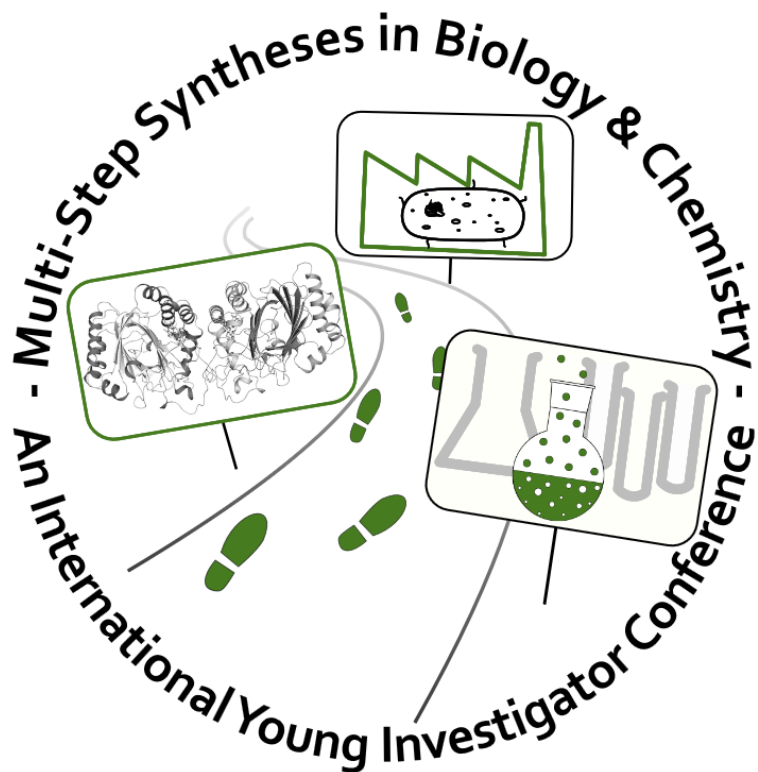


## 13<sup>th</sup> International CeBiTec Symposium



**December 2 – 4, 2019**

Center for Interdisciplinary Research (ZiF)

Bielefeld University, Germany

**Monday – December 2, 2019**

11:00 – 13:00	<b>Registration</b>
13:00-13:15	Welcome and Opening Remarks Prof. Dr. Harald Gröger, Bielefeld University - Chairman ICS 2019
<b>SESSION 1: Cascade Reactions using Chemo- and Biocatalysts</b> Session chairs: Prof. Dr. Harald Gröger	
13:15-14:00	Keynote Lecture: <b>Lipase/Transition Metal Cocatalyzed Dynamic Kinetic Resolution of Racemic Alcohols: from Batch to Flow</b> Prof. Dr. Shuji Akai, Osaka University
14:00-14:20	<b>Chemoenzymatic Cascade Reaction Combining Hydroformylation and Biotransformation to Obtain Nitriles Directly from Alkenes</b> Carmen Plass, Bielefeld University
14:20-14:40	<b>Discover Novel Protein Sequences</b> Dr. Jessica Rehdorf, BRAIN
14:40-15:00	<b>Novel Organocatalysed Multicomponent Reactions and Multienzyme Processes in Scalable &amp; Highly Enantioselective One-Pot-Cascades</b> Marvin Mantel, Heinrich-Heine-University Düsseldorf
15:00-15:15	<b>Coffee Break</b>
15:15-15:35	<b>Efficient Prediction of Flow Reaction Conditions using Machine-Learning for Enantioselective Domino Reaction</b> Assistant-Prof. Dr. Masaru Kondo, Osaka University
15:35-15:55	<b>Overcoming the Incompatibilities of Enzymatic Cascade Reactions by Compartmentalization in Microfluidics</b> Franziska Obst, Leibniz Institute of Polymer Research Dresden
15:55-16:15	<b>Sustainable Production of an <math>\omega</math>-Amino Acid: Three Ways to Fermentative Production of 5-Aminovalerate by <i>Corynebacterium glutamicum</i></b> Carsten Haupka, Bielefeld University
16:15-16:35	<b>Development of Industrial Multi-Step Processes for the Production of Carbohydrate Containing Food Ingredients</b> Dr. Andreas Vogel, c-Lecta
16:35-16:55	<b>Enzymatic Cascade Towards the Plant Metabolite 12-OPDA and Metathesis-Derived Compound Library Design</b> Jana Löwe, Bielefeld University
16:55-18:00	<b>Poster Session</b> – all numbers
18:00	<b>WELCOME PARTY</b> Venue: Center for Interdisciplinary Research (ZiF)

## Tuesday – December 3, 2019

SESSION 2: Catalyst Design and Metabolic Engineering	
Morning session chairs: Dr. Anke Hummel	
Afternoon session chair: Anastasia Kerbs	
09:00-09:45	Keynote Lecture: <b>Identification and Engineering of Transaminases and Imine Reductases for the Synthesis of Challenging Amines</b> Jun.-Prof. Dr. Matthias Höhne, University of Greifswald
09:45-10:05	<b>Engineering of Flavin-Dependent Halogenases</b> Hannah Minges, Bielefeld University
10:05-10:25	<b>Engineering and Biocatalytic Application of HheG – a Halohydrin Dehalogenase with Unique Activity in the Conversion of di-Substituted Epoxides</b> Jennifer Solarczek, Technical University Braunschweig
10:25-10:45	<b>Discovery of Novel Aldoxime Dehydratases with the 3DM-System</b> Michael Stricker, Bielefeld University
10:45-11:00	<b>Coffee Break</b>
11:00-11:20	<b>Biocatalysis in the Flavor &amp; Fragrance Industry</b> Dr. Sonja Borchert, Firmenich
11:20-11:40	<b>Chiral Vanadium Complex-Mediated Oxa-Piancatelli Reaction and Pictet-Spengler Reaction/Aromatization Sequence</b> Assistant-Prof. Dr. Makoto Sako, Osaka University
11:40-12:00	<b>Chiral Benzazaborole-Catalyzed Enantioselective and Regioselective Sulfonylations of Cyclohexanepolyols</b> Satoru Kuwano, Chiba University
12:00-12:10	<b>Conference Photo</b>
12:10-13:00	<b>Lunch Break</b>
13:00-13:45	Plenary Lecture: <b>Evolutionary Engineering of Corynebacterium glutamicum</b> Prof. Dr. Julia Frunzke, Research Centre Jülich / University of Düsseldorf
13:45-14:05	<b>Construction of a S-Adenosylmethionine-Regeneration Pathway and its Application to the Production of Methylated Compounds</b> Assistant-Prof. Dr. Kenji Okano, Osaka University
14:05-14:25	<b>Metabolic Engineering for Production of L-Carnitine by Corynebacterium glutamicum</b> Pierre Kugler, Bielefeld University
14:25-14:45	<b>Heterologous Expression and Characterization of a Cytochrome P450 Monooxygenase from Sesamum indicum</b> Stefan Wohlgemuth, Heinrich-Heine-University Düsseldorf
14:45-15:45	<b>Poster Session – Even numbers</b>
15:45-16:00	<b>Coffee Break</b>
16:00-17:00	<b>Poster Session – Odd numbers</b>
18:00	<b>CONFERENCE DINNER</b> Venue: Brauhaus Joh. Albrecht, Hagenbruchstrasse 8, 33602 Bielefeld

## Wednesday – December 4, 2019

SESSION 3: “Out of the Box” -Flow-Chemistry and Target-Driven Multistep Syntheses	
Session chairs: Alessa Hinzmann / Lukas Schober	
09:00-09:45	Keynote Lecture: <b>Engineering Chemistry: Integrated Control Strategies and Internet Enabled Tools for Synthesis</b> Dr. Daniel Fitzpatrick, University of Cambridge
09:45-10:05	<b>Incompatible Multi-Step Reactions Made Compatible by Nano-Scale Enzyme Membrane Reactors</b> Michael Mertz, FAU Erlangen-Nürnberg
10:05-10:25	<b>Rationalizing the Stereochemistry of Aldoxime Dehydratase-Catalyzed Nitrile Synthesis via Molecular Modelling</b> Hilmi Yavuzer, Bielefeld University
10:25-10:45	<b>Application of Biocatalysis as a State-of-the-Art Technology in the Synthesis of LCZ696</b> Dr. Florian Kleinbeck, Novartis
10:45-11:00	<b>Coffee Break</b>
11:00-11:45	Keynote Lecture: <b>Development of Chiral Spiro Bis(isoxazoline) Ligand (SPRIX)</b> Prof. Dr. Hiroaki Sasai, Osaka University
11:45-12:05	<b>Reconstitution of Lignan Biosynthetic Pathway for the Production of Podophylotoxin Precursor (-)-Pluviatolide in E. coli</b> Davide Decembrino, Heinrich-Heine-University Düsseldorf
12:05-12:25	<b>Asymmetric Formal Synthesis of (+)-Catharanthine via Desymmetrization of Isoquinuclidine</b> Assistant-Prof. Dr. Shingo Harada, Chiba University
12:25-12:45	<b>Dynamic Kinetic Resolution of a Tertiary Alcohol</b> Franziska Kühn, Bielefeld University
12:45-13:00	<b>Poster Awards</b>
13:00-13:15	<b>Closing Remarks</b> Prof. Dr. Harald Gröger, Bielefeld University - Chairman ICS 2019