

## CONFERENCE PROGRAM

*The conference schedule is set to Central European Time*

### 6th December 2023

**8:50 Online Platform Opening**

**9:00 Welcome address by Zeineb Aturki (Acting Director of ISB-CNR)**

**Opening by Massimo Trotta (President-Elect of the European Society of Photobiology)**

**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)**

*Native phosphite metabolism in nitrogen-fixing cyanobacteria and its use to manage contamination*

**12:25 Yonghua Li-Beisson (Biosc. Biotechnology Institute Aix Marseille, CEA, France)**

*Exploring algal lipid metabolism for a sustainable bioeconomy*

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

*Photosynthetic microalgae for sustainable wastewater treatment and agriculture*

**13:15 Closing remarks**

# Green Christmas Session

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 thylakoid membranes and whole 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)**

*Mathematical model to understand photosynthetic responses to light oscillating 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**