



Dr. Frank Heckel im Gespräch mit seiner Mitarbeiterin Dr. Marion Raters. (Bilder: Häsel/LCI)
Dr Frank Heckel in discussion with his staff member Dr Marion Raters. (Images: Häsel/LCI)

"I want to intensify the research into the recycling of packaging"

On 1 June 2019, Dr Frank Heckel (42) took over the directorship of the Food Chemistry Institute (LCI) of the Association of the German Confectionery Industry (BDSI). Dr Heckel succeeds Prof. Dr Reinhard Matissek in the post, who himself followed Prof. Dr Albrecht Fincke in 1989. We spoke with Dr Heckel about what he wants to do differently as well as those reliably tried-and-proven procedures from which he would never deviate.

sweets processing: How did you receive the news that you would take over the directorship post, and what was your first reaction?

Dr Frank Heckel: A colleague from my university days called me up and told me that the BDSI was looking for a successor to Professor Matissek. His name is prominent in the industry, so as a food chemist I listened very closely. My first reaction then was to agree on the spur of the moment to an initial meeting. This was followed by other discussions, but they never felt like job interviews. Instead, they were conducted very professionally and on equal footing. The fact that you're interviewing me today shows that the

BDSI and I brought this process to a successful conclusion.

sp: You've been involved at the LCI since December 2018. How was your initial period at the institute?

Heckel: Together with Professor Matissek, during the first six months, I got acquainted with the many interesting topics, the dedicated LCI team and, of course, numerous business figures from the confectionery industry along with experts from the German Federal Institute for Risk Assessment and the German Federal Office of Consumer Protection and Food Safety. I'm very happy that, at the beginning of June, I was able to

take over the running of this successful, very well-positioned institute. Professor Matissek built up an efficient institute with an outstanding structure and highly skilled, highly motivated employees. This left me with an excellent basis upon which to also master the important undertakings and challenges for the confectionery industry in the future as well.

sp: What practices will you preserve at LCI, and what will you change?

Heckel: In the future, LCI will continue to be an important link between the confectionery industry and the analytical world of food chemistry and technology. I'm a member of a variety

of scientific bodies including project advisory committees for the Research Association of the German Food Industry, the Regulatory and Scientific Committee of Caobisco Association of Chocolate, Biscuits and Confectionery Industries of Europe, and the Chairman of the BDSI's Health and Food Safety Working Group. One issue we will focus on more heavily at the LCI in the future is research into recycling and the recyclability of food packaging.

"Consumers must be able to rely on product safety"

sp: How will you apply your expertise from your previous positions?

Heckel: One important and topical field of work from my previous activities consisted of research on packaging sustainability. The German confectionery industry also has great interest in the foresightful, efficient handling of the required resources. Manufacturers have been consistently reducing the packaging materials they use for years. The continuing increase in the material efficiency of packaging saves resources and reduces CO₂ emissions. But first and foremost, packaging has to meet the food safety requirements for the products. For hygienic reasons among others, packaging must protect food from the entry of contaminants, microbial spoilage by things like bacteria, yeasts and fungi, and in some cases from light or oxidation. Consumers must be able to rely on product safety.

sp: What specific projects do you want to implement?

Heckel: Often, food requires far more resources and energy than packaging materials do. So, the choice of the right packaging frequently has a direct influence on a food's product life and can prevent the loss of resources and spoilage of the food. Thus, foods have to be appropriately packaged in order to reduce food losses. I want to intensify LCI's research into confectionery and snack packaging recycling and recyclability. Along with the necessary food safety, this must also take into account

assessments for energy, CO₂ and life cycles for the type of recycling. In the coming years, my team and I will make this complex issue a priority.

sp: How will globalization affect your activities?

Heckel: The almost quantum-like leap in the level of development in instrumental analysis will also be an intense focus at LCI in the future. We will maintain state-of-the-art analysis methods for our member companies in order to proactively improve the safety aspects for the confectionery industry even more.

sp: Surely that's not everything ...

Heckel: The overwhelmingly dominant number of materials discussed in a popular science, and increasingly in a populist context, is not due to new scientific findings or industrial processes. With today's unceasing developmental advances in measurement technology, we can now isolate and verify substances that simply could not be identified earlier because they were overseen by the technology of the day. And this development continues uninterrupted. In particular, the linkage of various analysis techniques taking advantage of and combining the respective benefits with ever more efficient electronics is, by no means, a signal that we've now reached the most minute point possible on the detection limit spiral. This will continue to spur great innovation potential and

Brief profile of Dr Frank Heckel

Dr Frank Heckel studied food chemistry at the University of Würzburg/Germany from 1996 until 2000, where he also went on to receive his doctorate in 2004. From 2005 to 2006, he was the Laboratory Manager at the acclaimed internationally active laboratory group Eurofins, and in 2007, he moved on to the leading packaging company for beverages and liquid food, Tetra Pak. There, he was responsible for the fields of migration analysis, the quality of packaged foods and the interaction between packaging and its contents. Dr Heckel's primary research is conducted in the areas of food safety (contaminants and process contaminants, the minimization of hydrocarbons and acrylamide in food) and food quality and analytics, principally in the fields of cocoa, confectionery, fine baked goods and snacks.

of course discussion, and, above all, the necessity for interpretation by everyone involved. My LCI employees and I look forward to this challenge, and especially to making new marks for the confectionery industry and beyond, as is the tradition of the institute.

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