

Cell manipulation science

Tuesday 18th March 2003 (Afternoon)

Processing and characterization of biological cells by oscillating fields

Chair Peter Fielden

Venue Lecture theatre B104 on the ground floor of the Faraday Tower

- 2.00 pm Common ground between oscillating field technologies. Jeremy Hawkes, UMIST.
2.20 pm Single cell manipulation. Kenji Yasuda, Tokyo University.
2.40pm Modelling of ultrasound standing waves. Martyn Hill, Southampton University.
3.00 pm Cell manipulation using ac electric fields, Gerard Marx, UMIST.
3.20 pm *Tea/coffee.*
3.40 pm An introduction to CFD and its role in fluid flow, Dave Emerson and Rob Barber, CLRC Daresbury Laboratory.
4.00 pm Cell adhesion in an ultrasonic standing wave trap, Despina Bazou, Cardiff University.
4.20 pm Modelling fluids on mesoscopic length scales. Julia Yeomans, Theoretical Physics, Oxford.
4.40 pm Leaky wave guides for cell detection in ultrasound fields, Nick Goddard, UMIST
5.00 pm *Close of open session.*
5.-7.00pm Management meeting
8.00 pm *Meeting meal IKAN (Thai Restaurant)*

Wednesday 19th March 2003 (Morning)

Cell manipulation applications

"What we would want if we could have it."

Chair Martyn Hill

Venue Room C2 in the Reynolds building.

- 8.45 am 'Ultrasonic standing waves mechanisms; an overview'. W.Terence Coakley, Cardiff University.
9.05 am Tissue engineering and ultrasound, Clare Selden, UCL.
9.25 am Contrast agent and erythrocyte behaviour in a 1.5 MHz ultrasound standing wave, Sanjay Khanna, Obst and Gynae, UWCM, Cardiff.
9.45 am *Tea/coffee.*
10.20 am Round table discussion. Directions for rapid progress. Chair W.Terence Coakley.
11.20 am Title to be announced (Rapid detection systems) Martin McDonnell, dstl.
11.40 Enhancement of BG spore capture on an immunosensor, using a flow-through ultrasonic standing wave system, Stacey Martin, Cardiff University.
12.00pm *Close.*