

4th IP Retreat TapNature



Report of Contributions

Contribution ID: 1

Type: **not specified**

Check in

Presenters: Dr JUNGHANNS, Charles; SMALUCH, Katharina

Session Classification: Check-In

Contribution ID: 2

Type: **not specified**

Intro welcome

Presenters: Prof. BÜHLER, Bruno; Dr WICK, Lukas

Session Classification: Check-In

Contribution ID: 3

Type: **not specified**

Intro welcome

Wednesday 22 October 2025 08:30 (15 minutes)

Presenters: BÜHLER, Bruno; WICK, Lukas

Contribution ID: 4

Type: **not specified**

Introduction to FACE: Scientific activities and future development

Wednesday 22 October 2025 14:30 (10 minutes)

Presenter: MILTNER, Anja

Session Classification: FACE

Contribution ID: 5

Type: **not specified**

Soil microbes in a world full of pesticides: Why spatial heterogeneity matters and how we may predict the fate of pesticides on agricultural fields in the future

Wednesday 22 October 2025 14:40 (15 minutes)

Presenter: UKSA, Marie

Session Classification: FACE

Contribution ID: 6

Type: **not specified**

Microbial transformation of organic micropollutants in redox-differentiated bank filtration systems

Wednesday 22 October 2025 14:55 (15 minutes)

Presenter: KÖPKE, Jimmy

Session Classification: FACE

Contribution ID: 7

Type: **not specified**

Underexplored interactions: how microplastics and inorganic fillers affect the fate of plasticizers

Wednesday 22 October 2025 15:10 (15 minutes)

Presenter: KARAGULYAN, Mariam

Session Classification: FACE

Contribution ID: 8

Type: **not specified**

Nature Strikes Back: Unleashing Hydrolases to Reshape the Future of Plastics

Wednesday 22 October 2025 15:25 (30 minutes)

Presenter: SONNENDECKER, Christian

Session Classification: FACE

Contribution ID: 9

Type: **not specified**

EBB –Introduction and Highlights of the PP

Wednesday 22 October 2025 08:45 (10 minutes)

Presenters: KORTH, Benjamin; STRÄUBER, Heike

Session Classification: EBB

Contribution ID: 10

Type: **not specified**

Modeling and Optimization of Ferricyanide Bio-Reduction in a Capillary Reactor – Biophotovoltaic System

Wednesday 22 October 2025 08:55 (20 minutes)

Presenter: CHAKRABORTY, Susmit

Session Classification: EBB

Contribution ID: 11

Type: **not specified**

Powering P. putida - On a Path towards Understanding Anodic Electro-Fermentation

Wednesday 22 October 2025 09:15 (20 minutes)

Presenter: PAUSE, Laura

Session Classification: EBB

Contribution ID: 12

Type: **not specified**

CityTech - Science and future of PP

Wednesday 22 October 2025 10:30 (5 minutes)

Presenter: SCHIERZ, Ariette

Session Classification: City Tech

Contribution ID: 13

Type: **not specified**

Grey Goes Green: Towards local urban water cycles by treating greywater with green roofs

Wednesday 22 October 2025 11:10 (10 minutes)

Presenter: DERADO, Sarya

Session Classification: City Tech

Contribution ID: 14

Type: **not specified**

Municipal Heat Action Planning and the importance of Blue-Green Infrastructure

Wednesday 22 October 2025 10:35 (25 minutes)

Presenter: RICHTER, Anett

Session Classification: City Tech

Contribution ID: 15

Type: **not specified**

Modeling of cyanobacterial metabolism

Wednesday 22 October 2025 12:45 (30 minutes)

Presenter: STEUER, Ralf

Session Classification: MYSUN

Contribution ID: 16

Type: **not specified**

When a chaotropic agent turns into a nutrient – Guanidine assimilation and riboswitch-based gene regulation in cyanobacteria for synthetic biology applications

Wednesday 22 October 2025 13:15 (20 minutes)

Presenter: KLÄHN, Stephan

Session Classification: MYSUN

Contribution ID: 17

Type: **not specified**

Establishing an in vivo cascade in cyanobacteria for light-driven redox biocatalysis on gram scale.

Wednesday 22 October 2025 13:35 (20 minutes)

Presenter: TÜLLINGHOFF, Adrian

Session Classification: MYSUN

Contribution ID: **18**

Type: **not specified**

Introduction of the NEXOGENESIS project

Wednesday 22 October 2025 11:00 (10 minutes)

Presenter: KHAN, Sabina

Session Classification: City Tech

Contribution ID: 19

Type: **not specified**

KONATES - Thermal energy storage in contaminated aquifers

Wednesday 22 October 2025 11:20 (20 minutes)

Primary authors: GEORGI, Anett; VOIGT, Carsten

Presenters: GEORGI, Anett; VOIGT, Carsten

Session Classification: City Tech

Contribution ID: 20

Type: **not specified**

Solution Lab URBAN LE

Wednesday 22 October 2025 11:40 (10 minutes)

Presenter: MÜLLER, Roland

Session Classification: City Tech

Contribution ID: 21

Type: **not specified**

From Lab-Scale Catalytic Biofilms to Living Materials

Wednesday 22 October 2025 13:55 (20 minutes)

Presenter: LAMBRECHT, Johannes

Session Classification: MYSUN

Contribution ID: 22

Type: **not specified**

Nature-Inspired Concepts for Developing Microbial Processes

Wednesday 22 October 2025 09:35 (20 minutes)

Guest speaker Dr. Rohan Karande (University of Leipzig)

Presenter: KARANDE, Rohan

Session Classification: EBB

Contribution ID: 23

Type: **not specified**

Raw Material Change –Replacing Fossil Carbon with Renewable Alternatives

Wednesday 22 October 2025 09:55 (20 minutes)

Guest speaker Dr. René Backes (DBFZ)

Presenter: BACKES, René

Session Classification: EBB