

Organised and Co-Sponsored by the IOA and UKAN Physical Acoustics Groups

Acoustic Materials and Metamaterials

Thursday 20 September 2018

The Millennium Suite, Arden Hotel, Solihull, Birmingham

Organised by the IOA Physical Acoustics Group, and co-sponsored by the recently established UK Acoustics Network; this meeting brings together many recognised specialists in acoustic materials and metamaterials from academia and industry. Delegates will be provided with a comprehensive programme of both theory and practice. If you utilise, specify or carry out research into materials or their acoustic properties, then this meeting is intended to help the delegate to understand the terminology used for absorbing, scattering and the diffusing of sound. Application of these methods can lead to the minimising of unwanted noise and his well-balanced programme includes; general methods, and presentations that will focus in on various applications and recent case studies.

Poster sessions will be conducted during break times, and we are delighted that Sonobex Ltd will be presenting a monetary prize for the best poster. Please submit the title of your poster to linda.canty@ioa.org.uk by 31 May 2018

08.30 Registration & Coffee

09.25 Welcome, *Mike Swanwick, Rolls-Royce plc*

09.30 Review of sound absorbing materials with nanopores, Dr Olga Umnova, *University of Salford*

10.00 A review of measurement methods of sound absorption properties 'in situ', Dr Aglaia Foteinou, *University of Wolverhampton*

10.30 Macro- and micro-structure designs for broadband metaporous absorbers, Prof Keith Attenborough, *Open University*

11.00 Coffee

11.30 Sound absorbing materials and their acoustical properties, Dr Haydar Aygun, *London South Bank University*

12.00 Acoustic materials Research - Gaps and future opportunities, Prof Kirill Horoshenkov, *Sheffield University*

12.30 Lunch

1.30 An introduction to acoustic metamaterials - A state of art review, Dr Daniel Elford, *Sonobex*

2.00 3D printing for acoustic performance, Dr Arun Arjunan, *University of Wolverhampton*

2.30 Tea

3.00 Sound propagation near grazing incidence over periodically-rough surfaces, Dave Berry, *Evora University, Portugal*

3.30 Acoustic metasurfaces for acoustic control, Prof Alastair Hibbins, *Exeter University*

4.00 Presentation to the Winner of the Poster Competition, Dr Daniel Elford, *Sonobex*

4:10 Close, *Mike Swanwick, Rolls-Royce plc*

