European Summit of Industrial Biotechnology

**esib /**

**Products & production for a better future**

- a *stage* to meet and talk
- a *pivot* for active exchange of news, ideas and trends
- a *hottbed* for innovation
- a *cradle* for fruitful co-operations
- a *cornerstone* of new incentives

**The European communication platform for Industrial Biotechnology**

*esib* has already established itself as one of the biggest biotech conference in Europe and an international platform for industrial biotechnology in multiple contexts. The event not only covers science but also deals with industrial needs and hopes, economic demands, funding resources or political aspirations and still leaves space for networking and recreation. It encourages all protagonists of industrial biotechnology to think outside the box and in new comprehensive dimensions.

In 2017, the *esib* focuses on „PRODUCTS & PRODUCTION“ – What are the new promising trends in science and industry? How is the production process of biotechnological and pharmaceutical products going to change in the future? How can we as a society benefit from new, environmentally friendly innovations, and what are the expectation and challenges?

To answer these questions, the *esib* is uniting major contributors to European industrial biotechnology under one roof to learn from celebrated experts, executives and entrepreneurs, to get new inputs from politics and funding agencies and to develop profitable ideas with prospective partners. We therefore cordially invite you to discuss vital questions and encouraging topics and to be on top of new insights and trends.

**esib /**

**science meets economy meets politics**

to discuss

- I nspiring trends of industrial biotechnology
- N ew disruptive technologies and incremental changes
- N ovel outcomes and approaches
- O utstanding hot topics
- V aluable insights in economic and political developments
- A wesome new design ideas and products
- T rendsetting concepts for funding and financing
- E xistential developments in the context of industrial biotechnology

Be part of it – have a voice – renew industrial biotechnology – INNOVATE

*esib – the European communication platform for Industrial Biotechnology*
01  Trends in Science

Modern chemistry or biotechnology? Both of them offer solutions for industrial processes, but as synthetic and chemical pathways often leave a bad feeling in the public’s mind, there is a huge demand for biotechnological production routes. What might be the right way to solve the future challenges and is biotechnology the solution to everything? Who is the winner from an economic/ecologic point of view? Meet two renowned laureates to discuss the most promising trends in science and learn about their different viewpoints.

Speakers

Manfred T. Reetz
External emeritus group leader of the Mülheim Max-Planck-Institute and Hans-Meerwein-Research-Professor at Philipps-University Marburg

Matthias Beller
Director “Leibniz-Institut für Organische Katalyse an der Universität Rostock e.V. (IfOK)” and Professor of „Catalysis“, University of Rostock

November 14th, 2017 / 13:00 - 14:30 / Plenary

02  Trends in Industry

Academia meets industry - both shape the future trends of industrial biotechnology. Experience the challenges of industrial biotechnology from the points of view of different global players in the worldwide biotech industry.

Speakers

Claus Crone Fuglsang
Senior Vice President Research & Technology, Novozymes A/S

Weichang Zhou
Chief Technology Officer & Senior Vice President, Biologics Development and Manufacturing, WuXi Biologics

November 14th, 2017 / 15:15 - 17:15 / Plenary
03 Trends in Science Communication
Is science engaging the public community? It is high time! Communication of excellent science is no longer restricted to high impact journals. To prevent your achievements from remaining unrecognized in a broader public make use of alternative communication channels. Blogs, newsletters, TV-interviews, scientific breakfasts, open labs, podcasts – there are no limits for creativity. Think outside the box and find out, how to address your target communities to improve both your research and your career.

November 14th, 2017 / 18:00 - 19:30 / Workshop

04 Trends in Evaluation of Science
It has become popular to evaluate research performance by quantitative indicators. What does it mean to use data to govern science? Do we damage the system with tools implemented without knowledge of good practice and interpretation? Are we obsessed finding our position in global rankings with arbitrary indicators? Do we get new perspectives beyond bibliometric indicators by so called alternative metrics (Altmetrics) coming from web sources and social media? Meet experts to discuss good practice, limitations and perspectives of research evaluation in the third year after the publication of the Leiden Manifesto for research metrics in Nature.

November 14th, 2017 / 18:00 - 19:30 / Workshop

05 Trends in IPR
Generating intellectual property and patents is a big issue in each researcher’s life. But what does it mean and what are the consequences of filing a patent – for your institution, for your research and for you as a person? Learn about relevant definitions and institutions on European level, and get insight into experiences at patent divisions of successful companies.

November 14th, 2017 / 18:00 - 19:30 / Workshop

06 Gala Academia
Meet, talk, eat, drink and enjoy an evening accompanied by interesting people! High above the old city center of Graz you will have the chance for networking with visionaries and doers, with decision makers and skeptics. Be part of it! (included in registration fee).

November 14th, 2017 / 20:30 / Social
07 Producing Current Trends in Antibody Engineering and Development

Antibodies are key players for the treatment of an enormous range of diseases. Think about anti-cancer antibodies, or, quite recently developed checkpoint modulating antibodies that allow a new approach for harnessing the immune system in its fight against cancer. Also infectious diseases are combated with antibodies. Join us and get to know the latest superheroes of modern medicine.

November 15th, 2017 / 09:00 - 11:00 / Workshop

08 Capturing the Smell – Biotechnology to Reshape Flavors & Fragrances Production

Will biotechnology be the gold standard to produce flavors and fragrances in the near future? Designer bugs that excrete grapefruit aroma and other compounds of immense economical/ecological value are no vision but reality. The market demand for natural ingredients is increasing, but what is the public perception of F&F compounds derived through biotechnology? And what are the obstacles for producers in terms of the ever-changing landscape of labeling regulations? Take the opportunity to hear the expert views first-hand.

November 15th, 2017 / 09:00 - 11:00 / Workshop

09 Start Up – Start Through – Start Now!
Produce Your Own Company

A golden key can open any door. You are planning a start-up? You are looking for financing possibilities for your ideas? Exchange experiences with successful start-up founders and benefit from their lessons learned. Meet investors and learn more about what they are looking for in a start-up company. What are their criteria to invest? Why invest in biotech in the first place?

November 15th, 2017 / 09:00 - 11:00 / Workshop
10 Science Flash

You have an idea you want to place on the market? You have an outstanding new finding you want to present? Be precise and be to the point, convince a jury in a powerful speed presentation.

November 15th, 2017 / 11:15 - 12:00 / Plenary

11 Biocatalytic Oxygenations – Towards New, Sustainable Products

The precise insertion of oxygen in molecules can yield high value compounds. Let’s have a look on the different enzymes in use for selective biocatalytic oxygenations. What are the perspectives for future applications? Is it already an economically viable alternative to chemical methods? How do experts cope with potential safety issues, while using oxygen or hydrogen peroxide as an oxidant? Let’s find out if the biocatalytic alternative is ready for scale-up and keeps up with chemical processes.

November 15th, 2017 / 13:30 - 15:30 / Workshop

12 Microbiome-based Products for Agriculture & Industry

Microbiomes are the hidden helpers for the health and well-being of not only humans and animals but also plants. Applications for plant protection, medicine, or agriculture are only a few examples for future perspectives. Could these possibilities of exploiting microbial (and chemical) diversity be the answer for today’s challenges in agriculture? How can they efficiently cover industrial needs for future products? Be part of an interesting discussion between representatives from industry, agriculture and leading scientists in this field.

November 15th, 2017 / 13:30 - 15:30 / Workshop
Discovering the Latest (Bio)pharma Production Technologies

When companies are thinking of biotechnological and pharmaceutical products, they are always considering quality, yield, costs and revenue. The optimization of all parameters is a complex but not impossible process. But how to design a production plant? What do you need to know about FDA/GMP compliant manufacturing? What about creating pharmaceutical products? Sharing and combining of knowledge (e.g. in the frame of the Human.technology Styria cluster) is an essential part in setting up production systems in an industrial scale. Join and get ready to design your production process!

November 15th, 2017 / 13:30 - 15:30 / Workshop

Enzyme Cascade Reactions in Industrial Biotechnology

Putting the right ingredients into one pot and getting out your target product – sounds like magic, but has a name: enzyme cascade reactions, an exciting recent development in biocatalysis. However, it is still difficult to overcome the obstacles on the way to industrial applications. Get insight into the recent developments about complex artificial metabolic pathways. What could be the methods for controlling side reactions and how to support the compatibility of catalysts? Be part and go for some new perspectives and the latest trends in this field.

November 15th, 2017 / 16:00 - 18:00 / Workshop

Production of Bulk Chemicals and Bioplastics using Microorganisms

How can we satisfy our needs for sustainably produced chemicals in the future? Many bulk chemicals are produced from fossil resources and need to be replaced by renewable and sustainable feedstocks in the future. Both, new processes and new products need to be developed and a key technology to enable this transformation is biotechnology and metabolic engineering. But what are the chemical products of the future and how can those be produced? In this session, experts from industry and academia will give insights into this broad field and tell about their perceptions and visions.

November 15th, 2017 / 16:00 - 18:00 / Workshop
Producing Trends – Interactive (World Café)

Bubbling with ideas? Let’s talk about them! Discuss your insights and concepts. Stimulate each other during lively face-to-face discussions in small groups. Be guest in our World Café, take a seat and be part of producing future trends.

November 15th, 2017 / 16:00 - 18:00 / Workshop & World Café

Science Meets Economy

Looking for new collaborations and partnerships? A guided Matchmaking Event organized by SFG and the Enterprise Europe Network is a unique opportunity to generate new business contacts and to develop new ideas. Select your partners and take the chance for 20-minute meetings. The meetings are arranged in advance and participation is requested in the course of the registration process.

November 15th, 2017 / 18:15 - 20:15 / Matchmaking

Chilling Life Science

Let the day fade away with fingerfood, cocktails and good company. Enjoy yourselves; it’s time to chill! (included in registration fee)

November 15th, 2017 / 21:00 / Social

Biotech Breakfast

Let the day begin! Breakfast is the most important meal of the day so let’s get together and start the last day of our summit with a delicious, typical Styrian breakfast to delight body & soul. (included in registration fee)

November 16th, 2017 / 08:00 - 10:00 / Social
20 “Made by Synthetic Biology” – A Status Quo Analysis

Let’s shed light on the status quo of applied synthetic biology from the angle of entrepreneurs, investors, and of technology experts. Has synthetic biology finally started to deliver on their promise to bioeconomy? What are the current products and have they already entered the market? Are the production techniques fundamentally different from established biotechnological approaches? What future innovations and products can we expect and how can we as a society benefit from them? Join us in a discussion about leaving the beaten track of inflated expectations and exaggerated anxieties raised by synthetic biology.

November 16th, 2017 / 10:00 - 12:00 / Workshop

21 How Many Bioinformaticians does it Take to Make a Product?

Bioinformatics has become one of the major disciplines that supports biotechnology research and development. How much bioinformatics is involved, which role does it play? Key researchers from industry will explain how they contribute to the development of new products. The academic side will be represented by Members of the Austrian Bioinformatics Platform ATBI, showing how they support industrial product development through collaborative projects.

November 16th, 2017 / 10:00 - 12:00 / Workshop

22 Challenges in Design and Production of New and Emerging Vaccines

None of us can imagine modern medicine without vaccines. Vaccines or drug delivery vehicles are often based on virus like particles. Our experts highlight recent technologies for production and up-scaling for industrial demands. How long does it take from test tube to patient? Get informed about mandatory steps on the long way to market authorization.

November 16th, 2017 / 10:00 - 12:00 / Workshop
**23 Science Flash**

You have an idea you want to place on the market? You have an outstanding new finding you want to present? Be precise and be to the point, convince a jury in a powerful speed presentation.

*November 16th, 2017 / 12:15 - 13:00 / Plenary*

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**24 Continuous Production**

Continuous production of biopharmaceuticals is a current challenge in bioprocess engineering. While this technology has already been established in the upstream field, it is still in its infancy in the downstream process. Which challenges are coming up when implementing continuous processes in industry? What are the regulatory hurdles to overcome? Get interesting insights into the views of industry, academia and regulatory authorities.

*November 16th, 2017 / 14:00 - 15:30 / Plenary*
Timetable Day 1
14th November

Industrial Biotechnology – The Big Trends

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<td>Science Meets Economy</td>
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<td>21:00</td>
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<td>Chilling Life Science</td>
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Designing Industrial Biotechnology
# Timetable Day 3
16\(^{th}\) November

Designing Industrial Biotechnology

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<td>14:00 - 15:30</td>
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<td>15:30 - 16:15</td>
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<td>Closing Remarks</td>
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Biotech in the Heart of Europe

The European Summit on Industrial Biotechnology (esib) is going to take place in Graz/Austria. The second largest city of Austria is a fascinating, beautiful and nice place. With more than 900 years of history, visitors get in touch with ancient knights, a vibrating cultural scenery that ranges from classics to modern approaches, greatly tasting food and an inspiring night life. Additionally, with 9 universities and colleges Graz is an internationally acknowledged place of science and research.

The conference will take place at the Messecongress Graz, which is centrally located in walking distance from the picturesque old town:

**Messe Congress Graz Betriebsgesellschaft m.b.H.**  
Messeplatz 1 / 8010 Graz / Austria  
[www.mcg.at/messegraz.at/en/](http://www.mcg.at/messegraz.at/en/)

Find more information about Graz at:  
[www.graztourismus.at/en](http://www.graztourismus.at/en)
Are you curious about the European Summit of Industrial Biotechnology or interested in sponsoring it? Don’t hesitate and ask us:

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