practical into an Upper-Level Ecotoxicology Course | **S. Nutile**	**7.01.T-06** Improving student outcomes with a "maker mindset" | **M. Greco**	L015/L019

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

Poster Schedule

Setup: 7:00–8:00 (see p. 10 for map of posters)
Take down: 17:30–17:45

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

Morning Poster Session: 8:00–9:00
Lunch Break: 12:00–13:30
Afternoon Poster Session: 15:30–17:30

Late-Breaking Science Posters

Late-breaking science posters start with P-We-196 on Wednesday. For a list of presentations, please visit the virtual platform.

Collaborative Oil Pollution Research: Successes and Opportunities | A. Bejarano, H. Dettman, D. French-McCay

1.04.P-We-002 Passive Sampling as a Novel Tool for Oil Spill Response in Canada | **Z. Pandelides**

1.04.P-We-004 Small Intertidal Microcosm Plant Exposure (SIMPLE) System: Use of a New Microcosm System to Examine the Effect of No. 2 Fuel Oil on Short- and Tall-Forms of Saltmarsh Cordgrass (Spartina alterniflora) | **R. Ferguson**

1.04.P-We-006 Acute and Chronic Hazard Assessment of 5 PACs to 5 Marine Species | **B. de Jourdan**

Assessing Environmental Behavior and Effects of Naturally Occurring Radioactive Material (NORM) | A. MacIntosh, S. Donaher

1.11.P-We-007 Toxicokinetics and Bioavailability of Radium-226 in the Estuarine Environment | **S. Donaher**

1.11.P-We-008 Taxonomic Patterns in Polonium-210 uptake in Marine Molluscs | **D. Hunt**

1.11.P-We-009 Evaluation of TENORMs in Medicinal Plants at a Legacy Uranium Mine and Mill Tailing Site | **J. Newmyer**

1.11.P-We-010 RNA Sequencing Analysis of Sunflowers Grown in Heavy Metal Salt Media | **J. Newmyer**

General: Environmental Toxicology and Stress Response | J. Wise, C. Voros, A. Schmidt

1.17.P-We-011 Assessment of Reprotoxic Potential of Bisphenol Analogs in Male Caenorhabditis elegans | **K. Waligora**

1.17.P-We-012 Development, Behavior, and Gene Expression Patterns of Two Zebrafish Strains Exposed to Two Fractions of Fine Particulate Matter (PM2.5) | **S. Victoria**

1.17.P-We-013 Ecological Risk Assessment of Polychlorinated Biphenyls (PCBs) levels in Water and Three Fish Species in Lagos lagoon, Lagos Nigeria | **F. Osuala**

1.17.P-We-014 U.S. National Recommended Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) Ambient Water Quality Criteria for Aquatic Life | **J. Justice**

1.17.P-We-015 Evaluation of Aquatic Invertebrates as Vectors of Contaminants to Proximal Ecosystems | **A. DeLoache**

1.17.P-We-016 Farming Antimicrobial Resistance: The Off-Target Effects of Fungicide Exposure on Plant Surface Bacteria. | **N. Wieber**

1.17.P-We-017 Homologous Recombination Repair Protect Whale Cells to Avoid Cr(VI)-Induced Chromosome Instability | **H. Lu**

1.17.P-We-018 Characterization of thyroid disrupting chemicals (TDCs) by modulation of hepatic metabolism: Adverse outcome pathway (AOP) approach | **B. Kwon**

1.17.P-We-020 Particulate Hexavalent Chromium Induces DNA Damage Response Failure in Human Cells but Not in Alligator Cells | **A. Williams**

1.17.P-We-022 Acute Beta-N-methylamino-L-alanine (BMAA) Effects on Adult Zebrafish Brain, Locomotion, and Recoverability | **D. Hamilton**

1.17.P-We-023 Linking Insecticide Body Residue With Thermal Performance and Behavioral Impairment in Juvenile Chinook Salmon | **L. Cominassi**

1.17.P-We-026 PFAS Bioaccumulation, Depuration, and Associated Energetic Costs in the Eastern Oyster, Crassostrea virginica | **K. Boyd**

1.17.P-We-027 Using A Toxic Aging Coin to Address Concerns for the Global Aging Crisis: Heads for Age Differences, Tails for Accelerated Aging | **S. Vielee**

1.17.P-We-030 Examination of acute exposure effects of untreated and AOP-treated OSPW using a human immune cell-based bioindicator system | **S. Paul**

1.17.P-We-031 Novel Microbe-Based Toxicity Assessment Tools for Examining Oil Sands Processed Waters | **K. Moghrabi**

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

2.02.P-We-033 Design Verifications and Improvements to the in-situ Toxicity Identification Evaluation System | **A. Crane**

2.02.P-We-034 Does the Individual Microbiome Reflect Health and Contaminant Exposure? | **M. Ottinger**

2.02.P-We-035 Unraveling 40 Years of Selenium Exposure in Burbot Populations: A Mining Story in the Elk-Kootenai Watershed | **N. Molbert**

2.02.P-We-036 Selenium Flux from Aquatic to Terrestrial Food Webs in the Upper Clark Fork River, Montana | **C. Zampetti**

2.02.P-We-037 Development of a Method to Monitor an Ecological Succession Remedy for Former Treatment Ponds at a Brownfield in Ohio | **K. Shearer**

2.02.P-We-038 In The Context of Estuaries: Impacts of Hypersalinity, Temperature, and Per- and Polyfluoroalkyl Substances (PFAS) on Early Life Stage Red Drum | **K. Roark**

2.02.P-We-040 Investigation of Multiple Stressors on the Health and Survival of Juvenile Puget Sound Chinook Salmon | **M. Driessnack**

2.02.P-We-041 Characterizing Metal Mixture Profiles in Japanese Water Environments and Illustrating Ecological Risk through Commonly used Approaches for Mixture Assessment | **W. Naito**

2.02.P-We-042 Uncovering the Links Between Anthropogenic Activities, Microbial Communities, and Greenhouse Gas Emissions in Wascana Creek, Canada | **M. Esser**

2.02.P-We-043 Assessing Potential Environmental Impacts of Exhaust Gas Cleaning System (EGCS) Discharges from Cruise Line Vessels | **W. Stubblefield**

2.02.P-We-044 Six-years of Surface Water Quality Measurements from Four Tributaries in the Arkansas Delta | **B. Singleton**

Stormwater Runoff Impacts and Potential Solutions | K. Rader, J. McIntyre, K. Schiff

2.09.P-We-045 Water Quality Impacts of Oil and Gas Produced Waters versus Commercial Dust Suppressants applied to Gravel Roads | **J. Farnan**

2.09.P-We-046 Discrete and Passive Sampling of 6PPD-Q in Stormwater-Impacted Surface Waters | **R. Lane**

2.09.P-We-047 Testing Removal of 6PPD-q and Coho Salmon Lethality by High Performance Bioretention Media Blends | **J. Lanksbury**

2.09.P-We-048 The Fate of 6PPD and 6PPD-Quinone in Air and Aquatic Conditions | **R. Mumford**

2.09.P-We-049 The Fate of 6PPD-Quinone in Soil and Water-Sediment Systems using a 14C Radiotracer | **R. Mumford**

A Frog, a Snake, and an Ecotoxicologist Walk Into a Pond (or, Advances in Ecotoxicology and Risk Assessment of Amphibians and Reptiles) | J. Marton, J. Brodeur, C. Godard, P. Henry

3.01.P-We-051 Assessment of Risk to Tiger Salamander Populations on Mines with Elevated Selenium | **C. Meyer**

3.01.P-We-052 ZnO Nanoparticles Affect Growth, Development, and Thyroid Histopathology in African Clawed Frog Tadpoles | **C. Theodorakis**

3.01.P-We-054 Monitoring accumulation and potential effects of per- and polyfluoroalkyl substances (PFAS) in diamondback terrapins (Malaclemys terrapin) in the Chesapeake Bay | **D. Haskins**

3.01.P-We-055 Response of Multiple-Biomarkers in amphibians from an environmental emergency region of Mexico | **O. Cruz-Santiago**

3.01.P-We-056 Spatial Variation of Mercury Exposure in Painted Turtles (Chrysemys picta) and Common Snapping Turtles (Chelydra serpentina) from Onondaga County, New York: Pre-Remediation in Onondaga Lake | **J. Tennant**

3.01.P-We-057 Dietary Exposure and Toxicity of Per- and Polyfluoroalkyl Substances (PFAS) Using Representative Invertebrate and Reptilian Models | **T. Anderson**

3.01.P-We-058 Ecotoxicity of Fluorine-Free Foams to Brown Anoles (Anolis sagrei) | **L. Odean**

3.01.P-We-059 Working Toward a Mercury Dietary NOAEL and LOAEL for Frogs | **P. Leitman**

3.01.P-We-060 Evaluation of anticoagulant rodenticides (ARs) effects in sea turtles by metabolome and lipidome analysis | **S. Nakayama**

3.01.P-We-061 Using a noninvasive sampling technique for profiling the biomarker response of marbled salamanders (Ambystoma opacum) across a rural to urban land use gradient | **H. Myers**

Linking Molecular, Cellular, Tissue and Organ Level Effects to Apical Endpoints in Wildlife Toxicology | T. Bean, B. Rattner, B. Hernout

3.03.P-We-064 Risk Assessment and Biomonitoring for Exposure and Effects of Legacy Persistent Organic Pollutants and Contaminants of Emerging Concern in Colonial Waterbirds of the Great Lakes | **K. Grasman**

3.03.P-We-065 The Use of Japanese Quail EcoToxChips to Improve the Understanding of the Mechanism(s) of Action of Ethinyl Estradiol (EE2) in Early-Life Stage Embryos | **E. Boulanger**

3.03.P-We-066 The Use of Japanese Quail EcoToxChips to Improve the Understanding of the Mechanism(s) of Action of Hexabromocyclododecane (HBCD) in Early-Life Stage Embryos | **E. Boulanger**

3.03.P-We-067 Effect of UV stabilizers and Filters in Early-Life Stage Japanese Quail and Double Crested Cormorant | **R. Koumrouyan**

3.03.P-We-068 Association of hepatic gene expression changes with tissue residue concentrations in wild-collected double-crested cormorant embryos using an EcoToxChip gene array | **M. King**

Can You See What I See: Taking A Look at Nanoparticle Environmental Interactions | K. Varner, G. Cobb, O. Tsyusko, E. Petersen

4.04.P-We-069 Antimicrobial Resistance in Surface Water Pathogens Induced by Silver Nanoparticles. | **O. Lucky**

4.04.P-We-071 Examining toxicity of 2D nanomaterials, nanocomposite membranes and their potential for removal of per-and polyfluoroalkyl substances . | **L. Madeo Cortarelli**

4.04.P-We-072 Resilience of Two 3D Printed Polymer Nanocomposites to UV-Degradation in Environmental Applications | **A. Kennedy**

4.04.P-We-076 Adsroption of CuO-based Nanopesticide on Chilean Volcanic Soils | **M. Gacitua**

Chemicals in Domestic, Agricultural and Industrial Waste: Occurrence, Fate and Use as Tracers | B. Chandramouli, S. Gewurtz, D. Price, J. Young Wise

4.05.P-We-078 Per- and Polyfluoroalkyl Substances (PFAS) in South Africa: A Survey of Variable Feedstock Composts | **A. Roche**

4.05.P-We-079 Tracing the Potential Nutrient Pollution Sources in Urban Watersheds: Utilizing Organic Chemical Tracers for Source Apportionment to Biscayne Bay (Florida) | **K. Troxell**

4.05.P-We-080 Detection of PFAS in water repellents in the Japanese market and estimation of their environmental impact | **S. Takagi**

4.05.P-We-081 Industrial Antioxidants and Their Transformation Products in Snow from Urban Roads in Greater Montreal, Canada: Identification and Chemometric Evaluation | **J. Osagu**

4.05.P-We-082 Characterization and Treatment of Effluent from the Galvanization Industry in Vanderbijlpark, South Africa | **T. Chauke**

Environmental Fate of Polymers | Y. Chai, V. Albright

4.07.P-We-083 Applying Colorimetric Methods to Predict the Biodegradation of Polymers | **E. Mitchell**

4.07.P-We-084 Evaluating CO2 Evolution Test Designs using Natural Polymers | **S. McLaughlin**

Environmental Forensics | N. Rose, G. Johnson

4.08.P-We-086 Evaluation of Polytopic Vector Analysis Sensitivity to Overlapping PCDD/F Source Signatures | **N. Rose**

4.08.P-We-087 Comprehensive Fingerprinting of Polycyclic Aromatic Compounds (PACs) In Samples From the Great Lakes | **I. Idowu**

4.08.P-We-088 Comparing sources of Polychlorinated Dibenzo-p-dioxins and -Furans to the Newtown Creek and Passaic River/Newark Bay | **L. Rodenburg**

4.08.P-We-089 An Artificial Intelligence Approach to Characterizing Three Decades of Polycyclic Aromatic Hydrocarbon Data | **F. Arzayus**

4.08.P-We-090 Identification of Ventilation Equipment, Adhesives, Caulking, and Structural Insulation as Sources of Airborne PCBs in Vermont Schools | **J. Hua**

4.08.P-We-091 Non-Target Chemical Composition of Surface Waters May Reflect Ecosystem Processes More Than Discrete Source Contributions | **C. Shi**

4.08.P-We-092 Source apportionment of polycyclic aromatic hydrocarbons (PAHs) throughout playground soils in Oklahoma City using various analyses | **S. Hileman**

Fate of Plastics in the Environment: Towards Unifying Laboratory Experiments, Field Observations and Modeling | J. Hu, M. Duhaime, C. Davis

4.10.P-We-093 A low-tech, mass-based community-scientist-oriented method for routine microplastics monitoring in coastal systems | **J. Farnan**

4.10.P-We-094 Development of Neural Network Models for Distributions of Plastics Patches in the Ocean by Sentinel-2 High-resolution Data | **Y. Kameda**

4.10.P-We-095 Development of Semi-automatic Analytical Methods for Fine Microplastics greater than 1 µm by Raman Imaging Microscopy | **Y. Kameda**

4.10.P-We-096 Spatial Distribution Of Microplastics In Overbank Deposits And Sandbar Sediments Of The River Loire (France) | **A. Zalouk**

4.10.P-We-098 Spatial and temporal patterns of plastic pollution in the Matagorda Bay System: Domestic or Industrial Source Concern? | **O. Fadare**

QSAR Models and Tools in Environmental Toxicology and Chemistry | L. Cassidy, M. Kawa, W. Lee

4.18.P-We-099 External Validation and Characterization of Ecotoxicity Prediction QSAR Model KATE2020 | **Y. Itami**

4.18.P-We-100 QSARs for biodegradation of chemicals in the environment: insights from new data | **T. Brown**

4.18.P-We-101 QSAR Evaluation and Development for the Prediction of Acute Responses in Fish to Exposure to Pesticides and their Degradates | **K. Vitense**

4.18.P-We-102 Prospective Optimization, Evaluation, and Application of In Vitro Methods to Study Biotransformation of Organic Chemicals in Birds | **M. Schultz**

Integrating Pesticide Exposure Models and Fate Data for Improved Risk Assessments | S. Crawford, J. Challis, V. Forbes

4.27.P-We-103 Does Pesticide Use Influence Phenology And Fitness Of California Birds? A Study Using Citizen Science Data | **Y. Zhang**

4.27.P-We-104 PROTEX: A powerful tool for evaluating the occurrence of and exposure to persistent and mobile pesticides and agrochemicals | **Z. Zhang**

4.27.P-We-105 A New Pesticides Data Visualization Tool for California | **E. Miller**

4.27.P-We-106 Evaluation of Pyrethroid Removal Efficacy in Agricultural Detention Basins | **B. Anderson**

Methods and Data for Cumulative Impact Assessment in the Context of Environmental Justice | W. Rish, C. Frey

5.04.P-We-108 Understanding ECEJ Census Data For A Large Group Of Manufacturing Sites With A Customized Dashboard | **T. Fewless**

5.04.P-We-109 Utilizing Existing Samples to Characterize Chemical Components of PM2.5 in Jackson, Mississippi | **A. Smith**

5.04.P-We-110 Evaluating Biometrics in National Health and Nutrition Survey (NHANES) Data to Estimate Allostatic Load in Cumulative Impact Assessments | **W. Klaren**

Soil Contaminants: Fate, Bioavailability, Environmental Toxicology in Ecological and Human Health Risk Assessment | M. Simini, R. Kuperman

5.11.P-We-111 Effect of soil properties on Bioaccumulation, translocation and Potential Risk of zinc oxide nanoparticles in soil-plant system | **S. Bae**

5.11.P-We-112 Reproduction Toxicities of PFAS-Free Replacements of Aqueous Film-Forming Foams for Soil Invertebrates. | **R. Kuperman**

5.11.P-We-113 Evaluation of Soil Background Values of Perfluoroalkyl and Polyfluoroalkyl Substances in Scandinavian Countries | **Z. Pandelides**

5.11.P-We-115 Widespread Climate and Emission Change Induce Losses of Selenium and Sulfur in Topsoil which Jeopardize the Soil Health and Human Nutrition on a Global and European Scale | **B. Droz**

5.11.P-We-116 Phytoavailability, Toxicity, and in Planta distribution of Coexisting Uranium and Microplastics Contamination in Mentha arvensis | **E. El Hayek**

5.11.P-We-117 The Impact of Site History on Metal Concentrations and Bioaccessibility in Urban Parks in Toronto | **M. Dodd**

5.11.P-We-118 Site-specific Relationship Between Porewater Concentrations and Bioaccumulation for Polychlorinated Biphenyls (PCBs) in the Marine Wetland near Naval Air Station, Pensacola, Florida | **M. Islam**

5.11.P-We-119 Investigation of the Factors that Control and Predict Mercury Methylation in Soils and Sediments | **H. Ziaei Jam**

General: Environmental Risk Assessment | A. Schmidt, J. Wise, C. Voros

5.12.P-We-120 Assessment of Allelopathic Plant Residual Effect of GM (Genetically Modified) Plants on an Indicator Plant | **J. Kim**

5.12.P-We-122 Weight of Evidence Environmental Persistency Assessment for Data Poor Synthetically Modified Biopolymers | **H. Streicher**

5.12.P-We-123 Environmental Risk Assessment Screening Proposal for Data Poor Substances – calibrated with Data Rich Substances | **H. Streicher**

5.12.P-We-124 Estimating Nectar Contamination with Pesticides using Leaf Tissue Measurements | **V. Rostan**

5.12.P-We-125 Health Risk Assessment of Globally consumed shark-derived products | **L. Garcia Barcia**

5.12.P-We-126 Macro-fouling of Cutlery and Other Single Use Plastics in a North Carolina Estuary | **D. Rittschof**

5.12.P-We-127 Analysis of the Geographic Exposure of Reptiles to Pesticides in Brazil and Suggestion of Focal Species in the Context of Environmental Risk Assessment | **M. Dias**

5.12.P-We-128 An Ecological Risk Assessment of Perfluorooctane Sulfonic Acid (PFOS) Exposure to Piscivorous Receptors: Evaluating Sources of Uncertainty | **S. Maggio**

5.12.P-We-129 General Approach for Selecting Analogues for Environmental Hazard of TSCA Chemicals | **J. Brennan**

5.12.P-We-130 Survey and Organization of Test Guidelines Available for Environmental Hazard in TSCA Risk Evaluations | **C. Green**

5.12.P-We-131 Evaluating the Framework of a Metals Environmental Risk Assessment through the Lens of Climate Change | **E. Middleton**

5.12.P-We-132 Establishing a Geospatial Tool that Allows for Data-based Tracking of Remediation and Assessments of Hazards Posed by Mined Lands in the Continental United States | **S. Seawolf**

5.12.P-We-133 Roadmap: Labcorp's approach to Next Generation Risk Assessment | **E. Danby**

5.12.P-We-134 Pharmaceuticals and Personal Care Products (PPCPs) in the Terrestrial Environment: What the Fuss? | **O. Ojo**

5.12.P-We-136 Considerations for reduced animal testing for environmental risk assessments of pharmaceuticals | **E. Danby**

5.12.P-We-137 Solid Media Sampling Considerations for Collecting Data Appropriate for Use in Risk Assessment | **J. Rothrock**

5.12.P-We-143 Developing Guidance for Performing Risk Assessments Applicable to the ASEAN Region | **E. Middleton**

5.12.P-We-144 Target Organ Toxicity in Sprague Dawley Rats Following Oral Exposure to Groundwater Mixture: Assessment of Dose-Response Relationships of Histopathological, Biochemical, and Behavioral Alterations. | **B. Boamah**

5.12.P-We-146 Comparing Water Quality Criteria from Around the World: Phthalates, Organophosphates, Carbamates, and Pyrethroids | **A. Hetrick**

5.12.P-We-147 Evaluating Contaminant Dynamics in a Periodically Inundated Floodplain | **A. Alborzi**

5.12.P-We-148 Validation of an Aquatic Food Web Model Using Site-specific Case Study Data | **J. Zodrow**

General: Engineering, Remediation and Restoration | J. Wise, A. Schmidt, C. Voros

6.04.P-We-149 Potential for In Situ Biodegradation of Pyridine Derivatives at the Indianapolis Reilly Tar and Chemical Superfund Site | **G. Sims**

6.04.P-We-152 Seasonal Sulfur Redox Cycling in Two Constructed Wetlands with Insight on How They Age | **C. Lindelien**

6.04.P-We-154 Development of QAPP for AROMA-VOC | **H. Tay**

6.04.P-We-155 Planning for Disaster: A Case Study Based on the East Palestine, Ohio Train Derailment | **B. Vigon**

6.04.P-We-156 Effects of Spatial Variability of Macroinvertebrate Communities on Assessment of Remediation and Restoration Efforts at Great Lakes Area of Concern (AOC) Sites. | **R. Yeardley**

6.04.P-We-157 Effect of C/N Ratio on Composting Chicken Manure Blended with Crude Oil for Remediation of Petroleum Hydrocarbon Polluted Soil | **I. Ahmed**

6.04.P-We-158 Utilization of Biochar for the Removal of Phosphorus and Chloride in Water | **S. Begum**

6.04.P-We-160 Impacts of Rainfall Pulses on Efflux of Cu and Zn from a Constructed Wetland | **D. Ricke**

6.04.P-We-161 Soil contaminated with mining waste abandoned 50 years ago in La Planta (San Juan, Argentina): From socio-environmental assessment to in situ phytoremediation | **B. Young**

6.04.P-We-162 Equilibrium Passive Samplers for Short-term Measurements of Polychlorinated Biphenyls | **O. Ghosh**

6.04.P-We-164 Optimization of Electrocoagulation for Removal of Chlorides in Galvanizing Industry - Protecting the Wetland Systems | **T. Chauke**

6.04.P-We-165 Photocatalytic Degradation and Removal of Organic Contaminants Using Polydimethylsiloxane (PDMS) Composite Sponge with Titanium Dioxide | **M. Ceccopieri**

6.04.P-We-166 Contaminants of Emerging Concern in Coastal Waters in St Croix, US Virgin Islands | **E. Bennett**

Approaches for Teaching Environmental Toxicology & Chemistry | A. Harwood, S. Nutile, A. Simpson, C. Singleman

7.01.P-We-168 Lessons Learned From Teaching Environmental Toxicology Across Multiple Modalities By Utilizing A Synchronous Hyflex Model | **J. Bisesi**

Metals: Application of Models and Bioavailability Measures – Recent Developments | E. Smith, C. Bergeron, C. Cooper, R. Gensemer

7.04.P-We-170 Integrating Multivariate Analyses, Metals Bioavailability Models, and Community Ecology to Address Sublethal Toxicity in a Former Mine Pit | **S. Brown**

7.04.P-We-171 Analysis of biokinetic parameters reveals patterns in mercury accumulation across aquatic species | **L. Stevenson**

7.04.P-We-172 Predicting Metal Toxicity to Aquatic Organisms in Rusting Arctic Rivers | **T. Evinger**

7.04.P-We-173 Assessment of Intermittent Lead Exposures using the Integrated Exposure Uptake Biokinetic Model | **H. Herring**

7.04.P-We-174 Use of the Zinc and Cadmium Biotic Ligand Model (BLM) to Evaluate Metals Toxicity in Whole Effluent Toxicity (WET) Testing | **A. Romero**

7.04.P-We-175 Relationships in Selenium Concentrations Among Fish Tissues: Monitoring and Regulatory Implications | **C. Detering**

Risk Communication: Strategies and Platforms that Work for New and/or Complex Risk Management Needs | M. Beal, R. Zajac-Fay, S. Sager, J. Clarkson

7.06.P-We-176 Why Crisis Communication is in a Crisis | **T. House-Knight**

7.06.P-We-178 Connecting the Dots: PFAS Risk Framework and Communication Hub | **M. Ballentine**

7.06.P-We-179 What Contributes to Perceptions of Public Health Advisories Across the United States? A Case Study on Communicating Variability in Fish Consumption Advisories Triggered by Perfluorooctane Sulfonate | **J. Makaure**

7.06.P-We-180 Ethylene Oxide Risk Communication: Reflections on a National Approach to Local Risk Comm at the USEPA | **M. Beal**

How Does the SETAC Community Define Good Quality Data? | S. Au, J. Corrales

7.08.P-We-181 Risk Assessment of Nanomaterials - What Regulators Want! | **S. Gewurtz**

7.08.P-We-182 Evaluation of relevancy, reliability, and quality of toxicity data in the ECOTOX Knowledgebase | **D. Hoff**

7.08.P-We-183 The Semi-Automated Study Quality Assessment and Reporting Evaluation (SQuARE) Tool for Assessing the Quality of Individual Studies and Extracted Datasets | **S. Vliet**

The Role of Deliberate and Unintentional Misinformation in Science and Communication: What Does it Look Like and How to Guard Against it. | W. Goodfellow, T. Canfield, P. Guiney

7.09.P-We-185 Misinformation in Science and Communication on Decision Making: As Scientists, What Are Our Roles as Gatekeepers? | **W. Goodfellow**

7.09.P-We-186 Perceptions of Bias: Does the standard of certainty change when politics comes into play? | **M. Dourson**

7.09.P-We-187 Maintaining High Quality in the International Journal – Environmental Toxicology & Chemistry – in the Face of Deception, Misleading Impact Factors, and the Limited Resources of a Non-Profit System. | **G. Burton**

7.09.P-We-188 Science Communication Mishaps: How They Occur, and Can They Be Fixed or Avoided? | **S. Ciparis**

7.09.P-We-189 A Journey through the Two Decades of Testing Hypotheses Based on Non-Reproduceable Science | **A. LeHuray**

7.09.P-We-192 Environmental Justice and Increased Environmental Equity Scrutiny: A Case Study in Risk Communication and Misinformation | **D. McCue**

Assessing Environmental Impacts Along Mineral Supply Chains | A. Ryan, E. Smith, C. Koffler

8.03.P-We-194 The Incorporation of Ecological Risk Assessment into the Life Cycle Assessment and Adaptive Management of Metals and other Materials | **W. Landis**

8.03.P-We-195 Meeting the Mineral Demands of Clean Energy Technologies: Maximizing Net Environmental Benefits While Ensuring Equitable Outcomes Across the Life Cycle of Mineral Extraction, Distribution and Use | **J. Toll**

Virtual-Only Presentations

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

General: Environmental Toxicology and Stress Response | J. Wise, C. Voros, A. Schmidt

1.17.V-019 Effects of black carbon, PM2.5 and temperature on daily asthma admissions in a city in Mississippi, USA | **H. Nguyen**

A Frog, a Snake, and an Ecotoxicologist Walk Into a Pond (or, Advances in Ecotoxicology and Risk Assessment of Amphibians and Reptiles) | J. Marton, J. Brodeur, C. Godard, P. Henry

3.01.V-006 Effects of Elevated Temperatures and Exposure to Atrazine on Amphibian Health and Immune Systems | **M. Gavel**

3.01.V-005 Effects and Bioconcentration of Bisphenol A and S on Chronically Exposed Tadpoles | **S. Robinson**

Linking Molecular, Cellular, Tissue and Organ Level Effects to Apical Endpoints in Wildlife Toxicology | T. Bean, B. Rattner, B. Hernout

3.03.V-026 Development of New Approach Methodologies (NAMs) for Avian Risk Refinement | **J. Maul**

Environmental Fate of Polymers | Y. Chai, V. Albright

4.07.V-009 Biodegradability of Polymeric Compounds under Controlled Composting Conditions According to ISO 14855-2 | **Y. Chai**

Fate of Plastics in the Environment: Towards Unifying Laboratory Experiments, Field Observations and Modeling | J. Hu, M. Duhaime, C. Davis

4.10.V-010 Distribution and Ecological Risk Assessment of Microplastics in the Water of St. Lawrence River, Estuary, and Saguenay Fjord in Canada | **H. Yespal Subha**

General: Environmental Risk Assessment | A. Schmidt, J. Wise, C. Voros

5.12.V-024 DEB-IBM-based effect modeling of thiamethoxam on field populations of the non-biting mosquito Chironomus riparius | **M. Vaugeois**

General: Engineering, Remediation and Restoration | J. Wise, A. Schmidt, C. Voros

6.04.V-018 Lemna minor mitigates effects in plasma and neurotoxic parameters in a Neotropical fish exposed to silver | **V. Bezerra**

Inclusive Diversity Committee

Gathering of Empowered Minds Social

ALL ARE WELCOME!

17:30–19:30 | Wednesday | L004

Join our panelists in discussing "Access" and what it means for individuals at various career stages.

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5-9 MAY 2024 | SEVILLE, SPAIN

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DAILY SCHEDULE	LISTED MEETINGS ARE OPEN TO ALL ATTENDEES	
7:00–15:30	Registration	South Pre-function Upper Concourse
7:00–17:30	Coat and Luggage Check	Fourth Street Pre-function
7:00–15:30	Speaker Ready Room	L012
7:00–8:00	Poster Setup	Exhibit Hall B
8:00–10:00	Morning Poster Sessions and Networking	Exhibit Hall B
10:00–11:00	SETAC North America Inclusive Diversity Committee	L013
10:00–12:00	Morning Platform Sessions	see p. 54
12:00–13:30	Lunch (on your own)	
13:30–15:30	Afternoon Platform Sessions	see p. 56
15:30–16:30	Afternoon Social	Exhibit Hall B
16:30–17:00	Closing	Ballroom A

ASSEMBLIES

Join Us for the Closing

Join us for the closing ceremony as we announce and celebrate the Best Student Presentation Awards and look back on a successful week.

Hear delightful closing remarks from the SETAC Louisville Program Committee chairs and newly elected SETAC North America President, and get a preview of next year's meeting in Fort Worth, Texas.

THURSDAY, 16 NOVEMBER

MORNING TALKS (T)

	10:00–10:15	10:20–10:35	10:40–10:55
Ballroom A	**Mercury Bioaccumulation, Exposure and Effects on Wildlife: Understanding How Ecosystem Pressures Drive Mercury Cycling** | S. Janssen, J. Ackerman, C. Eagles-Smith, B. Barst		
	4.15.A.T-01 Drivers of mercury contamination, methylmercury formation and mercury sources within lake sediments across the contiguous United States | **R. Lepak**	**4.15.A.T-02** Impacts of forest defoliation from spruce budworm on consumer allochthony and mercury bioaccumulation and biomagnification in stream food webs. | **K. Kidd**	**4.15.A.T-03** The Impact of Impoundment: The Influence of Impoundments on Fish Mercury Concentrations Along an Arid-Land River | **J. Willacker**
Ballroom B	**The Standardized Micro- and Nanoplastic Planet: Degradation, Fragmentation and Leaching** | L. Hildebrandt, F. Pohl, D. Mitrano, T. Zimmermann		
	4.21.T-01 Importance of Detection, Quantification and Identification of Micro- and Nanoplastics – Does My Instrumentation Matter? | **A. Jamting**	**4.21.T-02** Can Fully Automated Detection and Analysis of Microplastics Be Both Time-Efficient and Accurate? An Exploration of a Novel Approach. | **D. Robey**	**4.21.T-03** Distribution and Analysis of Nanoplastics in Lake Erie Drinking Water | **M. Jamison**
Ballroom C	**Identifying PFAS Sources Near and Far** | L. Rodenburg, S. Capozzi, T. Guillette, J. McCord		
	4.13.T-01 Atmospheric Releases of PFAS From Wastewater Treatment Plants and Implications for Worker Exposure | **D. Westerman**	**4.13.T-02** Sources Of Per- and Poly- Fluoro Alkyl Substances to The Influent and Effluent of Municipal Wastewater Treatment Plants | **L. Rodenburg**	**4.13.T-03** Investigation of PFAS in Domestic Water Supplies in an Oil and Gas Producing Region of Northern West Virginia | **S. Nason**
Ballroom D	**Exposure and Effects of Recognized and Emerging Contaminants to Wildlife** | K. Fremlin, J. Verreault, V. Jaspers, K. Fernie		
	3.02.T-01 Discussion -Exposure and Effects of Recognized and Emerging Contaminants to Wildlife | **K. Fremlin**	**3.02.T-02** Relationships between Spatial Behaviour, Habitat Use and Contaminant Exposure in Urban-Adapted Ring-Billed Gulls | **A. Lippold**	**3.02.T-03** Assessment of Per- and Poly- Fluoroalkyl Substances from Multiple Tissues of North Pacific Killer Whales | **S. Puthigai**
Ballroom E	**Effect of Environmental Pollutants to Aquatic Organism Health: Linking Molecular Effects to Apical Endpoints** | J. Magnuson, H. Puglis, T. King-Heiden		
	2.04.T-01 Integrated 'omics to connect to higher levels of biological organization | **J. Magnuson**	**2.04.T-02** Use of molecular tools and behavioral assessments to understand the developmental and multigenerational adverse outcomes of benzo[a]pyrene exposure | **K. Willett**	**2.04.T-03** Molecular insight into EDC-induced infertility in aquatic model systems | **T. Baker**
L005/L009	**Human Exposure to Organic Chemicals of Current Concern** | H. Whitehead, E. Ulrich, H. Stapleton, A. Salamova		
	4.11.T-01 Exposure of Young Children to Semi-Volatile Organic Compounds (SVOCs) in the Sleeping Micro-Environment | **S. Vaezafshar**	**4.11.T-02** Gas Chromatography - High Resolution Mass Spectrometry Analysis of Human Placenta for Environmental Chemicals of Concern | **M. Misselwitz**	**4.11.T-03** The Nexus between Wristband-associated Flame Retardants and Polycyclic Aromatic Hydrocarbons, Their Urinary Metabolites and Human Health | **M. Venier**
L010/L014	**Contaminated Sediment Toxicity, Emerging Contaminants, Risk Assessment and Management, Remediation, Restoration, Sustainability, Climate Change** | B. Brooks, C. Peterson, M. Novak, T. Hollweg		
	6.01.T-01 Indicators of Potential Remedy Success for a Mercury Impacted River Remediation | **S. Thakali**	**6.01.T-02** Contaminated Sediment and Climate Change – Sediment Desiccation, The Unthought About Hazard for Caps and Monitored Natural Recovery | **J. Dittman**	**6.01.T-03** Natural Resource Damage Assessment Habitat Restoration and Sediment Cleanup Coordination – Vigor Shipyards, Seattle, WA | **A. McKay**
L015/L019	**Demystifying the Method Standardization and Accreditation Processes** | C. Irvine, L. Van der Vliet, K. Payne		
	7.02.T-01 How to Remain Objective and Open; Overview of the Consensus Standard Development Process | **W. Lipps**	**7.02.T-02** Withdrawn	**7.02.T-03** Validation and Standardization are key design features for a New Approach Method: Lessons from the EcoToxChip Project | **N. Basu**

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

MORNING TALKS (T)

11:00–11:15	11:20–11:35	11:40–11:55	
Mercury Bioaccumulation, Exposure and Effects on Wildlife: Understanding How Ecosystem Pressures Drive Mercury Cycling | S. Janssen, J. Ackerman, C. Eagles-Smith, B. Barst			
4.15.A.T-04 Environmental drivers of mercury bioaccumulation across deep and shallow water basins of Lake Champlain | **V. Taylor**	**4.15.A.T-05** Development of a national-scale model to predict environmental mercury risk using dragonfly larvae as biosentinels | **C. Eagles-Smith**	**4.15.A.T-06** Winter mercury patterns in lake ecosystems and future environmental health risks | **R. Karimi**	Ballroom A
The Standardized Micro- and Nanoplastic Planet: Degradation, Fragmentation and Leaching | L. Hildebrandt, F. Pohl, D. Mitrano, T. Zimmermann			
4.21.T-04 The Physical Abrasion of Plastic to Form Microplastics: an Experimental Approach | **A. Fugagnoli**	**4.21.T-05** Characterization of Extractable and Leachable Additives from Microplastics Prepared from Reference Polymer Materials. | **A. Lewis**	**4.21.T-06** The Unusual Suspects: Screening for Persistent, Mobile, and Toxic Plastic Additives in Common Plastic Products | **E. Fries**	Ballroom B
Identifying PFAS Sources Near and Far | L. Rodenburg, S. Capozzi, T. Guillette, J. McCord			
4.13.T-04 Preliminary Analysis of PFAS in an Agricultural Ecosystem following Irrigation with Treated Effluent Wastewater | **K. McDermett**	**4.13.T-05** Trifluoroacetic Acid and Oher Ultrashorts: Understanding Sources, Measurement and Occurrence | **B. Chandramouli**	**4.13.T-06** From Watersheds to Dinner Plates: Evaluating PFAS Exposure through Fish Consumption in Michigan | **S. Capozzi**	Ballroom C
Exposure and Effects of Recognized and Emerging Contaminants to Wildlife | K. Fremlin, J. Verreault, V. Jaspers, K. Fernie			
3.02.T-04 Dietary Per- and Polyfluoroalkyl Substances (PFAS) Mixture Uptake and Elimination in the American Toad (Anaxyrus americanus) | **A. East**	**3.02.T-05** Imidacloprid Exposure is Detectable in Over One Third of Wild Bird Samples from Diverse Texas Ecoregions | **M. Anderson**	**3.02.T-06** Polyhalogenated Carbazoles in the Food Web of the St. Lawrence Estuary Beluga Population | **A. Trinquet**	Ballroom D
Effect of Environmental Pollutants to Aquatic Organism Health: Linking Molecular Effects to Apical Endpoints | J. Magnuson, H. Puglis, T. King-Heiden			
2.04.T-04 Sublethal effects of photo-induced crude oil toxicity to early life stage (ELS) red drum (Sciaenops ocellatus) across multiple levels of biological organization | **R. Leads**	**2.04.T-05** Linkage between mercury-induced epimutations and transcriptomes in zebrafish brain and retina associated with abnormal neurobehavior | **M. Carvan**	**2.04.T-06** Inhibition of Fin Regeneration in Fathead Minnow (Pimephales promelas) Following Exposure to the Synthetic Glucocorticoid, Fluticasone Propionate | **A. Cole**	Ballroom E
Human Exposure to Organic Chemicals of Current Concern | H. Whitehead, E. Ulrich, H. Stapleton, A. Salamova			
4.11.T-04 Investigating PFAS Levels in Paired Silicone Wristband and Blood Serum Samples | **T. Hoxie**	**4.11.T-05** Rapid Detection and Targeted Analysis of Fluorinated Compounds in Smart and Fitness Watch Bands | **A. Wicks**	**4.11.T-06** Insights from Recent Investigations on Neutral PFAS, their Presence in Consumer Products and in the Environment, and their Potential Exposure Assessments | **I. Titaley**	L005/L009
Contaminated Sediment Toxicity, Emerging Contaminants, Risk Assessment and Management, Remediation, Restoration, Sustainability, Climate Change | B. Brooks, C. Peterson, M. Novak, T. Hollweg			
6.01.T-04 How Old is Too Old? A Comprehensive Evaluation of Historical Sediment Data Representativeness to Support Development of Risk-Based Benthic Thresholds | **R. Zajac-Fay**	**6.01.T-05** PAHs Release from Resuspended Sediment: Comparison of Accumulation Between a Passive Sampler and Biota | **B. Chaumet**	**6.01.T-06** Mitigation of Porewater Sulfide in Wood Waste-Impacted Sediments by Reactive Amendments: Geochemical and Spectroscopic Observations in Bench-Scale and Field Pilot Studies | **M. Kanematsu**	L010/L014
Demystifying the Method Standardization and Accreditation Processes | C. Irvine, L. Van der Vliet, K. Payne			
7.02.T-04 Statewide Quality Assurance Studies to Support Whole Effluent Toxicity Testing in California, USA | **K. Schiff**	**7.02.T-05** Multi-Disciplinary Approaches to Collect Data that Supports New Anti-Sea Lice Therapeutant Product Development and Registration | **B. de Jourdan**	**7.02.T-06** Introduction to the NELAC Institute (TNI) Laboratory Accreditation Standards | **K. Payne**	L015/L019

THURSDAY, 16 NOVEMBER

AFTERNOON TALKS (T)

	13:30–13:45	13:50–14:05	14:10–14:25
Ballroom A	**Mercury Bioaccumulation, Exposure and Effects on Wildlife: Understanding How Ecosystem Pressures Drive Mercury Cycling** | S. Janssen, J. Ackerman, C. Eagles-Smith, B. Barst		
	4.15.B.T-01 Exploring Nearshore to Offshore Mercury Bioaccumulation Patterns in Lake Huron | **G. Armstrong**	**4.15.B.T-02** Shifts in the Pacific Salmon Community Alter Continental-scale Subsidy Biotransport | **J. Brandt**	**4.15.B.T-03** Methylmercury Effects on Birds: A Review, Meta-Analysis, and Development of Toxicity Reference Values for Injury Assessment | **J. Ackerman**
Ballroom B	**Advancing Wastewater Surveillance to Complement Community and Environmental Health Measures** | B. Subedi, D. Antkiewicz, S. Berry, D. Burgard		
	5.01.T-01 Advancing a Wastewater-based Framework for Monitoring Drug Use in Communities | **T. Sabo-Attwood**	**5.01.T-02** Wastewater as a Tool to Evaluate the Efficacy of a Statewide Drug Takeback Program | **D. Burgard**	**5.01.T-03** Wastewater Surveillance Signals for Xylazine in Kentucky | **C. Delcher**
Ballroom C	**Toxic Effects of Per- and Poly-Fluorinated Compounds: From the Molecular to Ecosystem Levels** | N. Karouna-Renier, C. Murphy, D. Haskins, M. Murray		
	3.04.T-01 PFAS Bioaccumulation and Trophic Transfer in Linked Stream and Riparian Food Webs | **K. Campbell**	**3.04.T-02** Relationships Among Structural Characteristics and Aquatic Toxicity for Per- and Polyfluoroalkyl Substances, Part 2: Evidence from Uptake, Bioconcentration, and Critical Body Burdens | **I. Mundy**	**3.04.T-03** Characterization of the Replacement PFAS, Perfluoroethylcyclohexane Sulphonate (PFECHS) and Perfluorobutane Sulphamide (FBSA) in vitro Individually and in Mixture with Perfluorooctane sulponate (PFOS) | **H. Mahoney**
Ballroom D	**Emerging Contaminants as Agents of Global Change: Prioritization of Whole Ecosystem and Multi-stressor Research** | A. Gray, J. Rodriguez Gil, M. Seeley		
	2.05.T-01 Can Agrochemicals Have an Effect on Greenhouse Gas Production in Freshwater Ecosystems? | **C. Cornish**	**2.05.T-02** The Effects of the Direct Discharge of Coalbed Methane Produced Water on the Headwater Streams of Colorado's Largest State Wildlife Area | **K. Kringel**	**2.05.T-03** Potential Synergistic Effects of Nitrogen and Copper on Periphytic Algae Growth and Community Structure in an Alpine Lake of the Sierra Nevada Mountains, California | **G. Ruso**
Ballroom E	**Alternative Approaches to Animal Testing: Exploring Approaches and Avenues for the Future Ecological Risk Assessments** | T. Norberg-King, R. Dalton, M. Embry, M. Lampi		
	1.02.T-01 Zebrafish embryo vs mouse – An alternative to mammalian teratogenicity tests in assessing effects of pharmaceuticals? | **K. Brotzmann**	**1.02.T-02** In vitro Screening of UV-stabilizers and UV filters: Cytotoxicity, CYP1A activity, and mRNA Expression in An Immortalized Embryonic Double-Crested Cormorant Cell Line | **T. Sharin**	**1.02.T-03** Focused transcriptomics arrays (EcoToxChips) to characterize the molecular toxicity pathways and transcriptomics points of departures (tPODs) of 6PPD-quinone in rainbow trout | **M. Hecker**
L005/L009	**Microbial Metagenomics: An Emerging Tool for Predictive Ecotoxicology** | J. Bisesi, K. Thompson, C. Martyniuk, J. Wilkinson		
	1.07.T-01 Evaluating metagenomic analyses for undercharacterized environments: what's needed to light up the biological "dark matter"? | **K. Thompson**	**1.07.T-02** Application of Metatranscriptomics to Assess the Role of Gut Microbiota in the Development of Obesity upon Early-life Exposure to Environmental Antibiotics | **M. Mortimer**	**1.07.T-03** Impacts of Antimicrobial Exposure on the Gut Microbiome of Early-Life Stage Fish: A Chemical and Species Comparison | **P. Ankley**
L010/L014	**The Behavior, Fate and Impact of an Increasingly Complex Array of Contaminants in Changing Arctic and Antarctic Environments** | M. Houde, J. Kucklick, R. Letcher		
	4.20.T-01 Impacts of Permafrost Degradation on Metal Concentrations in Arctic char from Melville Island, Nunavut, Canada | **K. Hudelson**	**4.20.T-02** Ultraviolet Absorbents and Industrial Antioxidants in the Tissues of the Seabirds, Mammals, and Fish from the Canadian Arctic | **A. Granados Galvan**	**4.20.T-03** Long Term Temporal Trends of Perfluoroalkyl Substances in Landlocked Char from High Arctic Lakes | **D. Muir**
L015/L019	**Use of Freshwater Mollusk Toxicity Data for Improved Conservation of Water and Sediment Quality** | N.Wang, P. Gillis, T. Augspurger, Y. Kudla		
	2.10.T-01 Assessing Ammonia Toxicity of Texas Unionid Mussels | **L. Gudgell**	**2.10.T-02** The Toxicity and Bioaccumulative Potential of the Anti-Malaria Pharmaceutical, Atovaquone to Freshwater Mussels and Chironomid Larvae | **P. Gillis**	**2.10.T-03** Comparing the Response of Glochidia and Juveniles of Common and Federally Endangered Freshwater Mussels to Three Contaminants of Concern | **D. Soucek**

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

AFTERNOON TALKS (T)

14:30–14:45	14:50–15:05	15:10–15:25	
Mercury Bioaccumulation, Exposure and Effects on Wildlife: Understanding How Ecosystem Pressures Drive Mercury Cycling | S. Janssen, J. Ackerman, C. Eagles-Smith, B. Barst			
4.15.B.T-04 Methyl Mercury Contamination and Diet of Nestling Red-winged Blackbirds | **M. Chumchal**	**4.15.B.T-05** Comparing In Vivo Methylmercury Detoxification in Two Species of Duck from Great Salt Lake, Utah | **S. Lopez**	**4.15.B.T-06** Temporal Trends of Mercury Contamination in Seabirds from Northwest Greenland | **K. Whitmore**	Ballroom A
Advancing Wastewater Surveillance to Complement Community and Environmental Health Measures | B. Subedi, D. Antkiewicz, S. Berry, D. Burgard			
5.01.T-04 Application of Wastewater-based Epidemiology to Monitor Substance Use Trends in Eastern Kentucky Communities | **S. Torabi**	**5.01.T-05** Wastewater -based epidemiology exposome: Mapping increased places of concern for metals exposure | **T. Smith**	**5.01.T-06** Bioinformatics based Screening of Wastewater Samples may Provide Information for Selecting Targeted Wastewater Surveillance of Potentially Emerging Viral Disease | **Y. Li**	Ballroom B
Toxic Effects of Per- and Poly-Fluorinated Compounds: From the Molecular to Ecosystem Levels | N. Karouna-Renier, C. Murphy, D. Haskins, M. Murray			
3.04.T-04 Do Perfluoroalkyl Acids Influence Reproductive Success of Tree Swallows? Going beyond PFOS and PFOA | **K. Hopkins**	**3.04.T-05** Accumulation of per- and polyfluoroalkyl substances and their association with immune parameters in juvenile osprey (Pandion haliaetus) from Chesapeake and Delaware Bays | **D. Haskins**	**3.04.T-06** Tissue distribution of PFAS in wildlife species and their toxicological significance: Relevance to Mustelids Evaluations | **J. Newsted**	Ballroom C
Emerging Contaminants as Agents of Global Change: Prioritization of Whole Ecosystem and Multi-stressor Research | A. Gray, J. Rodriguez Gil, M. Seeley			
2.05.T-04 Effects of Nanocopper Antifouling Paint on Benthic Community Diversity | **M. Giroux**	**2.05.T-05** Effects of Nitrapyrin on Nitrogen Procession and Microbial Community Structure in Aquatic Microcosms | **T. Edwards**	**2.05.T-06** The Crayfish Mercury Project: A Community-Based Approach to Environmental Monitoring at the River Basin Scale | **T. Libunao**	Ballroom D
Alternative Approaches to Animal Testing: Exploring Approaches and Avenues for the Future Ecological Risk Assessments | T. Norberg-King, R. Dalton, M. Embry, M. Lampi			
1.02.T-04 A New Approach Methodology for Predictive Developmental and Reproductive Toxicology (DART) with a C. Elegans-Based Assay | **S. Mondal**	**1.02.T-05** Withdrawn	**1.02.T-06** Genotoxicity of benzidine-based dyes in Chinese Hamster Ovary cells expressing human CYP1A2 and N-acetyltransferase 1 | **M. Habil**	Ballroom E
Microbial Metagenomics: An Emerging Tool for Predictive Ecotoxicology | J. Bisesi, K. Thompson, C. Martyniuk, J. Wilkinson			
1.07.T-04 Withdrawn	**1.07.T-05** Low-Level Short-Term Exposure of Mallards to Microcystin-LR Affects Cecal Virome and Microbiome Function | **S. Drovetski**	**1.07.T-06** Shifts in insect and riparian spider microbiome communities across the aquatic-riparian interface in a lake with elevated copper concentrations | **B. Perrotta**	L005/L009
The Behavior, Fate and Impact of an Increasingly Complex Array of Contaminants in Changing Arctic and Antarctic Environments | M. Houde, J. Kucklick, R. Letcher			
4.20.T-04 Persistent Organic Pollutants in Beluga Whales (Delphinapterus leucas) from Bristol Bay, Alaska | **J. Hoguet**	**4.20.T-05** Insights of a Temporal and Spatial Contaminant and Health Assessment of Two Alaskan Polar Bear Populations | **D. Wetzel**	**4.20.T-06** Very Short-, Short-, Medium,-, Long- and Very Long-Chain Chlorinated Paraffin Levels, Patterns and Time-Point Comparisons in Canadian (Hudson Bay) Polar Bears | **R. Letcher**	L010/L014
Use of Freshwater Mollusk Toxicity Data for Improved Conservation of Water and Sediment Quality | N.Wang, P. Gillis, T. Augspurger, Y. Kudla			
2.10.T-04 Developing a Reproductive Toxicity Test Method for Freshwater Mussels | **A. Sieja**	**2.10.T-05** Effects of copper, elevated CO2 and their combination on growth, calcification, gene expression and acid-base balance in Lymnaea stagnalis | **M. Grosell**	**2.10.T-06** Metal Accumulation, Fitness Effects, and Maternal Transfer in Non-Native Mysterysnails | **S. Nutile**	L015/L019

Poster Schedule

Setup: 7:00–8:00 (see p. 10 for map of posters)
Take down: 16:30–16:45

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

Morning Poster Session: 8:00–10:00
Lunch Break: 12:00–13:30
Afternoon Poster Session: 15:30–16:30

Late-Breaking Science Posters

Late-breaking science posters start with P-Th-165 on Thursday. For a list of presentations, please visit the virtual platform.

Alternative Approaches to Animal Testing: Exploring Approaches and Avenues for the Future Ecological Risk Assessments | T. Norberg-King, R. Dalton, M. Embry, M. Lampi

1.02.P-Th-001 Transcriptomics-based Points of Departure for Daphnia Magna Exposed to Per- and Polyfluoroalkyl Substances | **M. Hazemi**

1.02.P-Th-002 Initial Investigation of the Mysid Shrimp Molting System for the Evaluation of Endocrine Disrupting Compounds | **D. Allen**

1.02.P-Th-003 Advancing alternatives in marine toxicity testing: Can fish embryo or mysids be used as replacements for fish larvae? | **K. Solomons**

1.02.P-Th-004 Developing Hyalella azteca Embryo Toxicity Assay for High Throughput Toxicity Tests | **I. Polunina**

1.02.P-Th-005 Web-based Interspecies Correlation Estimation (Web-ICE) Toxicity Extrapolation Tool v4.0 | **S. Nelson**

1.02.P-Th-006 A tiered bioaccumulation assessment framework for organic chemicals | **A. Sangion**

1.02.P-Th-007 Diversifying the ECOTOXicology Knowledgebase: Inclusion of In Vitro Toxicity Data to Support Ecological Risk Assessment and Research | **M. Hornung**

1.02.P-Th-008 Towards establishing a 24-hour, microplate-based, transcriptomics assay for rainbow trout embryos | **N. Basu**

1.02.P-Th-009 Transcriptomic points of departure in 24 hr ELS tests of rainbow trout using EcoTox-Chips: A case study with ethinyl estradiol. | **E. Boulanger**

1.02.P-Th-010 Health risk of emerging contaminants in pet hair and indoor air: An Integrative approach of ToxCast endpoints and AOP network | **J. You**

1.02.P-Th-011 Physiologically Based Toxicokinetic Models: Chemical Exposure Simulations Applied to Novel Fish Species | **G. Langlois**

1.02.P-Th-012 Alternative Approaches to Animal Testing: Exploring Approaches and Avenues for the Future Ecological Risk Assessments | **K. Mittal**

1.02.P-Th-013 Using Museum Specimens to Document Contamination: A Superfund Case Study within the Tri-State Mining District | **S. Hileman**

1.02.P-Th-014 What is the Value of Standard in vivo Acute Fish Toxicity Tests for Pesticide Products in the US and the EU? | **K. Coady**

Microbial Metagenomics: An Emerging Tool for Predictive Ecotoxicology | J. Bisesi, K. Thompson, C. Martyniuk, J. Wilkinson

1.07.P-Th-015 Increasing Throughput of Full-length 16S Sequencing Utilizing Concatenation | **J. Wilkinson**

1.07.P-Th-016 Impacts of Erythromycin and an Antibiotic-Mixture on Juvenile Rainbow Trout Gut Microbiome | **P. Ankley**

Effect of Environmental Pollutants to Aquatic Organism Health: Linking Molecular Effects to Apical Endpoints | J. Magnuson, H. Puglis, T. King-Heiden

2.04.P-Th-017 High Content Screening To Predict Sublethal Effects On Daphnia: A New Tool For Rapid Assessment Of Chemicals | **A. Perez**

2.04.P-Th-018 Comparison of Zebrafish Toxicity Between Different Developmental Windows of Exposure to Three Environmentally Relevant PFAS Compounds | **P. Shankar**

2.04.P-Th-019 Reproductive toxicity of an estrogenic polyfluoroalkyl substance on fathead minnows | **J. Collins**

2.04.P-Th-020 Effects of Exposure to a Primary Wastewater Effluent on Liver Lipid Metabolism and Oxidative Stress in Northern Pike | **M. Meunier**

2.04.P-Th-021 Mixture effects of phthalate esters and their subgrouping based on toxicity profiles | **H. Yamamoto**

2.04.P-Th-022 Assessment of the Effects of Cadmium, Samarium and Gadolinium on the Blue Mussel (Mytilus edulis): a Biochemical, Metabolomic and Transcriptomic approach. | **A. Zalouk**

2.04.P-Th-023 Developmentally-related differences in sensitivity to propranolol in early life stage fathead minnow (Pimephales promelas) | **A. Biales**

2.04.P-Th-024 Characterization of Growth and the GH-IGF1 Pathway in Adult and Juvenile Mummichog (Fundulus heteroclitus) Exposed to Environmental Contaminants | **O. Kuntyj**

2.04.P-Th-025 Comparative toxicity profiles of environmentally relevant alkylated naphthalenes using early life stage zebrafish | **M. Morshead**

2.04.P-Th-026 Examining the Impact of Insecticide Treated Mosquito Net Fishing on Aquatic Organisms | **D. Love**

2.04.P-Th-027 Chronic Atorvastatin Exposure Increases the Intermolt Duration of Juvenile Red Swamp Crayfish (Procambarus clarkii) | **R. Dixon**

2.04.P-Th-028 Bioaccumulation of PFAS compounds and biological responses in aquatic biota exposed in situ to tertiary treated wastewater effluent | **G. Tetreault**

Emerging Contaminants as Agents of Global Change: Prioritization of Whole Ecosystem and Multi-stressor Research | A. Gray, J. Rodriguez Gil, M. Seeley

2.05.P-Th-031 Temperature Mediation of PFAS Toxicity for Estuarine Fish in the Long Island Sound Watershed | **M. Grimmelpont**

Use of Freshwater Mollusk Toxicity Data for Improved Conservation of Water and Sediment Quality | N. Wang, P. Gillis, T. Augspurger, Y. Kudla

2.10.P-Th-033 Tracking the Fate of Aged and Pristine Polyester Microfibres in Freshwater Mussel Megolanaias nervosa | **Y. Kudla**

2.10.P-Th-034 Evaluation of ammonia toxicity to juvenile fatmucket (Lampsilis siliquoidea) at different pH levels in short-term chronic exposures | **C. Ivey**

2.10.P-Th-035 Evaluation of Sediment and Water Quality to Support Freshwater Mussels in the Conasauga River, Georgia | **M. Martin**

Exposure and Effects of Recognized and Emerging Contaminants to Wildlife | K. Fremlin, J. Verreault, V. Jaspers, K. Fernie

3.02.P-Th-036 Assessing the differences between adult and nymph Amblyomma americanum (Lone Star) Ticks as viable sentinels for the detection of Per – and polyfluoroalkyl substance contamination | **T. Walsh**

3.02.P-Th-037 Long-Term Monitoring and Assessment of Population, Reproductive, and Immune Effects in Colonial Waterbirds Breeding at Contaminated Great Lakes Sites in Michigan | **K. Grasman**

3.02.P-Th-038 Occurrence and Species-Specific Variations of Per- and Polyfluoroalkyl Substances (PFAS) in Sharks from the Southeastern Coastline of the United States | **Q. Mehdi**

3.02.P-Th-039 Bioaccumulation Patterns of Individual Per- and Poly-fluoroalkyl Substances and Binary Mixtures in the Brain of Northern Bobwhite Quail | **K. Kikanme**

3.02.P-Th-040 Chronic Reproductive Toxicity of Five Fluorine-Free Firefighting Foams and a Short Chain Fluorinated Foam to Northern Bobwhite Quail (Colinus virginianus) | **F. Hossain**

3.02.P-Th-041 Mercury Concentrations in the Eggs of the Common Loon (Gavia immer) in the NYS Adirondack Park | **S. Burgy**

3.02.P-Th-042 Evaluation of options for an avian reproduction study protocol to meet global data needs | **T. Bean**

3.02.P-Th-043 Development and Application of a Liver Perfusion System to Evaluate the Biotransformation Capability of Juvenile American Alligators | **Y. Umeki**

3.02.P-Th-045 Validation of a method for determining polycyclic aromatic compounds in seabird feathers | **N. Vitharana**

3.02.P-Th-046 Characterizing Fluoride Exposure in Zalophus californianus on the North Central California Coast | **C. Sykes**

3.02.P-Th-047 National assessment of PFAS in livers of white-tailed deer | **E. Pulster**

3.02.P-Th-048 Adapting a Bioenergetics-based Dosimetry Model to Predict Bioaccumulation and Biomagnification of Per- and Polyfluoroalkyl Substances in an Insectivorous Bird Species | **A. Pesano**

3.02.P-Th-049 Effects of In Ovo and Ex Ovo Exposure to Two 'Alternative' Flame Retardants on Chick Embryonic Development | **C. Goodchild**

3.02.P-Th-050 Changes in Mercury, Stable Isotopes, and Polyunsaturated Fatty Acid Values Due to Aquatic Insect Metamorphosis and Insect-Mediated Contaminant Flux | **J. Landaverde**

3.02.P-Th-052 Characterizing Invertebrate Prey Diets of Songbirds Using DNA Metabarcoding: A Non-invasive Approach to Understanding Avian Diets and Potential Exposure to Persistent Organic Pollutants | **L. Smith**

3.02.P-Th-053 Exposure to the Flame Retardant Isopropylated Triarylphosphate Esters (ITP) Alters Microbiota Diversity, Metabolome and Immune Transcriptomic Responses of American kestrel (Falco sparverius) Nestlings | **K. Matterson**

3.02.P-Th-054 Contaminant Burdens in Common Loon (Gavia immer) Eggs Associated with Reduced Eggshell Thickness and Egg Size in New Hampshire, USA | **R. Flynn**

Toxic Effects of Per- and Poly-Fluorinated Compounds: From the Molecular to Ecosystem Levels | N. Karouna-Renier, C. Murphy, D. Haskins, M. Murray

3.04.P-Th-055 Exposure to per- and polyfluoroalkyl substances (PFAS) and cardiovascular disease in the Central Savannah River Area | **X. Xu**

3.04.P-Th-056 Comparative Toxicity of Legacy and Short-chain Replacement PFAS on Early Life Stage Estuarine Fishes | **K. Ackerly**

3.04.P-Th-057 Hazard Metrics, Including Transcriptomic-Based Points of Departure, for Fathead Minnow (Pimephales promelas) Exposed to 22 PFAS | **K. Bush**

3.04.P-Th-058 Uptake and Elimination for a Suite of Per- and Poly-fluoro Alkyl Substances (PFAS) in a Soil-Plant-Mammal Model | **M. Simini**

3.04.P-Th-059 Molecular Profiling of Tree Swallow (Tachycineta bicolor) Nestlings Exposed to Environmental Per- and Polyfluoroalkyl Substances in Support of Adverse Outcome Pathway Development | **E. Pavlovic**

3.04.P-Th-060 Effects Observed in Algae (Raphidocelis subcapitata) after 24-hours of Exposure to 22 Per- and -Polyfluoroalkyl Substances in a High Throughput Assay | **K. Flynn**

3.04.P-Th-061 Exposure to Short-Chain Perfluoroalkyl Carboxylic Acids (PFCAs) Increases Northern Leopard Frog (Rana pipiens) Tadpole Growth and Body Condition | **J. Rohonczy**

3.04.P-Th-062 A Critical Review Amphibian PFAS Ecotoxicity Research Studies: Identification of Screening Levels in Water and Other Useful Resources for Site-specific Ecological Risk Assessments | **Z. Pandelides**

3.04.P-Th-063 Measuring the Metabolic Effects of Environmental Per- and Polyfluoroalkyl Substance Exposure on Tree Swallows (Tachycineta bicolor) In Ovo Using Novel Field Respirometry Methods | **M. Thiel**

3.04.P-Th-064 Trophic Transport Pathways for Per- and Poly-Fluoroalkyl Substances in a Terrestrial System With Historical Aqueous Film-Forming Foam Contamination | **M. Eldridge**

3.04.P-Th-065 Relationships Among Structural Characteristics and Aquatic Toxicity for Per- and Poly-fluoroalkyl Substances, Part 1: Patterns in Sublethal Effects of Single Chemicals and Mixtures | **S. Kadlec**

3.04.P-Th-066 Effects of Perfluoroalkyl Substances on Amphibian Body & Hepatic Condition: Is Dysregulation of Lipid Metabolism a Driver? | **A. Bushong**

3.04.P-Th-067 Investigating the Effects of Chronic 6:2 Fluorotelomer Sulfonic Acid Exposure on Xenopus laevis through Metamorphosis | **E. Engel**

3.04.P-Th-068 PFAS Mixture and Full Life-Cycle Exposures To Fathead Minnows | **S. Lanasa**

Human Exposure to Organic Chemicals of Current Concern | H. Whitehead, E. Ulrich, H. Stapleton, A. Salamova

4.11.P-Th-069 Polyfluoroalkyl Substances (PFAS): Ligands that bind the orphan Nuclear Receptor 4A1 (NR4A1, Nur77) | **A. Hailemariam**

4.11.P-Th-070 Sewer Gas Siphon: A Mitigation Approach for Sewer Gas Vapor Intrusion | **H. Tay**

4.11.P-Th-071 Dietary PFASs Exposure from Home-Grown/Raised and Local Foods for a Midwestern PFAS-Impacted Community | **A. Bhattacharya**

4.11.P-Th-072 PFAS in Me: Which Ones and How Much? | **M. Shimizu**

4.11.P-Th-074 Assessment of Per- and Polyfluoroalkyl Substances (PFAS) in Tap Waters from Miami-Dade, South Florida | **C. Cuchimaque Lugo**

4.11.P-Th-075 The optimization of arsenolipid detection methods in seafood: identification and quantification of prevalent arsenolipid species | **S. Bhattacharjee**

4.11.P-Th-076 Updated and Novel Methods for Investigating Organophosphate Esters in Particulate Matter | **A.E. Clark**

4.11.P-Th-077 Investigating the Presence of Organophosphate Esters in Particulate Matter from Wildfires | **A.E. Clark**

4.11.P-Th-079 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**

4.11.P-Th-081 The Guts of PFAS Fish Consumption Advisories | **C. McCarthy**

4.11.P-Th-082 Development of a Highly Sensitive Analytical Method to Detect 1,4-Dioxane and Co-occurring Contaminants in Drinking Water and Blood Samples | **S. Liu**

4.11.P-Th-083 Trends of New Flame Retardant, PFAS, and Plasticizer Notifications in Canada | **J. Grundy**

4.11.P-Th-084 Evaluation of Environmental Impact of Vehicular Emission on Soil and Vegetables from Farmlands along the Major Highways in Enugu State" | **C. Uhama**

4.11.P-Th-085 Screening House Dust for PFAS: Revealing the Extent and Diversity of Contamination | **K. Adams**

Identifying PFAS Sources Near and Far | L. Rodenburg, S. Capozzi, T. Guillette, J. McCord

4.13.P-Th-086 PFAS in Largemouth Bass across Rhode Island: concentrations of pollutants and the social profile of visitors | **M. Cashman**

4.13.P-Th-087 Occurrence of per- and polyfluoroalkyls substances (PFAS) in groundwater from Miami-Dade, South Florida | **M. Guerra de Navarro**

4.13.P-Th-088 Target Analysis of Per- and Polyfluoroalkyl Substances, (PFAS) in Surface Water from Biscayne Bay Canals | **C. Heath**

4.13.P-Th-089 Non-Targeted and Targeted Analysis of PFAS in Household Media from the American Healthy Homes Survey II | **J. Boettger**

4.13.P-Th-090 Investigating the Presence of Per- and Polyfluoroalkyl Substances (PFAS) in Water Samples Collected Around the Island of Okinawa, Japan | **C. Camacho**

4.13.P-Th-091 Dispersion and Stratification of Per-and Polyfluoroalkyl Substances (PFAS) in Surface and Deep-water Profiles: A Case Study of the Biscayne Bay Area. | **O. Ogunbiyi**

4.13.P-Th-094 Co-Occurrence of Per- and Polyfluoroalkyl Substances (PFAS) with Known Industrial Contaminants in the State of Kentucky | **A. Gutierrez**

4.13.P-Th-095 Deriving Whole Fish to Fillet Conversion Equations for Per- and Polyfluoroalkyl Substances (PFAS) | **E. Levanduski**

4.13.P-Th-096 Assessment of Mercury and Per- and Polyfluoroalkyl Substances (PFAS) in New York's Seneca Lake Sport Fishes | **E. Levanduski**

4.13.P-Th-097 Quantifying Hidden Fluorine in Aqueous Film-Forming Foams via 19F NMR | **L. Carini**

4.13.P-Th-098 Discharge of per- and polyfluoroalkyl substances to the environment: Temporal implications for water quality assessment and management | **K. Stroski**

4.13.P-Th-099 Domestic Wastewater as a Nonpoint Source of PFAS Contamination in the US | **J. Rice**

Mercury Bioaccumulation, Exposure and Effects on Wildlife: Understanding How Ecosystem Pressures Drive Mercury Cycling | S. Janssen, J. Ackerman, C. Eagles-Smith, B. Barst

4.15.P-Th-101 Temporal Variation in Mercury Concentrations in Emergent Aquatic and Terrestrial Invertebrates of the Great Salt Lake Food Web | **K. Whitmore**

4.15.P-Th-102 Mercury and Selenium Concentrations in Lanugo of California Sea Lion (Zalophus californianus) Pups of the Southern Gulf of California | **T. Symon**

4.15.P-Th-103 Effects of nutrients on mercury bioaccumulation at the base of the coastal food web | **A. Agrawal**

4.15.P-Th-104 Spatial and Ontogenetic Variation in Mercury, Methylmercury and Selenium Accumulation Dynamics in Bull Sharks (Carcharhinus leucas) | **L. Garcia Barcia**

4.15.P-Th-105 The Bugs are Alright: Wildfires Increase Particulate Mercury Transport but Not Bioaccumulation in Northwestern U.S. Headwater Streams | **A. Baldwin**

4.15.P-Th-107 The Influence of Evergreen Forest Cover on Fish Mercury Concentrations in Western U.S. National Parks | **C. Flanagan Pritz**

4.15.P-Th-108 An Assessment of How Climate Change May Alter Mercury Loads and Sources in Tributaries and Sediments of Lake Superior | **M. Tate**

4.15.P-Th-109 Switching to Marine Prey Leads to Unprecedented Mercury Concentrations in a Population of Coastal Alaska Wolves | **B. Barst**

4.15.P-Th-111 Re-examining Mercury Exposure and Risk Assessment Through the Lens of Invasive Species | **S. Janssen**

4.15.P-Th-112 Demethylation of Methylmercury by Selenocysteine in Aquatic Environments | **C. Chukwuere**

4.15.P-Th-113 Field-Based Methyl Mercury Bioaccumulation Model from Sediments Through the Food Web in a River/Estuary System in the Northeastern United States | **J. Morris**

4.15.P-Th-114 Seasonal Variation in Mercury Concentrations in Tetragnathid Spiders | **J. Landaverde**

4.15.P-Th-115 Effects of lifetime hypoxia exposure on fish mercury uptake and food web structure | **H. Miraly**

4.15.P-Th-117 Mercury Analysis in the Tissues of Stranded Bottlenose Dolphin (Tursiops truncates) in Northeast Florida, 2013-2021 | **G. Bielmyer-Fraser**

4.15.P-Th-118 Relationship Between MeHg Concentrations in Two Spider Taxa, Emerging Aquatic Insect MeHg Concentrations, and MeHg Flux: Implications for Using Spiders as Sentinels | **M. Hannappel**

The Behavior, Fate and Impact of an Increasingly Complex Array of Contaminants in Changing Arctic and Antarctic Environments | M. Houde, J. Kucklick, R. Letcher

4.20.P-Th-119 Trends of perfluoroalkyl substances (PFAS) in seawater and ringed seals from Resolute Bay, Nunavut, Canada | **A. De Silva**

4.20.P-Th-120 Influence of Climate Related Factors on the Temporal Trends of Perfluoroalkyl Substances and polychlorinated biphenyls in Landlocked Char in two High Arctic Lakes | **D. Muir**

4.20.P-Th-122 Considerations for Designing an Antarctica Monitoring Program for Cyclic Volatile Methylsiloxanes (cVMS) | **J. Durham**

The Standardized Micro- and Nanoplastic Planet: Degradation, Fragmentation and Leaching | L. Hildebrandt, F. Pohl, D. Mitrano, T. Zimmermann

4.21.P-Th-123 Quantification and Qualification of Microplastics from Drinking Water Source of Beijing, Chaobai River | **G. Kaneza**

4.21.P-Th-124 Comparison of UV Photooxidation and Mechanical Abrasion on Polyethylene Terephthalate (PET) Micro and Nanoplastics in a Lab and Environmental Setting | **Z. Kasuske**

4.21.P-Th-127 Investigations of Microplastics in Surface Water at Rivers, Lakes and Bays using a Novel Automated Microplastic Sample Preparation System | **Y. Kameda**

4.21.P-Th-128 Relations of Surface Hardness and Elasticity to Carbonyl Indexes of Plastics Collected from Japanese Beaches and the Seas of Asia | **Y. Kameda**

4.21.P-Th-129 Establishment of a Semi-automatic Software to Identify Microplastics from Imaging Data by Micro-Fourier-transform Infrared Spectroscopy | **Y. Kameda**

4.21.P-Th-130 Aftermath of Microplastic Fibres being Exposed to Ultraviolet Radiation | **I. Nambi**

4.21.P-Th-131 Environmentally Relevant and Quantitative Mechanical Abrasion of Plastics and Generation of Nanoplastics Using a Novel High-throughput Weathering Reactor | **S. Ziemann**

Advancing Wastewater Surveillance to Complement Community and Environmental Health Measures | B. Subedi, D. Antkiewicz, S. Berry, D. Burgard

5.01.P-Th-132 Drugs Discharged at Rest Areas and Truck Servicing Facilities during Federal Holidays in the United States | **L. Jones**

5.01.P-Th-133 Low Level Quantification of Sucralose and Acesulfame Sweeteners in Wastewater | **C. Butt**

5.01.P-Th-135 Moving Beyond COVID-19: Monitoring Wastewater for Influenza and Respiratory Syncytial Virus, a Pilot Study | **R. Fahney**

5.01.P-Th-136 Variation in locational response to Omicron measured using wastewater-based surveillance at wastewater treatment plants, correctional facilities and assisted living facilities in Texas | **L. Langan**

Contaminated Sediment Toxicity, Emerging Contaminants, Risk Assessment and Management, Remediation, Restoration, Sustainability, Climate Change | B. Brooks, C. Peterson, M. Novak, T. Hollweg

6.01.P-Th-141 Field Demonstration of a Commercially Available Peeper Sampler for Measuring Metal Availability in Sediment Porewater and Surface Water | **J. Conder**

6.01.P-Th-142 The (Sometimes Overlooked) Role of Temperature in Passive Dosing experiments and Chemical Activity-Based Exposures | **S. Abel**

6.01.P-Th-143 Historical Levels of Polychlorinated Biphenyls (PCBs) in the Sediments of Apalachicola Bay, Florida | **A. Solanke**

6.01.P-Th-144 Assessment of Dechlorination Rate of Chiral PCBs and TCE in Town Creek, SC Sediment Exposed to Selected Essential Metals | **C. Sumner**

6.01.P-Th-145 Quantification of the Impact of Sediment Particle size Distribution on Sediment Resuspension and Release of Organic Contaminants | **B. Chaumet**

6.01.P-Th-146 Integrating Chemical Activity into Sediment-Water Bioassays with Benthic Invertebrates | **S. Abel**

6.01.P-Th-147 How to Set Up Sediment-Water Bioassays for Hydrophobic Organic Contaminants Using their Chemical Activity as Dose Metric | **S. Abel**

6.01.P-Th-148 Decreasing Uncertainties in Assessing Environmental Exposure, Resilience, and Ecological Implications of Dredging near Coral Reefs in the Honolulu Harbor | **J. Wilkens**

6.01.P-Th-149 Using Sediment Toxicity Tests to Develop Remediation Goals for PAHs at Manufactured Gas Plants | **S. Kane Driscoll**

6.01.P-Th-150 Re-Use for Restoration: Beneficial Use of Dry Sediment in a Nearly Freshwater Wetland | **W. Hovel**

6.01.P-Th-151 Multiple Lines of Evidence to Predict Sediment Toxicity to Invertebrates Due to DDT and its Metabolites | **P. Fuchsman**

6.01.P-Th-152 A Sustainable and Low-Impact Approach to Contaminated Sediment Remediation | **M. Ajemigbitse**

Treatment and Remediation of Micropollutants (Including PFAS, Microplastics, Microorganisms) | A. S

6.05.P-Th-153 The impact of pesticides and human use pharmaceuticals on nitrogen-removal processes with wetland treatment systems: A Mesocosm Study | **E. Nottingham**

6.05.P-Th-154 Microplastic Detection and Mitigation in Local Crops | **C. Bucklin**

6.05.P-Th-155 The Effects of Nanopesticides on Wetland Ecosystems | **K. Power**

6.05.P-Th-157 Assessing the impact of co-occurring contaminants of emerging concern (CECs) in constructed floating treatment wetlands | **M. Russell**

6.05.P-Th-158 Substantial Defluorination of Polychlorofluorocarboxylic Acids Triggered by Anaerobic Microbial Hydrolytic Dechlorination | **B. Jin**

6.05.P-Th-159 Advanced Clay-based Adsorbents for Reducing Bioavailability of Per- and polyfluoroalkyl Substances in Water | **R. Mukhopadhyay**

6.05.P-Th-160 Thermal treatment of PFAS in environmental media | **P. Potter**

6.05.P-Th-161 Impact of Biological Treatment on Chemical Composition of Wastewater and Associations with Microbial Communities | **G. Jones**

6.05.P-Th-162 Organic Matter Quality Impacts on Poly- and Perfluoroalkyl Substance Sorption to Soil: Using Low Molecular Weight Proxies to Improve Understanding of Interactions | **E. McKenzie**

Demystifying the Method Standardization and Accreditation Processes | C. Irvine, L. Van der Vliet, K. Payne

7.02.P-Th-163 Behind the Curtain - Testing Standards and Method Development | **C. Irvine**

7.02.P-Th-164 A Former Quality Assurance Director's Perspective on Implementing the TNI Standard in a Commercial Toxicity Laboratory | **K. Payne**

V | VIRTUAL PRESENTATIONS ASSOCIATED WITH THURSDAY SESSIONS

Virtual-Only Presentations

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

The Behavior, Fate and Impact of an Increasingly Complex Array of Contaminants in Changing Arctic and Antarctic Environments | M. Houde, J. Kucklick, R. Letcher

4.20.V-013 Mercury cycling in the Antarctic coastal zone (Admiralty Bay) | **D. Saniewska**

Advancing Wastewater Surveillance to Complement Community and Environmental Health Measures | B. Subedi, D. Antkiewicz, S. Berry, D. Burgard

5.01.V-014 Comparison of different nucleic acid extraction methods: An investigation on Abu Dhabi wastewater | **B. Shanmugam**

5.01.V-015 Profiling Microbial Community and Potential Pathogens through Wastewater Surveillance in UAE using MALDI-TOF Mass Spectrometry | **S. Singh**

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