

**Hal Alper***(The University of Texas at Austin, USA)*Unlocking metabolic potentials in *Saccharomyces cerevisiae***Elke Dittmann***(Potsdam University, Germany)*

Harnessing the potential of cyanobacteria for the production of bioactive peptides

**Tobias Erb***(Max-Planck-Institute of Terrestrial Microbiology, Germany)*

Building complex molecules out of thin air: Protein (re-)design meets metabolic engineering

**Yan Feng***(Shanghai Jiao Tong University, China)*

Enzyme Design for Efficient Biosynthesis of High-Value Compounds

**Jay Keasling***(University of California, USA)*

Engineered polyketide synthases: a molecular foundry for chemicals and materials

**Rodrigo Ledesma Amaro***(Imperial College London, UK)*

Advancements in sustainable bioproduction, from engineering individual strains to developing microbial communities

**Tianwei Tan***(Beijing University of Chemical Technology, China)*

Harnessing renewable energy for the biocatalytic conversion of carbon dioxide into value-added fuels and chemicals

The conference is supported by the Sino-German Center for Research Promotion - a public institution jointly established by the German Research Foundation (DFG) and the National Natural Science Foundation of China (NSFC) awarded to Martin Grninger (Goethe University Frankfurt) and Yongjin Zhou (Dalian Institute of Chemical Physics, CAS).

**BOOK OF ABSTRACTS**

A book of abstracts from all lectures and posters will be available online for all participants.

**VENUE**

DECHEMA e.V.  
Theodor-Heuss-Allee 25  
60486 Frankfurt am Main  
Germany

**ORGANISER**

DECHEMA e.V.  
Theodor-Heuss-Allee 25  
60486 Frankfurt am Main

Matthias Neumann  
Phone: +49 (0)69 7564-254  
E-Mail: matthias.neumann@dechema.de  
www.dechema.de



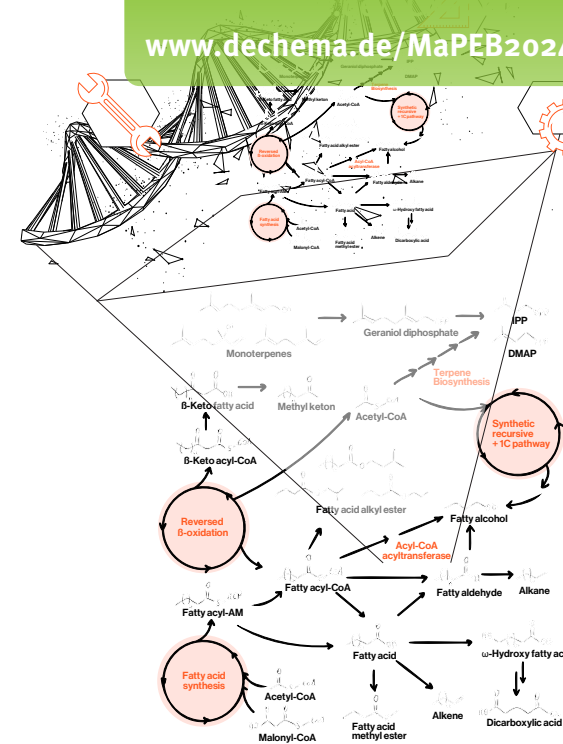
Gesellschaft für Chemische Technik  
und Biotechnologie e.V.

**PROGRAMME AT A GLANCE**

13 - 15 November 2024  
DECHEMA-Haus · Frankfurt

# International Conference on Metabolic and Protein Engineering for Biosynthesis

[www.dechema.de/MaPEB2024](http://www.dechema.de/MaPEB2024)



## Wednesday, 13 November 2024

09:00	<b>Welcome</b> Martin Grninger / Yongjin Zhou
	<b>CO<sub>2</sub> Fixation and Enzymatic C<sub>1</sub> Reduction</b> Chair: Yongjin Zhou
09:10	<b>KEYNOTE</b> Building complex molecules out of thin air: Protein (re-)design meets metabolic engineering Tobias J. Erb
09:55	Diethard Mattanovich
10:20	Liming Liu
10:45	Coffee Break
	<b>METABOLIC ENGINEERING IN VARIOUS MICROBIAL CHASSIS</b> Chair: Elke Dittmann
11:15	Andreea Perpelea
11:40	Chun Li
12:05	<b>KEYNOTE</b> Harnessing Renewable Energy for the Biocatalytic Conversion of Carbon Dioxide into Value-Added Fuels and Chemicals Tianwei Tan
12:50	Lunch Break
	<b>TERPENE BIOSYNTHESIS AND ENGINEERING &amp; MICROBIAL COMMUNITIES FOR BIOSYNTHESIS</b> Chair: Martin Baunach
13:50	Zongbao Zhao
14:15	Eric Helfrich
14:40	Yongjin Zhou
15:05	<b>KEYNOTE</b> Advancements in sustainable bioproduction, from engineering individual strains to developing microbial communities Rodrigo Ledesma-Amaro
15:50	Coffee Break
	<b>SELECTED POSTER TALKS &amp; POLYKETIDE SYNTHASE ENGINEERING</b> Chair: Kira J. Weissman
16:20	<b>Selected Poster Talks*</b>
17:20	Russell J. Cox
17:45	<b>KEYNOTE</b> Engineered polyketide synthases: a molecular foundry for chemicals and materials Jay D. Keasling
18:30	<b>Poster Session</b>
21:00	End of Day 1

## Thursday, 14 November 2024

	<b>SECONDARY METABOLITE PATHWAY ANALYSIS AND ENGINEERING 1</b> Chair: Max Crüsemann
09:00	Jeroen Dickschat
09:25	Roderich Suessmuth
09:50	Alexander Rittner
10:15	Coffee Break
	<b>SECONDARY METABOLITE PATHWAY ANALYSIS AND ENGINEERING 2</b> Chair: Mirko Joppe
10:45	Helge B. Bode
11:10	Kira J. Weissman
11:35	<b>KEYNOTE</b> Exploiting the potential of cyanobacterial megasynthetases Elke Dittmann
12:20	Lunch Break with Poster Session
	<b>PROTEIN ENGINEERING FOR NEW REACTIONS AND IMPROVED ACTIVITY</b> Chair: Florian Bourdeaux
14:00	Stephan Hammer
14:25	Anett Schallmey
14:50	Kristina Haslinger
15:15	Yongqin Lv
15:40	Coffee Break
	<b>NEW AND INNOVATIVE APPROACHES IN GUIDING PROTEIN ENGINEERING</b> Chair: Martin Grninger
16:10	Carlos G. Acevedo-Rocha
16:35	Hajo Kries
17:00	Klara Hlouchova
17:25	<b>KEYNOTE</b> Enzyme Design and Evolution for Efficient Biosynthesis of High-Value Compounds Yan Feng
18:10	<b>Poster Prices</b>
18:25	Networking Dinner
21:00	End of Day 2

## Friday, 15 November 2024

	<b>METABOLIC AND PROTEIN ENGINEERING TECHNIQUES 1</b> Chair: Mislav Oreb
09:00	Viktor Stein
09:25	Mingtao Huang
09:50	Julie Zedler
10:15	Coffee Break
	<b>METABOLIC AND PROTEIN ENGINEERING TECHNIQUES 1</b> Chair: Harald Berchtold
10:45	Lidan Ye
11:10	Jiaoqi Gao
11:35	Lihan Zhang
12:00	<b>KEYNOTE</b> Exploring strain diversity for metabolic engineering applications Hal Alper
12:45	<b>Closing Remarks</b>
13:00	Lunch / End of Symposium

\* Four PhD/PostDoc talks from the poster submissions will be selected for presentation during the evening session on November 13. Notifications will be sent out end of October.