



Minutes of the Aerosol Society Annual General Meeting

Thursday 5th November 2020

The Meeting was held on-line via Remo during AASC2020

Present: 75 Society members attended the meeting.

Jonathan Reid (Society President) welcomed everyone to the 2020 Aerosol Society AGM.

Approval of the Minutes of the Last Annual General Meeting (7th November 2019). Jonathan Reid asked if any member had any questions regarding the minutes from last year – no questions.

The minutes (which are on the website) were approved as an accurate and true record of the 2019 AGM. **Jonathan Reid requested the minutes were formally adopted and asked who was willing to propose and second this.**

Proposed: Matthew Wright

Seconded: Adam Boies

Jonathan Reid confirmed there were no matters arising.

The President and General Secretary's Report to the 2020 AGM

Introduction

Welcome to the 2020 Annual General Meeting of the Aerosol Society. Ongoing social distancing restrictions have meant that we have been forced to hold our AGM, along with the Annual Aerosol Science Conference and indeed most of our other events this calendar year, via online platforms. We appreciate this is far from ideal, but we have attempted as best we can to continue our engagement with members throughout this challenging time, and hope that those able to attend our previous online events and today's meeting have a positive experience. We look forward to future events when Society members can again meet in person to exchange scientific knowledge and network. At the same time, the COVID-19 pandemic has placed aerosol science at the forefront of national and international science and healthcare, in policy, academia, industry and the public eye, like rarely before. This reinforces the need for a strong skills, expertise and knowledge base in the UK and Ireland in our multidisciplinary research field.

Drug Delivery to the Lungs 2019 and Focus Meetings

The 30th Anniversary edition of the Drug Delivery to the Lungs conference was held in December 2019 in Edinburgh. Once again, DDL proved to be an exciting and well-attended conference, with 875 delegates from 35 countries and 113 exhibitors. There were 40 speakers (40% female) and 82 posters presented. Unfortunately, like many other events in 2020, hosting the usual face-to-face DDL will not be possible. However, a series of "DDL2020 Christmas Lectures" is planned, including invited speakers, flash presentations and pre-recorded 'on-demand' talks, which will focus on recent developments in the field of inhalation therapy. This will not be a commercial event and the lectures will be accessible to all. However, the DDL committee have successfully secured considerable sponsorship despite the online nature of the event, an indicator of the importance of the conference to our industrial partners.

In January, we supported the Third Atmospheric Ice Nucleation Conference (Aerosol Society Focus Meeting 14) which was held in Boston, USA. In April we hosted Focus Meeting 15 on the subject of Bioaerosols, a follow-up to a

meeting the Society organised in 2017. Although originally intended to be hosted in Bristol, the national lockdown led to us moving the conference online, our first foray into online conferencing at very short notice. With over 60 virtual attendees and no major technological difficulties, we considered this a great success for discussion of a very timely topic under very trying circumstances!

More recently, our Focus Meeting 16, held as a series of seminars over 4 weeks, examined 'COVID-19 and related inhalational infections', with keynote talks from Linsey Marr (Virginia Tech, USA), Don Milton (University of Maryland, USA), Paul Dabisch (National Biodefense Analysis and Countermeasures Center, Maryland, USA) and Lisa Ng (NIST, USA). These keynote lectures were supported by 15 contributed presentations over the first three sessions (Quantifying and measuring the sources of respiratory infection, Factors influencing disease in humans and development of experimental models and Understanding exposure and transmission in the indoor environment). All of these presentations are now available to view on our website, an excellent resource. The final session was a panel Q&A discussion on the topic of Pharmaceutical and risk mitigation strategies. The sessions had an attendance of over 100 on average, reaching new audiences beyond our regular Society membership.

As always, we warmly welcome proposals or ideas for future Focus Meetings from our membership, and can provide facilities for online conferences to members interested in hosting.

2019 Annual Aerosol Science Conference

Our Annual Aerosol Science Conference in 2019 was held at the Edgbaston Park Hotel and Conference Centre, University of Birmingham on 7th November 2018. 71 delegates attended, a slight decrease from previous years. The plenary speakers were Prof. Nicola Carslaw (University of York) "*Indoor air chemistry as a source of indoor aerosol?*", Dr. Anni Määttänen (LATMOS/IPSL, France) "*Detecting, observing and explaining the mesospheric CO₂ clouds on Mars*" and Prof. Yannis Hardalupas (Imperial College London) "*Temporal and spatial characteristics of liquid atomisation and dispersion of aerosols and consequences for applications*". The programme included a range of contributed presentations and posters across a wide range of aerosol science topics, covering aerosol technology and fundamentals, combustion, synthesis, indoor air, atmospheric aerosol and health. It is our intention to give more prominence to our student and early career researchers and actively encourage award winners to step forward to showcase their work at the conference. As always we are very grateful to our exhibitors and sponsors, and we thank Air Monitors, Scielutions, Enviro Technology, TSI, Filter Integrity and Swisens for supporting this event. Feedback from this edition, our second year at the new venue, was largely positive and we will take on board suggestions where possible when we are able to return to the venue in person.

Fundamentals of Aerosol Science

The Fundamentals of Aerosol Science day was run prior to AASC 2019 at the University of Birmingham on 6th November 2019. Attendance at this event was comparable to previous years, with 41 attendees compared with 43 in 2018. However, most pleasing was the greatly increased uptake of our '2-day ticket' offer to students attending both the FAS and AASC, which went up from 5 in 2018 to 26 in 2019. Many of these attendees were from the first cohort of Aerosol Science CDT students. We hope the experience of both the lecture-based learning overviews provided by FAS and the more general research talks of the following day was valuable to all who attended both days. This event will move online in 2020 and we already have over 100 registrations for the FAS day.

Grants and Awards

During 2019 we continued our review of the Society's awards and grants, in order to enhance our support for students and early career researchers in aerosol science. We continue to award the *Doctoral Thesis Prize*, a *Photography Competition prize*, *Early Career Scientist Travel Awards* and *Undergraduate Research Bursary*, and have updated some of the terms and conditions of our other awards. In 2019, we took the decision to rename the CN Davies Award as the *Aerosol Society Doctoral Student Award*, and the Small Research Grant has become the *Career Development Grant*. Both have marginally different eligibility criteria, reflecting the career stages and development outcomes we are focusing on for each award. We have also updated the deadlines for some of these awards, so please visit the website for details of when and how to apply: <https://aerosol-soc.com/grants-and-awards/>

Committee News

At the previous AGM a number of existing and/or co-opted committee members were elected for 2-year terms (Adam Boies, Amanda Lea-Langton, James McGrath, Paul Williams, Dave Worton, Gary Pitcairn, Dan McCluskey and Rachael Miles) while Omar Usmani stepped down from the committee. Long-standing members (with more than 10 years service) Simon Parker and Ian Colbeck were elected separately for further 2-year terms. We are always looking for new committee members, so if you have an interest in shaping how the Society is run and would like to contribute to the work of the committee, or just want to find out more, please contact the Society Administrator Diane Foster at admin@aerosol-soc.com or get in touch any of the current committee.

Equality, Diversity and Inclusion

We are continuing to inform our policy on Equality, Diversity and Inclusion, seeking advice from colleagues and organisations with an outstanding track record in this important area. Our ED&I policy should ensure we perform our work in a way that enables individuals, the Society and the aerosol science community to flourish regardless of our individual backgrounds and experiences. Amanda Lea-Langton and James McGrath are responsible for developing a Society policy and we are looking to implement a support fund for carers to enable them to attend our events. Our website now states our Society values as:

The Aerosol Society recognises the importance of our diverse community and believe that to produce the best quality science we must encourage a proactive and inclusive approach to equality. This can be achieved by developing and retaining a diverse range of talented people to achieve their full potential free from discrimination. We acknowledge our role in engaging with the wider aerosol science community to develop a fair and friendly environment by promoting equality, diversity and inclusion for all, recognising that we come from varying backgrounds and experiences.

The EPSRC Centre for Doctoral Training in Aerosol Science

The second cohort of twenty students have now joined the Engineering and Physical Science Research Council (EPSRC) for a *Centre for Doctoral Training (CDT) in Aerosol Science*, hosted at the University of Bristol. The first cohort of 14 students have now entered the research phase of their PhDs, moving to their home institutions. Activity in the first year centred on creating a comprehensive training portal for future aerosol scientists, drawing together expertise across a wide range of disciplines. Materials are now available online across 16 core topics in aerosol science. Student members of the Society can register to access these training materials for free and can attend the training events, currently virtual. Approaching 200 aligned students and professionals are currently registered for access to the training portal from across the UK and Ireland, and with some registrations from wider afield. The Society will host the training portal as a legacy at the end of the CDT, making it widely available for student training and continuing professional development. Over the last 6 months, the CDT has promoted the weekly research webinars to Society members and many have benefited from this access. Typical attendance at these webinars is between 50 and 80, with speakers from around the globe.

Society membership update

Our current membership stands at 841 members, compared with 605 in October 2018 and 853 in October 2019. For ordinary membership, very pleasingly, we are seeing sustained membership numbers across the board, with 423 student members, 151 academic members, and 241 industry members. We now have 23 retired members and we hope these members are able to take advantage of reduced rates for our events. We are also grateful for the continued support of our Corporate members, many of whom also provide valued support for our events through sponsorship. As ever, we are very grateful for the support of our members, without whom we would not be able to do the work that we do. As we continue to grow as a Society, we would be very grateful for feedback on what we are doing well, and where we can improve. If you have any comments or suggestions, we would be delighted to hear them. Please get in touch with Diane at admin@aersol-soc.com or speak to a committee member.

Website and communications

We continue to send out monthly Newsletters via email. This remains an important vehicle for communicating our activities, reaching a growing audience of Society members. Although we maintain regular content and features curated by the Committee and our Administrator, we would be delighted to include contributions, large or small,

from members and strongly encourage you to consider submitting an article. If you have any comments on items in the Newsletter or on the Website, or would like to contribute a topical news article, showcase your group's research, or advertise a job, PhD vacancy or upcoming event, please submit these contributions to Diane Foster (admin@aersol-soc.com).

European Aerosol Assembly News

The *European Aerosol Conference 2020*, hosted by GaeF (Association for Aerosol Research) and originally planned to be held in Aachen, Germany, was moved online due to the pandemic. Despite the inherent difficulties with organising an international conference online at very short notice, the meeting was largely successful with over 600 delegates presenting over 500 talks and 'posters' in parallel discussion sessions as well as the usual 5 well-attended plenary lectures, supported by 19 sponsors. There was also an in-person, socially distanced, panel discussion on Aerosols and COVID-19 held in Aachen City Hall. At the end of EAC2020, the Aerosol Society took over as Officers of the EAA for a 2-year term, presently Jonathan Reid, the Society President, and Matthew Wright, the General Secretary, until those positions change within the Aerosol Society at this year's AGM.

European Aerosol Conference 2021

As reported at the close of EAC2020, the Organising Committee for EAC2021 have regretfully been forced to make the early decision to move the conference online. This is a great shame for those who had already invested considerable time and energy in organising what would have been a great celebration of aerosol science in Birmingham. However, the early move to an online conference mitigates further financial risk to the Society and provides an opportunity to reach out to aerosol scientists worldwide who may not have been able to attend in person. The organisers are working closely with the team who delivered the successful EAC2020 online and others to ensure the conference experience for delegates and sponsors is as smooth, engaging and productive as possible, while the scientific programme is also being developed and will as usual reflect the state-of-the-art in global aerosol science and technology.

Change in Officer Roles and Comments from the President

At the annual meeting this year, I will step down from my roles as President and member of the Society committee. I have thoroughly enjoyed my time on the committee (exactly 10 years!) and it's been exciting to see the aerosol science community in the UK and Ireland grow in number and significance over these years. As Matt moves on to act as Treasurer, Jacqui as Vice-president and Ben as President (expecting that they are all approved!), I wish them well and look forward to continuing to engage with such a vibrant, multidisciplinary and friendly community.

Jonathan Reid (President)

Matthew Wright (General Secretary)

Treasurer's Report to the 2020 AGM

This annual report covers the financial year from April 2019-March 2020 (labelled as Year 2019 in this statement). The Aerosol Society has made a net profit of £111,272 for the 2019 financial year, which compares to a profit of £125,104 in 2018. The finances for the Society in 2018 therefore indicate a significant surplus was obtained for the second year in a row.

Sales in 2019 continue the recent increase and were up approx. £127k at £740,263 from £613,981 in 2018. Significant growth in the attendance at DDL, in particular for exhibitors, as well as growth in attendance at Focus meetings has grown sales ahead of predictions. This year represented DDL's 30th Anniversary meeting and the cost of the event was higher than last year. All Aerosol Society events made a profit and attendance at non-DDL events continues to grow strongly year-on-year. The Society's finances continue to benefit immensely from the increasing success of DDL, which continues to provide resources to undertake activities which further the development of aerosol sciences in the United Kingdom and Ireland.

2018 was a strong financial year for the Society with a gross (trading) surplus of £290,937 from events. This year represented DDL's 30th Anniversary meeting and the cost of the event was higher than last year but a significant surplus was still achieved. The DDL Sub-Committee have had extraordinary success of attracting over 800-plus conference attendees, with significant growth in the number of top-level sponsors and exhibitors from the pharmaceutical industry.

The total value of awards in 2018 was £25,651 covering the Student Travel Bursaries and the Small Research Scheme, Doctoral Thesis Prize, Photography Competition. This value is approximately £10k larger than last year as a result of changes to submission deadlines, a restructuring of awards and an increase in number in line with our commitment to train the next generation of aerosol scientists. Website costs were higher than last year (£10,936). The administration costs in this period were higher in 2018 (£84,987 compared to £73,972) predominately a result of additional DDL30 expenses. The benefits of the extra administrator continued to be displayed in 2019, with increased delegate numbers at our meetings, increased numbers of corporate sponsors at events such as the AASC, and improved communication with members. Meeting expenses have maintained a steady level of expenditure, with Aerosol society meeting (£7,914) and DDL meetings (£16,509) covering member's travel and room hire.

As a result of the large profit generated in 2018, the overall net worth of the society, as of 31 March 2020 has increased to £523,688 from £412,416. However, the long-term cash reserves of the Society remain untouched (£162,153) which have grown with a small yield to be expected in the current economic climate. The Committee has therefore been able to accommodate year-on-year investment for society development, enhancing the appeal of the DDL conference, education and training entirely within the annual cash flow of the Society. The process of restructuring the banking structure of the society has begun with the DDL and Aerosol Society now having separate operating accounts. A proportion of the surplus will be placed in a new savings account, but this has been challenging due to lack of savings accounts available under current financial conditions.

The coming 12 month period will be challenging for the Aerosol Society and DDL as a result of the SARS-CoV2 infections and the effects of lockdown/restrictions. DDL31 has been replaced with Christmas Lectures but sponsorship is large and covers some of the costs associated with hire of conference facilities. The move to virtual events for the period 2020-2021 will represent a challenge in terms of income and cost of facilities. Work is on-going to mitigate these costs as much as possible.

Jacqueline Hamilton (Treasurer)

(Final accounts are available on the Aerosol website)

Education Officer's Report. November 2019 - 2020

Training.

The Fundamentals of Aerosol Science

A single day course, The Fundamentals of Aerosol Science, was hosted by the Society at the Edgbaston Park Hotel, University of Birmingham, in November 2019. The content of the course was similar to previous years, with seven lectures covering a broad range of topics in aerosol science from aerosol sampling from the environment to aerosols thermodynamics and kinetics. The final lecture, which has a more applied focus, was given by Dr Michelle Dawson from GlaxoSmithKline.

The course started at 10.30am, giving attendees the opportunity to arrive in Birmingham from many destinations after peak travel time, and concluded at 5.15pm.

There were 7 lectures each of 45 mins duration. The following lectures were presented:

- (1) Welcome and Introduction: Dr Janine Jordan – Defence Science and Technology Laboratory
- (2) Basic concepts: Professor Ian Colbeck – University of Essex
- (3) Environmental Sampling: Dr Simon Parker – Defence Science and Technology Laboratory
- (4) Optical Properties: Dr Rachael Miles – University of Bristol
- (5) Physicochemical Characterisation: Dr Jurgita Ovadnevaite, National University of Ireland Galway
- (6) Thermodynamics and Kinetics: Professor Benjamin J. Murray – University of Leeds
- (7) Guest speaker: Dr Michelle Dawson - GlaxoSmithKline

There were 55 attendees coming from a wide range of backgrounds, including industry, academic research, atmospheric science, drug delivery etc. and government labs.

Feedback was largely supportive, with most attendees responding positively to the balance of topics covered, the length of the day and the appropriateness of the location and venue.

FAS 2020.

Due to the Covid-19 pandemic, the committee decided that this year we would not be able to host the FAS in person at the University of Birmingham. Instead the FAS will be delivered via Zoom on the 3rd November 2020, the day before the Annual Aerosol Society Conference. In order to shorten the day (to prevent screen fatigue) the committee decided not to include the guest speaker for this year but hopefully this valuable part of the program will return for FAS 2021.

The planned structure for 2020 is:

- (1) Welcome and Introduction: Dr Janine Jordan – Defence Science and Technology Laboratory
- (2) Basic concepts: Professor Ian Colbeck – University of Essex
- (3) Environmental Sampling: Dr Simon Parker – Defence Science and Technology Laboratory
- (4) Optical Properties: Dr Rachael Miles – University of Bristol
- (5) Physicochemical Characterisation: Dr Jurgita Ovadnevaite, National University of Ireland Galway
- (6) Thermodynamics and Kinetics: Professor Benjamin J. Murray – University of Leeds

Awards.

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

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 Overseas Conferences and present their work. The following awards have been made Nov 2019 – Nov 2020:

No travel awards were awarded this year due to the Covid-19 pandemic.

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 provides £1200 in funding, based on £200 per week for six weeks and eligible supervisors are encouraged to apply. For further details, please refer to the website.

This year Dr Miriam Byrne and Patrick Griffin from the University of Galway, were awarded this bursary in order to conduct a project entitled – Evaluating indoor aerosol concentrations during the Covid-19 pandemic.

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.

The applications have been reviewed and this grant will be awarded shortly.

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).

The successful applicants were Dan Bryant, Dan Hardy, Alfie Mayhew and Amy Wilson.

Doctoral thesis prize.

The Aerosol Society awards this annual prize for an outstanding body of original aerosol-related research. The winner will be announced at the AASC 2020.

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

Dr Janine Jordan (Education Officer)

Proposed elections to the Committee (Matthew Wright)

Prior to voting for Committee Officers and Members, Matthew gave a huge thank you to Jonathan for all his work over the years and for bringing the Society into a new era. As the vote was going to take place via a virtual show of hands, Matthew asked that they re-elected all new Officers together rather than individually.

The proposals for Officers were:

President of the Society - Ben Murray

Vice President of the Society - Jacqui Hamilton

Treasurer – Matthew Wright

Education Officer – Rachael Miles

General Secretary – Marc Stettler

All of the above were proposed by Jonathan Reid and seconded by James McGrath.

The floor was asked to raise any objections. **No objections were raised so the motion was carried.**

Committee Members

Rachel Miles proposed that all ordinary Committee Members are re-elected.

Janine Jordan seconded the motion.

The floor was asked to raise any objections. **No objections were raised so the motion was carried.**

The floor was asked if there were any objections to Darragh Murnane remaining on the Committee for an additional year? (He has served on the Committee for 10 years)

There were no objections, so the motion was carried.

AOB

Jonathan wished Ben well in his future role as President of the Society

Ben Murray said he would like to echo Matt's comments and to thank Jonathan for all the work he has done for the Aerosol Society and Aerosol Science. His leadership of the Centre for Doctoral Training was defining the next generation of Aerosol Scientists.

In terms of Finances, Jonathan has left the Society in a good position and they are able to weather the present climate.