

Zurich University
of Applied Sciences

zhaw

**Life Sciences and
Facility Management**

**Institute of
Chemistry and Biotechnology**

Industrial Biocatalysis

**8th Wädenswil
Day of Life Science**

hosts

CCBIO Symposium

June 20th, 2016

**RT 041, Campus Reidbach,
ZHAW Wädenswil, Switzerland**

www.zhaw.ch/ccbio

www.zhaw.ch/icbt/day-of-lifescience

Cover picture PDB ID: 4GWE, Pompeu et al. ACS Catalysis 3, 2876 (2013)

Introduction

Biocatalysis enables the sustainable production of chiral and highly functionalized compounds for the chemical and pharmaceutical industry. Recent key advances in DNA sequencing, gene synthesis and data analysis are now enabling scientists to tailor biocatalyst according to industrial needs and to reorganize enzymes into new biosynthetic pathways. This progress fuels the so-called «third wave of biocatalysis» and promises to unlock hitherto inaccessible enzyme activities for industrial biocatalysis and engineer microbial and fungal strains for the production of novel asset molecules.

The aim of the Symposium «Industrial Biocatalysis» is to provide a platform for scientific knowledge transfer and dialog for participants from industry and academia working in this growing research field. Fuelled by an interdisciplinary atmosphere recent and challenging topics of biocatalysis shall be discussed. Additionally, the Symposium will kick-off the newly founded Competence Center of Biocatalysis (CCBIO) at the ZHAW.

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 CCBIO 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

Dr. Rebecca Buller,
Head CCBIO,
Institute of Chemistry und Biotechnology,
ZHAW Wädenswil



Competence Center
for **Biocatalysis**

Partner

SWISS 
BIOTECH[™]
National Thematic Network

Program – Monday, June 20th

08.30	Registration and coffee
09.00	Welcome to the ZHAW, news and outlook Prof. Dr. Christian Hinderling, Zurich University of Applied Sciences (CH)
09.15	Building better enzymes Prof. Dr. Donald Hilvert, ETH Zurich (CH)
09.45	Chemo-enzymatic cascade reactions Prof. Dr. Marko Mihovilovic TU Wien (AT)
10.15	Integration of an equilibrium-limited cascade reaction and continuous chromatography for production of a rare sugar Prof. Dr. Sven Panke, ETH Zurich (CH)
10.45	Better than naturally designed: Synthetic nicotinamide cofactors for biocatalysis Prof. Dr. Frank Hollmann, TU Delft (NL)
11.15	Whole cell biocatalysis – status and future prospects Prof. Dr. Bruno Bühler, Martin-Luther-University Halle-Wittenberg (D)
11.45	Networking lunch and exhibition
13.30	Exploiting squalene hopene cyclases for biocatalysis Prof. Dr. Bernhard Hauer, University Stuttgart (D)
14.00	Unusual terpene cyclization in plants Dr. Hajo Kries, John Innes Centre, Norwich (UK)
14.20	Enzymatic resolution to access agrochemical intermediates Dr. Régis Mondière, Syngenta (CH)
14.40	Biotechnology at Lonza Speciality Ingredients (LSI) Dr. Marco Mirata, Lonza (CH)
15.00	Coffee
15.30	Competence Center for Biocatalysis (CCBIO) Dr. Rebecca Buller, Zurich University of Applied Sciences (CH)
15.50	Podium Discussion «Industrial Biocatalysis» Moderation: Dr. Roland Wohlgemuth, Sigma Aldrich (CH)
16.50	Closing Remarks
17.00	Aperitif & Farewell

General Information

Exhibitors

Culture Collection of Switzerland AG • Sigma-Aldrich Chemie GmbH

Fee

Participants CHF 150.-

Registration

Online registration: www.zhaw.ch/icbt/day-of-lifescience

E-Mail: weiterbildung.lsfm@zhaw.ch

The registration deadline is June 13th, 2016

Contact:

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Location

