

Modelling and Experiments in Drug Delivery Systems – report for MI-NET

The above titled workshop was held from 3-5th September 2018 at University of Glasgow, UK.

Full details on the workshop can be found at the website [here](#). The programme may be downloaded from [here](#). The book of abstracts is available on request.

Summary

Over 50 delegates covering modellers, experimentalists, industrialists and clinicians attended the event which featured an industry problem solving session. David Prime from GlaxoSmithKline presented a problem on drug delivery to the lung, while Prof Anthony Chalmers presented a clinical problem on drug delivery to brain tumours. Keynote speakers included David Saylor from the US Food and Drug Administration (FDA), Prof Paolo Netti from University of Naples Federico II and Prof Keith Oldroyd from the Golden Jubilee Hospital in Glasgow. In addition, over 30 MEDDS Abstracts were accepted and presented in oral and poster formats.



Outcomes and plans for future activities

Many new collaborations have been formed and there are ongoing discussions in relation to taking the industry problems forward.

We have also come up with several ideas for future activities:

- a) The creation of a textbook which could be used as a teaching material, broadly in the area of biofluid mechanics and mass transport (in the context of implantable devices and drug delivery systems)
(Actions: gather list of present courses taught by committee members and existing textbooks used as teaching resources, identify the unique selling point and motivate the need for the textbook in this area)
- b) The creation of a collaborative community supported by the FDA – see [here](#)
- c) The creation of a position paper (detailing challenges e.g. parameter estimation, quantifying uncertainties, in vitro to in vivo extrapolation, towards use of in silico methods (modelling and simulation) in FDA submissions etc.). The position paper may contain a ‘test problem’ which highlights several relevant challenges/issues.