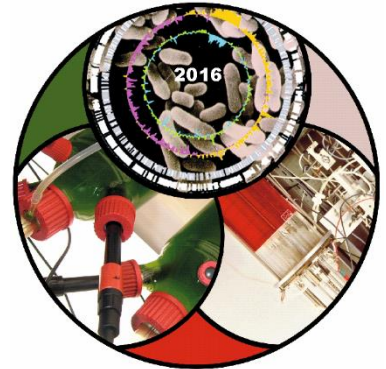


Advances in Industrial Biotechnology:

New Techniques, Substrates and Products for Bioprocesses

Center for Interdisciplinary Research (ZiF), Bielefeld University
 September 26 – 28, 2016

<http://www.cebitec.uni-bielefeld.de/6ICRC>



Program

MONDAY 26 September

9.00–10.30: *Registration and coffee*

10.30–10.45: *Conference Opening*

Volker F. Wendisch (Conference Chair)

Welcome address and Introduction to the CeBiTec

Olaf Kruse (Scientific director of CeBiTec, Bielefeld University)

C1 carbon sources for biotechnology

Session chair: **Jörn Kalinowski**

10.45–11.30: **Trygve Brautaset** (NTNU, NO)

*Metabolic engineering of methylotrophic *Bacillus methanolicus**

11.30–12.15: **Arren Bar-Even** (MPI Golm, DE)

The formate bio-economy

12.15–13.00: **Stephanie Heux** (INSA, FR)

*Synthetic C₁ metabolism: From *in silico* design to *in vivo* validation*

13.00–14.00: *Lunch*

C1 carbon sources for biotechnology (cont.)

- 14.00–14.30: Selected Talk: **Martijn Diender** (Wageningen, NL)
 Conversion of carbon monoxide or syngas into chain elongated products and higher alcohols by using a synthetic co-culture.
- 14.30–15.00: Selected Talk: **Kyle Lauersen** (Bielefeld, DE)
 Efficient phototrophic production of sesquiterpenoids from the eukaryotic microalga *Chlamydomonas reinhardtii*

Methods for biotechnology: development and applications

Session chair: **Alf Pühler**

- 15.00–15.45: **Dirk Löffert** (BioMillennia, FR)
 Speeding up production strain development: Culture & screening of up to 100 million production strain variants every week
- 15.45–16.15: *Coffee*
- 16:15–17.00: **Matthias Heinemann** (Groningen, NL)
 Flux control flux – a key challenge in metabolic engineering
- 17.00–17.30: Selected Talk: **Regina Mahr** (Jülich, DE)
 Biosensor-driven adaptive laboratory evolution of amino acid production in *Corynebacterium glutamicum*
- 17.30–18.00: Selected Talk: **Norbert Sewald** (Bielefeld, DE)
 Enzymatic Halogenation
- 18.00–19.30: *Poster session with Beer & Pretzel*

TUESDAY 27 September

Industrial Bioprocesses

Session chair: **Olaf Kruse**

- 09.00–09.45: **Akihiko Kondo** (Kobe, JP)
 Development of microbial cell factories for consolidated bioprocessing by synthetic bioengineering platform
- 09.45–10.30: **Rute Neves** (Chr. Hansen, DK)
 Industrial strain improvement for boosting food functionality
- 10.30–11.00: *Coffee*

Industrial Bioprocesses (*cont.*)

- 11.00–11.45: **Steffen Schaffer** (Evonik, DE)
Polyamide 12 from a renewable feedstock: a novel route to an established product family
- 11.45–12.30: **Tilmann Weber** (Novo, DK)
In silico and CRISPR/Cas9-based tools for the metabolic engineering of actinomycetes
- 12.30–13.00: Selected Talk: **Bastian Blombach** (Stuttgart, DE)
Vibrio natriegens, the novel microbial sprinter for industrial biotechnology
- 13.00–14.00: *Lunch*

Terpenoids: biosynthesis and production

Session chair: **Bernd Weisshaar**

- 14.00–14.45: **Jörg Bohlmann** (Vancouver, CA)
Discovery of Fragrance Biosynthesis in Tropical Sandalwood
- 14.45–15.30: **Guido Jach** (Phytowelt, DE)
Fermentative production of enantiopure terpenoid high value compounds
- 15.30–16.15: **Jens Schrader** (DECHEMA, DE)
Non-conventional microbial cell factories for the production of terpenoid flavour and fragrance compounds
- 16.15–16.45: *Coffee*
- 16.45–17.15: Selected Talk: **Jules Beekwilder** (Wageningen, NL)
Monoterpenoids as sustainable building blocks from for polymers that are currently produced from fossil resources
- 17.15–17.45: Selected Talk: **Nadja Henke** (Bielefeld, DE)
Harnessing sigma factor gene expression for carotenoid production in Corynebacterium glutamicum
- 17.45–18.15: Selected Talk: **Ulschan Scheler** (Halle a.d.Saale, DE)
Elucidation of the biosynthesis of carnolic acid and its reconstitution in yeast
- 18.15–19.00: *Poster session (cont.)*
- 19.30: *Bustransfer to Obersee*
- 20.00– : *Conference Dinner at Restaurant Seekrug (at Obersee)*

WEDNESDAY 28 September**Fine chemicals production by fermentation**Session chair: **Volker F. Wendisch**

- 09.00–09.30: Selected Talk: **Sarah Prexler** (Münster, DE)
[Protein bioengineering of plant polyphenol oxidases \(PPOs\)](#)
- 09.30–10.00: Selected Talk: **Frederik Walter** (Nottingham, UK)
[Production of 3-hydroxypropionate in *Cupriavidus necator* H16](#)
- 10.00–10.30: Selected Talk: **Jung-Won Youn** (Stuttgart, DE)
[Metabolic engineering of *Escherichia coli* for the biosynthesis of para-amino-L-phenylalanine](#)
- 10.30–11.00: *Coffee*
- 11.00–11.45: **Bernhard Eikmanns** (Ulm, DE)
[Pathway engineering in *Corynebacterium glutamicum* for the production of value-added products](#)
- 11.45–12.15: **Jin-Ho Lee** (Kyungsoong, KO)
[Systems metabolic engineering: Engineered *Corynebacterium* producing aromatic compounds derived from chorismate](#)
- 12.15–13.00: **Alexander Grünberger** (Jülich/Bielefeld, DE)
[Microfluidic single-cell cultivation: Is small the new beautiful?](#)
- 13:00-: *Closing Remarks*
end of conference
- A packed lunch will be available for departure