

The UK Acoustics Network Newsletter December 2019

Dear Members

The Network membership does not stop growing (841 members today vs 783 members since we sent our November newsletter). We are on track to pass the 1000-member barrier in 2020.

December events

In December the UKAN organised/sponsored the following 3 main events: (i) Underwater Acoustics PhD Symposium Day on the 16th December (UA SIG); (ii) UKAN PhD Exchange Day at Sheffield on the 6th of December; Mat&Flow 2019 Workshop in Le Mans (France) on the 2nd of December.

UKAN PhD Exchange Day at Sheffield was a really good event which should be repeated in other labs across the UK. 22 PhDs were registered and got involved in great networking and light-hearted friendly ideas exchange. The event started off in the lab of the [Leonardo Tribology Centre](#) lab where the local PhDs put on some bench top demonstrations (see photo below)



There were plenty of opportunities for everybody to wander around chatting over the demos. Some of the visitors were new PhD students looking to see how things were done. The Tribology Group at Sheffield picked up some valuable information from these discussions some of which have resulted in a collaboration with Cambridge on some micro-sized piezo chips. In the afternoon there were light hearted and supportive presentations from each person. There was general consent that this event needs to be repeated again at other universities. The idea of a hackathon was discussed. Nicholas Watson at the University of Nottingham is planning to host a similar event in the recent future.

Underwater Acoustics PhD Symposium Day was proved to be very, very popular with 72 people registering to attend. In addition to Gary Heald and Duncan Williams, 7 other Dstl employees, drawn from Platform Systems Division Underwater Group and Physical Sciences Group, attended the Symposium. 33 of the attendees were either current PhD students or people who had recently completed their PhD. One of the recent students was Julian Deeks, of Dstl Underwater Group, who gave a fascinating presentation about his PhD research on detecting weak signals in highly impulsive noise. Julian graduated this year having completed an external PhD at ISVR, Southampton. 14 current or recent PhD students presented at the symposium from 9 different universities. These were drawn from as far North as Aberdeen and as far West as Exeter. The remainder of the attendees

were made up of academic supervisors and staff from companies involved in Sonar and Underwater Acoustics research. This included the Technical Director of Thales UK and the Head of Sonar at Atlas Elektronik UK. A number of other government laboratories were represented including AWE, NPL and UK Hydrographic Office. Below is a group photo taken on the day.



Upcoming events

In our previous newsletter we already mentioned that the year 2020 will be a very busy for acoustics - 2020 is the [International Year of Sound](#). There will be a number of workshops and conferences supported by the UKAN. These events are listed [here](#). Most important events are: (i) [Forum Acusticum in Lyon](#) (France), 20-24 April; and (ii) [IoA Acoustics 2020 in Chester](#) (UK), 14-15 May. Forum Acusticum will cover all topics of Acoustics, from physical acoustics to sound perception. Industrial applications of acoustics are also targeted. Scientific and technical sessions at Forum Acusticum will be announced at the beginning of 2020. The IoA Acoustics 2020 is an opportunity to present your work to members of the UK's Institute of Acoustics. We would like to remind you that UKAN Early

Careers Group in conjunction with the IoA Young Members Group are running a joint session at the IoA Acoustics 2020 Conference. The session follows on from the UKAN 2019 event on building effective collaborations between industry and academia. If you are interested get in touch with Sam Jackson at earlycareersgroup@acoustics.ac.uk. Your contributions would be very welcome. Funding is available to support attendance at these events and other related events. We also encourage our members to come forward with proposals for other networking, training and grant writing events for 2020. Cross-SIG events leading to collaborative grant bids are highly encouraged.

EPSRC UK Acoustics Network+ Application

In November we invited our academic members to put their names forward as co-investigators to work on the UK Acoustics Network+ application. In total 24 applications were received. It was a tough selection process through which 11 applicants were chosen. Their names are: Abigail Bristow (University of Surrey); Simon Chandler-Wilde (Reading University); Trevor Cox (Salford University); Stephen Dance (London South Bank University); Antonio Filippone (University of Manchester); Alan Hunter (Bath University); Philip Nelson (University of Southampton); Mark Plumley (University of Surrey); Christian Sumner (Nottingham Trent University); Olga Umnova (Salford University). These academics fit the UKAN+ requirements extremely well in terms of their geographical locations, subjects and skills.

This team will be led by Kirill Horoshenkov and Richard Craster to develop and submit to the EPSRC a full application for the new 4-year network grant plus (UKAN+) which will be built on the success of UKAN. The planned deadline for the submission is

the 29th of February 2020. The link to the PDF file with the outline for the structure of UKAN+ and its objectives [is here](#).

The success of this application depends strongly on the industry buy-in and on our ability to demonstrate that UKAN+ is capable of developing and growing stronger industry links and securing sustainable industry support in the future.

The preferred route is through the financial and in-kind contributions from our industry members which level can vary depending on the company size, demands for innovation and strategic priorities.

Another route to create new industry/academia links will be through the development of a nascent CDT cohort of PhD/EngD students co-funded by industrial and academic partners. This will require collaboration between an industry or public sector partner and academic institution to fully co-fund a PhD student (normally 50:50 @ around £10,000/per annum/per partner) and for UKAN+ to provide support and training through ECG activities, e.g. free access to UKAN+ events, bespoke mentoring, training and overseas visits. This is open to any organisation or company who wishes to engage with UKAN+ as well as existing members. This will address the skills gap identified by partner employers by attracting more students into acoustics; build and support a cohort; build and strengthen industry links and build a brand around UKAN+ for future Centre for Doctoral Training.

We would like to ask our academic members to check with their home institution if it would be willing to co-fund a PhD provided there is matching level of support from the right industry partner. We would also like to ask any interested non-academic members who are in the position to provide any level of support for the UKAN+ (financial, in-kind or

organisational) to get in touch with us on before the 31st of January 2020 to discuss your involvement in UKAN+ (info@acoustics.ac.uk). Formal letters of support that can accompany the funding proposal would be particularly useful and we are happy to help our partners write letters of support.

We use this opportunity to wish a Merry Christmas and Happy New Year to you and your families. We would also like to use this opportunity to thank you for all good you have done for UKAN in 2019.



Yours sincerely,

Kirill Horoshenkov and Richard Craster

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