The IOA 2023 Medals and Awards presentations

The IOA annually honours people whose contributions to acoustics have been particularly noteworthy.

The medals and awards programme has evolved over the years and is now quite wide ranging in its acknowledgment of academic achievement, practical engineering applications and innovations, student achievement and contributions to the Institute and to the world of science and technology.

Each year the IOA announces its prestigious award winners following the Institute's Council meeting towards the end of March, and ahead of the annual conference. This year, the awards were presented at a lunch held at the Oval, Kennington, in April and gave us the opportunity to catch up on all the awards we were unable to present during the pandemic.

AWARD WINNERS

Best IOA Diploma Performance

2019 Irene Rodriquez, Akkodis (formerly at Allegro Acoustics)

2020 Robert Jinks, Array Technologies

2021 Frances Taylor, Coventry City Council

2022 Daniel Robinson, Robin Mackenzie Partnership

The IOA Young Persons Award for Innovation in Acoustical Engineering (sponsored by Cirrus)

2021 Dr Eric Ballestero, University of Le Mans, France

The Award for Distinguished Services to the Institute

2020 Hilary Notley, Defra

2023 Chris Barlow, KP Acoustics Research

2023 Jim Griffiths, Vanguardia

2023 Robin Woodward, Hayes McKenzie Partnership

The Award for Promoting Acoustics to the Public

2022 Dr Matt Muirhead, AECOM

The Peter Lord Award

2023 Dominic McSweeney, Brimelow McSweeney Architects

Brian Scrivener, Sound Advice

Nick Swainson, Cahill Design Consultants for the Dundonald Church project

The Dr Bob Peters Education Award

2022 Professor Keith Attenborough, IOA and Open University

The IOA Engineering Medal

2022 Dick Bowdler, noise consultant

The Tyndall Medal

2023 Dr Joshua Meggitt, University of Salford

The Rayleigh Medal

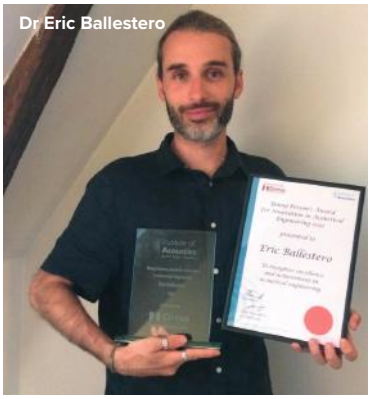
2022 Professor Jian Kang, University College London

2023 Professor Stephen Stansfeld, Queen Mary, University of London

The IOA Young Persons Award for Innovation in Acoustical Engineering (sponsored by Cirrus)

The IOA Young Persons Award for Innovation in Acoustical Engineering is designed to recognise excellence and achievement in acoustical engineering among those who are aged under 35 or early on in their careers in industry. It is also intended to increase awareness of the value of acoustic engineering and technology to the community at large.

Dr Eric Ballestero has been awarded the Institute of Acoustics Young Person's Award for Innovation in Acoustical Engineering 2021.


Dr Eric Ballestero

Dr Eric Ballestero citation:
In 2016 Eric studied on the IOA Diploma course under Dr Bob Peters. Bob decided Eric knew his stuff and encouraged him to join the Masters programme at London South Bank University. In 2018 Eric joined their PhD programme on a joint scholarship with the Royal Opera House (ROH).

The research undertaken, *To Reduce Sound Levels in the Pit* helped identify noise issues in the ROH orchestra pit and provided a technical solution. He designed the first acoustic metadiffuser, constructed prototypes and tested them to validate the simulation work. These diffusers were 20 times thinner than existing designs and therefore would actually fit within the confines of an orchestra pit. In 2021 he was awarded his doctorate.

This work led to three publications in leading scientific journals, all with collaborations other universities: University of Valencia, University of Le Mans and University of Edinburgh. Hence, Eric is very much a team player.

While undertaking his research Eric assisted with the Early Career Research-led Symposium for Acoustic Metamaterial conferences, and was the early career member on the UKAN Room Acoustics and Communication committee.

Eric is currently a postdoctoral research fellow at the University of Le Mans continuing his research in metamaterials and room acoustics.

The Institute of Acoustics is pleased to award Eric Ballestero with the IOA Young Person's Award for Innovation.

The Award for Distinguished Services to the Institute

The Award for Distinguished Services to the Institute was introduced so that the Institute could publicly acknowledge the debt owed to individual members who have provided sustained assistance over the years in some way with the running of the Institute.

Hilary Notley citation
Hilary Notley stepped down as Chair of the Meetings Committee at the end of 2019, a position she had held for seven years – one could say that Hilary outlasted three Prime Ministers, three Chancellors of the Exchequer and more Secretary of States for Environment than probably any other previous Chair of the Committee – the incumbent included.

Above: Hilary Notley receiving her Award for Distinguished Services to the Institute

Prior to taking up the role of Chair, Hilary had served the Committee as its Secretary and was the first of the Committee's Young Members Representatives all of which came after serving on the Committee as an ordinary member for several years.

Throughout Hilary's time on the Committee, she has made major contributions to the organisation of meetings and conferences on behalf of the Institute including ICBEN, Euronoise and lately, Inter-noise. Hilary was heavily involved in organising the flagship conference and dinner for the Institute's ruby anniversary in 2014 and worked with the office to make sure that the necessary insurances were in place for Leo Beranek to attend, aged 101, and give the after-dinner speech.

As Chair of the Committee, Hilary oversaw the implementation of the new meetings structure developed in 2014 and implemented until March 2020. P24

Under Hilary's guidance and direction, the 'meeting hubs' project was devised and implemented, and Hilary acted as the conduit between the Meetings, Publications and Education Committees in setting this up.

Hilary has been instrumental in coordinating the Groups and Branches strategy meeting which is usually scheduled every year and looks at coordinating the specialist technical meetings and Branch meetings for the year ensuing.

Hilary has provided the Committee and the Institute with the link to Government allowing the Committee to schedule meetings in response to key Government announcements.

In between her day job of acting as policy advisor to the UK Government and being Chair of Meetings Committee and not forgetting, as a parent, Hilary served as an elected member of Council until stepping down in 2019.

Not wanting to be away from the action for too long, Hilary was nominated for, and Council elected her to serve as Vice President for Groups and Branches in 2022 and the Committee look forward to working with Hilary in this role.

The Institute of Acoustics is therefore delighted to present Hilary Notley with the Award for Distinguished Service to the Institute.

Left:
Chris Barlow receives his Award for Distinguished Services to the Institute

Chris Barlow citation

Chris Barlow is Head of Research and Innovation at KP Acoustics Research Labs. He was previously Professor of Acoustics at Southampton Solent University and before that, recording engineer at Cloisters Records, responsible for classical music recording and production. His background, including the award of a doctorate, therefore has been in music and music technology and since then, his career has then been one of transition into acoustics.

His ongoing career in acoustics has included membership of the IOA and this award is in recognition of his significant contribution to two important areas – the education and training portfolio of the Institute and to the national and international profile of the Institute

In the first area, Chris is an active and energetic Chair of the IOA Education and Learning Working Group and of the Diploma Tutors and Examiners Sub-Committee. As such he has helped to formulate a way forward for the various options and hierarchy of course types including free and paid for CPD and has been an active and supportive Diploma tutor including being prepared to deliver Diploma teaching in the north west of England which has not had a Diploma Centre since Salford ceased to deliver. In 2022, he encouraged the development of online refresher courses which will be important for members, particularly the early career members. He is pioneering (at least the first) the new report writing courses for 2023.

In the second area, Chris has provided invaluable support and innovation in the development of a virtual national conference and of a hybrid international conference. This was at a time when the international pandemic was restricting and preventing meetings between groups of researchers, practitioners and policy makers. Acoustics 21 was originally planned to be the latest conference in the annual programme of the IOA. The pandemic prevented this conference going ahead and so it was replaced in 2022 with a virtual conference, but where contributors and attendees could come together through a hybrid hub format. Chris was a driver of the development of this format.

Chris's experience and expertise were therefore essential to the preparation for and organisation of Inter-noise 2022. He did this extremely competently through his official role of Technical Programme Co-Chair, but his additional input into the scheduling, accommodating and recording of the programme was a significant factor in the success of this conference. Of particular note were his inputs into:

- the hybrid format, which resulted in the attendance, in-person, of over 800 delegates, with an additional 300 delegates online;
- the programme of over 800 presentations required 15 parallel sessions over three days, with in-person and online presentations integrated into each session;
- the live-streamed presentations allowed online participants to view and ask questions as part of the follow-up to the presentations;
- all presentations were pre- or live recorded, and edited into an audio-visual archive, for use by delegates after the conference;
- he was also fully involved with the quality control of the abstracts and papers required to accompany the 800 plus presentations, and was extremely helpful in producing the conference proceedings; and
- his contribution to the young persons' component of the conference resulted in the highest number of early-career professionals and researchers (35% of total delegates) seen at an Inter-noise conference.

The hybrid format he was instrumental in developing was so successful that the international organising body, I-INCE, plan to use the same model for its future annual Inter-noise conferences.

The Inter-noise Conference Chair, Professor Barry Gibbs, is firmly of the opinion that without Chris's technical and organisational skills, Inter-noise 2022 in Glasgow could not have been as successful as it was. Indeed, it might have failed economically and reputationally.

The Institute of Acoustics is therefore delighted to present Chris Barlow with the Award for Distinguished Services to the Institute.

Jim is the face of the Vangardia and has been inspirational in leading many large scale, high profile projects. He has over 40 years' experience in all technical aspects related to sound, acoustics, noise and vibration, specialising in the field of stadia and arena design.

From his work at Live Aid in 1985, he has also pioneered the sound management at music events in stadia and large open-air festivals and was an expert witness at major infrastructure projects such as Heathrow Terminal 5, the Channel Tunnel Rail Link and Crossrail.

In addition to monitoring events such as those at Tottenham Hotspurs, Wembley Stadium, Hyde Park festivals and Glastonbury, he has been involved in the design of many facilitates both in the UK and abroad including the new Sydney Stadium and three FIFA world cup stadiums in Qatar.

Jim frequently shares his knowledge and has presented over 40 technical papers in the UK and overseas.

He is passionate about entertainment noise and was on the original Noise Council Working Party that published the Pop Code and is on the current working party responsible for preparing the new Code under the auspices of the Charted Institute of Environmental Health. He has also led three DEFRA and HSE research projects on entertainment noise.

Prior to forming Vanguardia, Jim was the Director of Acoustics at Travers Morgan and Capita Symonds for over 14 years.

Jim is a Fellow of the Institute of Acoustics and was awarded the Institute's Tyndall Medal for his work in acoustics and was presented with the outstanding achievement award 2018 at the International Stadium Business Design and Development Summit. This annual award recognises an individual that has shown exceptional commitment, service and leadership to stadium design and development over a sustained period.

Jim has been heavily involved in the Institute of Acoustics London Branch, joining the Committee in 1996. He was then elected as Chair serving in this position for 23 years! During that time he has been instrumental in organising numerous Branch meetings as well as conferences and social events to allow knowledge sharing with the help of his extensive network, as well as supporting members of the Committee and our attendees in learning and developing their own networks and skills.

He has given up a great deal of his time to support the IOA and is a great advocate for the acoustics industry and thoroughly deserves this award for his services to the Institute.

The Institute of Acoustics is therefore delighted to present Jim Griffiths with the Award for Distinguished Services to the Institute

Left:
Jim Griffiths with his Award for Distinguished Services to the Institute and IOA President, Alistair Somerville

Left:
Robert Woodward

Robin Woodward citation

Robin joined the Institute's Meetings Committee in 2014 and led the initiative to update the technology for accurate capture and transmission of presentations at Branch meetings and at national level. Robin was asked specifically to be the committee lead in setting up the Meetings Hub Network, which was borne out of findings of the Sustainable Acoustics Task Force.

In 2018, Robin advised the Institute in procuring virtual meetings equipment to be used for broadcasting Branch meetings. Robin's efforts in this area have been highly effective and many Branches are now regularly holding meetings allowing remote attendance via video conferencing software.

Over the following four years, Robin collated the information and developed protocols for holding meetings based in multiple hubs all of which was invaluable to the Institute in terms of positioning it to respond to the need arising from the pandemic.

During the first national lockdown in 2020 Robin led an initiative with Graham Parry and Chris Skinner to encourage Branches to hold meetings virtually and was on hand to offer the necessary advice.

In May 2021, the UK Government cancelled the booking at a hotel in Chester where Acoustics 2021 was to be held. With only five months before the conference, Robin Woodward and Chris Barlow investigated the feasibility of a virtual conference, arranged for purchase of equipment and the training of operators. In August 2021, Robin and Chris arranged a dry run to both test the equipment and demonstrate its use to the IOA Executive Committee ahead of the conference in October.

The timing of Robin's assistance in this was instrumental in addressing the need to host a national conference from multiple locations simultaneously. Robin also set up a WhatsApp group for coordinating everything between the various hubs.

The Institute's autumn conference was then broadcast using video conferencing software, which worked smoothly and seamlessly proving to be a very successful event.

Behind the scenes at the conference, Robin contributed a lot of time and effort to ensure that the right equipment was used and that everything was set up correctly; providing assistance not only to the IOA and the conference organisers but also to the presenters who were required to interact with the equipment as part of the digital conference experience.

It is no understatement to say that without Robin Woodward and Chris Barlow, Acoustics 2021 would not have been possible.

The Institute of Acoustics is therefore delighted to present Robin Woodward with the Award for Distinguished Services to the Institute P26

The Award for Promoting Acoustics to the Public

2022 Dr Matt Muirhead, AECOM

The Award for Promoting Acoustics to the Public was created to encourage activity that generates greater awareness of the importance of acoustics outside the acoustics' fraternity, that is to people without acoustical expertise.

Right:
Dr Matt Muirhead receiving his award

Dr Matt Muirhead citation

One of AECOM's acoustics experts, Matt Muirhead has 20 years' experience in data analysis, model development and prediction in vehicle, traffic and aircraft noise, environmental noise and vehicle safety. He has worked on and led a variety of projects concerned with the source noise of aircraft and motor vehicles, environmental noise mapping, vehicle noise regulations, understanding the impact of vehicle safety improvements and technologies and noise at work regulations. He has a track record in leading the successful delivery of research projects for a range of customers, including authoring publications helping to inform the UK's position on a number of noise related issues.

Throughout his career Matt has always been a keen advocate of promoting acoustics to the public of all ages. In the last five years, Matt has become a STEM (Science Technology Engineering and Maths) ambassador to raise the profile of acoustics to people of school age. Matt leads the AECOM acoustics STEM group and has helped create a guide and resource pack for members of AECOM looking to undertake acoustics-related STEM activities. Since 2018 he has had the opportunity to build on the work of Vicky Wills (Atkins) by chairing the newly formed IOA STEM Working Group (within the Education Committee).

Under Matt's leadership the STEM group has developed significantly and is now a fully-fledged Committee reporting to IOA Council. The STEM Committee is engaging with numerous other organisations – including Engineering UK, STEM Learning, the Winchester Science Centre, Frontiers for Young Minds, Primary Engineer, the ANC and UKAN. This has helped put acoustics at the front of many STEM initiatives and is delivering an ongoing strategic engagement with schools and colleges.

During the pandemic it was not possible to have face-to-face engagement, however Matt saw the opportunity to reach more people than ever before through online activities and initiatives. Working with the ANC and IOA, this started by producing a home schooling guide with a wealth of content and links to materials covering activities lesson plans, career guides, the experiences of STEM ambassadors, apprenticeships, curriculum relevant content and much more. Matt brought the two organisations together by chairing joint meetings in which a range of ideas were generated and discussed.

He invited students to take sound walks and discuss the findings via an online video call, as well as providing follow up activity for the children to watch in their own time. In summer 2022 he was a supervisor and mentor to an A-level student through the Nuffield Research Programme, Matt designed a soundscapes project that the student completed over several weeks, providing them with a valuable insight into acoustics – the project was a remarkable success and led to a Gold Crest Award.

Matt continues to promote acoustics through a range of activities, including:

- promoting the acoustics edition of the Frontiers for Young Minds journal and persuading lots of people in the industry to write about exciting research topics;
- together with Vicky Wills he organised the acoustic content for several virtual STEM festivals which lead to IOA having a prominent role at larger events, with excellent feedback;
- collating and finding a permanent home for a raft of acoustic-related STEM resources and making sure it got exposure; and
- bringing together his STEM role and day job to help author the IOA transportation noise supplement, which is aimed at the general public, by writing on the topics of road traffic noise and STEM activity.

More recently Matt has been involved in the partnership between Springpod and the IOA to provide a programme that explores careers, specialisms and opportunities available in acoustics to Y10-13 pupils. This programme covers everything from an introduction to the different areas of acoustics, to how roles in acoustics can make a significant impact in different areas of our lives. Attendees have the chance to take part in some great quizzes and amazing activities, and hear from leading industry experts. The 2022 programme was a success with around 1,000 students signing up. The 2023 programme has just gone live and we are hopeful to get even more students completing it this year.

Matt is not finished yet and has future goals for creating long lasting relationships with all STEM-related organisations that can help deliver impactful acoustic-based content that is aligned to the curriculum of a diverse young audience

In summary, Matt is an exemplar acoustic consultant and promoter of acoustics to the public and an asset to any team. His work is helping us recruit the next generation of acoustics consultants and encourage people to study acoustics. His passion for sharing knowledge and promoting STEM and his wide-ranging work to date demonstrate that he is more than willing to do what it takes to make sure young people, and the public at large grow up with a greater understanding and interest in acoustics

AECOM, the members of the IOA STEM Working Group and the ANC Futures Committee are all delighted to support this nomination – it is well deserved and indicative of much more to come.

The Institute of Acoustics is delighted to present Matt Muirhead with the Award for Promoting Acoustics to the Public.

Peter Lord Award

The Peter Lord Award is awarded annually for a building, project or product that showcases outstanding and innovative acoustic design. It is presented to the team or individual responsible for the acoustic design, and consists of a plaque to be displayed on the winning construction or project (where possible), together with a trophy and certificate for the winning team or individual. Peter Lord, a former IOA President who died in 2012, was a hugely influential figure in UK acoustics, being a driving force behind the setting up of the Institute, founder of the Applied Acoustics department at the University of Salford and first editor-in-chief of Applied Acoustics.

Above: The Peter Lord Award winners with Alistair Somerville

The winners of the 2023 Peter Lord Award are:
Dominic McSweeney, Brimelow McSweeney Architects, Brian Scrivener, Sound Advice and Nick Swainson, Cahill Design Consultants for the Dundonald Church project.
Dundonald Church is a new build church with 18 apartments on the upper floors, designed by Brimelow McSweeney Architects. The church comprises a 680-seat auditorium with state-of-the-art audio-visual equipment, three function halls, a large hospitality foyer with coffee shop, and offices for 25 staff. P28

There were significant acoustic challenges separating the church from the residential use, in the auditorium design and providing excellent acoustics in the halls and foyer spaces, which are immediately apparent to everyone visiting the building and are frequently praised.

The whole project team worked admirably to overcome the multiple challenges, particularly the acousticians, Ben Cahill of Cahill Design Consultants on the client team and Brian Scrivener of Sound Advice for the contractor's novated design team.

The Institute of Acoustics is pleased to award the team with the Peter Lord Award for 2023.

Left:
(L-R) Professor Keith Attenborough and Alistair Somerville

The Dr Bob Peters Education Award

2022 Professor Keith Attenborough, IOA and Open University

The IOA council approved this dedicated education award named after late Dr Bob Peters in 2020. The aims of the proposed award are twofold:

- to celebrate the memory of the late Dr Bob Peters who is widely remembered for his outstanding contribution to acoustics education and his long-standing commitment to teaching and student success; and
- to recognise excellence in the design, plan, delivery, management of acoustics education, or other significant contributions to education in acoustics.

The award may be for a single outstanding or significant contribution to acoustics education and training or a sustained long-term activity in this respect. Dr Bob Peters is widely remembered for his outstanding contribution to acoustics education and his long-standing commitment to teaching and student success. In making this award we celebrate both Bob's memory and recognise the excellence in a recipient who has demonstrated significant contributions to, the design, planning, delivery and management of acoustics education, or made other significant contributions to education in acoustics. The award can recognise either a single outstanding activity, or a significant, sustained long-term contribution. The recipient of this award has clearly demonstrated both.

During the pandemic Keith worked tirelessly to ensure continuity of delivery in our Diploma students' studies by:

- being instrumental in the development of the virtual laboratory school;
- managing the exam process to ensure high standards and the integrity of the examination process remained; and
- masterminding the blended learning videos and revisions of course notes.

He has also had a significant and sustained, career-long contribution to acoustics education and training. Whether through his UK-based academic posts, the founding of the Acoustics and Noise Control programme at the Open University, his international professorial teaching and research visits, his extensive IOA Committee involvement, acting as Chief Examiner for the IOA Diploma and in his current post as IOA Education Manager, he has demonstrated:

- excellence in teaching and learning, curriculum development and course design, with a strong commitment to student success;
- a commitment to the promotion and application of innovative methods and techniques;
- exemplary education management; and
- inspirational leadership and mentoring.

Keith's major contributions to acoustics in relation to the purpose of the Award

Education embodies all of the following: teaching, research, publishing, mentoring, course construction and delivery, examination and assessment. Bob Peters demonstrated a life-long professional and voluntary service commitment to all of these. Keith has done the very same. It is no surprise to note, therefore, that he includes 'education in acoustics' within his many professional and research interests. The other stated interests are 'outdoor sound propagation, linear and nonlinear acoustics of porous materials, metasurfaces and the acoustical greening of cities' and he continues to be active academically in these areas.

He has published over 140 papers in refereed journals, contributed to two books, been Editor in Chief for *Applied Acoustics* and Associate Editor of both the *Journal of the Acoustical Society of America* and *Acta Acustica*. He is the current Chair of ANSI S1 WG20 on the *Measurement of outdoor ground impedance*.

As a lecturer at the Open University, he founded the Acoustics and Noise Control programme in 1970, rising through the ranks to become Professor of Acoustics in 1992.

Between 1974 and 1990 he acted as a visiting (Assistant/Associate/Adjunct/Research) Professor to assist in teaching and research at numerous international academic institutions in India and the USA.

In 1998 he became the IOA's Chief Examiner of the IOA Diploma and in 2007 he was appointed as Education Manager. In this post he is tasked with managing the delivery of all the IOA certified qualifications. Such qualifications, from the Diploma to all the certificated short courses, are widely recognised and valued by those practicing in acoustics and maintaining high standards are critical to the activities of our Institute.

As the Institute's Education Manager, Keith has provided highly valued guidance and advice to the Education and Advisory Committee members, the IOA education staff and Council. This was particularly important and challenging during the pandemic.

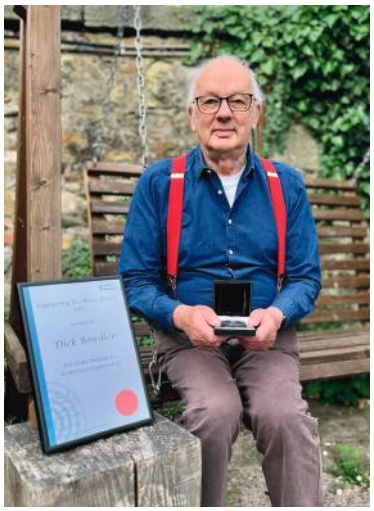
Our world continues to undergo rapid changes and there is a need for more digital and remote learning content to be offered. Our Institute's directly delivered distance learning Diploma option now provides all classroom sessions either by participating in the live class online, or attending physically in IOA's Milton Keynes classroom. Students can also catch up with an online recording of the classroom sessions at a time of their own choosing. This enhances the Institute's long history of supporting students from all around the world who choose to undertake the Diploma. The new blended training material provides additional support to improve the amount and quality of online learning content. Keith played a central role in developing and delivering this content, working closely with others to ensure material is kept up-to-date and relevant.

It is clear that Professor Keith Attenborough has enthusiastically committed his professional life to the pursuit of the highest of standards in the field of acoustics in education. His teaching, research, mentoring and management of the delivery of relevant, up-to-date acoustics training to our next generation of acousticians, makes him a very worthy recipient of the first ever Dr Bob Peters Education Award.

The Institute of Acoustics is pleased to award the Dr Bob Peters Education Award to Keith Attenborough.

The IOA Engineering Medal

2022 Dick Bowdler,
Noise Consultant



Left:
Dick Bowdler

The Institute of Acoustics' Engineering Medal is awarded in even-numbered years to registered engineers at Chartered, Incorporated or Engineering Technician grade in recognition of their outstanding contribution in the field of acoustical engineering.

Dick Bowdler citation:
Dick is a renowned chartered acoustic engineer and physicist with over 50 years of experience. As with so many of our members, his route into acoustics came through the performing arts where he began his career advising on lighting and acoustics for the architect Cedric Price, before moving to Sandy Brown Associates (SBA) in 1970 and becoming a partner in 1973. In 1974 he moved from England to Scotland to set up the SBA Scottish office and became one of the original members of the Institute of Acoustics, being awarded his IOA Fellowship in 1977. In 1987 he left SBA to set up New Acoustics, which has grown considerably to what it is today. In that time, he has developed tens of acousticians in the art of acoustic assessment and how to be acoustic consultants and leaves a strong legacy for future employees to follow.

In 2009 he set up his own business, where he has split his time between wind farm noise and noise-induced deafness cases. He has supported the very successful INCE/Europe series of bi-annual conferences on wind turbine noise since their inception in 2005 and took over the running of the conferences in 2015 (**https://www.windturbinenoise.eu/**). He has also branched out into organising conferences covering noise from drones. His work for INCE/Europe is particularly noted for bringing together all sides of the wind farm noise debate, encouraging the exchange of technical knowledge to further develop the understanding of wind turbine noise, the cause and effects, and regulation. The conferences routinely attract over 200 delegates from around the world, making a significant contribution to the scientific community. He was also instrumental in starting up the INCE/Europe symposium on quiet drones, which began in 2020. (**https://www.quietdrones.org/conferences/1-quiet-drones-2020/**)

In 2011, with Geoff Leventhall, he edited the book, *Wind Turbine Noise*, a collection of the state-of-the-art in wind turbine noise assessment at the time, which has become one of the go-to textbooks on the subject. He also joint-authored the chapter on amplitude modulation (AM), noting his role as technical overseer of the Renewable UK AM project, which shed light on the causes of amplitude modulation, and furthered our understanding of the potential mitigation options available. This body of work formed the basis from which the IOA AM Working Group developed their method for the detection of amplitude modulation in wind farm noise, which, in turn, has led to the inclusion of the method in an international standard.

Dick's other passion is to help employers and employees with noise induced deafness cases. He has given evidence many times at the Court of Session in Edinburgh and in Sheriff Courts in different parts of Scotland. IOA members were also provided with an article in the Acoustics Bulletin titled *An inevitable consequence – the story of industrial deafness*", setting out the history of the issue, and bringing the story up-to-date for modern workers and employers.

Dick has been a very active member of the IOA, writing and contributing to many articles for the Acoustics Bulletin, and presenting papers at various one day meetings, Branch meetings and conferences. I cannot recall any IOA wind farm meetings this century that Dick was not directly involved in or attended. He is a keen supporter of the IOA Scottish branch.

For his dedicated service to the Institute, and to acoustic engineering, the Institute of Acoustics is pleased to award Dick Bowdler the Institute of Acoustics Engineering Excellence Medal.

The Tyndall Medal

The Tyndall Medal is awarded biannually to a UK acoustician, preferably under the age of 40, for achievement and services in the field of acoustics. P30

John Tyndall (1820-1893) preceded Rayleigh as the Professor of Natural Philosophy at the Royal Institute. He investigated the acoustic properties of the atmosphere and though a distinguished experimental physicist, he is remembered primarily as one of the world's most brilliant scientific lecturers.

2023 Dr Joshua Meggitt, University of Salford
Dr Joshua Meggitt citation:

Above:
Dr Joshua Meggitt receives his award and medal

Dr Joshua Meggitt is an early career acoustician with a number of notable achievements to his name in the short time since completing his PhD.

He is author or co-author of 17 original scientific papers in high ranking acoustics journals, as well as a steady stream of conference publications. Remarkably, for such an early career stage, he is lead or sole author on the majority of these papers. A series of five papers dealing with uncertainty in the related areas of blocked forces measurement and sub-structuring provides a rigorous and comprehensive treatment of this whole subject not seen before in the literature. Two papers from this series are cited in an international standard indicating the relevance and timeliness of Josh's work. A number of other novel and industrially relevant contributions are evident from Josh's papers spanning the fields of acoustics, structural dynamics and virtual acoustic prototyping. These include the first integration of experimental blocked force data into advanced numerical models allowing us to 'switch on' realistic virtual machines. Josh's papers evidence collaboration with world leading partners, including Cambridge University, Bosch, Boeing, Dyson and Bentley and he was part of the team presenting a keynote address at the Inter-noise 22 congress, one of the largest global gatherings of acousticians of recent years.

In his brief career Josh has also provided enthusiastic service to the acoustics community; he is a popular teacher of acoustics at the University of Salford, helping to train well qualified acousticians of the future, he is a committee member on the IOA Noise and Vibration Engineering Group and co-lead of the UKAN special interest group in vibro-acoustics. He is also a reviewer for several high ranking journals – highly-skilled work that often goes unrecognised due to confidentiality.

The IOA is proud to award the Tyndall Medal to Dr Joshua Meggitt; a young acoustician of truly global standing and potential.

Rayleigh Medals 2022 and 2023
The Rayleigh Medal is the IOA's premier award, given without regard to age to persons of undoubted renown for outstanding contributions to acoustics. It is normally presented to a UK acoustician in even numbered years and an overseas acoustician in odd numbered years. The medal is named after John William Strutt, Third Baron Rayleigh (1842-1919), a versatile physicist who conducted experimental and theoretical research in virtually every branch of the subject. A graduate, fellow and eventually Chancellor of Cambridge University, he was a fellow and president of the Royal Society.

The Rayleigh Medal recipients will present their medal lectures at this year's IOA conference at The Guildhall in Winchester, on Monday 16 to Tuesday 17 October.

The Rayleigh Medal winner 2022:
Professor Jian Kang, University College London

ProfessorJian Kang's citation:
Professor Jian Kang was born in China and received his higher education at the prestigious University of Tsinghua where he was awarded a Bachelor's Degree in Architecture and a Master's Degree in Acoustics.

Above:
(L-R) Professor Jian Kang receives his award and medal from IOA President, Alistair Somerville

He came to Europe in 1992, sponsored by the German Ministry of Research and Technology, to become a scholar at the Fraunhofer-Institut für Bauphysik in Stuttgart. Here he worked on non-fibrous absorbers and low frequency sound insulation in buildings.

In 1993 Jian came to the UK where he undertook a PhD at the School of Architecture at the University of Cambridge. His thesis was sound propagation in long enclosures and this formed the foundation for his future researches in urban soundscapes. In 1996, Jian was awarded the Robert Newman Medal of the Acoustical Society of America 'For excellence in the study of acoustics and its application in architecture'.

On completing his PhD, Jian took up a lectureship at the School of Architecture at the University of Sheffield and was rapidly promoted to a professorship. Here he formed a strong multi-disciplinary research group which has worked extensively in environmental acoustics and led to the publication in 2007 of a book entitled 'Urban Sound Environment'. At micro-scale, Jian has developed theoretical and computer models for simulating sound propagation in street canyons and urban squares and examined the effectiveness of built environment morphologies. At macro-scale, he has studied the accuracy and efficiency of computer-based noise-mapping and applied the techniques in practice. He has also studied subjective aspects of environmental acoustics including soundscapes in urban open spaces based on 10,000 interviews across the EU and in China. P32