

Sunday September 6th

1900-2200

Registration & Get-together

Monday September 7th

0800-1100

Registration

0850-0900

Welcome & Opening

**Theme F: Innovation and applications of nanotechnology to environmental issues
(Chairs: J. Rose & T. Hofmann)**

0900-0930

Key Note

Jerome Rose: Applications of nanotechnology to environmental issues: opportunities for pollution treatment

0930-0950

F1 Jiyeol Bae: Fabrication of PES nanofiber supported thin-film composite membrane for forward osmosis

0950-1010

F2 Tiziana Tosco: Field-scale modeling of nanoparticle transport in aquifer systems

1010-1030

F3 Renato Grillo: Nanoparticles based modified release systems for herbicides: an alternative method of controlling weeds in agriculture

1030-1050

F4 Melanie Kah: Nanopesticides in the environment: nano and/or solute behaviour?

1050-1130

Coffee Break & Poster Session

**Theme CI: Toxicology & Ecotoxicology
(Chairs: J. Filser & R. Handy)**

1130-1150

C1 Lindsey Felix: Mechanisms of cellular uptake and sub-cellular localization of nanoparticles

1150-1210

C2 Brad Angel: The mechanism of toxicity of nanoparticulate CeO₂ to unicellular algae

1210-1230

C3 Rebecca Klaper: Molecular interactions of nanoparticles and *Daphnia magna* as a predictor of impact

1230-1250

C4 Anzhela Malysheva: Can you trust your EC 50? Investigating sorption of Ag NPs to the test containers in algal growth inhibition tests

1250-1350

Lunch Break & Poster Session

**Theme AI: Analysis of nanomaterials
(Chairs: G. Lowry & J. Ranville)**

1350-1420

Key Note

Greg Lowry: After 10 years of nanoEHS research: Are we measuring the right things to make decisions about fate and effects of nanomaterials?

1420-1440

A1 Stefan Schymura: Radiolabelling - A versatile tool for tracking nanoparticle release, uptake and transport

1440-1500

A2 Florian Dutschke: Evaluation of the fate and the behavior of

	anthropogenic Titanium dioxide nanoparticles in seawater and marine sediments using Centrifugal Field-Flow-Fractionation hyphenated to ICP-MS/MS (CFFF-ICP-MS/MS)
1500-1520	A3 Florian Meier: Supercritical CO ₂ extraction as an efficient tool for FFF sample pretreatment - Application toward sunscreen formulations and evaluation of the extraction efficiency using AF4-UV-MALS
1520-1540	A4 Sam Lawrence: Quantitatively Assessing Toxicological Effects of Engineered Nanomaterials with Hyperspectral Microscopy
1540-1620	Coffee Break & Poster Session
Theme B1: Release, behavior, and transformations (Chairs: C. Svendsen & I. Romer)	
1620-1640	B1: Mark Wiesner: Environmental interactions of nanomaterials in aquatic ecosystems
1640-1700	B2: Marie Sophie Briffa: Thermal Transformations of Manufactured Nanoparticles (MNPs) as a Proxy for Ageing
1700-1720	B3: Bettina Liebmann: The behaviour of selected nanoparticles in wastewater treatment
1720-1740	B4: Wei Chen: Environmental Transformation of Carbon Nanomaterials: Implications for Fate, Transport and Toxicity
1740-1800	B5: Maya Engel: Carbon nanotubes affect the amount and composition of dissolved organic matter (DOM) in aquatic environment
1800-1900	Poster Session & Drinks

Tuesday September 8th

0800-0900	Registration
0850-0900	Conference Information
	Theme D: Natural colloids and related processes (Chairs: N. Tufenkji & F. von der Kammer)
0900-0930	Key Note D
	Nathalie Tufenkji: Insights into Environmental NanoScience using QCM-D
0930-0950	D1 Patricia Maurice: Effects of particle size on hematite nanoparticle reactivity
0950-1010	D2 Deborah Oughton: A worm's eye view of uranium nanoparticles
1010-1030	D3 Jonathan Avaro: In situ characterisation of calcium carbonate prenucleation clusters around the solubility limit using Small Angle X-ray Scattering technics: impact of pH and carbonate concentration
1030-1050	D4 Danielle Slomberg: Characterization of Rhône River suspended particulate matter and its impact on titanium dioxide nanoparticle fate and heteroaggregation in surface water
1050-1130	Coffee Break & Poster Session
	Theme All: Analysis of nanomaterials (Chairs: G. Lowry & J. Lead)
1130-1150	A5 Serge Stoll: Towards a better understanding on agglomeration mechanisms and thermodynamic properties of TiO ₂ nanoparticles interacting with natural organic matter
1150-1210	A6 Herwig Peterlik: Silica nanoparticle aggregation in humid environment studied by in-situ small-angle X-ray scattering
1210-1230	A7 Adam Laycock: Stable Isotope Labelling – Opportunities to trace at environmentally relevant levels
1230-1250	A8 Bernd Nowack: Validation of modeled environmental concentrations of engineered nanomaterials by analytical measurements is not possible at the moment
1300-1400	Lunch Break & Poster Session
	Theme BII: Release, behavior, and transformations (Chairs: C. Svendsen & I. Romer)
1400-1430	Key Note
	Claus Svendsen: Moving to more functional non-standard experiments for assessing the effects of behaviour, aging, and fate processes on release forms of engineered nanomaterials under environmentally relevant conditions and time scales
1430-1450	B6 Amy Dale: Stream dynamics and chemical transformations control the environmental fate of silver and zinc oxide engineered nanoparticles in a watershed model
1450-1510	B7 John Pettibone: In situ measurement methods for examining factors

	controlling silver nanoparticle size, state and mass distribution in corrosive environmental waters
1510-1530	B8 George Metreveli: How do test media affect aging and colloidal status of silver nanoparticles?
1530-1550	B9 Basilius Thalmann: Effect of Ozone Treatment on Nano-Sized Silver Sulfide in Wastewater Effluent
1550-1610	B10 Claus Wasmuth: Behaviour of silver nanoparticles in aquatic indoor microcosms
1610-1650	Coffee Break & Poster Session
	Theme CII: Toxicology & Ecotoxicology (Chairs: J. Filser & R. Handy)
1650-1710	C5 Laura Lagier: Compared effects of carbon-based nanoparticles on <i>Xenopus laevis</i> tadpole: ecotoxicological assessment
1710-1730	C6 Valerie Leppert: The effect of particle size, phase and iron on low dose engineered silica-induced pro-inflammatory production
1730-1750	C7 Li Lingxiangyu: Sulfidation as Natural Antidote to Metallic Nanoparticles Is Overestimated: Case of CuO Nanoparticles
1750-1810	C8 Massimo Bidussi: Ecotoxicity of graphene-based nanomaterials on aeroterrestrial microalgae
1900	Meeting at UZAII and walk to Dinner Location
1930-2200	Conference Dinner
2200-0100	Party

Wednesday September 9th

0850-0900	Conference Information
	Theme E: Social, ethical and regulatory aspects (Chairs: T. Seager & G. Goss)
0900-0930	Key Note Thomas Seager: Integration of Social & Ethical Concerns in Nanotechnology Assessment
0930-0950	E1 Iris Eisenberger: The ethics of nano-regulation: Proposals for curing some shortfalls in EU law at the nano-nature interface
0950-1010	E2 Yevgeniya Tomkiv: Nanoremediation: sustainable or not?
1010-1030	E3 Yehia Eltemsah: Towards Safety by Design: Building a database of nano(eco)toxicity studies to establish the impact of physical-chemical properties
1030-1050	E4 Dana Kühnel: Providing comprehensive information on environmental impacts of nanomaterials - The DaNa2.0 Knowledge Base Nanomaterials
1050-1130	Coffee Break & Poster Session
	Theme CIII: Toxicology & Ecotoxicology (Chairs: J. Filser & R. Handy)
1130-1200	Key Note Juliane Filser: Effects of ENMs on soil communities
1200-1220	C9 Astrid Avellan: Environmental impact of Fe-doped imogolite nanotubes: toxicity towards soil bacteria
1220-1240	C10 Kelvin Gregory: Differential Impacts of Pristine and Transformed Ag Nanomaterials and of Cu Nanomaterials and Cu Ion on Freshwater Wetland Surficial Sediment Microbial Communities
1240-1300	C11 Erik Joner: Ecotoxicity of nanoparticles used for soil remediation of chlorinated pollutants. Findings from the large EU project NanoRem
1300-1400	Lunch Break & Poster Session
	Theme AIII: Analysis of nanomaterials (Chairs: A. Praetorius & J. Lead)
1400-1420	A9 Francisco Laborda: Analysis of Nanomaterials by Single Particle ICPMS: Limitations and New Trends
1420-1440	A10 Ruth Merrifield: Transformation kinetics of metallic nanoparticles in environmental and cell culture exposure media measured by spICP-MS
1440-1500	A11 Geert Cornelis: spICP-MS detection limits for TiO ₂ nanoparticles in natural systems
1500-1520	A12 Chady Stephan: Exploiting the Limits of Single Particle ICP-MS - From Particle Size to Particle Number
1520-1540	A13 Olga Borovinskaya: Single particle ICP-MS with the new icpTOF: Get also the multi-element composition
1540	Final Remarks & Awards