Monday 5th September  
ROOM 1  
09.45  Welcome – Martin Lester, Conference Chairman

SESSION 1 – BUILDING ACOUSTICS  
Chair. Roger Kelly

10.00  Designing and commissioning schools to meet Building Bulletin 93:2014 requirements  
Jack Harvie-Clark, A Cooke, B Paxton, F Larrieu, Apex Acoustics

10.30  Making sense of the acoustic performance of flanking paths for curtain walling systems  
Nick Conlan, J Harvie-Clark, Apex Acoustics

11.00  Acoustics and wellbeing in workplace design  
Andrew J Parkin, Cundall

11.30   Refreshments, Exhibition and Poster Session

12.00  RAYLEIGH MEDAL LECTURE 2016:  
Underground Acoustics  
Rupert Thornely-Taylor, Rupert Taylor

13.00  Geoff Kerry Distinguished Service Medal  
Geoff Kerry

13.15  Lunch

SESSION 2 – BUILDING ACOUSTICS  
Chair. Andrew Parkin

14.00  Feasibility study on using acoustic camera for acoustic imaging to detect air leaks in a structure  
Nikhilesh Patil, D Wong Mc-Sweeney, M Benjaber, R Fitton, A Elliott, D Waddington, University of Salford

14.30  Noise, ventilation and overheating in residential developments  
Anthony Chilton, J Healey, M Hyden, J Harvie-Clark, D Trew, N Conlan,  
ANC, Acoustics, Ventilation and Overheating Group

15.00  Active noise cooling vents for new homes  
Grant L Waters, B Jobling, Hoare Lea

15.30   Refreshments, Exhibition and Poster Session

SESSION 3 – BUILDING ACOUSTICS  
Chair. Adrian Popplewell

16.00  Quantifying noise exposure and natural ventilation performance in urban area  
Michael Barclay, University of Wales Trinity Saint David, S Sharples, University of Liverpool, J Kang, University of Sheffield

16.30  Standardising the testing and modelling methods of predicting the sound reduction through open windows  
Ze Nunes, C Jones, Mach Acoustics

17.00  Valuing the impact of fundamental design decisions in buildings: the case for noise and overheating  
Diana Sanchez, B Jobling, Hoare Lea

17.30  IOA Annual General Meeting – followed by refreshments
19.00  Reception
19.30  Conference and Awards Dinner
Monday 5th September

ROOM 2

SESSION 1 – PHYSICAL ACOUSTICS
Chair. Mike Swanwick

10.00 Air-borne acoustic surface waves generated over a periodic rough surface
Alexander Stronach, I Bashir, S Taherzadeh, K Attenbrough, The Open University

10.30 Sound Propagation through forests and tree belts
Keith Attenborough, S Taherzadeh, The Open University

11.00 Acoustic propagation over periodic and quasi-periodic rough surfaces
David Berry, University of Lisbon, University of Evora, Portugal, S Taherzadeh, A Stronach, K Attenborough, The Open University

11.30 Refreshments, Exhibition and Poster Session

12.00 RAYLEIGH MEDAL LECTURE 2016: ROOM 1
Underground Acoustics
Rupert Thornely-Taylor, Rupert Taylor

13.00 Geoff Kerry Distinguished Service Medal
Geoff Kerry

13.15 Lunch

SESSION 2 – PHYSICAL ACOUSTICS
Chair. Mike Swanwick

14.00 Monitoring and analysis of acoustic emissions from knee joints
Ivan Vatolik, G Hunter, M Everington, A Augousti, Kingston University

14.30 Localised elastic waves in structures of complex geometry
Victor Krylov, Loughborough University

15.00 Analysis of a low frequency muffler based on the Acoustics Black Hole Effect
Neha Sharma, O Umnova, A Moorhouse, University of Salford

15.30 Refreshments, Exhibition and Poster Session

SESSION 3 – PHYSICAL ACOUSTICS
Chair. Mike Swanwick

16.00 Terahertz sound lasers (sasers): recent developments and applications
Caroline L Poyser, A V Akimov, W York, R P Campion, A J Kent, University of Nottingham

16.30 Virtual assemblies and their use in the prediction of vibro-acoustic responses
Joshua W R Meggitt, A S Elliott, A T Moorhouse, University of Salford

17.00 Perceptual evaluation of the BS4142:2014 penalty method for multiple sound characteristics
Chris Youdale, J Woodcock, D Waddington, University of Salford

ROOM 1

17.30 IOA Annual General Meeting – followed by refreshments
19.00 Reception
19.30 Conference and Awards Dinner
Tuesday 6th September

ROOM 1

SESSION 1 – ENVIRONMENTAL NOISE
Chair. Richard Perkins

09.00 Construction noise and vibration monitoring systems, past, present and future
David Nicholls, AECL

09.30 A case study: the Forth replacement crossing
Martin Butterfield, Arup, L Shackman, Transport Scotland

10.00 Experience and lessons learnt from large military infrastructure projects
Ian Hepplewhite, J Trow, Amec Foster Wheeler

10.30 Managing noise and vibration at Victoria Station upgrade
Phil McIlwain, Westminster City Council, T Whatling, Taylor Woodrow, C O’Connor, BAM Nuttall

11.00 Refreshments and Poster Session

SESSION 2 – ENVIRONMENTAL NOISE
Chair. David Waddington

11.30 A review of research into human response to the amplitude modulated component on wind turbine noise and development of a planning control method for implementation in the UK
Richard Perkins, M Lotinga, WSP | Parsons Brinckerhoff, B Berry, Berry Environmental, C Grimwood, CJG Environmental Management, S Stansfeld, Queen Mary University of London

12.00 A comparative study of single and dual-screen windshield design approaches for noise measurements in high wind environments
David P Robinson, Cirrus Research

12.30 The use of proxy measurements to determine wind farm noise compliance, what are the options, is there a need for further guidance?
James Mackay, M Coulon, J Baldwin, TNEI

13.00 The assessment of tranquillity and noise impact on areas of quiet character
Clive Bentley, Sharps Redmore

13.30 Lunch

SESSION 3 – MEASUREMENT AND INSTRUMENTATION

14.30 BS4142:2014 Measurement Planning and Practice Workshop
Mark Dowie, Bruel & Kjaer UK, Ian Matthews, Red Twin

Practical guide to planning and performing measurements for BS:4142 with an overview of the acoustic correction features, calculation, assessment and reporting process. This will be followed by a case study with the opportunity for delegates to work in groups to perform calculations and discuss their conclusions.

16.30 Refreshments and Close
SESSION 1 – NOISE AND VIBRATION ENGINEERING
Chair. Russell Tipping

09.00 Numerical modelling case studies in acoustics, dynamics and vibroacoustics
Malcolm Smith, ISVR, University of Southampton

09.30 Using statistical energy analysis to predict sound insulation in buildings
Carl Hopkins, University of Liverpool

10.00 Assessing noise and vibration in buildings using finite element modelling: understanding the factors influencing predictions
Christos Karatsovis, D Lurcock, ISVR, University of Southampton

10.30 The application of higher-order adaptive finite elements in vibro-acoustic analyses,
Gaurav Kumar, K Vansant, Siemens

11.00 Refreshments and Poster Session

SESSION 2 – NOISE AND VIBRATION ENGINEERING
Chair. Malcolm Smith

11.30 Common pitfalls in computer modelling of room acoustics
Ian Rees, Adrian James Acoustics

12.00 A novel point source method for inverse scattering in waveguides
Rebecca K Haunton, S N Chandler-Wilde, University of Reading

12.30 Application of numerical model methods to the design of silencers
Erika Quaranta, S Roberts, ISVR, University of Southampton

13.00 Modelling the propagation of rotor stator interaction noise
Tom Richards, Dyson

13.30 Lunch

SESSION 3 – MUSICAL ACOUSTICS GROUP
Chair. Michael Wright

14.30 A preliminary investigation into emotional responses to emulated violins using electroencephalography
Mohammed Abdulaal, T Lloyd, P Gaydecki, University of Manchester

14.50 From light to sound: signal modality translation
Jiaxuan Wang, P Gaydecki, University of Manchester

15.10 Intelligent loudspeaker design with infinite impulse response to finite impulse response filter translation
Sheheera Ismail, P Gaydecki, University of Manchester

15.30 The Stradivarius question: a preliminary insight into virtual emulation and listener evaluation
Thomas Lloyd, S Ismail, P Gaydecki, University of Manchester, H Johannsson, Johannsson Violins, Iceland

15.50 Experiments with choirs – practice and pitfalls
Richard Seaton, D Sharp, A Jones, D N Pim, The Open University

16.10 A measurement method for rating the daytime noise impact of church bells
Tim Green, TGS acoustics, J Pritchard, University of Derby

16.30 Refreshments and Close
POSTERS

A comparison of measured reverberation times in furnished and unfurnished classrooms
Nicholas Barber, Tom Lucas, AECOM

Fitness noise control products – should we be measuring system or material properties
Paul Gartenburg, Pliteq, Canada, T Nash, Charles M. Salter Associates, USA

Public exposure to very high frequency sound and ultrasound: do we know the risks?
Beth Paxton, Jack Harvie-Clark, Apex Acoustics,

Nonwovens next top model?
Alistair I Hurrell, University of Sheffield, Michail T Pelegrinis, John Cotton Group

Relationship between the temperature and frequency dependence of the damping properties of natural rubber with different epoxidation level
Mahmud Iskander Seth A Rahim, University of Sheffield, Paolo Bonfiglio, Universita degli Studi di Ferrara, Italy

The assessment of noise from construction of offshore renewable energy infrastructure
Jonathan Sims, Hoare Lea Acoustics

Calculating façade sound insulation for different incident spectra: a new method to determine the optimum single number rating
Weigang Wei, Jack Harvie-Clark, Apex Acoustics

A quick method to measure the residual strain on membranes
Leiqing Zhou, M Pearce, R Prince, G Colston, O Trushkevych, M Myroniv, V A Shah, D R Leadley, R S Edwards, University of Warwick