

ProcessAbility
**A Workshop Organised by the EPSRC Directed Assembly Grand Challenge
Network and P&G Ltd**

Date: 20th & 21st October, 2014

Venue: P&G Brooklands General Offices, The Heights, Weybridge, Surrey, KT13 0XP

An intensive, cross-disciplinary, two-day workshop bringing together delegates from academia, P&G and other industrial partners, promoting discussion and tackling questions around how molecular properties affect the formulation of products and the processes used in their production.

Speakers

A variety of plenary talks and invited talks will be presented, including:

Setting the Question: Opportunities to match industry needs and academic opportunities

Prof Chick Wilson, University of Bath

Using computational fluid dynamics 'in real life' processes

Prof Harvey Thompson, University of Leeds

Understanding and controlling structured fluids

Prof Julian Eastoe, University of Bristol

Understanding particle chemistry for product control

Prof Jan Sefcik, University of Strathclyde

Designing particles with smart structure: the bridge between formulation, process and product properties.

Luis Martindejuan, P&G

Designing processes from the molecular level

Prof Claire Adjiman, Imperial

Process Control

Prof Alexei Lapkin, University of Cambridge

Reflection on industrial perspectives & priorities

Richard Storey, AstraZeneca

Opportunities to Present

Flash presentation and poster sessions will enable delegates to present their own research, to illustrate the practical formulation problems they face and to seek potential collaborators with similar interests. We encourage all participants to present in the 'flash session' using a three minute slot to present two slides about yourself and your area of research

Facilitated Discussion Sessions

Intensive facilitated discussion sessions will enable the community to share ideas and define gaps in process understanding where progress needs to be made.

These vibrant sessions are the core of Directed Assembly meetings, challenging participants to identify the most relevant problems to be tackled, formulate potential routes to solving these and discussing potential approaches for delivery of such solutions. The topics are tackled by posing a series of “How to” or “How can we” questions, and are facilitated by academic and industrial experts in the field.

These discussions will be captured for feedback to research funders and to those in the community looking to develop future work programmes.

Breakout 1: Using computational fluid dynamics ‘in real life’ processes

“How to” topics to include: using CFD for understanding critical transformations in complex fluids; Using CFD to best effect in everyday processing situations by practitioners rather than specialists, and without access to supercomputing; using virtual simulation in scale-up or scale-down processes, or for developing alternate equipment design.

Breakout 2: Understanding and controlling structured fluids

“How to” topics to include: controlling hydration and dispersion of polymers into structured formulations; transformation theory of structured fluids and using this in designing process; relevance of stability of fluids in processing environments.

Breakout 3: Understanding surface chemistry for product control

“How to” topics to include: controlling surface chemistry; effect of particle size distribution and influencing final product attributes including appearance; stability interactions in processes; surface coating of particles & predictive modelling of particles.

Breakout 4: Designing particles with smart structure: the bridge from process and formulation to product

“How to” topics to include: increasing understanding of product structure at different scales; using solid particles with smart structures to drive innovation; developing incompatible chemistry, providing easy separation processes from fluid streams, controlling release of active ingredients and controlling reactive sites in confined spaces; bringing together expertise across disciplines to achieve potential for understanding, designing and characterising such smart particles for processing.

Call for Posters: Attendees are invited to present posters on any appropriate aspect of their research or the practical industrial challenges faced. Please send your title to Deborah Demathieu, d.demathieu@bath.ac.uk

Registration: Registration is necessary, but free to participants and will include refreshments on both days and conference dinner for delegates staying overnight. To register for the event would:

- external delegates please register through this link <http://bit.ly/1zYVDnZ>
- if you have any questions about the registration process, please contact the Network meeting coordinator, Deborah Demathieu d.demathieu@bath.ac.uk.
- P&G staff please contact Laura Douglas douglas.l.6@pg.com

Please register by 10th October to ensure your place.

Support for Early Career Researchers

We have a limited number of bursaries available for Early Career Researcher members of the Network to cover up to £50 to help with travel and accommodation – this can be requested on registration. A poster prize will also be awarded for the best poster from an ECR.

Venue and transport: the symposium will take place at P&G's Brooklands site:

P&G Brooklands General Offices, The Heights, Weybridge, Surrey, KT13 0XP

The meeting starts with registration at 10am on 20th October and closes after lunch at 13:30 on 21st October. A full agenda will be circulated closer to the event.

For those arriving by car, parking will be available at P&G. Cars can be left overnight for those attending both days. Please let us know when you register if you will be bringing your car.

For those arriving by train, the Brooklands site is around 1.5 miles from Weybridge station where taxis or buses are available.

Accommodation and Conference Dinner: The conference dinner will be held at the Best Western Ship Hotel, Weybridge, KT13 8BQ, starting at 7pm. Network members registering through the conference website will be provided with dinner.

A shuttle taxi service will be arranged for those needing to travel between the Brooklands site and the hotel.

B&B accommodation can be booked with the hotel at discounted rates for this meeting from £112, please call them directly on 01932 848364 and quote code BU20/10. Budget accommodation is also available nearby

at the Walton-on-Thames Travelodge www.travelodge.co.uk/hotels/488/Walton-On-Thames-hotel

or at the Innkeeper's Lodge in Weybridge
www.innkeeperslodge.com/weybridge