

Institut für Ökologie, Evolution und Diversität & RobustNature Exzellenzcluster-Initiative



EINLADUNG

Kolloquium Wintersemester 2022 / 2023

Prof. Dr. Peter Fantke

Section for Quantitative Sustainability Assessment, Technical University of Denmark

hält am Dienstag, den **10.01.2023**, um 16:15 Uhr, im Biologicum, Maxvon-Laue-Str. 13, Campus Riedberg, Hörsaal 1 einen Vortrag über,

"Modelling chemical pollution to support a safe and sustainable chemicals management"

If you cannot measure it, you cannot manage it! However, since we cannot measure everything, models constitute an important component in quantifying and evaluating chemical impacts from local to global scale to support various decision-support tools from risk screening, via life cycle impact assessment, to chemical substitution. In this lecture, I will provide an outlook of how impact-modelling approaches can be used to assess chemical emissions, fate, exposure and toxicity to measure progress toward meeting the goals set out in the European and global sustainable development agenda. Specific focus will be on the consistent integration of different exposure aspects, and linking chemical pressure to ecological carrying capacities in the context of absolute environmental sustainability assessment of chemical pollution.



Peter Fantke is professor and head of the Section for Quantitative Sustainability Assessment at the Technical University of Denmark.

His research focuses on developing quantitative methods for evaluating exposure and toxicity impacts from chemicals on humans and the environment to address some of society's grand challenges, including air pollution and the global human burden of disease, ecosystem degradation, all related to harmful chemicals released throughout product life cycles. He contributed to several national and international projects focusing on life cycle impact assessment, external cost analysis, socioeconomic analysis, high-throughput risk screening, and chemical substitution.

He is executive manager of USEtox, the UNEP/SETAC scientific consensus model for characterizing toxicity impacts of chemicals. He contributes to training at MSc and PhD level, organizes international training workshops, and coordinates global task forces under UNEP on emission and impact modelling.

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Einladender: Prof. Dr. h. c. Henner Hollert