

## Industrial Biocatalysis

# 10<sup>th</sup> Wädenswil Day of Life Sciences

hosts

## 2<sup>nd</sup> CC BIO Symposium

**June 7<sup>th</sup>, 2018**

GA 203, Campus Grüental,  
ZHAW Wädenswil, Switzerland

[www.zhaw.ch/ccbio](http://www.zhaw.ch/ccbio)

[www.zhaw.ch/icbt/day-of-lifesciences](http://www.zhaw.ch/icbt/day-of-lifesciences)

# Introduction

Biocatalysis has developed enormously in the last decade and now offers solutions for the sustainable production of chiral and highly functionalized asset molecules. Products generated by enzymatic transformations are already being used in the food, feed, chemical, pharmaceutical and cosmetic industry and the accessible compound panoply is expected to expand even further. As a discipline, biocatalysis requires transdisciplinary expertise between the fields of chemistry, biotechnology, micro- and molecular biology and engineering and thus provides a dynamic environment which will fuel new applications and future innovations.

The 2<sup>nd</sup> CC BIO Symposium will feature cutting edge topics in the field, from enzyme discovery, optimization and computational design, to bioprocess engineering strategies and successful biocatalytic examples from industry. The meeting will again provide a platform for scientific knowledge transfer and dialog for participants from industry and academia in this expanding field and give an update about the current activities of the Competence Center for Biocatalysis (CC BIO).

The Competence Center of Biocatalysis at the ZHAW promotes biocatalysis as a complementary method to classic organic synthesis and aims to help bridge the gap between academic laboratories and the production plant. By connecting relevant research competences CC BIO strives to develop a comprehensive biocatalytic toolbox consisting of enzyme libraries and methods, which will facilitate the development of biocatalytic and biosynthetic processes for the chemical and pharmaceutical industry.

## Scientific Lead

Prof. Dr. Rebecca Buller,  
Head CC BIO,  
Institute of Chemistry und Biotechnology,  
ZHAW Wädenswil



Competence Center  
for **Biocatalysis**

# Program – Thursday, June 7<sup>th</sup>

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08.45	Registration and coffee
09.30	<b>Welcome to the ZHAW, news and outlook</b> Prof. Dr. Christian Hinderling, Zurich University of Applied Sciences (CH)
09.45	<b>Advanced tools for the discovery and engineering of enzymes for biocatalytic applications</b> Prof. Dr. Uwe Bornscheuer, University of Greifswald (D)
10.15	<b>Biocatalytic reductive amination</b> Prof. Dr. Nicholas Turner, University of Manchester (UK)
10.45	<b>Engineering strategies towards more efficient biocatalytic cascades</b> Dr. Selin Kara, Hamburg University of Technology (D)
11.05	<b>Biocatalysis in drug discovery and drug development at Novartis</b> Dr. Radka Snajdrova, Novartis Pharma AG Basel (CH)
11.30	Networking lunch
13.00	<b>Artificial metalloenzymes: Challenges and opportunities</b> Prof. Dr. Thomas Ward, University of Basel (CH)
13.30	<b>Combining enzymatic decarboxylation with homogeneous catalysis – tandem reactions for synthetic applications</b> Prof. Dr. Robert Kourist, TU Graz (A)
14.00	<b>Harnessing nature: Biocatalysis for development and drug discovery</b> Prof. Dr. Rebecca Buller, Zurich University of Applied Sciences (CH)
14.25	<b>Computational approaches to enzyme engineering using Rosetta / Cyrus Bench</b> Dr. David Pearlman, CyrusBio Seattle (USA)
14.45	Coffee

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15.15	<b>Linking photosynthesis and whole cell biocatalysis for C-H functionalization</b> Prof. Dr. Andreas Schmid, Helmholtz Centre for Environmental Research Leipzig (D)
15.45	<b>Novel enzymes for biocatalytic applications: Selective epoxide ring-opening and lignin depolymerisation</b> Prof. Dr. Anett Schallmeyer, TU Braunschweig (D)
16.15	<b>Biocatalysis from millilitres to cubic metres</b> Dr. Emil Byström, SpinChem Umeå (S)
16.35	<b>Enzyme shielding in a soft organo-silica layer: Biopharma applications</b> Dr. Yves Dudal, INOFEA AG Basel (CH)
16.55	<b>Closing remarks</b> Dr. Hans-Peter Meyer, HES-SO and Expertinova AG (CH)
17.00	Aperitif & Farewell
Chair	Dr. Roland Wohlgemuth, ESAB

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# General Information

## Exhibitors

INOFEA AG • SpinChem AB • Culture Collection of Switzerland AG

## Fee

Participants CHF 150.-

## Registration

Online registration: [www.zhaw.ch/icbt/day-of-lifesciences](http://www.zhaw.ch/icbt/day-of-lifesciences)

E-Mail: [weiterbildung.lsfm@zhaw.ch](mailto:weiterbildung.lsfm@zhaw.ch)

The registration deadline is May 31<sup>st</sup>, 2018

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8820 Wädenswil / Switzerland

## Partner



# Location

## ZHAW Zurich University of Applied Sciences

Life Sciences and Facility Management  
Institute of Chemistry und Biotechnology  
Grüntalstrasse 14  
P.O. Box  
8820 Wädenswil

[www.zhaw.ch/icbt/day-of-lifesciences](http://www.zhaw.ch/icbt/day-of-lifesciences)

