### **MONDAY 5 OCTOBER 2020**

## 12:45 Welcome, Stephen Turner, IOA President

## **ENVIRONMENTAL NOISE - ROOM 1**

## 13:00 Chair: Steve Mitchell & David Waddington

13:05 Implementing the Agent of Change principle in planning decisions

Toby Lewis, WSP

13:35 Noise policy developments in Wales

Martin McVay, Joanne Smith, Welsh Government

14:05 Synergies and conflicts between air quality and noise

Nigel Jones, Extrium; Martin McVay, Welsh Government; Richard Maggs, Bureau Veritas; Simon Shilton, Acustica; Steve Moorecroft, AQ Consultants

### 14:35 Break

14:45 Application of psychoacoustic metrics for the assessment of tonality of industrial sounds Julija Smyrnowa, The Environment Agency

15:15 Rethinking BS4142

William J Davies, David C Waddington, University of Salford

15:45 A review of the implications of local planning authorities' noise guidance in Scotland Ashley Leiper, Craig Cloy, EnviroCentre

16:15

16:45 Break and Posters

17:00 Virtual Happy Hour

18:00 Close

## **MONDAY 5 OCTOBER 2020**

# **NOISE AND VIBRATION ENGINEERING – ROOM 2**

## 13:00 Chair: Malcolm Smith & Emma Shanks

13:05 A review of noise exposure in UK call centres

Mat Tuora, Ian Rees, Adrian James Acoustics

13:35 Sound from domestic air source heat pumps: a case study

Matt Torjussen, noise.co.uk

14:05 Focusing of ground vibrations generated by trans-Rayleigh trains travelling with acceleration

Victor V Krylov, Loughborough University

## 14:35 Break

14:45 Attenuating lateral vibration sources

Adam Fox, Dan Emery, Mason UK

15:15 Sound Distribution for safe-listening in entertainment venues a review of existing policies and regulations Ken Liston, Nottingham Trent University; Ian M Wiggins, University of Nottingham

15:45 Construction: best practice for control of today's noise and HAV exposures Emma Shanks, HSE

16:15 Regulatory expectations verse noise and vibration realities

Chris Steel, HSE

16:45 Break and Posters

17:00 Virtual Happy Hour

18:00 Close

### **TUESDAY 6 OCTOBER 2020**

### **BUILDINGS ACOUSTICS - ROOM 1**

### 13:00 Chair: Roger Kelly & James Healey

- 13:05 Prediction of rain noise in buildings using empirical models for artificial and natural rainfall Carl Hopkins, Yicheng Yu, University of Liverpool
- 13:35 My thumb is on the bicycle pump considerations for the venting of air cavities below structurally isolated floating floors

Ben Burgess, M Harrison, Buro Happold

14:05 The accuracy of reverberation time prediction for general teaching spaces llaria Fichera, Cundall

#### 14:35 Break

- 14:45 Sound reduction performance of novel window designs for the control of internal noise levels and passive ventilation David Vinci, David Waddington, University of Salford
- 15:15 Ventilative cooling in noisy environments: practical options for the UK Nick Conlan, Jack Harvie-Clark, Apex Acoustics
- 15:45 The AVO Guide worked examples

Anthony Chilton, Max Fordham; David Trew, Bickerdike Allen; Nick Conlan, Jack Harvie-Clark, Apex Acoustics

16:15 Acoustic metamaterials: noise and overheating in residential buildings

Matthew Brown, Andrew Bullmore, Hoare Lea; M Bacarese-Hamilton, M Atherton, Brunel University; L Chalmers, D Elford, Sonobex

- 16:45 Break and Posters
- 17:00 Virtual Happy Hour
- 18:00 Close

## **TUESDAY 6 OCTOBER 2020**

## **PHYSICAL ACOUSTICS GROUP - ROOM 2**

### 13:00 Chair: Keith Attenborough

- 13:05 A study of the damaging effects of acoustic shock waves from a "controlled" explosion on nearly buildings Gordon Hunter, Alok Bhattacharyya, Kingston University
- 13:35 A review of acoustic space filling curve metamaterials for jet engine inlets Jennifer Glover, Daniel O'Boy, Loughborough University
- 14:05 Modelling of nonlinear dampers under low-amplitude vibration Sifa Gul Demiryurek, Anton Krynkin, Jem Rongong, University of Sheffield

### 14:35 Break

- 14:45 Approximation of impedance in serial arrays of coupled Helmholtz resonators Alex Dell, Anton Krynkin, University of Sheffield
- 15:15 An acoustic metamaterial impedance matching layer for air coupled piezoelectric transducers: an analytical study Paul Daly, James F C Windmill, Joseph Jackson, University of Strathclyde
- 15:45 Practical applications for low frequency noise problems Karol Bugaj, Daniel P Elford, L Chalmers, R D Wilson, Sonobex

16:15

16:45 Break and Posters17:00 Virtual Happy Hour

18:00 Close

### **THURSDAY 8 OCTOBER 2020**

### **SOUNDSCAPES - ROOM 1**

### 13:00 Chair: Grant Waters & Peter Rogers

13:05 Soundwalks in industrial areas Julija Smyrnowa, Environment Agency

13:35 An exploratory review of soundscape descriptor modelling for soundscape assessment and design practice Yiying Hao, Paul Johnson, Richard Cope, Bureau Veritas

14:05 Noise mapping and soundscapes Peter Rogers, Sustainable Acoustics

#### 14:35 Break

14:45 Tools for data collection in Soundscape applications Frederik Gast, Andreas Herweg, HEAD acoustics.

15:15 Acoustic perception EvALuation of buildings – the APEAL method Jack Harvie-Clark, Rebecca Romeo Pitone, Apex Acoustics

15:45 Soundscaping and Environmental Impact Assessment Dani Fiumicelli, Temple Group

16:15 The Soundscape Indices (SSID) Protocol – A method for practical soundscape assessments in the city Andrew Mitchell, Tin Oberman, Francesco Aletta, Matteo Lionello, Jian Kang, UCL

16:45 Break

17:00 Virtual Happy Hour

18:00 Close

#### **THURSDAY 8 OCTOBER 2020**

# 13:00 POSTERS Q&A - ROOM 2 - Chair: Martin Lester

13:05 Evaluation of the effectiveness of tool timers for estimation of daily exposure time to hand-arm vibration Antonia Hawker, Chris Steel, Health & Safety Executive

13:15 Repeatability of the balloon pop sound source in a room Luis Gomez-Agustina, Pedro Vazquez-Barrera, London South Bank University

13:25 Modelling, designing and commissioning offices using ISO3382-3 Ben Southgate, Richard King, Sandy Brown

13:35 Design strategies for linear semi-open plan classrooms: case study on improving he acoustic environment in a modern primary school Shenzhi Su, CSP Acoustics

14:00 Break

13:45

## **EARLY CAREERS GROUP - ROOM 2**

# 14:35 Chair: Sam Jackson

Discussion

14:45 What does the consultancy industry need from academia? A soundscape and planning perspective Ashley Leiper, EnviroCentre

15:15 What does the R&D Industry need from academia? Andrew Mathieson, Thales

15:45 Career routes from academia into consultancy Joseph Allen, RBA Acoustics

16:15 Career routes from academia into consultancy Nikhil Banda, Seiche

16:45 Break 17:00 Virtual Happy Hour

18:00 Early Careers Group Social and Quiz

### **FRIDAY 9 OCTOBER 2020**

## **SPEECH, HEARING AND BIOACOUSTICS - ROOM 1**

# 13:00 Chair: Gordon Hunter & Haydar Aygun

13:05 Acoustic intervention in a dementia clinic in Denmark

Andrea Harman, Saint-Gobain Ecophon

13:35 Acoustic characterisation of inhalation and exhalation Hector E Romero, Ning Ma, Guy J Brown, University of Sheffield

14:05 Sound exposure of staff at a conservatoire

Stephen Dance, Doug Shearer, London South Bank University; Georgia Zepidou, AECOM

#### 14:35 Break

14:45 Can statistical language models be used to distinguish between different genres of news? Gordon Hunter & Sabine Dreibe, Kingston University

15:15 Development of auscultation smartphone app: an investigation into the feasibility of replicating the mechanical auscultation procedure on a smartphone app

Nicholas Brown, Haydar Aygun, London South Bank University

15:45

16:15

16:45 Break

17:00 Virtual Happy Hour

18:00 Close

## FRIDAY 9 OCTOBER 2020

## **FUTURE OF ROAD AND RAIL MODELLING - ROOM 2**

# 13:00 Chair: Hilary Notley & Matthew Muirhead

13:05. Design manuals for roads and bridges: an introduction to LA111 noise and vibration lan Holmes, Highways England

13:35 Noise modelling – case for change Simon Shilton, Acustica

14:05 Data requirements and opportunities Nigel Jones, Extrium

# 14:35 Break

14:45 Rail noise modelling – current and future needs Stephen Turner, ST Acoustics

15:15 Road traffic noise modelling – current and future needs Matthew Muirhead, AECOM

15:45 Quality framework, propagation and future aspirations Simon Shilton, Acustica

16:15

16:45 Break and Posters17:00 Virtual Happy Hour

18:00 Close