

Portrait - Joint industrial research with the FEI at the University of Hohenheim

Which topics are currently being focussed on in the food industry and how can producers start into the future with better processes and products? Answers to these questions are provided by the Research Group of the Food Industry (FEI), which works for all sectors of the German food industry.



A visit to the Technical Centre of the University of Hohenheim in Stuttgart: In June, Prof. Jörg Hinrichs (left) informed the member of the Bundestag Dr. Stefan Kaufmann about the research activities of the Institute, which functions as an IGF competence centre for the food industry.

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Building bridges between science and industry

Since its founding in 1953, the Research Circle of the Food Industry (FEI) in Bonn, Germany, has offered small and medium-sized companies access to food research of practical relevance. This is done in particular by funding projects of Industrial Community Research (IGF). Many projects focus on questions of resource and energy efficiency, quality assurance, environmental protection or standardisation. The German Federal Ministry of Economics and Energy (BMWi) supports them with public funding. The range of topics covers all future technologies relevant to small and medium-sized enterprises: from materials research and biotechnology to Industry 4.0 and digitisation.



Industrial Community Research (IGF) is being promoted here: Dr. Stefan Kaufmann (far right) in conversation with Prof. Jörg Hinrichs and other scientists of the Institute.
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Research Heavyweights at Hohenheim

The Institute of Food Science and Biotechnology at the University of Hohenheim in Stuttgart is one of the IGF competence centres for the food industry. There are currently 23 ongoing IGF projects, which are supported by the small and medium-sized companies programme of the German Federal Ministry of Economics. With its work, the Institute makes a decisive contribution to the most important issues in food research. One example of this is a new online measuring system, which Hohenheim scientists from the Department of Dairy Science and Technology and Process Analytics and Grain Science are currently working on. In future it should be possible to use it to optimise the production of UHT milk containing fat.

"UHT milk is a proven product, the production of which has long been established. But now additional requirements are being placed on this product that were previously irrelevant – such as foamability," explains the engineer Prof. Jörg Hinrichs of the Department of Dairy Science and Technology. What's more: Quality assurance in companies today uses numerous analytical methods to determine whether the chemical, physical and microbiological properties of the pre-packaged product are within certain limits. "But this cannot reflect the complexity of the processes leading up to the "best-before" date - a prediction of how the quality of the product will develop over time is therefore only possible to a limited extent," explains Prof. Bernd Hitzmann of the Department of Process Analytics and Grain Science.

Early detection of instabilities in various raw materials

The long-term goal of the scientists in Hohenheim is to automate the analysis process. The system is then to be integrated directly into the product flow before the last treatment step and/or filling and will analyse the liquid product online. "In principle, this process can also be transferred to other products and can be used, for example, to assess product properties or for the early detection of instabilities in various raw materials, semi-finished products and in the processing of other liquid products," says Hitzmann.

The BMWi funds the project through the German Federation of Industrial Research Associations (AiF) and the Research Circle of the Food Industry with around Euros 443,000 for both disciplines. This makes it one of the research heavyweights at Hohenheim.

Impulses for 14 food sectors

Which research topics are still the focus of attention in the various sectors of the food industry, where do companies find incentives to shape the future with better processes and products, more resource efficiency or higher value creation? The FEI offers answers to these questions – for example at fei-bonn.de/branchenimpulse. There, sector-specific overviews of practice-relevant IGF projects are compiled for 14 different sub-sectors of the food industry.

Additional information and contact

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