International Council of Chemical Associations

12-14 JUNE 2023

2023 ICCA MARII WORKSHOP

Alexis Royal Sonesta Hotel

Seattle, USA

#microplastics

PROGRAMME

Monday 12 June

Time (PST) / Room	Event	
8:30 - 9:00 Author's Corner	Welcome	
9:00 - 10:45	**Elevator pitches MARII Projects** (6x15min) *Chair: Blanca Serrano*	
	ECO56 - UTOPIA: Development of a mUltimedia uniT world OPen-source model for mIcroplAstic | *Matt MacLeod – Stockholm University* ECO57 – *µBETR Global* – A global scale high-resolution multimedia environmental fate & transport model for micro- and nanoplastics | *Antonia Praetorius – University of Amsterdam* ECO61 Emission factors for micro and nanoplastics | *Sam Harrison – UKCEH* ECO 61 HERA-MP - Establishment of a Holistic Environmental Risk Assessment for MicroPlastics in the terrestrial environment using the study of environmentally relevant particles | *Karsten Schlich – Fraunhofer IME* Characterizing Composition Profiles and Environmental Risk of Microplastics in Tokyo Bay, Japan | *Wataru Naito – AIST*	
10:45 - 11:15	*Coffee break*	
11:15 - 12:30 Author's Corner	**Elevator pitches MARII Projects** (3x15min)	
	Characterization of Exposures to Airborne Human-Respirable Microplastic Particles | *Alison Elder - University of Rochester* Development of MNP Health & Environmental Literature Platform (MNP-HELP): A curated Literature Repository for Risk Assessment Research| *Julie Panko – ToxStrategies* Brigid Project | *Camilla Carteny - PlasticsEurope*	
12:30 - 1:30	*Lunch*	
1:30 - 3:00	**Parallel sessions**	
	Break-out room: Author's Corner	Break-out room: Gallery
	Reference Materials - Status and Needs ***Chair: John Norman & Wendel Wohlleben*** The need for reference materials in microplastics studies from a toxicological perspective *by Ingeborg Kooter, TNO* Reference materials: Literature review *by Todd Gouin, TG Environment*	**Microplastic effects testing with relevance for environmental modelling and risk assessment** ***Chair: Albert A. Koelmans*** Unveiling the effects of microplastics: QA/QC, effect thresholds and effect mechanisms *by Vera de Ruijter, WUR* A recipe for environmentally realistic microplastic to use in effect tests *by Bart Koelmans, WUR* Current research initiatives and strategies for microplastic management in California *by Leah Thornton Hampton, SCCWRP*

3:00 - 3:30	*Coffee break*	
3:30 - 5:00	**Parallel sessions** *(cont'd)*	
	Reliably Generating Microplastic Particles for Laboratory Testing *by Christie Sayes, Baylor University* Progress with Reference Materials in Europe *by Wendel Wohlleben, BASF and Luke Parker, TNO* General Discussion *John Norman – ACC*	Higher-tier community effects of nano- and microplastics in the context of risk assessment *by Paula Redondo Hasselerharm, IMDEA Water* Microplastic particle effects and risks: The way forward *by Todd Gouin, TG Environment* General Discussion *Albert A. Koelmans - WUR*
6:00 – 7:30	*Networking reception at Alexis Royal Sonesta Hotel (Restaurant and Patio)*	

Tuesday 13 June

8:30 - 8:45	Recap from day 1 and outline day 2	
8:45 - 10:00	**Parallel session**	
	Break-out room: Author's Corner	Break-out room: Gallery
	Degradation Processes of Microplastics ***Chair: Kara L. Law & Jing Hu*** Opening *Kara L. Law* Generation of Microplastics in the Ocean Environment *by Anthony Andrady, North Carolina State University* Linking Formulation to the Fate and Impacts of Plastics in Sunlit Surface Waters *by Bryan James, WHOI* Processes of Environmental Plastic Weathering and Biodegradation in Natural Systems (and how to study them) *by Melissa Duhaime, University of Michigan (online)*	**IVIVE in human toxicology assessment of microplastics** ***Chair: Robert Ellis-Hutchings and Tanja Hansen*** Opening *Robert Ellis Hutchings – Dow* Some Fundamentals of Particle Dosimetry for Risk-Directed Studies *by Justin Teeguarden, PNNL* Earlier and Novel Findings from Inhalation Studies of Ultrafine Particles: Predictors for Effects and Biokinetics of Inhaled Micro- and Nano-Plastics? *by Günter Oberdörster, U. Rocherster* In-vitro inhalation microplastics assessments: IVIVE approaches *By Tanja Hansen, Fraunhofer ITEM*
10:00 - 10:30	*Coffee break*	
10:30 - 12:00	**Parallel sessions** (cont'd)	
	Predicting plastic fragmentation in the environment *by Sam Harrison, UKCEH* General Discussion *Jing Hu - Dow*	Well-characterized nanoplastics for oral exposure studies in vivo *by Leah Johnson, RTI International* General Discussion *Tanja Hansen – Fraunhofer ITEM*
12:00 - 1:00	*Lunch*	
1:00 - 2:45 Author's Corner	**Joint session: A risk assessment framework for microplastic particles** Chair: Jens C. Otte & Todd Gouin (TBC)	

	Opening *Jens Otte, BASF* Risk assessment of Microplastic particles for human health and environment, a probabilistic view *by Bart Koelmans, WUR* Lost in parameter space – Can we reduce the complexity in microplastic research? *by Holger Kress, University of Bayreuth* Assessing Risks of Microplastics in Drinking Water and the Aquatic Environment to Inform Risk Management Strategies in California *by Scott Coffin, California State Water Resources Control Board* Human health risk frameworks – needs for human health microplastics risk assessment *by Raymond Pieters - Utrecht University* General discussion *Todd Gouin, Jens Otte*
2:45 - 3:15	Conclusions and Next Steps
3:15 - 3:45	**Case Study – Microparticle monitoring at the Seattle Aquarium: Life before and after Covid-19** *by Veronica Padula, Seattle Aquarium*
3:45 - 6:00	Walk to Seattle Aquarium and free time to tour the Aquarium
6:00 - 7:30	Networking drinks and snacks at the Pike Brewing Company, 1415 1st Ave, Seattle *(6 minutes walking from the Seattle Aquarium)*

Wednesday 14 June – Additives workshop

9:00-9:30 Author's Corner	Welcome
9:30-10:30	**Overview of chemical additives & Risk based scientific principles**
	Additives in Polyethylene and Copolymers *By Alexander Williamson, Dow* The role of additives in a circular plastics economy *By Ricarda Fieber, ETH Zurich*
10:30-11:00	*Coffee break*
11:00-12:30	**Chemical Additives in Plastic – A framework towards risk-based approaches**
	LRI ECO58 - Comprehensive additive release and bioaccessibility model for risk assessment of micro- and nano-plastics in the environment *by P. Lee Ferguson, Duke University* U.S. Regulation of Food Contact Substances and Microplastics Implications *by Katie Skaggs, Keller and Heckman LLP*
12:30 - 2:00	*Lunch*
2:00 - 3:30	**Risk assessment Framework for Additives**
	Additives risk assessment Framework *Craig Davis & Jing Hu* Brainstorming and next steps
3:30-4:00	*Coffee break*
4:00-5:00	Debrief from brainstorming
5:00-5:30	Wrap up and next steps