SETAC AUSTRALASIA

ACTRA

2025 CONFERENCE

BUILDING A LASTING LEGACY: OUR CHOICE, THEIR FUTURE

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

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 -7.30pm	**Welcome Reception with Exhibitors** **Performance and Awards Presentation** 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 – 5.35pm	Registration Desk Open		James Cook Hotel Level 16 Foyer
	Plenary Session 1 - *Supported by Botanical Resources Australia*		
8.45 - 9.25am	**Mihi Whakatau & Conference Opening**		Chancellor 1
9.25 – 9.55am	**Plenary: Simon Upton** (Parliamentary Commissioner for the Environment)		Chancellor 1
9.55 - 10.25am	**Plenary: Erica Gregory** (NZ EPA) "Whiria te muka, whiria te mātauranga, whiria te taura tangata – Weave the rope, thread the knowledge, strengthen the bond"		
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 **Chair:** Jackie Myers, AQUEST RMIT University	**1C:** Predator free islands and conservation - human health risk aspects **Chair:** Robert DeMott, Ramboll
Room	**Chancellor 1**	**Chancellor 6**	**Chancellor 4**
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, Institute of Environmental Science and Research**	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, The Environment and Water**	Tackling Pollution through Transdisciplinary and Indigenous Partnership Approaches **Virginia (Jinny) Baker, Institute of Environmental Science and Research (ESR)**	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**
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 NIWA***	**2B(i):** Bridging the gap: Collaborative pathways to transformative outcomes in pollution monitoring, mitigation and management 2 **Chair:** Jackie Myers, AQUEST RMIT University	**2C:** Toxicology of the Visual System **Chair:** Effi Liden, APVMA / ACTRA Membership Officer
Room	**Chancellor 1**	**Chancellor 6**	**Chancellor 4**
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**
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**	
2.00 – 2.15	Metal Management: Characterising Native DOM Super-Producers to Feed a DOM-Metal-Mixture-Bioavailability Model **Aleicia Holland, La Trobe University**	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 **Karen Thompson, NIWA**	**2B(ii):** Toxicants and environmental impacts on wildlife 1 **Chairs:** Olivier Champeau, EPA & 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*		
3.30 – 4.00pm	**Plenary: Lidia Morawska** (Queensland University of Technology) From Science to Policy: mandating indoor air quality for public buildings		Chancellor 1
4.00-4.05pm	**SLR Consulting Presentation**		
4.05 – 4.10pm	*Move between sessions*		
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, NZ EPA & Dayanthi Nugegoda, RMIT University & Anne Vignier, Cawthron Institute	**3C:** Contaminants in consumer products and cosmetics **Chairs:** Sarit Kaserzon & Sara Ghorbani Gorji, The University of Queensland & Melanie Kah, University of Auckland ***Supported by University of Auckland***
Room	**Chancellor 1**	**Chancellor 6**	**Chancellor 4**
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 **Ian Zammit, QAEHS, 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 Amy 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**	
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**	
5.40 – 5.50pm	**Awards Presentation**		Chancellor 1
5.50 – 7.00pm	**Poster & Networking Reception in exhibition area**		Chancellor 2 & 3
7.00pm onwards	**Student Function**		Fork & Brewer

Wednesday 27 August

8.00 – 5.30pm	**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**	Chancellor 1
9.00 – 9.05am	**Vincent Arbuckle** (Deputy Director-General New Zealand Food Safety (DDG))	
9.05 – 9.35am	**Plenary: Peter Dawson** (New Zealand's Environmental Protection Authority)	
9.35 – 10.05am	**Plenary: Vittorio Fattori** (FAO) Food safety foresight and emerging issues	

10.05 – 10.35am	**Plenary: John Roche** (Ministry for Primary Industries) 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 1 **Chair:** Kate Bromfield, HazEL ***Supported by Hazard Evaluation Ltd***	**4B(i):** Toxicants & environmental impacts on wildlife 3 **Chairs:** Olivier Champeau, NZ EPA & 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**	**Chancellor 6**	**Chancellor 4**
11.00 – 11.15	A structural basis for the activation of peroxisome proliferator-activated receptor gamma (PPARγ) 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 Picho, The University of Queensland**
11.45 – 12.00	PFAS in Tap and Bottled Water in Australia: Overcoming Detection Limits and Background Contamination **Sara Ghorbani Gorji, UQ**	**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 L. 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**	

12.00 – 12.15	Untargeted Screening of Environmental Samples – Identifying Emerging Pollutants **Courtney Milner, Agilent Technologies**	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 pyrolysis-gas chromatography/mass spectrometry and micro-Fourier-transform infrared spectroscopy **Helena Ruffell, University of Canterbury**
12.15 – 12.30	Combining Passive Sampling and HRMS for Scalable Micropollutant Monitoring Frameworks **Pulasthi Serasinghe, Rmit Aquest**	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 2 **Chairs:** Anathea Albert & Michaela Busch, 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**	**Chancellor 6**	**Chancellor 4**
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 **Madara Weerasooriyagedara, University of Melbourne**	**5B(ii):** Environmental omics applied to ecotoxicology & eco-surveillance **Chairs:** Steve Melvin, Griffith University & David Beale, CSIRO Low salinity influences the dose-dependent transcriptomic responses of oysters to cadmium **Junfei Zhan & Chenglong Ji, Ludong University**	Do microplastics increase the toxic effects of Cyanobacterial toxins on the floodplain mussel (*Velesunio ambiguus*)? **Sadia Sharmin, University of Technology Sydney (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, 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
	Plenary Session 4 – *Supported by MERA / NiPERA*		
3.30– 4.00pm	**Plenary: Kevin Thomas** (The University of Queensland) Plastic Particles and Human Health: Addressing Analytical Challenges in Exposure Assessment		Chancellor 1
4.00 – 4.30pm	**Plenary: Bryan Brooks** (Baylor University, Texas) Chemicals, Waste and Pollution Prevention: Advancing Precision in Environmental Toxicology and Chemistry		
4.30 – 4.35pm	**MERA/ NiPera Presentation**		
4.35 – 5.30pm	**Concurrent Session 6**		
	6A: ACTRA Debate/ Panel **Chair/Moderator:** Tarah Hagen, SLR Consulting / ACTRA President	**6B: SETAC AU AGM**	
Room	**Chancellor 1**	**Chancellor 6**	
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)	
5.35 – 6.30	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)

Thursday, 28 August

8.00 – 5.00pm	**Registration Desk Open**		James Cook Level 16 Foyer
	Plenary Session 5 - *Supported by Department of Climate Change, Energy, the Environment and Water (Australian Government)*		
8.45– 9.15am	**Welcome & Plenary: Nicholas Ashbolt** (CRC SAAFE) Microbial Fallout: Pollution-Driven Evolution, Ecosystem Tipping Points, and the Case for New Risk Endpoints		Chancellor 1
9.15 – 9.20am	**Department of Climate Change, Energy, the Environment and Water (DCCEEW) Presentation**		
9.20 – 9.25am	*Move between sessions*		
9.25 – 10.55am	**Concurrent Session 7**		
	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 3 **Chairs:** Ailish Power & James Butcher, EPA
Room	**Chancellor 1**	**Chancellor 6**	**Chancellor 4**
9.25 – 9.40	Dietary exposure assessment – giving context to toxicology **Peter Cressey, ESR**	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**
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, Ministry for Primary Industries**	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**
9.55 – 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)**
10.10 – 10.25	Revisiting genotoxicity studies: case of Bromoform **Abhishek Gautam, Institute of Environmental Science and Research (ESR)**	A bioanalytical and chemical approach for wastewater discharge: beyond detected chemicals for water quality assessment **Minna Saaristo, Environmental Protection Authority Victoria**	**7C(ii):** Ecotoxicology & environmental monitoring in challenging environments **Chairs**: Sarah McDonald, TropWATER & Martine Tande, TropWATER/JCU Ice Station: A multidisciplinary approach to assessing environmental risk of a former Antarctic station buried below the ice

			Gwilym Price, Australian Antarctic Division
10.25 – 10.40	Toxicological Considerations of Low Doses of Bromoform as an Environmental Inhibitor **Pravesh Tyagi, Ministry for Primary Industries**	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**
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**
10.55 – 11.20am	**Morning Tea in Exhibition**		Chancellor 2 & 3
11.20 – 12.50am	**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 **Chair:** 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**	**Chancellor 6**	**Chancellor 4**
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 Airborne microplastics: their origins and characteristics **Lidia Morawska, Queensland University of Technology**	Inclusion of microbial endpoints in site-specific Risk Assessments, Environmental Guidelines and Remediation Targets for Antarctic soils. **Catherine King, Australian Antarctic Division**	Setting guidelines well – do we have a problem? **Therese Manning, Enrisks**
11.50 – 12.05		Identifying microbial indicators of pollution in freshwater urban constructed wetlands **Anna Flynn, Aquatic Environmental Stress Research Group, 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
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 **Chair**: 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, EPA
Room	**Chancellor 1**	**Chancellor 6**	**Chancellor 4**
1.35 – 1.50	**Expert Panel on Risk Assessment** **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**	Addressing uncertainty in risk assessment and regulatory decisions for industrial chemicals **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, Environmental Protection Authority NZ**
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

		Chair: Prof Nick Ashbolt, SAAFE-CRC	**Joanna Dowle, Environmental Protection Authority**
2.50 – 3.05			Strengthening the EPA's approaches to the assessment of wide dispersive chemicals **Eugene Georgiades, Environmental Protection Authority NZ**
3.05 – 3.35pm	**Afternoon Tea in Exhibition**		Chancellor 2 & 3
	Plenary Session 6 - *Supported by NZ Environmental Protection Authority*		
3.35 – 4.05pm	**Conference Closing Ceremony** **Student Awards**		Chancellor 1

Poster Presentations **Poster Session: Tuesday 26 August, 5:40 – 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 (Australia)
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	Marine guideline values for the oil spill control agent Slickgone EW	Florita Flores, Australian Institute of Marine Science
P-12	A Hybrid Multisampler with Tandem Quadrupole Mass Spectrometer to Solve Solvent Effect in PFCAs and its Precursor FTOHs Analysis	Chris Fouracre, Agilent

P-13	Preliminary assessment of the stability and extraction of tyre-derived compounds, N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine (6PPD) and 6PPD-quinone, for environmental soil analysis	Gloria Hui Yu Gao, University of Melbourne
P-14	PFAS in Cosmetics: Investigating Natural and Organic Products	Sara Ghorbani Gorji, The University of Queensland
P-15	Determination of Estrogenic Pollution in Otago Surface Waters	Iona Grigor, Environmental Protection Authority
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	AQUA-GAPS/MONET-Derived Concentrations and Trends of PFAS across Global Waters	Sarit Kaserzon, The University of Queensland
P-19	Bushfire fighting chemicals disrupt amphibian tadpole growth, development and pigmentation	Chantal Lanctot, Griffith University
P-20	Occurrence of pharmaceuticals of 6 therapeutic classes in Spanish Mediterranean marine biota	Jorge Lejo-santiago, University of A Coruña
P-21	Characterising environmental nanoplastics using Asymmetrical Flow Field-Flow Fractionation coupled to Pyrolysis-Gas Chromatography-Tandem Mass Spectrometry	Haitao Lin, The University of Queensland
P-22	A Machine Learning approach for predicting and interpreting key factors affecting nanopesticide wash-off from leaves	Run Luo, The University of Auckland
P-23	Home range size and foraging niche moderate lead exposure variability in terrestrial birds	Max M Gillings, Macquarie University
P-24	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-25	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-26	Exposure to Lead (Pb) influences the outcomes of male-male competition during precopulatory intrasexual selection	Rosemary Patrick, University of Newcastle (Australia)
P-27	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-28	A meta-analysis reveals PFAS concentrations double with each trophic level	Lorenzo Ricolfi, UNSW Sydney
P-29	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-30	Effects of marine heatwave stress and harmful algal blooms on juvenile mussel (*Perna canaliculus*) survival and physiology	Anne Rolton, Cawthron Institute
P-31	A collaborative approach: Using NZ native plant DOM super producers to mitigate metal toxicity	Amelia Shepherd, Earth Sciences Institute (NIWA)

P-32	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-33	Establishment and Safety Assessments of Micro/Nanoplastic Libraries 6: Focus on Surface Degradation	Yasuo Tsutsumi, The University of Osaka
P-34	Estrogenic contamination of Otago's surface waters: Incidence, associations, and implications for management	Danielle Turner, University of Otago
P-35	From Lab to Field: A Comparison of the Biodegradation Rates of Organic Chemicals in a Subtropical River	Lily Weir, The University of Queensland
P-36	Estimating ketamine consumption and evaluating removal rates across Australia during Census week 2021 using wastewater-based epidemiology	Zeyang Zhao, The University of Queensland
P-37	Toxicity and uptake of environmentally relevant micro and nanoplastics in crop plants	Shima Ziajahromi, Griffith University