A bioeconomy future through digital innovation

Digitalization as a future trend in the biobased economy

Smart aids have become very useful in the biobased economy and offer enormous potential. In plant breeding, for example, a large quantity of genetic data can be screened for desired properties. This leads to an increase in productivity and reduces the error rate. New opportunities are also opening up for agriculture: Fields can be managed more sustainably with the help of application software (apps) that evaluate weather, plant and soil data. These findings enable a reduction in the use of chemicals and water, but also the development of new products such as microbial soil fertilizers.

Smart aids at the 8th International Bioeconomy Conference

Digitalization is also essential for the bioeconomy and will therefore be a topic throughout the 8th International Bioeconomy Conference. In SESSION 3 - PLANT PRODUCTIVITY FOR A GROWING BIOECONOMY, renowned international experts will provide insight into current developments in plant breeding efficiency and the use of apps to select new, more productive plants.

Prof. Ulrich Schurr from the Institute for Bio- and Geosciences in Jülich will give a talk on quantifying the interaction between plants and the environment in order to optimize yield and quality. His talk will be held during SESSION 3 on May 14, 2019. Prof. Schurr has headed the IBG-2 Institute: Plant Sciences at the Jülich Research Center since June 2001. His research focuses on quantitative information about key processes of plant systems in their interaction with dynamic environmental factors and on the underlying physiological and molecular mechanisms. And it is precisely here where important new possibilities in this field are generated through a combination of plant sciences and state-of-the-art digitalization approaches.

SESSION 3 will be opened by Dr. Jurandir V. de Magalhaes from the Brazilian Agricultural Research Corporation. His keynote speech will outline the current developments in sustainable millet and corn production. Dr. Néstor Carillo from the National University of Rosario in Argentina will talk about how things currently stand with regard to improvements to the crop index and stress tolerance.

A special feature of the 8th International Bioeconomy Conference will be a first-time look at developments in countries outside Europe. This year’s partner region is South America, which will be represented by many renowned businesspeople and scientists. There, harvest improvement, optimization of stress tolerances and market access for innovations through digital support are also highly topical and vital issues.
Digitalization is also essential and useful in other areas of the bioeconomy. For example, the use of drones in timber harvesting, determining pest infestation and producing on a more resource-efficient basis with the help of 4.0 technologies. In Session 4, Dr. Andreas Petri from Miltitz Aromatics GmbH will present a pathway to success through the resource-efficient production of fine chemicals.

**Event app to promote the conference’s network character**

Digitalization is also increasingly finding its way into various event formats. The *LineUpr* event app was already used last year at the 7th International Bioeconomy Conference. The aim of the app is to promote interaction among participants by helping them to keep each other up to date and to share information and network with other interested participants. Such digital support platforms are lending new impetus to the transfer of knowledge between scientists and their research results on the one hand, and companies and start-ups on the other. Thus, this year's 8th International Bioeconomy Conference will be accompanied by a special adjunct feature that enables direct feedback and immensely strengthens the network character of the conference.

Launched in 2012, the *International Bioeconomy Conference* is one of the most important bioeconomy events in Germany. Conference participants will gain comprehensive insights into the possibilities and potentials of the bioeconomy and, in particular, the region of Central Germany. This year’s partner region South America will provide an international flair. The *8th International Bioeconomy Conference* will be held on May 13 and 14, 2019 at the Leopoldina in Halle (Saale).

Sign up for the conference through the following link: [https://www.bioeconomy-conference.de/anmeldung/](https://www.bioeconomy-conference.de/anmeldung/).

Further information can be found at: [https://www.bioeconomy-conference.de](https://www.bioeconomy-conference.de).