

CONFERENCE PROGRAM

The conference schedule is set to Central European Time

2nd December 2025

8:50 Online Platform Opening

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

Opening by Massimo Trotta (President of the European Society for Photobiology)

SESSION CHAIRS: Giorgio Perin, Lauri Nikkanen, Maya D. Lambrev

9:15 Keynote: Tomas Morosinotto (University of Padova, Italy)

Genetic optimization of photosynthesis to improve biomass productivity in algae

10:00 Maria Agustina Dominguez-Martin (University of Cordoba, Spain)

Cyanobacterial light harvesting: structure, diversity, and regulatory mechanism

10:25 Gilles Peltier (Aix-Marseille Inst. Biosciences and Biotechnology, CEA, France)

Interplay between the CO₂ concentrating mechanism and photorespiration in green algae

10:50 Break 25 min

11:15 Stefania Viola (Aix-Marseille Inst. Biosciences and Biotechnology, CEA, France)

*Role of respiratory oxidases in photosynthetic electron transport in *Synechococcus elongatus* PCC 7942*

11:40 Andrea Fantuzzi (Imperial College London, UK)

*Structure/function studies of chlorophyll *f*-containing photosystems from *Chroococcidiopsis thermalis* PCC 7203*

12:05 Volha U. Chukhutsina (Vrije University Amsterdam, The Netherlands)

Using advanced crystallographic approaches to resolve how orange carotenoid protein works

12:30 Dimitris Petroutsos (Uppsala University, Sweden)

Remote regulation of photosynthesis through plasma membrane light perception

12:55 Closing remarks

Green Christmas Session

PHOTOSYNTHETIC MICROORGANISMS FOR SUSTAINABLE DEVELOPMENT



3rd December 2025

8:50 Online Platform Opening

Session: Photosynthetic Factories: From the Lab to Industrial Applications

SESSION CHAIRS: *Yagut Allahverdiyeva, Sarah d'Adamo, Yonghua Li-Beisson*

9:00 Rui Miao (Uppsala University, Sweden)

Oldest organism for newest sustainable chemical production

9:25 Yasuyo Yamaoka (The Catholic University of Korea, Republic of Korea)

Designing industrial microalgae by controlling stress response

09:50 Julie Zedler (Friedrich Schiller University Jena, Germany)

Spatial organisation of product biosynthesis in cyanobacteria: from protein targeting to new-to-nature structures

10:15 Lu-Ning Liu (University of Liverpool, UK)

Design principles and environmental adaptation of natural photosynthetic complexes

10:40 Break 25 min

11:05 Michele Fabris (University of Southern Denmark, Denmark)

Domestication of algal bio-factories: metabolic mapping and engineering of diatoms

11:30 Fabrizio Bezzo (University of Padova, Italy)

DigitAlgaesation: a knowledge-based training network for the digitalisation of photosynthetic bioprocesses

11:55 Yagut Allahverdiyeva-Rinne (University of Turku, Finland)

From biomass to biocatalysis: harnessing photosynthetic biotechnologies for sustainable bio-production

12:20 Sarah d'Adamo (Wageningen University, The Netherlands)

Towards industrial photosynthetic factories: a SUN-PERFORM perspective

12:45 Closing remarks