5th ANNUAL AEROSOL SCIENCE CDT SANDPIT EVENT

Thursday 7th July 2022
Please view our event [Code of Conduct here](#) to ensure all participants have an enjoyable and fulfilling experience during our Sandpit event.

<table>
<thead>
<tr>
<th>CONTENTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WELCOME</td>
<td>3-4</td>
</tr>
<tr>
<td>LOCATION</td>
<td>5</td>
</tr>
<tr>
<td>SANDPIT</td>
<td></td>
</tr>
<tr>
<td>Timetable</td>
<td>6</td>
</tr>
<tr>
<td>Guest Speaker</td>
<td>7</td>
</tr>
<tr>
<td>Breakout sessions</td>
<td>8</td>
</tr>
<tr>
<td>Covid Mitigations</td>
<td>9</td>
</tr>
<tr>
<td>Contact Us</td>
<td></td>
</tr>
</tbody>
</table>
We are gladly back to be holding our 5th Annual Aerosol Science CDT Sandpit 2022 in-person.

This will be a great opportunity to hear about the challenges you are currently facing in aerosol science and give our Partners the chance to connect with our team of Academics from our 7 Partner Institutions and discuss interdisciplinary and multi-institutional research to generate ideas for future projects as we recruit our 5th cohort of students in 2023.

Best regards

The CDT Core Team
Adam Boies is Head of the Energy Group within the Cambridge University Engineering Department and leads a group in Nanomaterials and Aerosol Engineering. His research focuses on characterizing the evolution, dynamics and impacts of gas-phase nanoparticles with an emphasis on energy applications, aerosol instrumentation and emissions. As Partnerships Chair of the Aerosol Science Doctoral Training Centre his focus has been to ensure that the CDT brings value to our industrial and government partners through continued education, research and training of the next generation of aerosol scientists. We aim to ensure that the Aerosol Science CDT serves as a nucleus for industrial, academic and industrial research sparking new collaborations and partnerships.

Find out about our Partners—exploring the (Inter!)National Skills Gap in Aerosol Science.

If you are interested in representing any of the thematic areas (Health, Technology, Atmospheric Aerosols, Measurement Techniques and Basic Aerosol Processes) at our Partnerships Board for year 2022-23 please contact our CDT Partnerships Manager to put your candidacy forward.

Please view our event Code of Conduct here to ensure all participants have an enjoyable and fulfilling experience during our Sandpit 2022 event.
LOCATION

CLIFTON HILL HOUSE
Lower Clifton Hill, Clifton, Bristol BS8 1BX
## Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:30</td>
<td>Welcome and Introduction</td>
<td>5 min</td>
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<tr>
<td>09:35</td>
<td>Guest Speaker Interview</td>
<td>20 min</td>
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<tr>
<td>09:55</td>
<td>Overview of breakout sessions</td>
<td>5 min</td>
</tr>
<tr>
<td>10:00</td>
<td>Session 1</td>
<td>70 min</td>
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<tr>
<td>11:10</td>
<td>Break</td>
<td>15 min</td>
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<tr>
<td>11:25</td>
<td>Session 2</td>
<td>70 min</td>
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<tr>
<td>12:35</td>
<td>Closing remarks</td>
<td>10 min</td>
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<tr>
<td>12:45</td>
<td>End of Sandpit - Lunch</td>
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</tbody>
</table>
We are delighted to welcome Prof Cath Noakes as our Guest Speaker for this year’s Sandpit. Cath Noakes is a chartered mechanical engineer, with a background in fluid dynamics. Her teaching and research expertise is in building physics and environmental engineering and she leads research into ventilation, indoor air quality and infection control in the built environment. Her internationally recognised group carry out experimental and modelling based studies, in particular to explore the transport of airborne pathogens, the influence of indoor airflows and effectiveness of engineering approaches to controlling airborne disease transmission. This include substantial research activity and policy advice relating to COVID-19 transmission.

During the COVID-19 pandemic she co-chaired the Environment and Modelling sub group for the UK Scientific Advisory Group for Emergencies (SAGE) and have contributed to multiple advisory groups and initiatives through IMechE, CIBSE, the Royal Academy of Engineering, the Academy of Medical Sciences, WHO, the NHS and several government departments. She was Faculty of Engineering Athena Swan Lead 2014-2017 and led a successful Silver Athena Swan submission covering all five schools in the Faculty. She was chair of the University Women at Leeds network 2013-2017. In December 2021, she was one of the guest lecturers in the Royal Institution Christmas Lectures and has received a number of awards and professional recognition.
At the beginning of each session, we will be hearing 2min pitches from Academics and Partners about the challenges they are facing in the current aerosol science landscape. This will then be fruit for discussions to find solutions and possible research projects for our 5th cohort of students who will start their training in October 2023. The breakdown of the challenges may change depending on submissions.

**SESSION 1 CHALLENGES**

1. Aerosols in our atmosphere
2. Therapeutics, vaccine and drug delivery systems
3. Transmission of disease
4. Toxicology and impacts on health
5. Advances in measurements and data processing

**SESSION 2 CHALLENGES**

1. Aerosols in our atmosphere
2. Therapeutics, vaccine and drug delivery systems
3. Aerosol modelling (incl. computational fluid dynamics)
4. Agriculture and aerosols
5. Aerosol technology to support the energy transition (including radioactive aerosols)

**Project submission deadline:**

**Monday 26th September 2022, 9 am.**
COVID MITIGATIONS

We are mindful of the continuing risks of transmission of Covid-19 and want to try and ensure we all have a safe and enjoyable conference. Although the venue has a capacity of 30 to 50 per room, we will limit attendance to 15 to 30 per room to avoid crowding. We do not require the wearing of a face covering but recognise that many of our attendees may choose to.

We will be:

- Monitoring ventilation and CO2 levels in the venue using CO2 detectors
- Using air purifiers to supplement good ventilation in the venue
- Where appropriate opening doors and windows to ensure ventilation throughout the day
SPECIAL THANKS

The Aerosol Science CDT team would like to thank our guest speaker for accepting the interview, our partners and partnerships board for their insights and continuous support over the course of the year, and finally, all of our Sandpit 2022 event attendees for participating. Thank you for taking the time and effort to travel to Bristol and attend our in-person events this year. We hope the Sandpit discussions will lead to interesting and exciting projects for our 5th cohort of PhD students starting in 2023!

EPSRC Centre for Doctoral Training in Aerosol Science

Key contacts:

◊ Prof Jonathan Reid - CDT Director
◊ Dr Rachael Miles - CDT Course Manager
◊ Kate Lucas - CDT Administration Manager
◊ Yaelle Hartley - CDT Partnerships Manager
◊ Sam Archard - CDT Administrator

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🌐 https://www.aerosol-cdt.ac.uk/