

Press information

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Innovation dynamics in the agricultural sector

"The most exciting conference we have held in a long time! Who would have thought that the agricultural and food sectors would develop such innovation dynamics?" (Michael Carus)

Michael Carus, one of the leading European bioeconomy experts and managing director of the nova-Institut (Hürth), initiator of the new conference "Revolution in Food and Biomass Production", 1-2 October 2018, Cologne, in conversation with the editorial staff.

You've hosted so many conferences, and the new one is supposed to be the most exciting?

Carus: The topic spans a whole range of current developments. Synergy effects between nine different areas of innovation suddenly lead to a revolution in food and biomass production. In twenty years' time, our food will look and be produced differently from today – and probably more efficiently, sustainably and healthy. Biomass for the bio-economy will undergo a new evaluation.

Can you be a little more specific?

Carus: Of course. On the one hand, digitisation permeates the entire agricultural sector, with weather data, networked tractors that optimise fertilisers, robots for crop protection and as harvest helpers, drones and artificial intelligence. At the same time, we have reached a detailed understanding of the processes in the soil and at the roots. Instead of damaging the soil as before, we can now bring it back to life with biostimulants and agro-probiotics. On the other hand, new areas for the production of food and biomass are unlocked: The urban centres, the deserts and arctic regions of our planet. Biotechnology and plant chemistry enable the production of valuable foods, flavours and fragrances from biomass by-products. For example, nature-identical vanillin from the wood component lignin.

What is driving the whole thing?

Carus: Three aspects are driving these developments. The first is the growing world population and increasing prosperity. Both are leading to a considerable increase in the demand for food. The second is efficiency: there are many ways to improve the efficiency of converting solar energy into biomass into recyclable materials. Yields can be increased while input can be

reduced at the same time. Side streams can be used in the food or chemical industry. Here, new technologies allow for progress that was unthinkable just a few years ago. This also pays off ecologically. Thirdly, the rapidly advancing climate change, in which the agricultural industry plays a major role. The new technologies in the nine presented innovation sectors promise strong reductions in greenhouse gas emissions all along the value chain.

And what impact does this have on the traditional bio-economy in which you have been primarily active so far?

Carus: If biomass can be produced with a lower ecological footprint, bio-based products also have a correspondingly lower footprint. The competition between food and non-food is also disappearing. Food and non-food are becoming increasingly popular. The only thing that remains relatively scarce and costly to produce is proteins. And this is where we start and, for the first time, present the "Future Protein Award" for innovative solutions. The participants of the conference will choose the winner!

Isn't the broad-based approach at the expense of depth?

Carus: We cannot replace a specialised conference focusing on one of the individual topics. We never wanted that either. We have tried to present typical and particularly good examples and see great synergy effects by bringing all nine fields of innovation together in one place. Each sector is driving the innovation forward, mostly without any connection to the other sectors. I think that a lot of new networks and projects will be born at the conference.

Will there be a REFAB II?

Carus: Absolutely. We will announce the date soon. After initial scepticism, we have met with great approval and interest both in industry and in politics and civil society. There is a strong need for information and networking. We already have two important sponsors for REFAB 2019.

A short summary please

Carus: On 1 and 2 October 2018, around 300 experts from 30 countries will meet in Cologne for the international conference "Revolution in Food and Biomass Production" (www.refab.info) to present and discuss the latest innovations and concepts. At the accompanying exhibition, companies, among others, will compete for the "Future Protein Award". The participants will select the winners, who will be announced to the world press at the end of the conference.

We thank you for the interview and wish you all the success.

Responsible for the content under German press law (V.i.S.d.P.):

Dipl.-Phys. Michael Carus (Managing Director)
nova-Institut GmbH, Chemiepark Knapsack, Industriestraße 300, DE-50354 Hürth (Germany)

Internet: www.nova-institute.eu – all services and studies at www.bio-based.eu

Email: contact@nova-institut.de

Phone: +49 (0) 22 33-48 14 40

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