acoustics.ac.uk
THE UK ACOUSTICS NETWORK

The UK Acoustics Network Newsletter
September 2020

Dear UKAN Members

UKAN+ grant application

The EPSRC has written to us to confirm that the award value for the UKAN+ grant is £1.4M. We requested the start date for this grant to be the 15th of March 2021 so that it will run until the 14th of March 2025. One objective of UKAN+ is to set up a National Centre for Coordination of Acoustics Research (NCCAR) and to achieve full sustainability for the Network. A copy of the UKAN+ case for support can be found here. We invite your comments on these two points. More specifically, it is helpful to hear your ideas for possible terms of references which will govern the operation of the NCCAR and lead to a fully sustainable network. It is also of interest for us to understand better what our members may expect from the NCCAR in terms of guidance and support for their research, career progression, leadership development and advocacy. Do not hesitate to write to us at info@acoustics.ac.uk.

Events

The rest of this year is going to be busy with a range of UKAN online events. Keep an eye on our Events page. The Early Careers SIG is running a series of webinars over the next few months, organised by Dr. Simone Graetzer (University of Salford), who is the Lead for the Early Careers Group in the UKAN+ grant. Following a successful talk from Dr. James Armstrong (Imperial College London) on acoustic assembly of biomaterials and engineered tissues, in October, there will be talks on psychoacoustic methods informing novel aerial vehicle design from Dr. Antonio Torija Martinez (University of Salford) and the bioacoustics of deer mice from Dr. Nicholas Jourjine (Harvard). For more information check here. An interesting webinar on Valuing Soundscape is also organised by the Noise and Soundscape SIG to run on the 24th of November (click here). Add these dates to your diary to avoid missing these and other events.

Perception of Urban Soundscapes Questionnaire

Maria Luiza, a PhD student in the Acoustics Research Centre at the University of Salford, is conducting an evaluation study on how people perceive Urban Soundscapes and how these urban sounds affect their emotional states through online questionnaires. The experiment consists of the participant watching six 30-second video samples (360 degrees videos and spatial audio) from different places in Greater Manchester, UK. It starts with a basic consent form, some demographic questions, and specifications of the digital system to be used. Then, each video is followed by questions regarding the predominant sound source, four soundscape perceptual dimension types (Calm, Exciting, Chaotic, and Monotonous), and three emotional scales (SAM - Self Assessment Manikins - Valence, Arousal, and Dominance) are presented. The whole experiment should take around 10 to 20 min and can be done on a PC or with a smartphone. The questionnaire is anonymous and we encourage our members to support this work by getting in touch with Maria Luiza at: manchester.soundscape.experiment@gmail.com. Here is the short video with the research introduction.

https://www.youtube.com/watch?v=yz_5uIhUGCQ.

Filming virtual tours around acoustics labs

Our members may recall several lab exchange events from last year, e.g. UK Acoustics Network PhD Exchange Day at Sheffield organised by Professor Rob Dwyer-Joyce (Sensors SIG) in December 2019. Because of the Covid-19 situation there are now restrictions on this kind of face-to-face events. However, we encourage our members to film virtual tours around their labs to make them available via the UKAN website. These can be done by the host University's in-house A/V teams or enthusiastic PhD/PDRAs who know how to film. Funding is available from UKAN to support this activity.

ESPRC Early Career Forum

The Engineering Theme at EPSRC are currently recruiting for their Early Career Forum, and we would like to bring this opportunity to the attention of the members of our Early Career Group SIG. Specifically, the EPSRC is seeking applications from Early Career industrialists, academics, and from individuals working in the third sector and government organisations to join their Engineering Early Career Forum. The Engineering theme aims to identify and tackle fundamental engineering research challenges with the potential for lasting academic, social, and economic benefit to the UK. These challenges are often inherently interdisciplinary, cutting both across EPSRC's portfolio and across the Research Councils more widely. Engaging with early career stakeholders from academia, industry and policymaking is a crucial part of achieving these aims, helping to set the direction for engineering research in the near future. The Engineering Early Career Forum acts as an informal advisory stream to the EPSRC. Members are advocates for EPSRC within the community and provide a broad perspective of the needs and views of the engineering community, offering opinion across the breadth of the Theme. The call can be found here, the closing date is the **19th October 2020** and we encourage our early career members to put forward their nominations to represent UKAN and acoustics as a research discipline.

New grants in acoustics

UKAN would like to congratulate Prof. Philip Joseph and his team on getting a new grant from the EPSRC entitled Quiet Aerofoil with Adaptive Porous Surfaces. Introducing porosity onto an aerofoil has been shown to have a significant influence on the boundary layer and provide significant reductions in its noise radiation. This is a multi-disciplinary research project aimed at understanding and exploiting the interactions between porous aerofoils and the boundary layers developing over them for the purpose of optimising noise reductions without compromising aerodynamic performance. The use of adaptive manufacturing technology will be investigated for providing the optimum porosity at different operating conditions. It is a £1.57M investment in aeroacoustics research in the UK which will be carried out at the Universities of Southampton, Brunel, City of London and Nottingham. Well done.

Do send your ideas/requests at info@acoustics.ac.uk.

Stay well.

Kirill Horoshenkov and Richard Craster