Program

Sunday, 28. October, 2018

From 16.00	Arrival, registration
17.30-17.45	Introduction by the Organizing Committee
	Chair: Bernhard Wehrli
17.45 – 18.15	**Chelsea Rochmann,** University of Toronto, Canada *The fate and effects of microplastic in aquatic ecosystems*
18.15 – 19.15	*Welcome drink*
19.15	*Dinner*

Monday, 29. October, 2018 - Morning

8.15 – 8.30	CSF Welcome Address and Monte Verità introduction video
	Chair: Thorsten Hüffer
8.30 – 9.00	**Richard Thompson,** University of Plymouth, UK *How concerned should we be about microplastics?*
9.00 – 9.30	**Gunnar Gerdts,** Alfred Wegner Institute, Germany *Defining the baselines and standards for microplastics analyses in European waters!? Highlights and pitfalls of JPI-O BASEMAN*
9.30 – 9.45	**Joana MacLean,** GFZ German Research Centre for Geosciences *Microbiology of the terrestrial 'plastisphere' - enrichment and characterization of plastic- associated microbial communities*
9.45 – 10.00	**Delphine Kawecki-Wenger,** Empa, Switzerland *Environmental flows of macro- and microplastics for seven different polymers using Material Flow Analysis*
10.00 – 10.45	*Coffee break*
10.45 – 11.00	**Philipp Hopp,** BASF, Germany *Development of a prototype environmental risk assessment framework for microplastics*
11.00 – 11.15	**Brett Roblin,** Trent University, Canada *Atmospheric deposition of microplastics into remote lake catchments*
11.15 – 11.45	**Denise Mitrano,** Eawag, Switzerland *The path of microplastics to the environment: fate and transport in wastewater treatment systems*
11.45 – 12.00	**Allan Gross,** Aarhus University, Denmark *A critical view of wastewater treatment plants ability to clean for microplastics*
12.00 – 12.15	**Christian Laforsch,** University of Bayreuth, Germany *Microplastic in the environment - organic fertilizer as an entry vehicle*
12.30	*Lunch*

Monday, 29. October, 2018 – Afternoon

Chair: Ralf Kägi

14.00 – 14.30	**Martin Wagner,** NTNU, Norway *Risk to all or none? On the toxicity of microplastics to animals, scientists and societies*
14.30 – 15.00	**Michael Sander**, ETH Zurich, Switzerland *Going beyond microplastics: biodegradation of synthetic polyesters in soils*
15.00 – 15.15	**Gabor Bordos,** WESSLING Hungary Ltd., Hungary *Microplastics in riverine systems of Hungary*
15.15 – 15.30	**Nathalie Vallotton,** Dow Europe GmbH, Switzerland *Risk based approach to assess solid cross-linked styrene/acrylate copolymers in the environment*
15.30 – 15.45	**Joana Sipe,** Duke University, USA *Quantifying and scaling rates of microplastic generation from various plastic sources during use from mechanical stress*
15.45 – 16.30	*Coffee break*
16.30 – 16.45	**Nathan Bossa,** Duke University, USA *Effect of Nanomaterials on microplastics exposure, behavior, fate and toxicity*
16.45 – 17.00	**Francesca De Falco**, National Research Council, Italy *Quantitative approaches to investigate the release of microfibres from washing processes of synthetic clothes*
17.00 – 17.15	**Yaping Cai**, Empa, Switzerland *The origin of fiber micro-fragments in polyester textiles: does the production process matter?*
19.00	*Dinner*

Tuesday, 30. October, 2018 - Morning

Chair: Thilo Hofmann

8.30 – 9.00	**Rainer Lohmann,** University of Rhode Island, USA *Sorption of organic pollutants to Microplastics in fresh (and saltier) water systems*
9.00 – 9.15	**Todd Gouin,** TG Environmental Research, UK *Challenges and limitations associated with aquatic toxicity and bioaccumulation studies for sparingly soluble and particulate substances*
9.15 – 9.30	**Scott Coffin,** University of California, Riverside, USA *Analytical and in vitro estimates of estrogenicity from simulated digests of plastic items*
9.30 – 9.45	**Andrew Reynolds,** Dublin Institute of Technology, Ireland *Standardizing in-vivo analysis methods for toxicological effects within freshwater organisms from nano-polystyrene exposure*
9.45 – 10.00	**Veronique Adam,** Empa, Switzerland *Towards ecotoxicological Risk Assessment of Microplastics: A comparative Analysis of Hazard and Exposure Data in Freshwater*
10.00 – 10.45	*Coffee break*
10.45 – 11.15	**Thorsten Hüffer,** University of Vienna, Austria *Microplastic aging and its impact on leaching of polymer additives*
11.15 – 11.30	**Sven Seidensticker**, Eberhard Karls Univ. Tübingen, Germany *Microplastic as pollutant vector: Influence of non-linear sorption and coupled mass transfer*
11.30 – 11.45	**Robin Treilles,** University of Paris-Est, France *Impacts of digestion protocols on man-made and natural fibers*
11.45 – 12.00	**Patricia Burkhardt-Holm**, University of Basel, Switzerland *MOSeS - Microplastics Oil Separation Standard for Surface, Soil and Sediment Samples*
12.00 – 12.15	**Heejun Kang,** University of Science and Technology, Republic of Korea *Microplastics in fat, oil and grease (FOG) in sewage*
12.15 – 13.45	*Lunch*

Tuesday, 30. October, 2018 - Afternoon

Chair: Denise Mitrano

14.00 – 15.00	**Panel discussion**: Industry point of view
15.00 – 15.30	**Natalia Ivleva,** TUM, Germany *Microplastic in environmental samples: Identification and quantification by Raman microspectroscopy*
15.30 – 16.15	*Coffee break*

Chair: Chelsea Rochmann

16.15 – 16.30	**Florian Meier,** Postnova Analytics GmbH, Germany *Hyphenation of Asymmetrical Flow Field-Flow Fractionation and Raman Spectroscopy for the simultaneous fractionation and identification of submicroplastic particles*
16.30 – 16.45	**Andreas Kerstan,** Agilent Technologies, Germany *FTIR imaging as a new method in microplastics and microparticle analysis*
16.45 – 17.00	**Andreas Huber,** neaspec GmbH, Germany *nano-FTIR nanoscopy based identification of polymers on sub-100nm length scales*
17.00 – 19.00	Poster session
19.00	*Dinner*

Wednesday, 31. October, 2018 - Morning

Chair: Denise Mitrano

8.30 – 9.00	**Tamara Galloway,** University of Exeter, UK *Bioaccumulation and biological effects of micro and nano plastics*
9.00 – 9.15	**Boris Eyheraguibel,** CNRS, France *From macro to nano : analytical tools to follow plastic fragmentation and biodegradation*
9.15 – 9.30	**Dieter Fischer,** Leibniz-Institut f. Polymerforschung Dresden, Germany *Analytical approach for the identification and quantification of microplastic particles in environment samples by a combination of particle analysis with FTIR and Raman microscopy*
9.30 – 9.45	**Kathrin Oelschlaegel,** Fraunhofer Institute of Ceramic Technologies and Systems, Dresden, Germany *Surface charge – An important parameter to evaluate the interactions of microplastics with environmental substances*
9.45 – 10.00	**Julia Reichel**, TU München, Germany *Application of thermal extraction/desorption-pyrolyse-GC/MS to investigate sorption of contaminants on and the identity of (sub)microplastic*
10.00 – 10.45	*Coffee break*
10.45 – 11.00	**Friederike Stock,** Federal Institute of Hydrology, Germany *A new approach to separate (micro)plastics from environmental samples*
11.00 – 11.15	**Rune Aardal Hansen**, Aarhus University, Denmark *Sampling design and instrument development for investigation of microplastics in coastal sediments*
11.15 – 11.30	**Shaun Forrest**, Carleton University, Canada *Citizen science sampling programs as a technique for monitoring microplastic pollution. Lessons learned and recommendations for working with volunteers to expand spatial coverage for monitoring plastic pollution in freshwater ecosystems*
11.30 – 11.40	CSF Award ceremony
11.40 – 12.00	Closing remarks
12.00	*Lunch and departure*

Posters list

Posters are sorted alphabetically according to the presenting author.

1. Size fractionation of plastic nanoparticles via crossflow filtration
André Marcel Bienfait

2. A comprehensive investigation of microplastic contamination in Lake Mjøsa, Norway's largest lake
Nina Buenaventura

3. Preparation and characterization of nano-sized polyethylene particles
Jessica Caldwell

4. Interactions of dissolved organic matter with microplastics
Stephanie Castan

5. Optimizing the workflow for microplastic analysis by FT-IR microscopy
Annamaria Cavalleri

6. Microplastics a macro-disaster: a threat to the largest fish of our seas?
Giulia F. A. Donati

7. Ingestion of microplastics in the monogonont rotifer *Brachionus calyciflorus*
Claudia Drago

8. Characterization of exo-metabolism involved in plastic biodegradation
Boris Eyheraguibel

9. Fate and transport of particulate plastics in a pilot scale wastewater treatment plant (WWTP)
Stefan Frehland

10. Detecting microplastics via photoluminescence: first experiments
Sebastian Gies

11. Investigation of the biodegradability of powdered plastics by strains isolated from the surfaces of composted films
Judit Háhn

12. Microplastics in coastal North Sea sediments – Analyzed using Fourier Transform Infrared Spectroscopy
Lars Michael Hildebrandt

13. Development of a prototype environmental risk assessment framework for microplastics
Philipp Hopp

14. Determination of tire wear particles in road runoff based on elemental composition
Philipp Klöckner

15. Microplastic as an emerging contaminant of water – a state of knowledge in Poland
Ewa Kmiecik

16. Assessment of microplastic concentrations in human stool – Final results of a prospective study
Bettina Liebmann

17. Freshwater microplastic input from Pearl River Estuary is contaminating Hong Kong waters
Hoi-Shing Lo

18. The challenge of detecting submicro- and nanoplastics in environmental and biological matrices – From sample preparation to characterization via Field-Flow Fractionation
Florian Meier

19. Trace nanoplastic and microplastic fiber analysis in wastewater and activated sludge: synthesis and utility of metal doped plastics
Denise M. Mitrano

20. Molecular interactions of organic compounds with tire crumb rubber
Ruoting Peng

21. Characterisation of microplastics in Hong Kong waters: An unexplored type of fragment may reveal a new cause of formation
Beverly Hoi Ki Po

22. Inter-study comparison of Nile Red-based staining protocols for the detection of microplastics in environmental samples
Julia A. Prume

23. The use of moss (*Hylocomium splendens*) as a biomonitor for microplastics
Brett Roblin

24. Survey on occurrence of microplastics in an urban river watershed of Da Nang city in Vietnam
Taishi Ushijima

25. Microplastics in surface waters at Lake Kallavesi, Finland – Analysis of size distribution and their possible sources
Emilia Uurasjärvi

26. The effects of additives and microplastics on freshwater organisms
Jana Vašíčková

27. Tire wear particles in the aquatic environment
Stephan Wagner

28. Influence of environmental factors on the leaching of polymer additives from carbon nanotube (CNT) polymer composites in water
Imari Walker Karega