

Agenda for the UK Acoustofluidics SIG Meeting

<u>Time and Date:</u> 8:30 am - 4.30 pm, Friday 21st June 2024 <u>Location:</u> Roundhouse, Dyson Institute of Engineering and Technology (DIET), Malmesbury, UK <u>Web-link</u>

<u>Agenda</u>

08:30 – 09:00: Registration

09:00 – 09:10: Welcome and Safety

09:10 – 09:30: Prof Richard Fu, Northumbria University Title: Mission Impossible for Acoustofluidics!

09:30 – 09:50: Prof Julien Rebound, University of Glasgow Title: Acoustofluidic nanoLSPR Scanning Microscope

09:50 – 10:00: Xiaoyan Zhang, Cardiff University Title: Acoustofluidic Devices for Perturbation from Cell-Level to Tissue-Level

10:00 – 10:10: Luke Haworth, Northumbria University Title: Harnessing Active and Passive Strategies Nano-Innovation for Anti-Icing and De-Icing: Hydrophobic Nanoscale Surfaces and Surface Acoustic Waves

10:10 – 10:20: Hui Ling Ong, Northumbria University Title: Controlling Bacterial Growth and Inactivation Using Thin Film-Based Surface Acoustic Waves

10:20 – 10:30: Jikai Zhang, Northumbria University Title: Flexible Surface Acoustic Wave Technology for Accelerating Bacterial Cellulose Culture

10:30 – 10:50: Break

10:50 – 11:10: Prof James Kwan, University of Oxford Title: Solid Cavitation Nuclei for Ultrasound Enhanced Drug Delivery

11:10 – 11:30: Dr Baixin Chen, Heriot Watt University Title: Modeling of surface acoustic wave interactions on a sessile droplet by Lattice Boltzmann Method

11:30 – 11:50: Jeremy Hawkes, Acoustic Machines Ltd Title: Predicting the position of nodes in a fluid on a flat plate

11:50 – 12:10: Dr Caroline Pouya, University of Exeter

Title: Metamaterial Control of the Surface Acoustic Wave Streaming Jet

12:10 – 13:00: Lunch and Poster Presentation Sessions

13:00 – 13:40: (keynote talk) Prof Sandy Cochran, University of Glasgow Title: Exciting Times in Sonobeaming

13:40 – 14:00: Dr Despina Moschou, University of Bath Title: Lab on (In) a PCB

14:00 – 14:20: Prof Hywel Morgan, Southampton University Title: From Smartphones to Diagnostics

14:20 – 14:40: Prof Megan J Povey, University of Leeds Title: Acoustic and Rheological Determination of the Elastic Properties of Soft Materials

14:40-15:00: Break

15:00 – 15:20: Prof Jain Zhou, Hunan University, China Title: Flexible and high-frequency surface acoustic wave devices

15:20 – 15:40: Dr Fria Hossein, UCL Title: Advanced Ultrasound Techniques For Complex Multiphase Flows

15:40 – 16:00: Dr Ruchi Gupta, University of Birmingham Title: Acoustically Levitated Droplets for Chemical Reactions and Bioassays

16:00 – 16:10: Thank you and Goodbye.

Accommodation

Accommodation options near the Dyson campus include the Old Bell Hotel in Malmesbury and several hotels in Chippenham.

Travel and Maps

Here are some options for travellers to consider:

By Air: The nearest international airport to the Dyson Institute is Bristol Airport (BRS), approximately 30 miles away. From Bristol Airport, travellers can take a taxi or hire a car to reach the institute.

By Train: The Dyson Institute is approximately 12 miles from Chippenham Station and 9 miles from Kemble Station.

By Car: Travelers coming by car can use <u>this pinpoint on the map</u>. On arrival, please take the visiting route and park in the parking area. The roundhouse should be easily identifiable.

<u>Contact</u>

If you have any problems or queries, please get in touch with Dr Mehdi Biroun at <u>Mehdi.Biroun@Dysoninstitute.ac.uk</u>

or organising committee at: <u>Acoustofluidics2024@dysoninstitute.ac.uk</u>

For UK Fluid Network SIG Acoustofluidics <u>Richard.fu@northumrbia.ac.uk</u>