Short report EPSRC UK Acoustics Network (UKAN) Early Careers Special Interest Group

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Early Careers Special Interest Group (SIG-ECG)

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In this short report, we provide a summary of the outcomes of the Early Careers Special Interest Group (SIG-ECG) of the UK Acoustics Network to this date. We summarise the feedback from our largest action to this point, and outline future events.

Formation

This group was formed at the launch of UKAN in November, 2017. Drs. Simone Graetzer, Sam Jackson and Artur Gower were appointed as coordinators following that meeting. A committee was formed. A poll was held to appoint the lead coordinator, Simone Graetzer, who oversees the activities of the group and is the group representative on the UKAN steering committee.

Actions

From February to July 2018, we planned our first residential training event for thirty SIG-ECG members. We used polls to obtain information about what training our members wanted to receive. We then made enquiries about possible venues, and approached approximately 15 experts with a request to provide training.

In April, at Acoustics 2018 (Cardiff), we presented a poster describing the group's objectives and plans. We also held a meeting with the members present, which was attended by a representative of the Institute of Acoustics Young Members Group.

From the 6th to 9th August, we held our residential training event, UKAN Summer School 2018 (UKANSS18), at Gregynog Hall in Wales. This workshop was aimed predominantly at developing soft skills, which we and the UKAN directors consider to be important for the career progression of early career researchers, lecturers and practitioners, and the importance of which is often overlooked. The summer school covered skills in communication, networking, collaboration, entrepreneurship and teamwork, in addition to providing career development advice and information about funding opportunities and training in grant and paper writing. Training in signal processing and practical applications of frequency analysis was also provided as the technical aspect of the summer school. Presenters include Professors and Readers from the University of Sheffield, the University of Bristol, the University of Southampton, University College London, and London South Bank University, and representatives from Thales, Dyson, Ultrahaptics, Brüel & Kjær and the EPSRC. On the last day, we collected feedback from attendees. All attendees stated that the UKAN Summer School 2018 met or exceeded their expectations, with an average rating of 9 out of 10, where 1 was 'did not meet expectations' and 10 was 'exceeded expectations'. The presenters' expertise was rated as excellent on average (on a Likert scale with options 'unsatisfactory', 'satisfactory', 'good' and 'excellent').

The following comment expresses many of the sentiments that attendees shared: "Overall, I found the school extremely useful. The programme was well balanced with an excellent mixture of academic and industrial. The sessions on paper and grant writing were beneficial. All talks from representatives from industry and spin-outs were informative and very useful. The 2 hours with EPSRC were also helpful and insightful for those of us looking to submit grant proposals. Last but by no means least, the classes with Justine Jones were

fantastic. After initial reservations (lasting less than 5 minutes) I found the improvisation and presentation training a wonderful experience. My presentation preparation has been informed immeasurably. I have learned a lot about both presentational aspects and framing of message. I have made many network contacts that I will stay in touch with regarding future collaboration and ideas. I will recommend this school to everyone back in my Department/Group".

Other comments about presentations that were found to be most beneficial included the following:

"Dr Dorney – Great ideas on public engagement"

"Prof Croxford – Discussion of the commercialisation process, funding when your research grant fails, brief discussions on business plans."

"Dr Malkin – Ultrahaptics - Discussion on success in difficult circumstances and ideas to business."

"Tuesday morning's session (Writing papers and grants) was really good as it's refreshing to hear about collaboration and interaction with companies".

"The mock interviews exercise (amazing) and the honesty and career advice of speakers to support career planning."

Plans for action following the event included the following:

"Keep in touch with people who may have relevance to my work. I found one person who I can immediately work with"

"Getting more active on social media and public outreach"

"Revising my research proposal based on what I learned"

"Thinking about how to connect my research with practical uses"

"Trying to write some small grants"

"Writing a grant proposal and improving the quality of my papers"

"Promoting UKAN"

"Encouraging more postgraduate, undergraduate and senior academics in acoustics to join the Network."

Suggestions and comments included the following:

"Addition of longer breaks and more social activities" and "slightly less content per day". Requests for more sessions regarding theoretical acoustics, industrial speakers (how to integrate industry and research), outreach training/developing resources for engagement and outreach, interactive activities such as hands on experiments and more time for networking. Justin Jones's presentation skills workshops were much appreciated with most delegates citing them in the category of 'most beneficial' presentations. One delegate commented that they "helped to improve good co-working between participants".

Following the event, two attendees were invited to join the SIG-ECG committee. Both are practitioners. Hence we now have a more equal representation in our committee of academia and industry.

Future actions

We held a SIG strategy meeting towards the end of the school to collect feedback about the training that our members wanted in future. Two events are likely to be held by April 2019: an event on acoustical applications of machine learning and big data, and on programming,

and an event on Academia-Industry connections in Acoustics, e.g., moving from academia into industry, collaborating with industry, and industry and civil service research engagement. We have already started to approach experts to provide training. Our members are also keen for us to organise informal social events to encourage networking and maintain the connections that were established at the summer school.