

REPRODUCED SOUND 2023

Audio accessibility – the ingredients of success

14-16 November 2023

The Bristol Hotel, Princes Street, Bristol

Organised by the Electroacoustics Group of the Institute of Acoustics in collaboration with ABTT, AES, APRS & ISCVE

TUESDAY 14 NOVEMBER 2023

2000 AUDIOSCENIC Workshop

The workshop will begin with an introduction, then delegates will be able to book to attend the two one-to-one demonstrations. Light refreshments will be available in the bar area.



3D audio experts Audioscenic will bring two devices powered by their user adaptive spatial audio technology to Reproduced Sound 2023: A Razer Leviathan V2 Pro soundbar and a laptop integrated with their technology.

The Audioscenic team will be present on Tuesday evening giving conference goers an opportunity to listen to the latest implementation of their technology.

AUDIOSCENIC

WEDNESDAY 15 NOVEMBER 2023

0800 Registration and refreshments

0900 Welcome, EAG Chairman, Ludovico Ausiello

0915 AWARDS

Peter Barnett Memorial Award

Angelo Farina, University of Parma, Italy
(Professor Farina won't attend but, in absentia, a summary of Professor Farina's work will be given by the Chair)

0945 Presentation of HonFIOA by the President to Jamie Angus-Whiteoak

1000 A life electroacoustic: From Altec to Array Loudspeakers and AI; A time of change

Jamie Angus-Whiteoak, Consultant

1030 Refreshments

Session 1 - Live sound/venues, Chair: Glenn Leembruggen

1100 Inaudibility criteria and alternative methods for controlling music noise levels from late night entertainment

James Gardner, JG Acoustics, UK; Gareth Hance, Electric Star, UK; Adam Hill, University of Derby, UK

1130 The effect of purported acoustically transparent materials on sound propagation

Zsombor Szoke, Jon Burton, Mark Dring, Adam Hill, University of Derby, UK

1200 Towards a subjective quantification of noise annoyance due to outdoor events

Charbel Hourani, Adam Hill, University of Derby

1230 Electroacoustic Group AGM

1300 Lunch

Session 2 - Measurement, Chair: Bob Walker

1400 Extending the acoustics centre concept to directional loudspeakers

Jonathan Hargreaves, Acoustics Research Centre, University of Salford

1430 Variable bracing patterns to tune soundboard and membrane speakers

Ludovico Ausiello, Portsmouth University

1500 The Icosa project - An improved omnidirectional sound source for room acoustic testing without the strong lobing of "dodec" loudspeakers

David Gilfillan, ICE Design, Australia; Adam Hill, University of Derby; Glenn Leembruggen, Acoustic Directions, Australia

1530 Refreshments

Session 3 - Transducers 1, Chair: Ludovico Ausiello

1600 Adventures in high intensity acoustic testing: a loudspeaker system for small-scale tests

Jonathan Hargreaves, University of Salford; James Hipperson, Funktion One Research; D Wong-McSweeney, N O'Doherty, University of Salford

1630 An investigation into the effect of sweat and moisture on the performance of in-ear monitors

Adam Hill, Ross Gilmour, Jon Burton, University of Derby, UK

1700 The advancement of ceiling array technology exploring the challenges of creating a microphone array with integrated loudspeaker

Matthew Fisher, John Ellis, Shure UK; Matthew Koschak, Shure, USA

1730 Close

1830 Conference Reception and Dinner

MUD DOCK CAFÉ, The Grove, Bristol (walking distance from The Bristol Hotel)
An iconic café set in an old harbourside building



THURSDAY 16 NOVEMBER 2023

0800 Registration and refreshments

Session 4 - Speech Intelligibility, Chair: Paul Malpas

0930 Speech metrics in reverberant environments

Hugh Hopper, Consultant

1000 Investigations into problems with sound quality during video conferences in corporate meeting rooms

Glenn Leembruggen, Mark Hanson, Camille Hanrahan-Tan, Mark Thompson, Acoustic Directions, Australia

1030 Refreshments

Session 5 - Signal Processing, Chair: Ludovico Ausiello

1100 Using sparse sampling to reduce aliasing in array loudspeakers

Jamie Angus-Whiteoak, Consultant

1130 Objective measurement for evaluation of haptic audio signals and transducers

Stephen Oxnard, Laurence Hobden, Ethan Stanhope, Christian Cotton, Fraser Todd, Meridian Audio

Session 6 - Transducers 2, Chair: Adam Hill

1200 Correcting aberrations in audio systems with acoustic metamaterials

Letizia Chisari, Gianluca Memoli, Metasonix & University of Sussex; Andy Philippides, University of Sussex

1230 Active unimorph controlled diaphragm - A novel method for modal control of loudspeaker transducer diaphragms

Kelvin F Griffiths, Electroacoustic Design

1300 Lunch

Session 7 - Modelling, Chair: Andy Horsburgh

1400 The use of simulation to determine optimal voltage correction for a unimorph transducer

Patrick C Macey, PACSYS; Kelvin F Griffiths, Electroacoustic Design

1430 Experimental and theoretical investigation of an unusually shaped horn

Joerg Panzer, R&D Team Software Development, Germany; Patrick Macey, PACSYS

1500 Refreshments

1530 Diversity presentation and discussion

Mark Bailey

Session 8 - Hearing Impairment, Chair: Dan Pope

1600 Hearing health for audio professionals

Ian Wiggins, University of Nottingham; Rob Shepherd, Consultant Clinical Audiologist

1630 Discussion on Hearing Impairment

1700 Close