



PHOTOSYNTHETIC MICROORGANISMS FOR SUSTAINABLE DEVELOPMENT

CONFERENCE PROGRAM

The conference schedule is set to Central European Time

6th December 2023

8:50 Online Platform Opening

9:00 Welcome

Opening:

Session: Photosynthetic Factories

SESSION CHAIRS: Kyle Lauersen, Giorgio Perin, Maya D. Lambreva

9:15 Keynote: Peter Ralph (University of Technology, Sydney, Australia) Elite strain development using phenomics

10:00 Pia Lindberg (Uppsala University, Sweden)

Metabolic engineering of cyanobacteria for sustainable production of chemicals and fuels

- **10:25 Sarah d'Adamo (Wageningen University, The Netherlands)** Prospects for lipid production and engineering in microalgae
- **10:50 Olaf Kruse (Bielefeld University, Germany)** Bioengineering microalgae for their application as green cell factories

11:15 Break 20 min

11:35 Alessandro Alboresi University of Padova, Italia)

Flavodiiron proteins, a molecular valve for the regulation and the engineering of photosynthetic electron transport

12:00 Patrik Jones (Imperial College London, UK)

Towards commercialisation of photosynthetic microbial processes with a measurable impact

12:25 Yonghua Li-Beisson (Institute of Biosci. Biotechnol. Aix Marseille, CEA, CNRS, France)

Exploring the potential of algal lipid metabolism for biofuel and green chemistry

12:50 Luisa Gouveia (National Laboratory of Energy and Geology, Portugal)

Photosynthetic microalgae for sustainable wastewater treatment and agriculture

13:15 Closing remarks



PHOTOSYNTHETIC MICROORGANISMS FOR SUSTAINABLE DEVELOPMENT



7th December 2023

8:50 Online Platform Opening

- Session: Structure, Function & Dynamics of Photosynthetic Components SESSION CHAIRS: Giorgio Perin, Alessandro Alboresi, Gert Schansker
- **9:00 Keynote: Roberta Croce (Vrije Universiteit Amsterdam, The Netherlands)** Chlamydomonas in the light: one alga, multiple responses
- **9:45 Petar H Lambrev (Institute of Plant Biology, BRC, Hungary)** Revealing ultrafast molecular mechanisms by two-dimensional electronic spectroscopy
- **10:10 Anjali Pandit (Leiden Institute of Chemistry, The Netherlands)** Tuning into photosynthesis with NMR: dynamic structures and processes in proteins, membranes and cells
- **10:35 Angela Falciatore** (Institute of Physicochemical Biology, CNRS, France Diatom model species to address the functional diversity of photosynthesis

11:00 Break 25 min

- **11:25 Gert Schansker (Heinz Walz GmbH, Germany)** Photosynthetic Control, a probe for the balance between the activities of photosynthetic electron transport and Calvin Benson cycle in plants
- **11:50 Esa Tyystjärvi (University of Turku, Finland)** Temperature dependence reveals how singlet oxygen is formed and allows calculation of contributions of photoinhibition mechanisms
- **12:15 Ladislav Nedbal (Palacký University Olomouc, Czech Republic)** Photosynthetic responses to light that changes on different time scales
- **12:40 Alberto Mezzetti (Sorbone University, France))** Light-adapted state in photosynthetic Reaction centres studied by time-resolved FTIR difference spectroscopy

13:05 Closing remarks