

Molecular Biotechnology

Center for Interdisciplinary Research (ZiF), Bielefeld University
April 3 – 4, 2014

PROGRAMME

Thursday, April 3rd, 2014

11:00 *Registration / Snacks*

12:00 *Opening remarks*

Volker F. Wendisch, Bielefeld University, Germany

Welcome addresses

Martin Egelhaaf (Vice-President for Research, Bielefeld University)

Stefan Ludwig (Vice-Rector for Research, University of Münster)

N.N. (University of Paderborn)

Introduction to the CeBiTec

Thomas Noll, Bielefeld University, Germany

Session I: *Bacterial and Environmental Biotechnology*

Chair: Volker F. Wendisch

12:30 **Jörn Kalinowski** (Technology Platform Genomics, CeBiTec, Bielefeld)
Genome and transcriptome research of industrially relevant bacteria

13:00 **Hans-Joachim Warnecke** & M. Mayer (Chemical Engineering, Paderborn)
Microbiological evaluation of drinking water by morphological and DNA sequencing based identification of organism in distribution networks.

13:30 **Susanne Fetzner** (Microbiology, Münster)
Biodegradation and enzyme-catalyzed modification of quinoline compounds

14:00 **Bodo Philipp** (Microbial Biotechnology, Münster)
Synthetic microbial communities for biotechnological applications

14:30 *Coffee and Cake / Poster Presentation*

Session II: *Biopolymers*

Chair: Dirk Prüfer

16:00 **Bruno Moerschbacher** (Molecular Phytopathology and Renewable Resources, Münster)
Bioengineering of chitin

16:30 **Karsten Niehaus** (Proteome and Metabolome Research, Bielefeld)
Engineering microbial xanthan production

17:00 **Alexander Steinbüchel** (Molecular Microbiology and Biotechnology, Münster)
Microbial degradation of Natural Rubber and Gutta Percha and possible technical applications

17:30 Coffee break

Session III: Protein production

Chair: Olaf Kruse

18:00 **Karl Friebs** (Fermentation Engineering, Bielefeld)
Protein production by Escherichia coli

18:30 **Thomas Noll** (Cell Culture Technology, Bielefeld)
Functional genomics in mammalian cell culture: from tool development to application in process and cell line optimization

20:00 Conference Dinner at Westend Restaurant

Friday, April 4th, 2014

Session IV: Biocatalysis

Chair: Karsten Niehaus

09:00 **Harald Gröger** (Organic Chemistry I, Bielefeld)
Integrating enzyme catalysis in synthetic chemistry

09:30 **Oliver Strube** (Coating Materials and Polymers, Paderborn)
Enzyme-mediated coatings

10:00 **Hennig D. Mootz** (Protein Chemistry and Biotechnology, Münster)
Engineering split inteins for applications in chemical protein labeling

10:30 **Norbert Sewald** (Organic Chemistry III, Bielefeld)
Enzymatic halogenation

11:00 Coffee break

Session V: Production and applications of monomers and polymers in biotechnology

Chair: Bodo Philipp

11:30 **Volker F. Wendisch** (Genetics of Prokaryotes, Bielefeld)
Production of diamines and carotenoids from alternative carbon sources by microbial cell factories

12:00 **Dirk Prüfer** (Plant Biotechnology, Münster)
Engineering production of latex and bio-isoprene

12:30 **Dirk Kuckling** (Organic and Macromolecular Chemistry, Paderborn)
Responsive hydrogels and potential applications in biotechnology

13:00 Lunch / *Poster Presentation*

Session VI: *Green biotechnology*

Chair: Bruno Moerschbacher

14:30 **Olaf Kruse** (Algae Biotechnology and Bioenergy, Bielefeld)
Fuels and lipids from microalgae

15:00 **Michael Hippler** (Plant Biochemistry and Biotechnology, Münster)
Quantitative proteomics to reveal remodeling of bioenergetics pathways in Chlamydomonas reinhardtii

15:30 **Bernd Weisshaar** (Genome Research, Bielefeld)
The Beta vulgaris genome

16:00 *Closing remarks / Coffee and cake*
