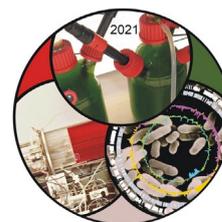


International CeBiTec Research Conference 2021

September 13th – 15th

Advances in industrial biotechnology: Prospects and challenges for the development of algal biotechnology

Venue: Center for Interdisciplinary Research (ZiF), Bielefeld University, Methoden 1, 33615 Bielefeld



Monday, 13.09.2021

Please join the conference at the venue (ZiF) via your own means of transport

10:00

Registration opens

Welcome & Opening

13:00 – 13:15

Olaf Kruse, Scientific Director of the Center for Biotechnology (CeBiTec, Bielefeld University)

Session 1

Chair Kyle Lauersen

13:15 -13:50

Michael Hippler (University of Münster) - *Structural and functional dynamics of algal photosystem I and its importance for light-driven hydrogen production*

13:50 – 14:15

Christian Südfeld (Wageningen University) - *The nucleolus as a genomic safe harbor for strong gene expression in *Nannochloropsis oceanica**

14:15 – 14:40

Ralf Steuer (Humboldt Universität zu Berlin) - *Maximizing phototrophic productivity: insights from computational models and high-density cultivation*

14:40 – 15:15

Thomas Baier (Bielefeld University) - *Intron-mediated enhancement of nuclear transgene expression in *Chlamydomonas reinhardtii**

Coffee Break & Poster Session, 15:15 – 16:30

Session 2

Chair Olaf Kruse

16:30 – 17:05

Aniek van der Woude (Photanol BV) - *Cyanobacterial cell factories: a showcase of organic acids*

17:05 – 17:30

Pedro Moñino Fernández (Wageningen University) - *Algae blues: Is *Galdieria* the new *Spirulina*?*

17:30 – 18:30

CeBiTec Distinguished Lecture

Sarah E. O'Connor (Max Planck Institute for Chemical Ecology, Jena) - *Harnessing the chemistry of plant natural product biosynthesis*

A bus transfer from the ZiF to the Mercure Hotel will be offered after the Distinguished Lecture.

Tuesday, 14.09.2021

A bus transfer from the Mercure Hotel to the ZiF will be offered at 08:15 o'clock.

9:00 – 9:15

Announcements & Introduction

Session 3

Chair Patrik Jones

9:15 – 9:50

Roberto Bassi (University of Verona) - *Domesticating Chlorella vulgaris for cell wall permeability*

9:50 – 10:15

Tomas Morosinotto (University of Padova) - *Acclimation of photosynthesis of Nannochloropsis gaditana cultures in outdoor photobioreactors*

10:15 – 10:40

Stefano Cazzaniga (University of Verona) - *Monomeric antennae CP26 and CP29 reveal distinct roles in light harvesting and excess light energy dissipation in Chlamydomonas*

Coffee Break, 10:40 – 11:10

Session 4

Chair Patrik Jones

11:10 – 11:45

Peter Lindblad (Uppsala University) - *Engineering photosynthetic microorganisms for direct solar chemical and fuel production from carbon dioxide, example butanol*

11:45 – 12:10

Ilka Maria Axmann (Heinrich Heine University Düsseldorf) - *Metabolic engineering of Synechocystis sp. PCC 6803 for the photoproduction of the sesquiterpene valencene*

12:10 – 12:35

David Russo (Friedrich Schiller University Jena) - *Development of cyanobacterial secretion for biotechnological applications*

Lunch, 12:35 – 13:30

Session 5

Chair Michael Hippler

13:30 – 14:05

Patrik Jones (Imperial College London) - *Engineering cyanobacteria for sustainable bioproduction of chemicals*

14:05 – 14:30

Katrin Geisler (University of Cambridge) - *Synthetic biology for the controlled production of high-value compounds in Phaeodactylum tricornutum*

14:30 – 15:05

Young Researcher Award

Julie A. Z. Zedler (Friedrich Schiller University Jena) - *Scaffolding and co-localisation of heterologous enzymes in cyanobacteria*

Coffee Break & Poster Session, 15:05 – 16:00

Session 6

Chair Michael Hippler

16:00 – 16:35

Paul Hudson (KTH Royal Institute of Technology, Stockholm) - *Detecting and exploiting metabolite-protein interactions in and around the bacterial Calvin cycle*

16:35 – 17:00

Max Angstenberger (University of Verona) - *Advanced nuclear genome editing in Chlamydomonas reinhardtii - Developments and perspectives*

17:00 – 17:25

Matthew Booth (University College London) - *Design and optimisation of a dynamic light intensity profile to improve biomass productivity for photosynthetic microorganisms*

17:25 – 17:50

Federico Perozeni (University of Verona) - *Enhancing microalgae consumption by changing their flavour: geraniol accumulation in Chlamydomonas reinhardtii*

A bus transfer from the ZiF to the Mercure Hotel will be offered at 18:00 o'clock.

Conference Dinner, 19:15 - open

Brauhaus "Joh. Albrecht", Hagenbruchstraße 8, 33602 Bielefeld

The walking distance from Mercure Hotel to the conference dinner venue is ~1.5 km.

Please come via your own means of transport.

Wednesday, 15.09.2021

A bus transfer from the Mercure Hotel to the ZiF will be offered at 08:15 o'clock.

9:00 – 9:15

Announcements & Introduction

Session 7

Chair Peter Lindblad

9:15 – 9:50

Maria Barbosa (Wageningen University) - *Industrial strains in microalgal biotechnology: from Nannochloropsis to Picochlorum?*

9:50 – 10:15

Giorgio Perin (University of Padova) - *Faster relaxation of microalgae photoprotection mechanisms increases biomass productivity in photobioreactor*

10:15 – 10:40

Kyle Lauersen (King Abdullah University of Science and Technology) - *SynBio, bioprospecting, and future agriculture in the Middle East & North Africa*

Coffee Break, 10:40 - 11:10

Session 8

Chair Peter Lindblad

11:10 – 11:45

Peter Nixon (Imperial College London) - *Enhancing photosynthesis: the light reactions*

11:45 – 12:10

Christiane Funk (Umeå University) - *Wastewater reclamation by microalgae - a Nordic perspective*

12:10 – 12:35

Sarah D'Adamo (Wageningen University) - *Insights on lipid metabolism and optimization in oleaginous microalgae*

Lunch snacks, 12:35 – 13:00

13:00 – 13:25

Robin Barten (Wageningen University) - *Bioprospection and directed evolution of thermo-tolerant microalgae to reduce cooling costs in microalgae production*

13:25 – 13:50

Edoardo Andrea Cutolo (University of Verona) - *Exploiting alternative phosphorous metabolism for heterologous expression of cellulolytic enzymes in microalgae and their selective cultivation*

13:50 – 14:00

Olaf Kruse – Concluding remarks & farewell

Conference closes