

25 May 2023 / UFZ Leipzig: KUBUS



Conference Programme

Time	Location	Programme
11:00 am	Foyer	Warm-up at KUBUS Leipzig
		UFZ services: HIGRADE, Do-it, Statistics support, WTT,
		RDM, Bioinformatics Service, International Office, Family
		support office
01:00 pm	Hall 1	Welcome & Opening
		Prof. Rolf Altenburger
		Dr. Daniel Kaping
		Poster Pitches
		Chair: Sarah Unrath & H. Stembridge Ayuk
02:15 pm	break	
02:30 pm	Foyer	Open Poster Session
		Scientific posters and UFZ services
04:00 pm	Hall 1	Award Ceremony including
		Awarding of Prizes for Best Posters & Best Poster Pitch
		Honoring of PhD Finishers
		Keynote event: Andrea Büermann & Dr. Guy Pe'er:
		"Citizen Science: exciting, promising but also demanding!
		Example from VielFalterGarten"
		Chair: Dr. Daniel Kaping
~5:00 pm	Foyer	Get-together with snack buffet, ~7:00 pm "after-show"



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Posters

Ecosystems of the Future



- 1. Linda Rigerte (BOOEK): Drought tolerant synthetic community from barley rhizosphere
- 2. **Fatemeh Dehghani Mohammad Abadi (BOOEK)**: Linking heat and matter turnover during microbial decomposition of glucose in soil to procedure of substrate application
- 3. Saneesh Cherapurath Soman (BZF): "End of a conversation"
- 4. Julián Equihua (BZF): Connectivity planning through deep reinforcement learning
- 5. **Jana Kachler (ESS):** People and Nature- What values associate nature visitors with protected areas in Germany?
- 6. **Sarah Martin (PHYDIV):** Effects of nitrogen and litter addition on germination and seedling growth of 75 grassland species
- 7. **Franziska Walther (PHYDIV):** Spatio-temporal variation of zoophilous pollen traits within species How diverse are pollen of insect-pollinated plants in space and time?

Environmental Engineering and Biotechnology



- 8. **Gangan Wang (ISOBIO):** Direct-geneFISH to link antibiotic resistance gene presence and phylogeny in microbial populations
- 9. Katharina Smaluch (SOMA): Heavyweight data: Microscale material balancing in microfluidics
- 10. Xiaoyan Chen (TUCHEM): Optimization of pollutant removal from green roofs operated with low-polluted wastewater (cancelled)
- 11. **Pegah Fatehbasharzad (TUCHEM):** Is electrosorption fit for the removal of persistent and mobile organic compounds?
- 12. **Yu Liu (UBT):** Identification of enzymes responsible for anerobic transformation of sulfamethoxazole in sulfate reducing bacteria
- 13. **Christina Schäfer (UMB):** Engineering microbial communities for the conversion of lignocellulose into medium-chain carboxylic acids
- 14. **Adrian Tüllinghoff (UMB):** From photons to product Cyanobacterial whole-cell redox biocatalysis: Why? What? How much?
- 15. **Jinyao He (UMB):** Electric field effects on sorption and microbial degradation of waterborne (urban) contaminants
- 16. **Muhammad Kabiru Nata'ala (UMB):** Uncovering the Hidden Role of Prokaryotes in Carbon Fixation from Marine Surface Water: Insights for Climate Regulation
- 17. **Gennuo Wang (UMB):** Exploring the potential interactions of DNA viruses and their prokaryotic hosts in Bromoxynil and Control soils



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Environmental Engineering and Biotechnology



- 18. Laura Pause (UMB): Anaerobic glucose uptake across the cytosolic membrane of Pseudomonas putida in BES
- 19. Hans Schneider (UMB): Physiology of Synechocystis sp. PCC 6803 under biophotovoltaics conditions
- 20. Natalia Sánchez (UMB): The future of phytoremediation (cancelled)
- 21. **Die Hu (UMB):** Did you know gut microbial stability may be linked with allergies? An exploration at atopic eczema in 10 years old children

Environment and Society



- 22. **Sören Richter (BEN):** Explorative scenarios for system integration of biorefineries in cascaded material flows within a future circular bioeconomy in Germany up to 2045
- 23. **Jasmin Heilemann (OEKON):** From rain-fed to irrigated agriculture? Projecting the future irrigation water demand in Germany using a hydro-economic multi-agent system model
- 24. Jan Sodoge (SUSOZ): Text-mining for assessing and analyzing socio-economic drought impacts
- 25. Felix Klickermann (UPR): Management of Water Allocation Conflicts Legal bases, empiricism, perspectives

Water Resources and Environment



- 26. Yao Li (ASAM): How climate change affects the expansion and contraction of river networks
- 27. **Safae Aala (ASAM):** Do land-cover mosaics affect the variability of suspended sediments in rivers? The case of large river basins in Germany (cancelled)
- 28. **Alexandra Schlenker (FLOEK):** Stream food webs between degradation and recovery the history of a multiple-stressed urban stream catchment
- 29. **Anne Jähkel (HDG, ASAM):** Quantification of hydrologic turnover and its implications for nutrient uptake in streams
- 30. Valeria Farez-Román (SEEFO): Winter diatom ecology in lakes
- 31. Lipa Nkwalale (SEEFO): Evaluating synchrony among neighboring reservoirs through high frequency data
- 32. **Patrick Aurich (SEEFO):** The floating membrane equilibrator: a low-cost device to measure CO2 concentrations at the water-atmosphere interface.



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Smart Models / Monitoring



- 33. Masooma Batool (CHS): Long-term Trajectories of Soil Nitrogen Surplus Across Europe (1850-2019)
- 34. **Mohit Anand (CHS):** Identifying compound weather drivers of tree mortality with generative deep learning
- 35. Jalil Asadi (MET): Uncertanity quantification-Subjectivity in imaging and image fusion (cancelled)
- 36. Lukas Flinspach (OESA): Reproducing alpine treeline ecotones in an agent-based model: the STEM

Chemicals in the Environment



- 37. **Aurelio Giovanni Foscari Widmann Rezzonico (ANA)**: Biodegradation studies on tire tread particles: a comprehensive investigation on both leachates composition and particle changes
- 38. **Shuxian Gao (ANA):** Multiple Deuterium Labelling: New Insights into the Fate of Organic Pollutants in Natural Waters.
- 39. **Silvia Dudasova (ANA):** Automated data processing workflow: a tool for Ultra-High Resolution MS data used in PFAS molecular formula validation
- 40. **Laura-Fabienne Fröhlich (ANA):** Biotransformation potential of xenobiotics in an in vitro Model of Human Gut Microbiota
- 41. **Orasai Faikhaw (ANA):** Microplastic Contamination in an Urban River in Germany Investigating and Tackling the Challenge of Organic-Rich Matrix
- 42. Steffen Weyrauch (ANA): Aging of Tire and Road Wear Particles Results of a Lab study
- 43. Carolin Dahley (AUC): New insights into the passive membrane permeability of organic chemicals
- 44. Soné Kotze (AUC): Quantitative considerations for active transport
- 45. **Nadia Katherine Herold (BIOTOX):** Development of a Toxicity Fingerprinting System to Identify Acute Neurotoxicants in Larval Zebrafish
- 46. **Bernhard Kodritsch (BIOTOX):** Linking toxicokinetics and toxicodynamics based on dose-and time-resolved internal concentration and effect data of selected compounds in the zebrafish embryo
- 47. **Illés Bock (BIOTOX):** The role of toxikokinetics in the diagnostic assessment of chemicals by zebrafish embryo automated phenotyping
- 48. **Ziran Yin (IMMU):** Different effect of BPA and its analogs on T helper 1 cell differentiation between male and females
- 49. **Victor Castañeda-Monsalve (MOLSYB):** Screening the influence of 93 chemicals on the Simplified Human Gut Microbiota Model (SIHUMIX) using (meta)proteomics and metabolomics
- 50. **Stefanie Raps (MOLSYB):** Unravelling the modes of action of Triclosan and its alternatives in human macrophages
- 51. Jonas Gröning (OEKOTOX): Consequences of pesticide regulation on ecological risk in streams
- 52. **Isaac Tanui (WANA):** Spatial Temporal Analysis and Risk Assessment of Organic Micropollutants in Western Kenya
- 53. Julia Huchthausen (ZELLTOX): Investigation of chemical transformation processes in in vitro bioassays
- 54. **Weiping Qin (ZELLTOX):** Role of bioavailability and protein binding of perfluoroalkyl substances in cell-based bioassays for quantitative in vitro to in vivo extrapolations