



DECHEMA

Gesellschaft für Chemische Technik
und Biotechnologie e.V.

PROGRAMME

30 November 2023 · DECHEMA-Haus · Frankfurt am Main

Infoday – Food Proteins from Biotechnology

<https://dechema.de/Food23>



© freshidea



The infoday is certified with 10 credits
by ZFL (Zertifizierungsstelle für die
Fortbildung von Lebensmittelchemiker).



We want to take a look at the presence and future of food and nutrition. Which food innovations are already available today, what can be expected in future? What is (still) utopia?

Representatives from science and industry will inform about the current state of food biotechnology and new developments. Start-ups and established food tech players present their vision of future nutrition and face critical scientific discussion.

The info day, organized by DECHEMA's food biotechnology division, will cover topics such as cultured meat production, precision fermentation and single cell protein as well as the underlying technologies. Traditional techniques such as fermentation using microorganisms and enzymatic processing to improve taste, digestibility and techno-functional properties of food proteins are still highly relevant and will also be the focus.

How will our diets and food production change in the future? What major transformations are already underway? What opportunities does this open up in terms of food security and a balanced, health-promoting diet while at the same time addressing climate change? Modern food biotechnology can be seen as an opportunity for a sustainable food production. This info day on Food Proteins from Biotechnology seeks to provide a platform that offers opportunities for discussion and exchange between science, industry and society.

COMMITTEE

Prof. Dr. Lutz Fischer	Universität Hohenheim/D
Dr. Martin Gand	Justus-Liebig-Universität Gießen/D
PD Dr. Christian Hertel	DIL Deutsches Institut für Lebensmitteltechnik e.V., Quakenbrück/D
Dr. Thomas Kiy	Lonza AG, Basel/CH
Dr. Patrick Lorenz	BRAIN Biotech AG, Zwingenberg/D
Julia Manhard (chairperson)	optiferm GmbH, Oy-Mittelberg/D

As of November 2023.

Subject to alterations. Submission title and authors information as provided by the authors.

No proof by DECHEMA.

Thursday, 30 November 2023

10:00	Welcome and Introduction Prof. Dr. Lutz Fischer, University Hohenheim/D
10:10	Food systems in transition Prof. em. Dr. Hannelore Daniel, formerly Technical University of Munich/D
10:40	Alternative proteins: What are suitable expression systems? Dr. Patrick Lorenz, BRAIN Biotech AG, Zwingenberg/D
11:10	Coffee break
	Protein from Precision Fermentation
	<i>Chair: Dr. Thomas Kiy, Lonza AG, Basel/CH</i>
11:40	From DNA to cheese – what it takes to get there Dr. Bastian Jöhnk, Formo Bio GmbH, Frankfurt am Main/D
12:10	Planet A Foods – sustainable solutions for food ingredients leveraging frontier technologies Kevin Schmitz, Planet A Foods GmbH, Planegg/D
12:40	Lunch break with Poster Session
13:40	Animal-free structure-forming protein polymers from yeast precision fermentation Dr. Marc Werten, Wageningen University and Research/NL
14:10	Designing proteins to create a new wave of high-performing consumer products Ruben Von Krannichfeldt, Cambrium GmbH, Berlin/D
14:40	Coffee break
	Cultured Seafood and Single Cell Protein
	<i>Chair: Dr. Martin Gand, University Gießen/D</i>
15:10	BLUU Seafood – Cultivating fish cells for biomass production Ricco Heinze, BLUU GmbH, Lübeck/D
15:40	The next generation of sustainable food ingredients: Mycelium production with Kynda plug & play fermentation PD Dr. Jörg Bormann, Kynda Biotech GmbH, Jelmendorf/D
16:10	Closing Remarks Prof. Dr. Lutz Fischer, University Hohenheim/D



INSPIRING SUSTAINABLE CONNECTIONS

World Forum and Leading Show for the Process Industries

ACHEMA is the global hotspot for industry experts, decision-makers and solution providers. Experience unseen technology, collaborate cross-industry and connect yourself worldwide to make an impact.

10 – 14 June 2024

Frankfurt am Main, Germany

www.achema.de

Are you ready? Join now!

POSTER

- P 01 **Continuous Pulsed Electric Fields Treatment for Selective Extraction of Proteins from Microbial Cells**
Felix Schottroff¹; University of Natural Resources and Life Sciences (BOKU), Vienna/A
-
- P 02 **Screening of Basidiomycota for production of protein-rich mycelia on two different carrot side streams**
Leonie Juhrich¹; Kai Reineke²; Holger Zorn¹; Martin Gand¹; ¹ Justus Liebig University Giessen/D; ² GNT Europa GmbH, Aachen/D
-
- P 03 **Flexible software for advanced fermentation process control - BioPC: a case study for food preservative production**
Juris Vanags¹; Arturs Suleiko¹; Konstantins Dubencovs¹; Bioreactors.net AS, Riga/LV
-
- P 04 **Meat Substitutes as a Source of Protein in the Diet – Influence of Altering the pH on the Formation of Fibrous Structures**
Felix Ellwanger¹; Melanie Fuhrmann¹; Gabriela Saavedra I.²; Heike P. Karbstein¹; Karlsruhe Institute of Technology (KIT), Karlsruhe/D; ² Thermo Fisher Scientific, Karlsruhe/D
-
- P 05 **Engineering the future of food: enhancing β -lactoglobulin functionality through precision fermentation**
Sarah Brune¹; Loes Hoppenreijts²; Julia Keppler²; Remko Boom²; Rebekka Biedendieck¹; Rainer Krull¹; TU Braunschweig/D; ² Wageningen University & Research, Wageningen/NL
-
- P 06 **Development of an evaluation platform for growth factors for the production of cultivated meat**
Marie-Luise Schlieker¹; Franziska Beck¹; Thomas Graf¹; Chantal Treinen¹; Philipp Noll¹; Marius Henkel¹; Technical University of Munich, Freising/D
-
- P 07 **Applied molecular bioprocess control using RNA thermometers for precision fermentation**
Christina Peternell¹; Philipp Noll¹; Chantal Treinen¹; Marius Henkel¹; Technical University of Munich, Freising/D
-
- P 08 **Life Cycle Assessment of Commercial-Scale Cultured Meat Production: Past, Present, and Future**
Katharina Julia Brenner¹; Marius Henkel¹; Philipp Noll¹; Chantal Treinen¹; TUM, München/D
-
- P 09 **Determinants of consumer's purchase intention for precision fermentation-based cheese in Germany: an exploratory approach**
Jana Kilimann¹; Jeanette Klink-Lehmann¹; Janine Macht¹; Monika Hartmann¹; Rheinische Friedrich-Wilhelms-Universität Bonn/D

- P 10 **Perspectives for complex tissue patterning in cultured meat**
Freya Mehta¹; Technical University of Munich, Freising/D
-
- P 11 **Investigation of the gel-forming and interface stabilizing properties of yeast cells (*Saccharomyces cerevisiae*) in food emulsions**
Laura Riedel¹; Heike P. Karbstein¹; Ulrike S. van der Schaaf¹; Karlsruhe Institute of Technology (KIT), Karlsruhe/D
-
- P 12 **SylPlant – build the future of innovative protein production in Europe.**
Heiko Keller¹; ifeu – Institute for Energy and Environmental Research Heidelberg/D

Fokusthema
**„Nachhaltig produzieren in Chemie,
 Pharma und Life Sciences“**



11. – 13. SEPTEMBER 2024 · FRIEDRICHSHAFEN

- » Die Lösungen von F&E auf Ressourcenknappheit und Klimawandel
- » Prozessentwicklung, Scale-Up und mehr Prozesseffizienz für eine nachhaltige Produktion
- » 2,5 Tage intensiver Austausch über Branchen, Fachgrenzen und Generationen hinweg
- » Workshops, Keynotes, Vorträge und Diskussionen
- » Karriereforum und tägliche Poster-Sessions



Die Beitragseinreichung ist ab 15. November möglich
Weitere Infos: www.dechema.de/DECHEMA_Forum_2024

VERANSTALTER



MIT UNTERSTÜTZUNG DES



ORGANISATION AND VENUE

DECHEMA e.V.

Theodor-Heuss-Allee 25

60486 Frankfurt am Main

Germany

www.dechema.de

CONTACT

Silke Rumpf-Kwasniok

+49 (0)69 7564-280

Silke.Kwasniok@dechema.de