





25-28 August 2025 • Te Whanganui-a-tara Wellington



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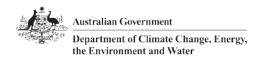
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WELCOME

We welcome you all to Te Whanganui-a-tara Wellington, Aotearoa New Zealand on 25-28 August 2025 for the first ever joint Society of Environmental Toxicology and Chemistry Australasia (SETAC AU) and the Australasian College of Toxicology & Risk Assessment (ACTRA) conference.

The theme of this year's conference is 'Building a lasting legacy: Our choice, their future'. What legacy will our work leave for future generations?

Rooted in an understanding of the impacts of chemicals and emerging challenges, this conference will explore how diverse knowledge systems, collaborations, and innovative educational and engagement strategies can secure a better outlook for generations to come.

Scientists, knowledge keepers, practitioners, and end-users from diverse fields will share their research, insights, and strategies, fostering collaboration for improved environmental outcomes.

Key themes of the conference include the following.

- From knowledge to wisdom, uncovering our learned lessons
- Breaking the cycle: Ensuring history doesn't repeat
- Leaving a mark: The legacy we aspire to

The SETAC AU and ACTRA recognise the importance of a skilled workforce in the fields of toxicology, ecotoxicology, environmental chemistry, and risk assessment. This conference will further strengthen collaboration between industry, government, academia, end users, and stakeholders.

Many thanks to the 2025 Conference Organising Committee, and its members and sub-committees including:

• Local Organising Committee:

- O Eugene Georgiades [Co-convenor, Environmental Protection Authority, Te Mana Rauhī Taiao (NZ EPA)]
- O Tarah Hagen (Co-convenor, SLR Consulting Australia Pty Ltd and ACTRA President; FACTRA)
- O Belinda Cridge (Water NZ)
- O Jo Cavanagh (Manaaki Whenua)
- O Sally Gaw (University of Canterbury)
- O Melanie Kah (University of Auckland)
- O Jeane Nicolas (Ministry for Primary Industries, Manatu Ahu Matua [MPI]),
- O Andrew Pearson (Tonkin & Taylor)
- O Shaun Presow (NZ EPA)
- O Karen Thompson (Earth Sciences New Zealand)
- O Louis Tremblay (Manaaki Whenua).

ACTRA Annual Scientific Meeting Sub-committee:

- O Roger Chong (Retired)
- O Rhian Cope (FACTRA, SLR Consulting and ACTRA Secretary)
- O Effi Liden (Australian Pesticides and Veterinary Medicines Authority and ACTRA Registrar)
- O Katie Richardson (RACTRA; Senversa and ACTRA Vice President)

- O Leonid Turczynowicz (University of Adelaide)
- O Adam Wightwick (RACTRA; Ramboll)
- Paul Wright (FIUPAC, FACTRA; RMIT University and ACTRA Immediate Past President).

SETAC Conference Organising Sub-committee:

- O Kath Hassell (President; RMIT University)
- O Tom Cresswell (Vice President; Australia's Nuclear Science and Technology Organisation [ANSTO])
- O Francesca Gissi (Vice President; ANSTO)
- O Shelly Templeman (Secretary; James Cook University)
- O Andrew Harford (Treasurer/Immediate Past President; Australian Government Department of Climate Change, Energy, the Environment and Water)
- O Tim Remaili (Assistant Treasurer; NSW Department of Climate Change, Energy, the Environment and Water)
- O Chantal Lanctôt (Membership Officer; Griffith University)
- Julia Jasonsmith (Strategic Directions Officer; Murrang Earth Sciences)
- O Sarah MacDonald (Communications Officer)
- O Danielle Hill (Social Media Manager; Griffith University)
- O Sarah Green (Student Representative; La Trobe University)
- O Reinier Mann (Bulletin Editor; Queensland Department of the Environment, Tourism, Science and Innovation).

Workshop Leaders:

- O Dr Rhian Cope & Dr Maryam Moslehi (SLR Consulting)
- Āwhina Herekiuha (Ngāti Tara-Tokanui, Ngāti Tamaterā, Ngāti Hako, NZ EPA)
- From Principles to Practice: Belinda Cridge (Water NZ); Katie Richardson (Senversa); Jeane Nicholas (MPI) & Andrew Pearson (Tonkin+Taylor)
- O Dr Victor Kabay (University of Melbourne) & Dr Nicola Mutch (PHF Science)
- O Prof Sally Gaw (University of Canterbury); Prof Kevin Thomas (The University of Queensland) & Andrew Chappell (PHF Science).

Organising & opening session support:

- O Hemi Akuhata (EPA NZ Te Mana Rauhi Taiao)
- O Wiremu Moeahu (Te Rūnanganui o Te Āti Awa ki te Ūpoko o te Ika)
- O Tautoko Rātū (Te Rūnanganui o Te Āti Awa ki te Ūpoko o te Ika).

We are also very grateful for the conference organising support provided by Kerry South and Luxor McGowan from Conferences & Events Ltd.





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Our sincerest thanks to the following sponsors for their generous financial support and also for supporting their staff to attend the SETAC AU / ACTRA Conference.

Host

Environmental Protection Authority, Te Mana Rauhī Taiao (NZ EPA)

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The impressive scientific program features presentations from several invited national and international speakers, including (in order of appearance in the program):

- Simon Upton (Parliamentary Commissioner for the Environment)
- Erica Gregory (NZ EPA)
- Bruno Piccoli (University of Rome Tor Vergata)
- Lidia Morawska (Queensland University of Technology)
- Peter Dawson (NZ EPA)
- Vittorio Fattori (Food and Agriculture Organization of the United Nations)
- John Roche (MPI)
- Kevin Thomas (The University of Queensland)
- Bryan Brooks (Baylor University)
- Nicholas Ashbolt (CRC SAAFE).

Many thanks to all of these experts for their contributions to the Conference.

The Conference also provides a forum for SETAC AU and ACTRA members and non-members to submit papers on various research topics and other commentaries. This year there are three concurrent streams of submitted oral presentations, numerous poster presentations, as well as an ACTRA Debate / Panel Session (topic: *Risks from the circular economy can be safely managed and are outweighed by the benefits*) and a Risk Assessment Panel Session.

Please note that the SETAC AU Annual General Meeting (AGM) will be held as a hybrid event this year at the same time as the ACTRA Debate / Panel Session on Wednesday 27 August.

We are looking forward to seeing as many of you as possible in person in Te Whanganui-a-tara Wellington. We hope you will take this opportunity to enjoy some stimulating science, as well as the exciting social program that includes a welcome reception, a poster reception, a buddy breakfast, a student function, and of course the gala dinner to be held at New Zealand Parliament (bring your dancing shoes!).

We hope you will join us and contribute to fruitful learning and discussion, meaningful connections, and an inspiring exchange of ideas.

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Sincerely,

Eugene Georgiades and Tarah Hagen

Co-convenors of the SETAC AU / ACTRA Conference

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Monday, 25 August

9.00am – 6.00pm	Pre-Conference Workshops - Range of half day & full day offerings CLICK HERE TO VIEW TIMINGS OF EACH ONE	James Cook Hotel Level 16
6.00 –	Welcome Reception with Exhibitors	
7.30pm	Performance and Awards Presentation @ 6.30pm	
-	For all conference delegates with RSVP through registration. Drinks & nibbles provided.	

Tuesday, 26 August

7.00 – 8.30am	Buddy Breakfast For invited mentors & mentees		James Cook Hotel Level 17, Chancellor 6
7.30 – 5.50pm	Registration Desk Open		James Cook Hotel Level 16 Foyer
	Plenary Session 1 – Supported by Botanical Resources Australia Co-chairs: Allan Freeth and Eugene Georgiades, NZ EPA		
8.45 – 9.25am	Mihi Whakatau & Conference Opening		Chancellor 1
9.25 – 9.55am	Plenary: Simon Upton (Parliamentary Commission	ner for the Environment)	
9.55 – 10.25am	Plenary: Erica Gregory (NZ EPA) "Whiria te muka, whiria te mātauranga, whiria te taura strengthen the bond"	tangata — Weave the rope, thread the knowledge,	
10.25 – 10.30am	Session Wrap-Up & Announcements		
10.35 – 11.00am	Morning Tea in Exhibition area		Chancellor 2 & 3
11.00 – 12.30pm	CONCURRENT SESSION 1		
	1A: Risk Assessment & Regulation of Metals in the Asia-Pacific Region 1 Chairs: Jenny Stauber, La Trobe University & Ross Smith, Hydrobiology & Ellie Middleton, NiPERA	1B: Bridging the gap: Collaborative pathways to transformative outcomes in pollution monitoring, mitigation and management 1 Chairs: Jackie Myers & Claudette Kellar, AQUEST, RMIT University	1C: Predator free islands and conservation - human health risk aspects Chair: Robert DeMott, Ramboll
Room	Chancellor 1 (L16)	Chancellor 6 (L17)	Chancellor 4 (L16)
11.00 – 11.15	Developing acute copper and zinc guideline values for freshwaters in Aotearoa New Zealand Jenni Gadd, Hydrotoxy Research	Collaborative Action Against Waterway Contamination Claudette Kellar, AQUEST, RMIT University	Saving Species - One Island at a Time Keith Springer & John Quigley, BirdLife South Africa
11.15 – 11.30	A new framework for the implementation of bioavailability-based metal guideline values in Australia and New Zealand Jenny Stauber, La Trobe University	He kākano ahau: Learnings of an Indigenous emerging scientist on delivering impact for Māori Grace Feltham, PHF Science	Predator-free islands: assessment and mitigation of human exposure to rodenticides during invasive rodent eradication Paula Castaño, Island Conservation
11.30 – 11.45	An improved method for deriving default guideline values for metals in freshwaters in Australia and New Zealand Aleicia Holland, La Trobe University	Lessons from the coalface: risk assessment techniques from heavy industry Victor Kabay, University of Melbourne	Advancing the registration of norbormide as an alternative to broad-spectrum rodenticides Charles Eason, Lincoln University
11.45 – 12.00	A Methodological Framework for the Assessment of Bioavailable Iron in Fresh Water Samples Emiliano Balsamo Crespo, Southern Cross University	How to Poison the Credibility of Regulators: Responding to Hollywood's Advocacy on PFAS Craig Dalton, University of Newcastle	Lord Howe Island Rodent Eradication Program — Community Health Concerns Belinda Goldsworthy, Environmental Risk Sciences (enrisks)
12.00 – 12.15	Optimisation of the USEPA (1991) pH 2 extraction method for measuring potentially bioavailable iron (iron III) Melanie Trenfield, DCCEEW	Tackling Pollution through Transdisciplinary and Indigenous Partnership Approaches Virginia (Jinny) Baker, PHF Science	Addressing Agent Toxicity in Community Risk Assessment for Lord Howe Island Rodent Eradication Bob DeMott, Ramboll
12.15 – 12.30	Environmental risk assessment of chromium in waters near nickel laterite deposits in South-east Asia and Melanesia Ross Smith, Hydrobiology	A collaborative pathway to improved vegetation management Jackie Myers, Aquest RMIT University	Discussion & Q&A





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Tuesday, 26 August

12.30 – 1.30pm	Lunch in Exhibition area		Chancellor 2 & 3	
1.30 – 3.00pm	CONCURRENT SESSION 2			
	2A(i): Risk Assessment & Regulation of Metals 2 Chairs: Jenny Stauber, La Trobe University & Ross Smith, Hydrobiology & Ellie Middleton, NiPERA Supported by Earth Sciences NZ	2B(i): Bridging the gap: Collaborative pathways to transformative outcomes in pollution monitoring, mitigation and management 2 Chairs: Jackie Myers & Claudette Kellar, AQUEST, RMIT University	2C: Toxicology of the Visual System Chair: Effi Liden, APVMA / ACTRA Membership Officer	
Room	Chancellor 1 (L16)	Chancellor 6 (L17)	Chancellor 4 (L16)	
1.30 – 1.45	Barium toxicity to stygobionts and groundwater guideline values Merrin Adams, Aquatic Ecotox	Cultural Considerations of Trace Elemental Seafood Safety Following Volcanic Eruption at Whakaari White Island Danielle Blackwell, The University of Waikato	Visual and ocular discomfort/disorder/impairment/ disease at work: a new issue or an old one? Bruno Piccoli, University of Rome Tor Vergata *Virtual Presenter	
1.45 – 2.00	Assessment of Amphibola crenata as a bioindicator of estuarine trace element pollution using biochemical and physiological endpoints Nuwan De Silva, Environment Canterbury Regional Council	The Mystery of the Tainted Aquifer: Using Emerging Contaminants and Environmental Isotopes to Unmask the Sources of Groundwater Pollution Oliver Jones, RMIT University	viituai rieseittei	
2.00 – 2.15	Metal Management: Characterising Native DOM Super- Producers to Feed a DOM-Metal-Mixture-Bioavailability Model Karen Thompson, Earth Sciences NZ	Transforming chemical and waste management using multiple worldviews Louis Tremblay, Manaaki Whenua - Landcare Research		
2.15 – 2.30	Metal Mitigation: Nature based solutions for freshwater management Aleicia Holland, La Trobe University	2B(ii): Toxicants and environmental impacts on wildlife 1 Chairs: Olivier Champeau, EPA NZ & Dayanthi Nugegoda, RMIT University & Anne Vignier, Cawthron Institute		
		Can exposure to pharmaceuticals impact animal interactions and survival in the wild? Marcus Michelangeli, Griffith University		
2.30 – 2.45	2A(ii): Contaminants in soil: Filling knowledge gaps & enhancing decision making 1 Chairs: Jo Cavanagh, Manaaki Whenua Landcare Research & Albert Juhasz, University of South Australia	Herbicides detected in soils surrounding solitary ground-nesting bee nesting aggregations Felicia Kueh Tai, Plant and Food Research	Development of Proposed New Perchloroethylene Toxic Optic Neuropathy Toxicity Reference Value and Action Levels Rhian Cope, SLR Consulting	
	New Insights into Pesticide Residues in New Zealand Soil Melanie Kah, The University of Auckland			
2.45 – 3.00	Springtail safari: a field-based assessment of agrichemical use Jo Cavanagh, Manaaki Whenua Landcare Research	PFAS and pesticides in Australian raptor species: terrestrial biomonitor for a changing climate Phoebe Lewis, Environment Protection Authority Victoria		
3.00 – 3.30pm	Afternoon Tea in Exhibition area		Chancellor 2 & 3	
	Plenary Session 2 – Supported by SLR Consulting Chair: Tarah Hagen, SLR Consulting			
3.30 – 4.00pm	Plenary: Lidia Morawska (Queensland University o From Science to Policy: mandating indoor air quality for p		Chancellor 1	
4.00- 4.05pm	SLR Consulting Presentation			
4.05 – 4.10pm	Move between sessions			





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Tuesday, 26 August

4.10 – 5.40pm	CONCURRENT SESSION 3		
	3A: Contaminants in soil: Filling knowledge gaps & enhancing decision making 2 Chairs: Jo Cavanagh, Manaaki Whenua Landcare Research & Albert Juhasz, University of South Australia	3B: Toxicants and environmental impacts on wildlife 2 Chairs: Olivier Champeau, EPA NZ & Dayanthi Nugegoda, RMIT University & Anne Vignier, Cawthron Institute	3C(i): Contaminants in consumer products and cosmetics Chairs: Sarit Kaserzon, The University of Queensland & Melanie Kah, University of Auckland Supported by University of Auckland
Room	Chancellor 1 (L16)	Chancellor 6 (L17)	Chancellor 4 (L16)
4.10 – 4.25	The Contaminated Sites We've Shut Down Ruth Jarman, Environmental Risk Sciences (enRiskS)	Application of the Fish Embryo Toxicity (FET) Test to Assess Bifenthrin Toxicity in Early Life Stages of two native fishes: Mogurnda adspersa and Melanotaenia fluviatilis Tehmina Yaqoob, RMIT University	Triaging Chemical Analyses in Product Testing: The Role of Non-Destructive Analytical Methods lan Zammit, The University of Queensland
4.25 – 4.40	Arsenic, cadmium, lead, antimony bioaccessibility and relative bioavailability in legacy gold mining waste Farzana Kastury, Future Industries Institute/University of South Australia	Understanding the impacts from fluoride emissions to local wildlife at an aluminium smelter Kate Langdon, Environmental Risk Sciences	PFAS and Other Additives in 'Eco-Friendly'/Compostable Products: Analytical Insights from Aotearoa New Zealand Nargiss Taleb, University of Auckland
4.40 – 4.55	How effective are immobilisation strategies for reducing ecological and human exposure to PFAS in AFFF-impacted soil? Albert Juhasz, University of South Australia	Green-lipped mussels as a New Zealand ecotoxicology model: Effects of land-derived stressors and temperature on early life stages Julien Vignier, Cawthron Institute	From Lipstick to Lunch Plates: Unmasking PFAS in Everyday Essentials David Springer, Envirolab
4.55 – 5.10	Intact soil monoliths sampling and experimental setup to assess the fate of a PFAS-fungicide in two soils of north-eastern Italy Giovanna Piazzon, University of Padova	Metal bio-accumulation patterns in Mollusca globally: the influence of life history traits Allison Luengen, Australian Institute of Marine Science	Measuring PFAS in Cosmetics: Analytical Perspectives and Results Jacob Jaine, ALS Global
5.10 – 5.25	Assessing Contaminant Risks in Antarctic Soils: Development of Native Fungal Toxicity Tests Jordan Vink, University of New South Wales	Heavy metal concentrations in feathers and metabolomic profiles in Pacific black ducks (Anas superciliosa) from Southeastern Australia Dayanthi Nugegoda, RMIT University	3C(ii): Contaminants of emerging concern 1 Chair: Shaun Presow, EPA NZ
			Marine guideline values for the oil spill control agent Slickgone EW Florita Flores, Australian Institute of Marine Science
5.25 – 5.40	Microplastic Mass Inputs from Landfill Soil-like Fractions to Soil Systems: Quantification Approach and Implications for Waste Management Strategy Fangfang Lou, Zhejiang University	*ACTRA Di Marco Student Grant Recipient* Altered avian sperm morphology around nickel extraction and processing industries in New Caledonia Max Gillings, Macquarie University	From Lab to Field: A Comparison of the Biodegradation Rates of Organic Chemicals in a Subtropical River Lily Weir, The University of Queensland
5.40 – 5.50pm	Awards Presentation		Chancellor 1
5.50 – 7.20pm	Poster & Networking Reception in exhibition area		Chancellor 2 & 3
7.30pm onwards	Student Function RSVP required		Fork & Brewer, 20 Bond Street





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Wednesday, 27 August

8.00 – 5.35pm	Registration Open		James Cook Hotel Level 16 Foyer
	Plenary Session 3 – Supported by MPI Tony Roach Memorial Plenary		,
8.45 – 9.00am	Welcome & Award Announcements Chair: Jeff Fowles, MPI		Chancellor 1
9.00 – 9.05am	Vincent Arbuckle (Deputy Director-General New Zo	ealand Food Safety (DDG))	
9.05 – 9.35am	Plenary: Peter Dawson (NZ EPA) Stockholm Convention after 20 Years: How has it reduced	d exposures to persistent organic pollutants	
9.35 – 10.05am	Plenary: Vittorio Fattori (FAO) Food safety foresight and emerging issues		
10.05 – 10.35am	Plenary: John Roche (MPI) Food security, consumer preferences and the interaction	with environmental inhibitors	
10.35 – 11.00am	Morning Tea in Exhibition		Chancellor 2 & 3
11.00 – 12.30pm	CONCURRENT SESSION 4		
	4A: Contaminants of emerging concern 2 Chair: Kate Bromfield, HazEL Supported by Hazard Evaluation Ltd	4B(i): Toxicants & environmental impacts on wildlife 3 Chairs: Olivier Champeau, EPA NZ & Dayanthi Nugegoda, RMIT University & Anne Vignier, Cawthron Institute	4C(i): Whole-of-life approach to risk assessment Chairs: Adam Wightwick, Ramboll & Tarah Hagen, SLR Consulting / ACTRA President
Room	Chancellor 1 (L16)	Chancellor 6 (L17)	Chancellor 4 (L16)
11.00 – 11.15	A structural basis for the activation of peroxisome proliferator-activated receptor gamma (PPARy) by perfluorooctanoic acid (PFOA) John Bruning, The University of Adelaide	Expanding the use of portable XRF to monitor lead exposure in an Australian duck species two decades after a ban on lead shot Damien Nzabanita, RMIT University	Regulatory challenges of waste reuse in a circular economy Antti Mikkonen & Jen Martin, Environment Protection Authority Victoria
11.15 – 11.30	Are PFAS yet another threat to bees? Carolyn Sonter, University of New England	Does ionising radiation impact the growth of a tropical marine microalgae? Informing potential risks from offshore oil and gas infrastructure Alexandra Bastick, ANSTO & La Trobe University	Recovery of industrial residues: Toxicology needs to support risk assessments for resource recovery Adam Wightwick, Ramboll
11.30 – 11.45	Small Creatures, Big Contaminants: PFAS uptake in macroinvertebrates Adele Romagnano, RMIT University	Bioaccumulation and biodistribution of legacy nuclear contaminants in metamorphosing tadpoles at the Savannah River Site, South Carolina Danielle Hill, Griffith University	4C(ii): Micro- and nanoplastics: Environmental emission and sources, human exposure, & potential health implications 1 Chairs: Cassandra Rauert & Elvis Okoffo, University of Queensland Quantifying Small Antifouling Paint Particles in
			Sediments by Pyrolysis-Gas Chromatography-Mass Spectrometry Gabriel De La Torre, The University of Queensland
11.45 – 12.00	Untargeted Screening of Environmental Samples — Identifying Emerging Pollutants Courtney Milner, Agilent Technologies	4B(ii): Enhancing evidence synthesis in ecotoxicology: Current practices, what we are missing, & how we can improve 1 Chair: Marcus Michelangeli, Griffith University	Optimising pyrolysis GCMS techniques for halogenated plastics detection Ruvini Weerasinghe, QAEHS, The University of Queensland
		A research synthesis of humans, animals, and environmental compartments exposed to PFAS: A systematic evidence map and bibliometric analysis of secondary literature Lorenzo Ricolfi, UNSW Sydney	





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Wednesday, 27 August

12.00 – 12.15	Combining Passive Sampling and HRMS for Scalable Micropollutant Monitoring Frameworks Pulasthi Serasinghe, RMIT Aquest	The effects of micro-plastics on the fitness of marine animals: a meta-analysis Xinyi Liu, Australian National University	Comparative analysis of conventional and biodegradable microplastics in composts by pyrolysisgas chromatography/mass spectrometry and micro-Fourier-transform infrared spectroscopy Helena Ruffell, University of Canterbury
12.15 – 12.30	A Hybrid Multisampler with Tandem Quadrupole Mass Spectrometer to Solve Solvent Effect in PFCAs and its Precursor FTOHs Analysis Chris Fouracre, Agilent	MATES: A tool for evaluating the quality of reporting of meta-analyses Kyle Morrison, University of New South Wales	Assessment of Microplastic Pollution in Snow: A Study from a High Mountain National Park in Türkiye Fatma Nur Eraslan, Eskisehir Technical University
12.30- 1.30pm	Lunch in Exhibition		Chancellor 2 & 3
1.30 – 3.00pm	CONCURRENT SESSION 5		
	5A: Contaminants of emerging concern 3 Chairs: Anathea Albert & Michaela Busch, NZ EPA	5B(i): Enhancing evidence synthesis in ecotoxicology 2 Chair: Marcus Michelangeli, Griffith University	5C(i): Micro- and nanoplastics: Environmental emission and sources, human exposure, & potential health implications 2 Chairs: Cassandra Rauert & Elvis Okoffo, University of Queensland
Room	Chancellor 1 (L16)	Chancellor 6 (L17)	Chancellor 4 (L16)
1.30 – 1.45	A national survey of the occurrence of antimicrobials in wastewater influent, effluent and biosolids Jake O'brien, The University of Queensland	Embracing open and transparent research practices in behavioural ecotoxicology Kate Fergusson, Monash University	Do microplastics change the microbial risk profile of wastewater? Louise Weaver, New Zealand Institute of Public Health and Forensic Science
1.45 – 2.00	Assessment of Seasonal Variability, Treatment Performance, and Ecological Risks of Target Contaminants of Emerging Concerns (CECs) in four Victorian WWTPs	5B(ii): Environmental omics applied to ecotoxicology & eco-surveillance Chairs: Oliver Jones, RMIT University & Sarah Green, CSIRO	Do microplastics increase the toxic effects of Cyanobacterial toxins on the floodplain mussel (Velesunio ambiguus)? Sadia Sharmin, University of Technology Sydney
	Madara Weerasooriyagedara, University of Melbourne	Low salinity influences the dose-dependent transcriptomic responses of oysters to cadmium Junfei Zhan & Chenglong Ji, Ludong University	(UTS)
2.00 – 2.15	Occurrence of synthetic musk fragrances in Australian urban streams in relation to land-use Tanya Paige, RMIT University	Individual and interactive effects of particulate copper and common carp (Cyprinus carpio L.) on prokaryotic and eukaryotic benthic assemblages Grant Hose, Macquarie University	5C(ii): Alternative approaches to animal testing Chairs: Emma Garfield & Maria Charry, NZ EPA
			Development and characterisation of marine wildlife cell cultures for ethical toxicity testing Jason van de Merwe, Griffith University
2.15 – 2.30	The application of effect-based methods (EBMs) for water quality assessment in South Africa (SA): Wakkerstroom, a case study Natalie Aneck-hahn, University of Pretoria	Exploring the co-exposure effects of environmentally relevant microplastics and an estrogenic mixture on the metabolome of the Sydney rock oyster Sazal Kumar, University of Newcastle	Monitoring chemical exposure and effect in sea turtles using novel cell-based bioassays Kimberly Finlayson, Griffith University
2.30 – 2.45	Advancements in Biotransformation Pathway Prediction: Enhancements, Datasets, and Novel Functionalities in enviPath Liam Brydon, University of Auckland	Functional omics insights into per- and polyfluoroalkyl substances (PFAS) exposure in different marine turtle taxa Sarah Green, CSIRO	Exploring in silico strategies for advancing early-stage development of pest-selective toxicants Erica Hendrikse, Manaaki Whenua Landcare Research
2.45 – 3.00	Does benchmarking increase the accuracy of predicting biodegradation across aquatic ecosystems? Run Tian, The University of Queensland	Discussion & Q&A	Discussion & Q&A
3.00 – 3.30pm	Afternoon Tea		Chancellor 2 & 3





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Wednesday, 27 August

	Plenary Session 4 – Supported by MERA / NiPERA Chairs: Sally Gaw & Louis Tremblay, University of Canterbury & Manaaki Whenua - La	ndcare Research	
3.30– 4.00pm	Plastic Particles and Human Health: Addressing Analytical Challenges in Exposure Assessment Plenary: Bryan Brooks (Baylor University) Chemicals, Waste and Pollution Prevention: Advancing Precision in Environmental Toxicology and Chemistry MERA/ NiPera Presentation		Chancellor 1
4.00 – 4.30pm			
4.30 – 4.35pm			
4.35 – 6.00pm	CONCURRENT SESSION 6		
	6A: ACTRA Debate/ Panel Chair/Moderator: Tarah Hagen, SLR Consulting / ACTRA President 6B: SETAC AU AGM		
Room	Chancellor 1 (L16)	Chancellor 4 (L16)	
4.35pm start	ACTRA Debate/ Panel Session (4.35pm – 5.35pm) Risks from the circular economy can be safely managed and are outweighed by the benefits Debaters/Panellists: Hannah Blumhardt (Reuse Aotearoa) Adam Wightwick (Ramboll)	SETAC AU AGM (4.35pm – 6.00pm)	
6.00 – 6.30pm	Make way to Conference Dinner		
6.30 – 11.30pm	Conference Dinner Hosted in a truly iconic space at the heart of New Zealand's democracy. A sit-down dinner which will be light on formalities and heavy on great food and fun! Plan for music and dancing after dessert! Semi-formal dress.		New Zealand Parliament (1 Molesworth Street, Pipitea)



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Our team of specialists offer a range of services, including (eco)toxicology advice on chemical exposures (in air, water, soil, food, consumer products and medicines), health risk assessments and chemical registration support, through to geochemistry advice, land resource assessments, erosion and landform evolution assessments. We are proud to support the SETAC AU / ACTRA conference and foster continuing education and professional development.



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Thursday, 28 August

10.55 – 11.20am	Morning Tea in Exhibition		Chancellor 2 & 3
10.40 – 10.55	Dynamic PFAS exposure and body burden models provide insights for management of livestock on PFAS impacted farms to ensure food quality and market access Antti Mikkonen, Environment Protection Authority Victoria	Discussion & Q&A	The Potential of Australian Trees as Groundwater Biomonitors Sarah McDonald, TropWATER
10.25 – 10.40	Toxicological Considerations of Low Doses of Bromoform as an Environmental Inhibitor Pravesh Tyagi, MPI	Managing wastewater for One Health using a holistic approach to maximise opportunities for future investment and innovation Karl Bowles, Jacobs	Metal bioaccumulation in a tropical river food web in northern Australia Isabel Ely, Charles Darwin University
		Authority Victoria	lce Station: A multidisciplinary approach to assessing environmental risk of a former Antarctic station buried below the ice Gwilym Price, Australian Antarctic Division
10.10 – 10.25	Revisiting genotoxicity studies: case of Bromoform Abhishek Gautam, PHF Science	A bioanalytical and chemical approach for wastewater discharge: beyond detected chemicals for water quality assessment Minna Saaristo, Environmental Protection	7C(ii): Ecotoxicology & environmental monitoring in challenging environments Chairs: Sarah McDonald, TropWATER & Martine Tande, TropWATER/JCU
9.55 – 10.10	Chemical contaminants in New Zealand agricultural water — charting the food safety implications Andrew Pearson, Tonkin + Taylor	Comparative study of PFAS treatment by UV, UV/ozone, and fractionations with air and ozonated air Jianhua Zhang, Victoria University	Where Do Tyre Particles Go? Quantifying and Identifying Tyre Wear Particles in Balcony Road Dust Simran Kaur, QAEHS (The University of Queensland)
9.40 – 9.55	Thallium in Kale from the New Zealand Total Diet Study: Concentrations, Doses, and Comparison with an Overseas Case Study Jefferson Fowles, MPI	Synergistic Application of UV/Peracetic Acid and Biological Activated Carbon Filtration for Mitigating Organic Micropollutants and Toxicity in Wastewater Sana Ajaz, Griffith University	Evaluating herbicides as ALP enzyme inhibitors — towards rapid herbicide monitoring Abner Tonu Lema, Monash University
9.25 – 9.40	Dietary exposure assessment – giving context to toxicology Peter Cressey, PHF Science	Oxidative stress biomarkers in wastewater influents as potential indicators of community health and wellbeing Sally Gaw, University of Canterbury	Drowning in Toxins: Exploring the Ecotoxicological Effects of C. grandiflora on Freshwater Species Martine Tande, TropWATER
Room	Chancellor 1 (L16)	Chancellor 6 (L17)	Chancellor 4 (L16)
	7A: Food Chemical Risk Assessment 1 Chairs: Stuart Creton, Food Standards Australia New Zealand & Jefferson Fowles, New Zealand Food Safety	7B: Future-Proofing Wastewater Treatment: Tackling Emerging Contaminants with a Holistic Approach — it's more than just PFAS Chairs: Becky Macdonald, Jacobs NZ Ltd & Monique Binet, CSIRO Supported by Water NZ	7C(i): Contaminants of emerging concern 4 Chairs: Ailish Power & James Butcher, NZ EPA
9.25 – 10.55am	CONCURRENT SESSION 7		
9.20 – 9.25am	Move between sessions		
9.15 – 9.20am	Department of Climate Change, Energy, the Enviro	onment and Water (DCCEEW) Presentation	
8.45– 9.15am	Welcome & Plenary: Nicholas Ashbolt* (CRC SAAFE) Microbial Fallout: Pollution-Driven Evolution, Ecosystem		Chancellor 1
	Plenary Session 5 – Supported by Department of Climate Change, Energy, the Environment and Water (Au Chair: Rick van Dam, WQadvice		stralian Government)
8.00 – 4.00pm	Registration Desk Open		James Cook Level 16 Foyer





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Thursday, 28 August

11.20 – 12.50pm	CONCURRENT SESSION 8		
	8A(i): Food Chemical Risk Assessment 2 Chair: Maryam Moslehi, SLR Consulting / ACTRA Committee Member	8B: Identifying 'ecologically relevant endpoints' for microbial processes to inform Environmental Quality Guidelines and One Health approaches 1 Chairs: Monique Binet, CSIRO & Anthony Chariton, Macquarie University & Marie Thomas, AIMS Supported by Australian Institute of Marine Science	8C: Bridging the gap: Enhancing decision making in regulatory science Chair: Chris Lee-Steere, Australian Environment Agency Pty Ltd
Room	Chancellor 1 (L16)	Chancellor 6 (L17)	Chancellor 4 (L16)
11.20 – 11.35	The Green Fairy Rosalind Dalefield, Food Standards Australia New Zealand	Mining impacts on biogeochemical processes: Insights from the Ranger Uranium Mine Anthony Chariton, Macquarie University	New Approach Methods as a solution to contaminants of concern in composts Julia Jasonsmith, Murrang Earth Sciences
11.35 – 11.50	8A(ii): Particulates, plastics and real-time risks Chair: Maryam Moslehi, SLR Consulting	Inclusion of microbial endpoints in site-specific Risk Assessments, Environmental Guidelines and Remediation Targets for Antarctic soils.	Setting guidelines well — do we have a problem? Therese Manning, Enrisks
	Airborne microplastics: their origins and characteristics Lidia Morawska, Queensland University of Technology	Catherine King, Australian Antarctic Division	
11.50 – 12.05	_	Identifying microbial indicators of pollution in freshwater urban constructed wetlands Anna Flynn, RMIT University	Machine Learning for Predicting Environmental Mobility Based on Retention Behaviour Tobias Hulleman, The University of Queensland
12.05 – 12.20	Particulates, plastics, and real-time risks Len Turczynowicz, University of Adelaide	Beyond Microtox — a bacterial toxicity assay suitable for risk assessment in tropical environments Heidi Luter, Australian Institute of Marine Science	Applying a screening approach and mixture-based considerations to human and ecological risk assessment of pesticide contaminated groundwater Sarah Guy, Tonkin + Taylor
12.20 – 12.35	Understanding spatial and temporal trends of atmospheric microplastics in laboratories Honglin Chen, QAEHS, University of Queensland	Research to regulation: A quantitative framework for establishing microbial sensitivity thresholds to protect marine ecosystems Marie Thomas, Australian Institute of Marine Science	The currency of ecosystem services: applications for ecotoxicology Sarah McDonald, TropWATER
12.35 – 12.50	Everyday exposure to plastic particles: investigating microplastics and nanoplastics in Australian drinking water and release from plastic products Elvis Okoffo, QAEHS, University of Queensland	Predicting the combined effects of pollution and heat stress to adjust guideline values for tropical marine microbiomes Andrew Negri, Australian Institute of Marine Science	Reasons for (not?) using passive sampling techniques for environmental monitoring Jochen Mueller, QAEHS - The University of Queensland
12.50 – 1.35pm	Lunch in Exhibition		Chancellor 2 & 3





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Thursday, 28 August

1.35 – 3.05pm	CONCURRENT SESSION 9		
	9A: Expert Panel on Risk Assessment Chair/Moderator: Len Turczynowicz, University of Adelaide	9B: Identifying 'ecologically relevant endpoints' for microbial processes to inform Environmental Quality Guidelines and One Health approaches 2 Chairs: Monique Binet, CSIRO & Erica Donner, CRC SAAFE & Claire Hayward, University of South Australia Supported by SAAFE-CRC	9C: Regulatory science, policies, and evidence-based decisions Chair: Eugene Georgiades, NZ EPA
Room	Chancellor 1 (L16)	Chancellor 6 (L17)	Chancellor 4 (L16)
1.35 – 1.50	Panel Members: Lidia Morawska (Queensland University of Technology), Ruth Jarman (enRisks), Stuart Creton (Food Standards Australia New Zealand), Effi Liden (Australian Pesticides and Veterinary Medicines Authority)	Antimicrobial resistance: A global health crisis with complex environmental dimensions Erica Donner, CRC SAAFE	Revisions to the ANZG method for deriving water quality guideline values for toxicants Rick Van Dam, WQadvice
1.50 – 2.05		Defining Meaningful Environmental Endpoints for Antimicrobial Resistance: Moving Beyond MICs to Assess Minimal Selective Concentrations for Key Endpoints Claire Hayward, University of South Australia	Addressing key questions in deriving species sensitivity distributions: Insights from recent studies Yuichi Iwasaki, National Institute of Advanced Industrial Science and Technology (AIST)
2.05 – 2.20		Environmental drivers of AMR: investigations of associations of metal contaminants and AMR in agricultural, airstrip and microcosm soil Barry Palmer, Massey University Wellington	Navigating Uncertainty in Industrial Chemical Risk Assessment: Essential Oils as a Case Study Alexander Shadie, Australian Industrial Chemicals Introduction Scheme
2.20 – 2.35		Shaping an approach for deriving water quality guideline values for antimicrobials that integrate ecotoxicity and antimicrobial resistance endpoints Monique Binet, CSIRO	Developing a more focused picture of NZ's chemical landscape Oliver ter Ellen, NZ EPA
2.35 – 2.50		Discussion Panel on ecologically relevant endpoints for microbial processes	Changing the rules to keep New Zealanders safe - the role of reassessments in chemical management Joanna Dowle, NZ EPA
2.50 – 3.05			Strengthening the EPA's approaches to the assessment of wide dispersive chemicals Eugene Georgiades, NZ EPA
3.05 – 3.35pm	Afternoon Tea in Exhibition		Chancellor 2 & 3
	Plenary Session 6 – Supported by NZ EPA		
3.35 – 4.05pm	Conference Closing Ceremony Student Awards SETAC AP 2026 Announcement SETAC AU 2027 Announcement		Chancellor 1





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Poster Presentations

Poster Session: Tuesday 26 August, 5:50 – 7:00pm

Number	Title	Presenter
P-01	PFAS Characterization in Four Victorian Wastewater Treatment Plants: Temporal Trends, Mass Flows, and Catchment-Specific Insights	Mulugeta Akele, University of Melbourne
P-02	In vitro effects of environmentally relevant concentrations of para-nonylphenol and selected pyrethroid metabolites on a mouse Sertoli cell line	Natalie Aneck-hahn, University of Pretoria
P-03	Degradation of per- and polyfluoroalkyl substance (PFAS) in Aqueous Film Forming Foam (AFFF) and Foam Fractionate by ultrasound	Olalekan Simon Awoyemi, University of Newcastle
P-04	How rad is your science: Reducing animal requirements in ecotoxicology studies	Alexandra Boyd, ANSTO
P-05	Assessing the ecological risk of complex contaminant mixtures to Antarctic terrestrial communities using Direct Toxicity Assessments	Kathryn Brown, Australian Antarctic Division
P-06	Harvestsafe Aotearoa — Investigating Soil Contamination in Community Gardens and Māra Kai	Biying Cao, University of Auckland
P-07	The geochemistry of palladium (Pd) in two Australian soils	Po-hao Chen, University of Melbourne
P-08	Pharmacokinetic basis for vertebrate pesticide developments to minimise negative impacts on wildlife when protecting native species	Charles Eason, Lincoln University
P-09	Distribution, Exposure, and Health Risks of Per- and Polyfluorinated Substances (PFAS) in Seafood from High Fishing and Rural Communities: A Meta-analysis	Maureen Egbuatu, University of Newcastle
P-10	Current Situation of Highly Hazardous Pesticides in Chile: A One Health Approach	Sebastian Elgueta, University San Sebastian
P-11	Preliminary assessment of the stability and extraction of tyre-derived compounds, N-(1,3-dimethylbutyl)-N'-phenyl-phenylenediamine (6PPD) and 6PPD-quinone, for environmental soil analysis	Gloria Hui Yu Gao, University of Melbourne
P-12	PFAS in Cosmetics: Investigating Natural and Organic Products	Sarit Kaserzon, The University of Queensland







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Poster Presentations

Poster Session: Tuesday 26 August, 5:50 – 7:00pm

Number	Title	Presenter
P-13	PFAS in Tap and Bottled Water in Australia: Overcoming Detection Limits and Background Contamination	Sarit Kaserzon, The University of Queensland
P-14	AQUA-GAPS/MONET-Derived Concentrations and Trends of PFAS across Global Waters	Sarit Kaserzon, The University of Queensland
P-15	Determination of Estrogenic Pollution in Otago Surface Waters	Iona Grigor, NZ EPA
P-16	Assessing metal mixture toxicity in Japanese rivers based on realistic exposure profiles	Yuichi Iwasaki, AIST
P-17	Whole effluent toxicity testing using in vitro effect-based methods: comparison with conventional methods	Matt Johnson, Griffith University
P-18	Bushfire fighting chemicals disrupt amphibian tadpole growth, development and pigmentation	Chantal Lanctot, Griffith University
P-19	Occurrence of pharmaceuticals of 6 therapeutic classes in Spanish Mediterranean marine biota	Jorge Lejo-santiago, University of A Coruña
P-20	Characterising environmental nanoplastics using Asymmetrical Flow Field-Flow Fractionation coupled to Pyrolysis-Gas Chromatography-Tandem Mass Spectrometry	Haitao Lin, The University of Queensland
P-21	A Machine Learning approach for predicting and interpreting key factors affecting nanopesticide wash-off from leaves	Run Luo, The University of Auckland
P-22	Home range size and foraging niche moderate lead exposure variability in terrestrial birds	Max M Gillings, Macquarie University
P-23	Sixty years since Silent Spring: a map of meta-analyses on organochlorine pesticides reveals urgent needs for improving methodological quality	Kyle Morrison, University of New South Wales
P-24	Assessing the permeation of surface-modified nanoplastics (NPs) across in vitro human gut-blood and blood-brain barrier models	Yufei (Lily) Pan, The University of Queensland
P-25	Exposure to Lead (Pb) influences the outcomes of male-male competition during precopulatory intrasexual selection	Rosemary Patrick, University of Newcastle





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Poster Presentations

Poster Session: Tuesday 26 August, 5:50 – 7:00pm

Number	Title	Presenter
P-26	Exploring the Effects of Pristine and Aged Biodegradable PLA and Conventional LDPE Plastic on Soil Nutrient Processes Influenced by Earthworms	Lisa Qian, University of Auckland
P-27	A meta-analysis reveals average trophic magnification of PFAS and drivers of variability.	Lorenzo Ricolfi, UNSW Sydney
P-28	Assessing the effects of Harmful Algal Blooms and associated toxins on the early life stages of green-lipped mussels in New Zealand	Anne Rolton, Cawthron Institute
P-29	Effects of marine heatwave stress and harmful algal blooms on juvenile mussel (Perna canaliculus) survival and physiology	Anne Rolton, Cawthron Institute
P-30	A collaborative approach: Using NZ native plant DOM super producers to mitigate metal toxicity	Amelia Shepherd, Earth Sciences NZ
P-31	Developing a microplastic extraction method for agricultural soil: A comparative study of recovery efficiency, cost and environmental footprint	Carolyn Sonter, University of New England
P-32	Establishment and Safety Assessments of Micro/Nanoplastic Libraries 6: Focus on Surface Degradation	Yasuo Tsutsumi, The University of Osaka
P-33	Estrogenic contamination of Otago's surface waters: Incidence, associations, and implications for management	Danielle Turner, University of Otago
P-34	The Australian Environmental Specimen Bank (AESB): A National Resource for Chemical Exposure Science and Human and Environmental Monitoring	Josh Tynan, The University of Queensland
P-35	Estimating ketamine consumption and evaluating ketamine/norketamine ratio across Australia during Census week 2021 using wastewater-based epidemiology	Zeyang Zhao, The University of Queensland
P-36	Toxicity and uptake of environmentally relevant micro and nanoplastics in crop plants	Shima Ziajahromi, Griffith University
P-37	Artificial Intelligence—Supported Risk Communication in Low-Trust Environmental Incidents	Craig Dalton, HNE Health District



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