

DAY IN THE LIFE

IAgrE member Daniel Hefft, who works for Weetabix as a Process Development Engineer, outlines his role and a typical day.

Daniel gained a BSc in Food Science and Technology at the University of Applied Sciences Ostwestfalen-Lippe before becoming Head of Production at German cake manufacturer Kuchenmeister GmbH. He then gained an MSc in Food Technology at the University of Reading before taking up his present role.



1. What does a typical day look like? - Although a 9 to 5 job, there is not such a thing as a typical day – one of the reasons why I love my job and my profession. One day you will be spending your time on HAZOP (Hazard and operability study) studies, the next day you get called in to the factory for some trouble shooting. Many times, you will conduct pilot plant trials to identify and assess process-related risks and conduct scale-up exercises. A good proportion of my time I am

doing measurements and link them to mathematical models which are in development or already in place.

2. How did you get into Engineering for Food and Drink?

- The first time I got into food engineering was in my 9th year at school back in Germany. I was doing private tutoring in Latin for a family whose father works for a food manufacturer. In this year we had to take an industrial placement for a period of 2 weeks. The first time I went into the factory I was fascinated how things work and all the technology in there. I was impressed to see how much science, technology and engineering is required to turn a potato into fries, dumplings, hash browns... Since then I went in all my school summer breaks into food manufacturing businesses and studied Food Science and Technology along with an engineering qualification in 2010. It is a journey, I have never regretted.

3. What engineering skills have you used in the last week?

- I had to prepare a factory trial (management skills), including the mass balances for the recipe, trial and H&S risk assessments etc (H&S skills, processing skills). Further, I got called in for some



value engineering work where a process needed some tweaking (gathering data and analysing it afterwards), was involved in a pilot plant trial for scale-up purposes (Buckingham π theorem) and had to do some networking with one of our external research partners.

4. What new engineering skills do you see yourself using in the future?

- Soft skills are gaining an increasing importance. When I started out in university engineers were seen as a sort of semi gods and geeks. To create sustainable and effective workflows and relationships it is important to present yourself to broad audiences and being able to communicate technology and mathematics in a simple manner. Besides those soft skills I will need to get more into IT systems. The food industry will shift more and more into industry 4.0 where robots will be in place. I think I have a good understanding about the mechanics of those systems, however, no idea about the "thinking" processes of such systems.

5. What do you want the IAgrE EFD Group to be doing in three years' time?

- Promoting the food engineering profession, being the first choice to join and home for food and drinks related engineers and to offer broad CPD opportunities and key events for young and senior food engineers. This group is a vivid platform for all food professionals from farm to fork and by doing so create true links for both ends of the equation.

