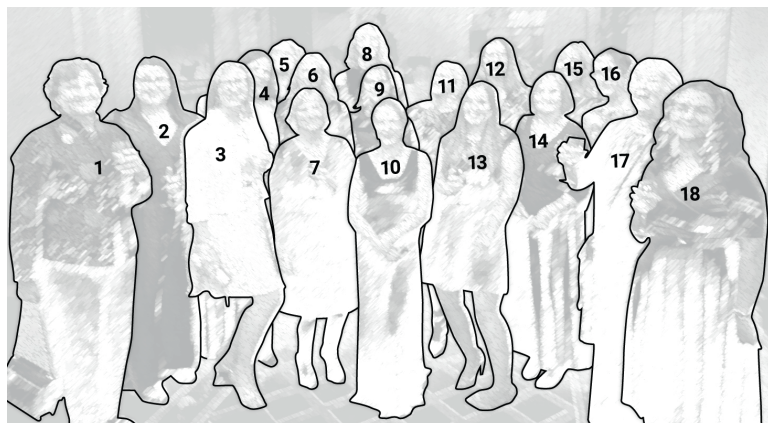


Inspirational women in acoustics

By Angela Lamacraft (Sustainable Acoustics Ltd), Vicky Wills (AtkinsRéalis), Reena Mahtani (Stantec UK) and Anne Budd (New Acoustics Ltd)

This incredible photograph of inspiring women was captured at the IOA's 50th anniversary dinner, the details of which are covered on page 54 of this issue. We couldn't let this opportunity pass by without comment, especially as International Women's Day is 8 March, so let's find out more about these fantastic acousticians:

1 Professor Dame Ann Dowling (OM, DBE, FRS, FREng), Deputy Vice-Chancellor and Emeritus Professor of Mechanical Engineering at the University of Cambridge. She is a Fellow of the Royal Society, Royal Academy of Engineering and is a Foreign Member of the US National Academy of Engineering, the Chinese Academy of Engineering and of the French Academy of Sciences. She is an Honorary Fellow of the Institution of Mechanical Engineers, the Institution of Engineering and Technology and the Institution of Engineering Designers and a Fellow of the Royal Aeronautical Society, the American Institute of Aeronautics and Astronautics and of the Institute of Acoustics. She has honorary degrees from 21 universities including Oxford, Imperial College London, Glasgow, the Technical University of Eindhoven, KTH Royal Institute of Technology Stockholm, Trinity College Dublin and McGill Canada. [P20](#)



Above:
Photo credit: Andrew Beverley, CDM Stravitec UK

A specialist in aeroacoustics, Dame Ann became the first female professor of Engineering at Cambridge in 1993 and went on to become the Head of the Department of Engineering at Cambridge University 2009-14 and President of the Royal Academy of Engineering 2014-19.

She led the Cambridge MIT Silent Aircraft project, which published its radical new design concept, SAX-40, in 2006 with the aim of raising aircraft industry aspirations. She also chaired the agenda-setting and widely respected joint Royal Society/Royal Academy of Engineering report *Nanoscience and nanotechnologies: opportunities and uncertainties* published in 2004, which highlighted the need for responsible regulation and research around the use of materials at an extremely small scale – only a few millionths of a millimetre.

She was nominated in BBC Radio 4 Woman's Hour power list 2013 as one of the 100 most influential women in the country. For her pioneering work in acoustical engineering, Dame Ann was awarded the IOA Engineering Medal in 2014 and she gave her medal lecture on the reduction of jet noise. In 2016 she was awarded the Institution of Mechanical Engineers' James Watt International Gold Medal and in 2019 she received the Royal Society's Royal Medal for her 'leading research on the reduction of combustion, aerodynamic noise and the design of aircraft and her distinguished services to engineering'.

Finally, Dame Ann was the first female engineer to join the Order of Merit (OM), which only has 24 living members at any time, after being appointed by Her Majesty Queen Elizabeth II in 2016. She is only the tenth woman in over 100 years to join the OM, following in the footsteps of some uniquely accomplished women from politics, science and the arts.

2 Jenny King (AMIOA), Acoustic Consultant at AECOM, member and early careers representative of the IOA STEM Committee, is a regular attendee at the London Branch meetings and was awarded Highly Commended for the John Connell Rising Star Award 2024. Though relatively new to the field of acoustics, Jenny has already made significant contributions to our industry through her passion for STEM as well as acoustics as a whole and this has quickly established her as a prominent figure in the community.

3 Eleanor Girdziusz (MIOA), Senior Associate and Building Acoustics Lead at Stantec UK in London, an IOA Diploma Examiner in Building Acoustics and part of the team that put together the acoustic work experience on Springpod. She has trained as a secondary school teacher and brings her passion for training and education to the work she does.

4 Fiona Rogerson (MIOA), Senior Acoustic Consultant at Arup, Honorary Secretary of the IOA, serving on the Executive Committee and IOA Council, and a long-standing member, and past Chair of IOA Midlands Branch. Fiona has a strong interest in people and their development, as well as a passion for equity, and is currently mentoring champion for the Arup Acoustics team.

5 Vicky Wills (FIOA), Associate Acoustic Consultant at AtkinsRéalis, member of IOA London Branch, IOA STEM Committee and ANC Future Acousticians, winner of the IOA 'Promoting Acoustics to the Public Award' and listed as one of the Top 50 Most Influential Women in Engineering in 2016. Vicky has worked at AtkinsRéalis (was Atkins) since 2001, mainly focusing on the assessment of environmental noise from large road schemes. She has brought acoustics to the attention of hundreds of children through her tireless work promoting STEM, and particularly acoustics, within schools and at careers fairs.

6 Angela Lamacraft (IEng FIOA), Senior Acoustic Consultant at Sustainable Acoustics Ltd, current Trustee and Council member of the IOA, founder and former Chair of the IOA Equity, Diversity and Inclusion Working Group, Chair of the IOA School Competition Committee, former Chair of the IOA Young Members Group and various other IOA and ANC roles. Angela is an acoustic consultant at Sustainable Acoustics Ltd, working on environmental, industrial and building acoustics projects. She works tirelessly to promote the benefits of equity, diversity and inclusion within the IOA and members' organisations. She was awarded the IOA Award for Promoting Acoustics to the Public in 2024.

7 Sam Riley (MIOA), Acoustic Consultant at dB Consultation Ltd. Now working full time in environmental acoustics, Sam previously worked in Environmental Protection for 32 years. She obtained the first Public Space Protection Order after the legislation was released in 2014 to stop car meets in a car park and associated noise from local roads being used as a race circuit.

8 Elle Hewett (MIOA, MAAS), Associate Consultant at Stantec UK in Bristol. Elle has worked most of her career in Sydney, Australia and is enthusiastic about good acoustic design. She is part of the ANC's marketing committee and one of her projects in Australia won the 2023 ANC Sustainability award.

9 Daniela Filipe (MIOA), Head of Acoustics at Experience Studios in London. She is a member of the IOA Building Acoustics Group and regularly presents for the IOA on events such as *The Art of Being a Consultant*. In 2020 one of her projects won the ANC Environmental award.

10 Jo Webb (CEng HonFIOA),

Vice President International of the IOA following a term as President of the Institute 2016-2018, and member of the Parliamentary Liaison Group and North West Branch Committee. Jo has also been part of the IOA Membership Committee and the Noise and Vibration Engineering Group. She was educated at the University of Salford graduating in 1987 from the electroacoustics course and later gaining a masters in acoustics. She is now back at Salford following a 35 year career in consultancy. She was a Technical Director of Wood Group, an Associate at Arup Acoustics where she worked for 18 years, and had jobs at various other consultancies as well as in a local authority, after starting her career with Building Design Partnership. Jo is undertaking research for a PhD sponsored by the Royal Horticultural Society in the potential of natural noise control as part of a wider study of the ecosystem services of hedges. As well as her research work Jo now spends time encouraging and supporting others to build careers in acoustics through the UK Acoustics Network and the university.

11 June McClung (MIOA),

Noise Manager at Edinburgh Airport. She started out as an analytical chemist at the Scottish Environmental Protection Agency, moving into Environmental Health in 2005 and spent 12 years in local authority environmental health/pollution control in Scotland and Wales. For the past eight years June has been managing noise at Edinburgh Airport, involved in airspace change – modernising Edinburgh Airport's flightpaths to minimise the number of people overflown, managing the airport's five-year noise action plan process and public consultation, community noise board and noise insulation scheme. June is also a member of the IOA Publications Committee and is active in the IOA Scottish Branch.

12 Anne Budd (MIOA MASA),

owner and Director at New Acoustics Ltd since 2005 and Chair of IOA Scottish Branch. She has worked internationally as a product manager for acoustic instrumentation and standardisation, conducted research into school acoustics, speech intelligibility of young children and teachers' voices, and is currently an acoustic consultant. Anne was the first woman to be elected in a contested vote to the board of the ANC and is a member of the ANC Future Acousticians Group and the ANC Sports and Leisure Noise Working Group.

Anne has previously been Secretary of IOA London Branch, member of and Early Careers Representative on IOA Council, Secretary of the Building Acoustics Group, member of the IOA Women and Families Working Group, member of IOA Scottish Branch committee, has led consultations and drafted responses on behalf of the IOA and has taken an active role in the organisation of IOA conferences and meetings. She is currently a member of the IOA Parliamentary Liaison Group representing Scotland and continues to volunteer in STEM-related activities on behalf of the IOA promoting acoustics wherever she can.

13 Josie Nixon (MIOA), Principal

Acoustic Consultant at HA-Acoustics, former Chair of the IOA Early Careers Group, Secretary of the IOA Eastern Branch and member of the IOA Bursary panel. Josie's enthusiasm for supporting people at the beginning of their career in acoustics has undoubtedly helped many budding acousticians. She mainly works in environmental acoustics and her proudest achievement is the diversity of her past projects. Whether undertaking a foundry noise at work survey, monitoring music festivals, producing noise impact assessments to support planning applications or UKAS sound insulation testing.

14 Bridget Shield (MBE FASA

HonFIOA), Emerita Professor of Acoustics at London South Bank University and the first woman President of the IOA (2012-2014). Bridget was one of just a few women members when she joined the IOA. After serving on several IOA committees she became its first female Council member, first female Fellow, and first female Honorary Fellow. In 2021 she was awarded an MBE in the Queen's Birthday Honours for her 'services to Acoustic Science and to inclusion in Science and Engineering'.

Professor Shield retired from London South Bank University after 30 years during which time she co-founded the national Women in Engineering Centre at the University and was course director of the MSc in Environmental and Architectural Acoustics.

Bridget's research interests included railway noise, concert hall acoustics, hospital noise and the social and economic costs of hearing loss in Europe. Her major research activity for 20 years, in collaboration with Professor Julie Dockrell of the Institute of Education, focused on the effects of noise and poor acoustics on children and teachers in primary and secondary schools. In 2003 she was appointed by the Department for Education and Employment as editor of Building Bulletin 93 (BB93), which contains the acoustic performance specifications for schools. Bridget has taken an active role in increasing public understanding of science and has prided herself on being a role model for women, promoting women, diversity and inclusivity in acoustics throughout her career.

Professor Shield's work has attracted major national and international accolades; she was elected as an Honorary Fellow of the IOA and awarded the Institute's RWB Stephens Medal. She also received the UK Noise Abatement Society's Lifetime Achievement Award and was awarded a Fellowship from the Acoustical Society of America. P22

15 Sarah Huskie (MIOA),

Managing Director of CDM Stravitec UK. She is a member of the IOA EDI working group and one of the judges of the ANC awards. She was also the Secretary of the Middle East Branch of the IOA and has led teams in the UK, the Middle East and Asia Pacific, working on projects such as the Marina Bay Sands in Singapore. She has a personal interest in health and fitness, which fits amazingly well in her daily work.

16 Abigail Bristow (FIOA), Professor of Civil and Environmental Engineering at the University of Surrey, Fellow of the Royal Society of the Arts and the Chartered Institution of Highways and Transportation, and currently a co-investigator for UKAN+. Abigail has extensive experience in research in the areas of transport management and policy, most notably appraisal of the environmental effects of transport with particular focus on noise and climate change.

17 Sue Bird (MBE CEng FIOA) has been a member of the IOA since its foundation. She has been the President of the Women's Engineering Society (WES) twice and helped set up the International Network of Women Engineers and Scientists (INWES) where she was President for three years. She was granted an MBE for 'Services to engineering and to women into engineering both in the UK and abroad' and awarded the Elizabeth Hardwich medal of WES. In 1992 she was

part of the government working group which produced the report 'The Rising Tide' concerning women in STEM.

Sue served as Chair and later President of the Association of Noise Consultants and as the senior examiner for the registration scheme for 10 years. She is also named as an Honorary Member of the ANC. She initiated the CPD committee at the IOA, and is still working on this, helping to assess members' records.

She has worked in the aircraft industry, in local government, and for 22 years as a partner in Bird Acoustics. Even though she is retired, she is still a very active part of the acoustics industry, volunteering her time as Chair of Judges of the ANC awards and on the IOA CPD committee.

18 Reena Mahtani (FIOA FWES IEng), Principal Consultant at Stantec UK. She is a Trustee and Council member of the IOA, the Chair of the Bursary Fund, the Secretary of the Southern Branch Committee and a member of the Sustainability and Soundscapes working groups of the ANC. Reena has worked in projects both in the UK and Singapore and has an interest on making the acoustics industry more inclusive and welcoming.

Out of shot: Louise Beamish

(MIOA), Director of Acoustics at WSP and board member and current Chair of the ANC. Louise has led several industry groups and committees, such as the IOA London Branch, the ANC Marketing Committee, was Chair of the Trailblazer Group for the Environmental Practitioner Degree Apprenticeship and she established the IOA Early Careers Group. She has been able to bring her passion for championing women in STEM careers, as well as her enthusiasm for industry-wide collaboration and innovation, and continues to have a positive influence on the acoustics industry through her role at the ANC.

What an incredible bunch, between them committing huge amounts of time and effort into helping the acoustics profession, both technically and in terms of governance and leadership.

There are, of course, many awe-inspiring women in acoustics who were not at the dinner, and there are many other groups of members that could be written about. We would love to hear more about our diverse membership so please submit an article to the IOA or a post for the EDI blog (diversity@ioa.org.uk) if you would like to raise awareness of other members. ☺