

Education Officer's Report. November 2021 – 2022

Training

The Fundamentals of Aerosol Science (FAS)

FAS 2021

A single day course, The Fundamentals of Aerosol Science, was hosted by the Society on 3rd November 2021. This course was delivered online via Zoom due to the Covid-19 pandemic. The content of the course was similar to previous years, with five lectures covering a broad range of topics in aerosol science.

Following attendee feedback from FAS 2020, the length of the day was shortened with the course moved to start earlier in the day to make it easier for those with caring responsibilities to attend the full programme. The programme for the day is given below.

9.30 – 9.45	Welcome and Introduction (Dr Rachael Miles – University of Bristol, Society Education Officer)
9.45 – 10.45	Basic Concepts (Professor Ian Colbeck – University of Essex)
10.45 – 10.55	Break
10.55 – 11.40	Environmental Sampling (Dr Simon Parker – DSTL)
11.40 – 12.25	Thermodynamics and Kinetics (Dr Bryan Bzdek – University of Bristol)
12.25 – 13.10	Lunch
13.10 – 13.55	Physicochemical Characterisation (Dr Jurgita Ovadnevaite – NUI Galway)
13.55 – 14.40	Optical Properties (Dr Katherine Manfred – University of York)
14.40 – 14.50	Wrap up (Dr Rachael Miles – University of Bristol, Society Education Officer)
14.50 – 15.30	Facilitated Networking Opportunity

FAS 2021 featured two new speakers – Dr Katherine Manfred (University of York) who took over the Optical Properties lecture from Dr Rachael Miles, and Dr Bryan Bzdek (University of Bristol) who took over the Thermodynamics and Kinetics lecture from Professor Ben Murray. There was no guest lecture this year in order to keep the online day as compact as possible.

There were 45 course attendees at peak, coming from a wide range of disciplinary backgrounds. The majority of those attending were postgraduate students or postdoctoral researchers/academics. All lectures were recorded and made available to view again by attendees for a period of one month after the day. Overall feedback on the utility of the day was strongly positive. A link to request access to the Aerosol Science CDT training materials was circulated after the course, with six people signing up.

FAS 2022/23

The next FAS day will be run online via Zoom in late January/early February 2023.

Awards

The Society currently offers six education related awards for its members:

Carers' Award

This is a new award introduced in 2021. It provides funding to support members of The Aerosol Society that might not otherwise be able to attend a research event or conference due to their personal responsibilities.

Up to November 2022, no applications have been received for the Carer's Award.

Doctoral Thesis Prize

The Aerosol Society awards this annual prize for an outstanding body of original aerosol-related research. This prize is kindly sponsored by Aerosol Science and Technology.

The 2021 winner of this award was Dr Alberto Sanchez Marroquin, from the University of Leeds.

No nominations were received for the award in 2022.

Early Career Scientist Travel Award

Awards in the form of bursaries of agreed amounts are available to early career scientists (including postdoctoral researchers) who are members of The Aerosol Society to attend conferences and present their work.

In 2021, one Travel Award application was received and funded to the value of £500.

In 2022, eight Travel Award applications have so far been received, with seven funded to the value of £500 each.

Undergraduate Research Bursary

This bursary scheme provides an opportunity for undergraduate students enrolled in a range of physical science, engineering or technology-based degree programmes to spend a minimum of six weeks working on an aerosol research project. Through support from the bursary scheme, an undergraduate will be able to gain experience in aerosol science research and encourage them to pursue a career in aerosol science. The bursary is for a total of £2079 – this is based on a real National Living Wage of £9.90 per hour, at 35 hours per week for six weeks. For further details, please refer to the website.

Three applications were received for this award in 2022, and two were funded:

- Saranpreet Singh and Dr Stephen Worrall at Aston University for their project 'Aerosol Assisted Chemical Vapour Deposition (AACVD) of 2D transition metal dichalcogenides for aqueous pollutant degradation'.
- Kira Kapustina and Dr Sri Hapsari Budisulistiorini at the University of York for their project 'Identifying nitroaromatic species in PM2.5 during the winter of 2022 in Manchester'.

Aerosol Science Career Development Grant

The Aerosol Society is passionate about supporting aspiring researchers in aerosol science. This flexible grant is intended to support new and emerging aerosol scientists by funding projects which contribute to a scientist's career development. The grant can support scientists from public, private, and university organisations.

In 2021, three applications were received, and one grant was awarded:

- Dr Ruairaidh Dobson, to investigate the adaptation of low-cost PM2.5 sensors for wearable use in low- and middle-income countries (value £4,768.60).

In 2022, five applications were received, and one grant was awarded:

- Dr Alison Bain, to undertake instrument development, experimental measurements and modelling studies to look at the effect of surfactants on aerosol surface tension (value £5,000).

Aerosol Society Doctoral Student Award

The Aerosol Society Doctoral Student Award is designed to recognise, reward, and encourage doctoral students who are engaged in aerosol science. The award is aimed at graduate students who are within the first two years of studying for a doctorate at a United Kingdom or Irish University (considering part time working).

In 2021, nine applications for the award were received and five awards were made, each for £1000:

- Ibrahim Alhindawi – National University of Ireland Galway
- Robert Alexander – University of Bristol
- Ellie Vokes – University of Bath
- Natalie Ratcliffe – University of Reading
- Victoria Legh-Land – University of Hertfordshire

In 2022, 13 applications for the award were received and are currently being reviewed.

If you would like to apply for any grants or awards, please refer to the Society website for the full terms and conditions.

Dr Rachael Miles

Education Officer