

Teaching core chemical engineering principles – how do we incorporate broader concepts into a full curriculum?

09:00 – 09:30	Registration/Refreshments
09:30 – 09:45	Welcome - Aims/scope/outcomes of the workshop
09:45 – 10:45	Industrial Perspectives <i>Highlighting the gaps in student's knowledge/skills in terms of Particle Technology and Digitalisation for the Pharma/Food industry</i>
09:45 – 10:00	Conrad Davies , Senior Principal Scientists at Pfizer
10:00 – 10:15	Dr.-Ing. Thoralf Hartwig , Principal Process Engineer at Pharmaron & Honorary Visiting Professor at UCL - <i>Chemical Engineering in the Pharmaceutical Industry: Core engineering skills & key contributions</i>
10:15 – 10:30	Keith Taylor , Katesby Process Engineering Ltd – <i>Digitalisation applied to Pharma and Small Molecule API manufacture with suggestions for course content.</i>
10:30 – 10:45	Emma McLeod , Senior Research Fellow at Mondelez International – <i>The Smart Chocolate Factory Engineer</i>
10:45 – 11:00	Coffee Break
11:00 – 12:00	Academic and Student Perspectives
11:00 – 11:05	Ahmet Demir , a student perspective, University College London - <i>Global Food Security and its relevance to modern chemical engineering fields</i>
11:05 – 11:10	Han Liew , a student perspective, University College London - <i>Towards better storage of food: Flash freezing</i>
11:10 – 11:30	Dr. Andy Ingram and Dr Kit Windows-Yule , University of Birmingham – <i>Highlighting the connections with food, pharma and digitalisation in the context of particle technology and current practice and perceived gaps</i>
11:30– 11:45	Dr. Maximilian Besenhard , Lecturer for Digital Manufacturing of Advanced Materials at University College London - <i>Digital Manufacturing at UCL and the Manufacturing Futures Laboratory</i>
11:45– 12:00	Professor Jarka Glassey , Newcastle University – <i>Solids Handling in Pharma and Food – Is It Covered Enough?</i>

	<i>A Look at Food Engineering and Options in MEng</i>
12:00 – 12:45	Lunch
12:45 – 14:30	Focus groups <i>(Efficient and effective teaching of particle technology and digitalisation, and the resources required)</i>
14:30 – 15:00	Feedback and discussion
15:00 – 15:15	Closing remarks
15:15	Refreshments/Departure