

INSTITUTE OF ACOUSTICS

***38th ANNUAL REPORT OF THE COUNCIL
FOR THE YEAR ENDED 31 DECEMBER 2011***



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The Institute has continued to serve the interests of its members through its established programmes in the areas of education, professional development, meetings and publications, and by providing representation in areas such as the Engineering Council, Standardisation and International affairs.

The Trustees confirm that in the exercise of their powers as charity trustees, they have had due regard to the published guidance from the Charities Commission on the operation of the public benefit requirements and the aims of the charity are carried out for the public benefit.

During the year:

- Two new team members joined the staff at Head Office during the year – Hazel Traynor joined the team as Administrative Assistant, and Louise McHugh joined as Accounts Administrator.
- An ambitious programme of well attended conferences and technical meetings was undertaken at international, national and regional level.
- Six formal applications for Chartered Engineer registration and one for Incorporated Engineer were submitted in 2011 and Professional Review Interviews were held in May and December. Three were 'Standard Route' candidates, holding accredited degrees, and four were 'Non-standard Route'. All were successful.
- By September 2011 the 'new' Diploma in Acoustics and Noise Control, now in its third year, recruited 112 new candidates of whom 37 chose to study by the Distance Learning Scheme. As a result of grades obtained in 2010/11, the Diploma has been awarded to 86 students.
- Planning has been ongoing throughout 2011 for ECUA 2012 which will take place 2-6 July 2012 at Heriot-Watt University in Edinburgh, to be held in the UK for the first time in the conference's history.
- Planning had also taken place this year for the Acoustics 2012 conference being organised jointly with the French Acoustical Society – SFA. This will take place in Nantes, 23–27 April 2012.
- The Institute's 'Acoustics Bulletin' had a change of Editor during the year. After eleven years in the hot seat, Ian Bennett decided to relinquish his responsibility of editing the journal. The Institute's own Publicity Officer – Charles Ellis – agreed to take over and this will complement the monthly e-newsletter which he currently compiles. We all thank Ian for his hard work over the years.
- During the year an election was held to establish new members on the Institute's Council. This was the first time the process had been undertaken since 2003.
- The Institute is represented internationally through the following members: Colin English (Vice President, EAA), Barry Gibbs (Director, IIAV), Prof Y W Lam (ICA Board), and Rupert Thornely-Taylor (Director, IIAV).

- ❑ The Institute once again sponsored one of the Noise Abatement Society's John Connell Awards.
- ❑ The Institute also sponsored the schools leaflet for Noise Action Week.
- ❑ The Institute has pro-actively engaged with a number of government departments (DfE, CLG, Defra and DECC) to influence future policies affecting acoustics.

STANDING COMMITTEES

The operation of the Institute is guided by Council through standing committees concerned with Education, Medals and Awards, Meetings, Membership, Publications, and Research Co-ordination. There is also a committee of the Engineering Division.

Education Committee

The Diploma and Certificate courses have continued to recruit and to provide education and training for both members and non-members of the IOA. The education programmes and courses introduce many working in acoustics and associated professions to the Institute and help in the recruitment of new members.

In September 2011 the 'new' Diploma in Acoustics and Noise Control, now in its third year, recruited 121 new candidates of whom 37 chose to study by the Distance Learning Scheme. As a result of grades obtained in 2010/11, the Diploma was awarded to 86 students.

For the 2011/12 presentation of the Diploma the distance learning notes for the Building Acoustics and Environmental Noise Modules have been revised, edited and distributed.

In 2010/11, the Certificate of Competence Courses recruited as follows; Management of Hand-Arm Vibration 14 students (nine pass), Environmental Noise 164 students (147 pass), and Workplace Noise and Risk Assessment 59 students (48 pass). The Certificate of Proficiency programme in Anti-Social Behaviour (Noise) is run in Scotland by Bel Education and Strathclyde University and recruited 27 students (21 pass).

A new Certificate Course, Certificate of Competence in Building Acoustics Measurements is being launched at eight centres in 2012.

For the purpose of answering student and other queries, the credit transfer rating of the Diploma has been agreed as 90 credits. This valuation is in the light of the advanced standing for Diploma holders awarded by Derby University and NESCOT (Surrey University) for their relevant MSc courses. In 2011, Diploma members interested for CPD or other reasons have been able to register for additional specialist modules but only one has taken advantage of this opportunity.

During the year the Committee has accredited a new Diploma Centre at Southampton Solent University (also accredited for CCBAM and CCENM) and re-accredited centres at Colchester (CCENM and CCWPNRA) and Leeds Metropolitan (Diploma, CCENM, CCWPNRA and CCMOEHAV).

During 2011, Mike Fillery has taken over as chair of CCENM Management Committee, and there is a new Chair Stephen Williamson for the ASBA Certificate Committee in Scotland.

The Education Committee continues to be indebted to the support of its members, course tutors and examiners, the work of the Education Manager and for the assistance provided by the Education Administrator and other members of office staff.

Engineering Division Committee

2011 has seen an increase in demand for Engineering Council registration from Institute members, in both Chartered Engineer and Incorporated Engineer categories. The Committee met twice during the year. One internal audit was carried out, with no non-compliances identified. The number of initial enquiries for registration from Institute members grew to 97 and the increase in numbers of candidates wishing to present themselves for interview continued.

Six formal applications for Chartered Engineer registration and one formal application for Incorporated Engineer registration were submitted in 2011 and Professional Review Interviews were held in March, May and November. Three were 'Standard Route' candidates, holding accredited degrees, and four were 'Individual Route' candidates with diverse backgrounds. All candidates were successful.

Presentations on Engineering Council registration were given to consultancies and to members. Interest in IEng registration at a relatively early career stage has increased considerably following a publicity campaign during the summer.

Following the grant of a further five-year licence by the Engineering Council in January 2010, a formal Risk Register, covering the full range of the Institute's activities, has been developed on behalf of Council and put into place in early 2011.

Medals and Awards Committee

Professor John Bradley was awarded the 2011 Rayleigh Medal at the Auditorium Acoustics Conference in Dublin for his outstanding work, especially in the field of architectural acoustics. The IOA Young Persons' Award for Innovation in Acoustical Engineering (sponsored by IAC) was awarded to Georgia Zepidou at the same event.

At Acoustics 2011 in Glasgow, Professor Bridget Shield was awarded the R W B Stephens Medal for her outstanding teaching and research, including her recent work on school acoustics. Three other awards were made at the conference including an Honorary Fellowship awarded to Professor Keith Attenborough for his long and distinguished work in both acoustics research and education. The other two awards were for Distinguished Services to the Institute, one to Tim Clarke partly for his work on ENG, and the other to Andrew Jellyman for his contributions to CPD and also the Midlands Branch.

Elsewhere, Dr Kyle Becker received the 2011 A B Wood Medal. Unusually, there were joint winners of the Professor D W Robinson Prize: Paula Firth and Debra Lumb.

Three prizes were awarded for our Diploma students. The best student prize for 2010 went to Sarah Large and for 2011 Luke Rendell (to be presented in 2012). The ANC Prize for the best Diploma Project for 2011 was awarded at Reproduced Sound to Andy Thompson.

At the same conference, Bob Walker who previously worked for the BBC, was given the Peter Barnett Memorial Award. And Steve Dorney from University of Southampton was given the Award for Promoting Acoustics to the Public for his work with ISVR developing public engagement and outreach activities.

Meetings Committee

The committee met four times in 2011. The year finally saw some stability within the membership of the committee, with no changes from last year's report. The committee constitutes a chair (Jeremy Newton), secretary (Hilary Notley), young member (Christopher Turner) and two other members – Ken Dibble and Paul Lepper.

The committee presided over the organisation of 11 meetings covering a wide variety of topics. The feedback from the meetings' questionnaires continues to be very favourable. Given the global recession, the financial performance of meetings has been under some scrutiny and we continue to review performances and learn from our experiences so that deficits may be minimised in the future and meetings continue to generate a moderate surplus.

In particular, the financial performance of conferences has been looked at extremely closely and the lessons learnt are being implemented into the planning processes for future events.

Membership Committee

The committee met four times in 2011. One new member joined the committee which now has its full complement of 12 members.

278 applications for membership were considered and 248 accepted. The majority of these were for new associate members and for associate members transferring to corporate member grade when they had accumulated sufficient experience.

Work on the CPD scheme continues. From May CPD became a requirement for all candidates applying for or transferring to corporate grades. The CPD team continued to work on a means of encouraging CPD for the whole membership that will not be burdensome for the members to submit or for the Institute to check.

The committee considered nine Code of Conduct cases. Two were resolved informally and one resulted in the expulsion of the member after a conviction for fraud. The other cases were more complicated with large amounts of evidence submitted. This continues to be a substantial part of the committee's work.

2011	FIOA	MIOA	AMIOA	Tech	Affil	Student	Sponsor	Total
Applicants	3	135	99	15	3	20	3	278
Elected	3	118	85	15	4	20	3	248
New Members	0	26	80	10	5	18	3	142
Resigned	8	58	64	11	13	11	8	173
Deceased	1	4			1			6

Publications Committee

Through 2011 the committee met three times, although the website sub-committee met much more frequently working on the new IOA website. At the start of the year there was a consultation period for stakeholders where requirements for the new website were documented. The sub-committee has now taken these requirements forward, developing the new website and providing the main committee with updates along the way. The new website should be launched early in 2012.

Bi-monthly issues of Acoustics Bulletin continue to be produced, providing a high standard of technical content and reporting details of the Institute's' meetings and affairs. Towards the end of 2011 Ian Bennett stepped down after 11 years as editor of Acoustics Bulletin, and Charles Ellis (IOA Publicity Officer) took over. The committee would like to thank Ian for all his hard work as editor over the years. An editorial board is being formed to assist Charles with the technical contributions. Charles also produces the monthly Acoustics Update, developing the e-newsletter to a high standard.

The IOA group on the social networking site LinkedIn continues to attract a steady stream of interested people, now with over 2000 members. Do drop by when you're in the area and join in the discussions.

There have been two changes in committee membership over the year with one person leaving the committee and another joining. Thanks go to all members of the committee for volunteering their time over the year, especially members of the website sub-committee who have given many hours taking the website project forward.

Research Co-ordination Committee

The committee met twice in 2011, in May and October. Professor Kirill V. Horoshenkov took over the role of Chair from Professor Keith Attenborough. The discussions focused on the committee membership structure, organisation of the Acoustics 2012 conference in Nantes (France) and better links between the IOA and EPSRC/Defra/TSB. It has been agreed to introduce a two-tier membership structure of the RCC. There will be a core group (tier one) of committee members. These members attend regularly the committee meetings and contribute systematically to the operation of the RCC. Tier two members are those members of the Institute who play a role in this committee and can be invited to attend some meetings of this committee to assist with various matters which require additional acoustics and acoustics-related expertise. Tier two membership can be more appropriate for younger members, those members who are not based in the UK and other IOA members who cannot regularly attend the RCC meetings. It has been noted that better communication with government funding organisations and IOA is needed. Actions have been assigned to some committee members to deal with this issue. Two new members have joined the Committee: Professor Abigail L. Bristow and Dr Ray Kirby.

SPECIALIST GROUPS

The Institute reflects the broad spectrum of the science and application of acoustics and several specialist groups exist to foster contacts between members of the various specialisms.

Building Acoustics Group

Another busy year has just passed with the group delivering high quality educational meetings, providing thorough and coherent consultations for new documents and standards, and promoting the IOA to a wider audience.

We were involved with organizing the following meetings:

- The IOA autumn conference in Glasgow in September 2011 – this successful two-day meeting was organized in collaboration with the Environmental, Measurement and Vibration Groups
- 8th International Conference on Auditorium Acoustics in Dublin – May 2011
- International Symposium on Temporal Design in Sheffield – July 2011
- Acoustic Challenges in Green Buildings – February 2011
- Young and Senior Members' Groups meetings

Consultations were made on:

- BS8233
- CIBSE Guide
- AIS Office Acoustics Guide
- Schools Acoustics
- ISO 140
- BREEAM

A real effort has been made to communicate acoustics as a profession to schools and universities and our Young Members' Group is growing and becoming more vibrant. The Chairman of the Building Acoustics Group was also the guest speaker at a high level conference on acoustics in Saudi Arabia. Promoting acoustics is an important part of building design.

2012 looks like being another exciting year with the joint meeting with the French Acoustical Society in Nantes and the promise of another high-quality IOA autumn meeting.

Thanks go to all the people who have given their time so generously. We really couldn't do it without you.

Electro-acoustics Group

During 2011, the group committee organised and put on Reproduced Sound 2011, the annual two-day conference that has run every year since 1984. This was held at the Thistle Hotel, Brighton and was once again well attended with both regulars and new faces. Feedback (questionnaire forms) was sought from attendees and these have been scrutinised to inform future events, especially from the new influx of student attendees. It was announced at RS2011 that RS2012 would return to the Thistle on 14-16 November. Themes will include the use of audio systems to develop and communicate acoustic designs in the inter-disciplinary environment, commonly referred to as auralisation. As ever, abstracts the wider range of subjects affecting electro-acoustics will be welcomed.

Opinion was also sought at the 2011 AGM as to the venue for RS 2013. The idea of Manchester/Salford, with links to the BBC MediaCityUK development, was enthusiastically received, and investigations into venues and links with the BBC are already being explored.

Environmental Noise Group

In May 2011 the group held a well-attended workshop on Emerging Government Planning Policy: What Does it Mean for Practicing Acousticians? The delegates brought together discussions on a number of planning policy changes that may influence ENG member activities in the coming years.

The committee considered several public consultations and prepared a response to the Draft National Planning Policy Frameworks consultation in October 2011.

In September 2011 ENG members supported the Acoustics 2011 conference in Glasgow, A new decade – a new reality, Rethinking acoustic practices for the austerity decade. The AGM was held on 14 September 2011 at which the ENG committee was re-elected with two changes. The chairman thanked the committee for their enthusiasm and diligence in preparing numerous consultation responses in the previous two years. Thankfully the demand for these responses has now slowed.

Measurement & Instrumentation Group

During 2011 the group has played a significant role in the planning and programme of the conference Acoustics 2011, A new decade – a new reality, Rethinking acoustic practices for the austerity decade, held in Glasgow on 14-15 September. The joint effort of four of the IOA's groups made for a wider coverage of topics, and the visits to nearby sites of acoustic interest, especially the one organised by the M&I Group to the Hamilton Mausoleum, with its magnificent reverberation time, provided some diversification from the fare of papers and presentations at the Crowne Plaza Hotel, and was enjoyed by all who were able to join in.

Over the past year, committee members have continued contributing to the regular Instrumentation Corner article in Acoustics Bulletin, which has produced some interesting discussion and articles, and this is scheduled to continue for the forthcoming year.

A one-day meeting in London entitled You want to put a microphone where! – Measuring and assessing noise sources close to the ear was planned for 6 April 2011, but had to be postponed due to difficulties in getting the intended presenters to be available on that date.

A programme of three one-day meetings has been planned for 2012, with the first of these covering environmental noise propagation to be held at the Royal Society, London on 21 March.

Thanks go to all members of the committee for the active roles they take in all aspects of the group's activities and to Martin Armstrong for his secretarial skills on behalf of the group.

Musical Acoustics Group

The Musical Acoustics Group is in the process of being revitalised by Mike Wright and there is a core of people very keen to move forward.

An ad hoc committee has been reformed comprising Paul Malpas, Richard Keeble, Jonathan Kemp, Serafina Dirosario and David Sharp. It is hoped that the group will be co-ordinating its work with the Musical Acoustics Network, a network was originally funded by an EPSRC grant but now self funding. A one day meeting, The King of Musical Instruments – Acoustic Challenges, is expected to be held at the National Museum, Cardiff on 21 May 2012. Group members should make their interests known to Michael Wright so that further events can be planned.

Noise and Vibration Engineering Group

Two main committee meetings were held during the year, supplemented by smaller subgroup meetings to develop specific events. The main focus of committee meetings was developing plans for events of interest to the NVEG membership.

A workshop on Sound Power Measurement – Problems and Practice was held at ISVR in early June. This was a repeat of a similar event in 2010 and was very successful, generating good feedback from delegates and interesting technical results.

Several members of the committee assisted in the Acoustics 2011 conference, notably Andrew Watson, who was one of the main organisers. The group contribution to the conference was a session on NVH issues in cars, chaired by Stephen Walsh. An AGM was also held at the conference.

Plans for 2012 include assisting in the organisation of Acoustics 2012 in Nantes (Malcolm Smith is on the scientific committee and is chairing various sessions). Plans for other meetings later in the year are being formulated, for example on low noise design of machinery and possibly another vehicle NVH event.

Joint IOA/IOP Physical Acoustics Group

The Anglo-French Physical Acoustics Conference (AFPAC) was held in Fréjus, France, from 19-21 January 2011. This was a joint meeting with the GAPSUS group of the Société Française d'Acoustique, and brought together acousticians from both countries. There were 60 attendees with 40 papers being presented. The conference was widely acclaimed as being very enjoyable.

A successful tutorial day on physical acoustics was held at the Institute of Physics in London on 22 September 2011. Three external speakers presented tutorials that were accessible to

non-specialists in their field. This year's theme was Son et lumière or Light and sound and the three tutorials were on: Photo-acoustics (Emmanuel Bossy, Institut Langevin, Paris, France), Acousto-optics (Steve Morgan, University of Nottingham), and Sono-Luminescence (Robert Metin, University of Gottingen, Germany).

Senior Members' Group

The Chairman wishes to record his appreciation for the support and efforts of the committee.

The Senior Members' Group was set up in January 2011. There has only been one meeting – the inaugural meeting at which Bridget Shield gave an interesting talk about her experiences in acoustics. We also had a stimulating presentation about the environmental research at London South Bank University in whose building the meeting was hosted. The Chairman records his appreciation for the efforts made by the presenters at this meeting.

The main objective of the group is to co-ordinate the skills and experience of members for the benefit of the Institute. The following have been our principal activities:

- offering assistance to implement CPD
- assisting in checking out the new website
- assisting the Young Members' Group
- offering to review articles for Acoustics Bulletin
- contributing to both Acoustics Bulletin and Acoustics Update.

The History Project has been progressing under the guidance of Geoff Kerry with assistance from group members.

Speech and Hearing Group

The group committee met four times in 2011. The only event of note held over the year was a fascinating talk on Tinnitus and Hidden Hearing Loss, given by Professor David MacAlpine of the Ear Institute at UCL, immediately before the group's AGM in February. However, group members have continued collaborating with the Institute's Building Acoustics Group, the British Society of Audiology, the Voice Care Network and the British Voice Association, over issues of common interest. Members of the committee have been involved in the planning of the speech and hearing sessions to be held at Acoustics 2012 in Nantes, France in April 2012 (organised jointly by the IOA and their French counterpart, the SFA). Further activities are planned for 2012, including a visit to the National Sound Archives at the British Library.

Underwater Acoustics Group

In 2011 the group continued to concentrate on the dissemination of knowledge via its conferences. A bio-acoustics contribution to ICBEN's 10th International Congress on Noise as Public Health Problem was made by Paul Lepper and Peter Dobbins. The main event of the year, however, was the joint IOA/USF conference on ambient noise held at the National Oceanography Centre, Southampton, in October. This event was organised by a committee led by Stephen Robinson, and was a great success. There were 83 attendees, 34 speakers and five keynote speakers. There were a lot of positive comments and no complaints. The conference dinner held on board the Princess Caroline was very popular. Following this success, the group is dedicating its main efforts to organising the European Conference on Underwater Acoustics (ECUA 2012) to be held in Edinburgh in July 2012. To date, this conference has attracted more than 400 contributions, and we thank Chris Capus for his efforts in organising this event.

Young Members' Group

The group committee meets quarterly and has a representative on most of the specialist groups and regional branches.

Activities

The Young Members' Group sent out a questionnaire to better understand the needs and expectations of the young members.

Postcards have been printed for the group for distribution at branch meetings and events.

Two public inquiry theory and practice' seminars have been arranged for London and Manchester (in February). Delegate places at the London seminar have been fully booked.

We have gained sponsorship for future social events and other seminars/workshops are planned for the coming years.

REGIONAL BRANCHES

The regional branches of the Institute exist to further the technical and social activities of the Institute at local level.

Central Branch

The branch held six evening meetings during 2011 with an average attendance of around 18. The first meeting in February was A Current Review of Acoustic Design for Speech Privacy between Offices in New Developments and Fit-outs presented by Alex Krasnic, which provided a useful round-up of the issues and criteria relating to office acoustics. In May, Professor Dame Ann Dowling gave an interesting talk on Towards a Silent Aircraft, followed in June by a well attended presentation on Structure-borne Noise and Vibration from Building Mounted Wind Turbines by Professor Andrew Moorhouse. Colin English led a discussion headed Review of BS 8233 – An Opportunity to Comment, feeding into the consultation process for updating the standard. In October, Lisa Lavia took us through the Noise Abatement Society's Quiet Deliveries Scheme. In December, Professor Colin Waters introduced A Discussion on the Relative Merits of Different Noise Metrics in the Assessment of Transportation Noise" following the AGM which included Richard Collman being elected as Chair, Mike Breslin as Secretary and the retirement of David Watts, Ralph Weston and William Egan, all of whom had served a full six years on the committee from the inception of the branch and to whom a debt of gratitude is due. Thanks are also extended to all the speakers and the venues for hosting the meetings.

Eastern Branch

The branch maintained healthy membership interest via a wide range of presentations in 2011. The topics as usual have been diverse and aimed at both business interests and some social interests. We were fortunate to attract Dr Phil Morgan from the Transport Research Laboratory (TRL) and Dani Fiumicelli from AECOM early in the year and had a really interesting trip to Gemini Recording studios in April. Branch members will know noise from kitchen extract systems is an issue close to Clive Pink's heart and we were really pleased that Peter Hunnaball from Flakt Woods tackled this topic in July. We have had two hugely enjoyable but very different music presentations this year, one on hi-fi equipment and one on voice training, both by true experts in their field. Between those two, we had our eyes opened to new technology for internet-enabled noise monitoring which is certain to take off in a big way in the next few years. Eastern Branch covers a massive area so members will appreciate our meetings move around the county more than other branches but attendance generally remains good so we will strive to continue along these lines.

Branch meetings 2011 (with attendance figures)

24 February – Quiet Deliveries Demonstration Scheme Dr Phil Morgan	Ipswich	[37]
24 March – Noise impact from Small Wind turbines Dani Fiumicelli	Braintree	[32]
28 April – Gemini Recording Studios Visit Pat Gruebe)	Ipswich	[14]
26 July – Noise Impact from Kitchen Extract Ventilation Systems Peter Hunnaball	Colchester	[25]
29 September – Hi-Fi Myths Busted Mike Swanwick	Peterborough	[24]
18 October – New Technology for Internet Enabled Noise Monitoring & Group Discussion of Revision of BS 8233:1999 Dan Saunders and Clive Pink	Woodbridge	[13]
22 November – Estill Voice Training System Ben Mann	Colchester	[22]

Irish Branch

This year has seen three events organised by the Irish Branch, as well as responding to the *Higher Education Strategy Consultation* issued by the Department for Employment and Learning for Northern Ireland.

At the end of June we held our AGM at AWN Consulting in Dublin which progressed and closed smoothly, with Robert McCullagh standing for re-election and being duly re-elected. Damian Brosnan was co-opted in order to add “fresh blood”. Following the AGM we had two speakers on the subject of Outdoor Music Events in European Cities – Noise Control and Monitoring. Michelle McNally of Dublin City Council gave a presentation on recent research into the Acoustic Control at Outdoor Events in Europe which involved contacting relevant bodies in the major cities in Europe with a questionnaire on standards applied and monitoring techniques used, for which 13 cities responded. Whilst there was some variation, it appears that the general consensus was for a “daytime” noise limit of 75dB $L_{Aeq,15min}$ at neighbouring dwellings being appropriate in city and urban locations, and a limit of 65dB $L_{Aeq,15min}$ for rural locations. Michelle’s talk was followed by Gary Duffy of Enfonc Limited giving a presentation on Efficient Noise Monitoring at Outdoor Events in which he gave an example of how modern instrumentation and communication technologies have been employed at a large annual outdoor multi-stage event outside Dublin. This enabled simultaneous real-time noise monitoring at six remote locations with the sound levels being available at a central control location as well as at each of the major stages. This was an interesting and well received meeting.

In September there was a very well attended meeting in Dublin given by Rupert Thornley-Taylor on his involvement in a local Dublin case where residents complained about noise from a recently completed light rail (tram) scheme: Smyth -v- Railway Procurement Agency and Veolia Transport Dublin Light Rail Limited – A Noise Nuisance Judgement. The talk, which was most illuminating, was ended by an extended period of questioning from the floor.

In October we held the sixth annual Gerry McCullagh Memorial Lecture at which Professor Peter Wheeler gave a résumé of his experiences in acoustics throughout his varied

involvements in the world of acoustics. It was entitled *Taking Tea with Wotan – Tales of an itinerant acoustician*, and covered his time at Imperial College, the BBC, ISVR, Rascal Acoustics and Salford.

London Branch

The London evening meetings have been successfully held for a second year at WSP's offices. Attendance has been sustained in line with the previous year's meetings, with a record head count of 78 members reported at our January evening meeting. Typically most other events attracted more than 40 attendees.

It has been another very busy year which has included nine events, comprising seven evening meetings, a half-day visit, a "sound walk and talk" and the annual dinner.

As usual, the topics for the evening meetings have been very varied in nature, covering subjects such as construction noise, soundscapes, a review of BS 8233, and wind farm noise.

The year began with Steve Summers' enlightening talk on construction noise, which had one of the highest attendance records for any London evening meeting. The next evening meeting was held in April and was hosted by Stephen Turner, the Head of the Technical Team at Defra. Stephen presented an update on the latest research, strategy and policy information from the Noise and Nuisance Department at Defra. This was followed by a presentation by Dani Fiumicelli at the next meeting in May, who provided a detailed review of the current assessment methodologies for evaluating wind farm noise. Following our normal two month break for the summer, Dr Bob Peters and Colin Cobbing gave a joint presentation in September on measurement / assessment uncertainty as part of the EIA process. This was followed by an interesting presentation by Simon Kahn on the review of BS 8233. There were a range of views expressed from the floor and a lively debate ensued. Alex Krasnic gave the final talk of the year on the subject of Acoustic Ambassadors.

In February 2011, Stuarts Monks' earlier 2010 talk on the noise strategy for the London Olympics was complemented by an exciting half-day visit to the London Olympic Park in Stratford. As would be expected, this visit was over-subscribed. The visit comprised a guided tour of the park by David Demolder, Head of Licensing. David gave an initial overview of the history of the project and then took our group on a bus to see all the venues. Some of the iconic structures of note were the Olympic Stadium, the Basketball Arena and the Aquatics Centre designed by the international architect Zaha Hadid. After the tour, we walked to the nearby Formans fish restaurant which overlooks the park, where we were treated to a splendid lunch. The visit culminated in a talk by Mark Murphy, who described the sound and acoustic design work that had been completed and was ongoing for a number of the venues.

In June 2011 Claire Shepherd and Max Dixon organised a "sound walk and talk", which took a slightly different format to our normal evening meetings. The evening began with short introductions by Claire and Max into the concepts behind 'soundscapes' and some suggestions of how participants could get the most out of the soundwalks. The meeting then split into two groups which were led by Claire and Max around planned routes, to demonstrate the wide variety of sounds that can be experienced even in a busy city like London.

In November 2011 we held our annual dinner in our usual location, the Bleeding Heart restaurant, which is renowned for its excellent French cuisine and friendly ambience. Our previous visits have been good and it has always proved popular. This year's after dinner speaker was IOA President-Elect, Professor Bridget Shield. A few days before the annual dinner, Bridget was honoured at the Noise Abatement Society's annual John Connell Awards ceremony held at the Houses of Parliament, at which she was praised for 'working tirelessly' to effect solutions for the public benefit. Bridget gave a wonderful talk about her life in

acoustics with the aid of some old photographs showing some not so old acousticians – well not old at that time that is! Her work has been markedly varied, dealing with many subjects such as her recent research into noise and poor acoustics in schools; the prediction of industrial noise; community response to railway noise; concert hall acoustics; and annoyance caused by low frequency noise. The talk was well received and the discussion went on into the late evening.

Midlands Branch

2011 has again been a very successful year again for the Midlands Branch. We held 10 well attended meetings from a planned 12, with a wide and interesting range of subjects. It is our intention to continue planning one meeting a month for the forthcoming year. CPD certificates are handed out at all meetings and we try to provide a range of topics and use venues across the region to appeal to as wide range of the membership as possible.

Branch meetings 2011

18 January – BS5228: Spreadsheet or Mapping; You Decide Andy Nash, Robert Colder & Peter Hepworth	University of Derby
30 March – Hi-Fi Myths, Busted! Mike Swanwick	Arup. Solihull
13 April – Introduction to PA and Speech Intelligibility Jorge D'Avillez	Atkins, Birmingham
18 March – Micro Wind Farms Dani Fiumicelli	URS Nottingham
22 June – NAS- Quiet Deliveries Lisa Lavia	URS Nottingham
21 July – Recent Developments in Soundscape and Case studies of Sheffield Gold Route Jian Kang	University of Sheffield
17 August – Review of BS8233 Alex Ahern	Saint-Gobain, East Leake
20 September – IOA Diploma Student Projects The Noise Impact of Night-time Deliveries to Supermarkets Caroline Pope Evaluation of Prediction and Measurement Methods for Small Studio Design Ken Liston Real Ear Attenuation at Threshold (REAT) Using Audiology Testing Facilities Lesley Peplow	University of Derby
23 November – Towards a Silent Aircraft Dame Ann Dowling	Loughborough University

The branch committee would like to thank all the speakers for their technical contributions, and the support from the various sponsoring venues who include: Atkins Birmingham, Arup Solihull, Saint-Gobain, University of Derby, University of Sheffield, Loughborough University and URS Scott-Wilson, who all provide the vital facilities and refreshments.

Several committee changes were proposed and agreed at the 2011 AGM, namely:

- Mike Swanwick stepped down as Secretary, and was thanked for his contributions over the last four years. Kevin Howell was duly elected as the new Secretary. Mike agreed to stay on the committee as an ordinary member.
- John Hinton was elected as an honorary committee member to reflect the recreation and his service to the branch.
- Mike Breslin and Grant Swankie were both elected and welcomed to the committee.

Finally a vote of thanks to the stalwart members behind the scenes, including: Kevin Howell for his Acoustics Bulletin reports, and Andrew Jellyman for creating the CPD certificates.

The branch committee also held its traditional planning meeting, where we have planned an equally full programme of monthly meetings for 2012.

The chairman would like to add a very strong vote of thanks for the excellent service from Mike Swanwick in his role as secretary and thanked him for remaining on the committee as an ordinary member.

North West Branch

The generally aged and almost retired branch committee organised five meetings during 2011 starting in February at BDP with a presentation by Keith Vickers of Brüel & Kjaer. He provided a commentary on the surprisingly short history of the sound level meter from the analogue variety up to the current digital models, even giving younger members the opportunity of playing with a type of 2203 model and “is that a needle?”. Of course, all the types on display were familiar to the majority of the committee members!

In May, at Arup, Professor Andy Moorhouse of University of Salford presented the findings of a recent research project funded by the Department for Communities and Local Government, the Department of Energy and Climate Change and the Department for Environment Food and Rural Affairs into structure-borne noise and vibration from micro-turbines mounted on buildings. Andy provided the results of the investigation, which included long term monitoring of two small wind turbines in the field, a measurement survey of transfer functions for masonry buildings, laboratory measurements of mast properties and a field survey of micro wind turbine installations.

Roger Tompsett of Noise Map Ltd visited BDP in June where he provided a presentation of Solving Practical Difficulties in the Assessment of Construction Noise. Roger suggested many construction noise assessments are inadequate and need to be more detailed to respond to the requirements of a typical modern code of construction practice, including appropriate mitigation measures. The application of the advice in BS5228 “*Noise and vibration control on construction and open sites*” was considered and the prediction of noise from a real life situation using a computer model was demonstrated. Useful information on the practical difficulties in assessing construction noise was provided, including the risks of over prediction due to inadequate details of the construction operations particularly “on-time”.

As part of a “round the regions” discussion opportunity to comment on the proposed revision to BS8233 ‘*Sound insulation and noise reduction for buildings – Code of practice*’, Phil Dunbavin of PDA led a meeting at Arup in August. Phil is a representative of the BSI Committee and orchestrated responses from members on the aspects of BS8233 that need to be improved.

Finally in November at BDP, after the AGM, David Waddington ably assisted by Eulalia Peris, Gennaro Sica and James Woodcock of University of Salford presented a summary of the approach to a research project on Human Response to Vibration in Residential Environments funded by the Department for Environment, Food and Rural Affairs (Defra) UK. The project work included face-to-face interviews and internal vibration and noise exposures determined by measurement and calculation. Exposure-response relationships were presented for different vibration sources and the combined effects of vibration and noise exposure were also considered. Comparisons with published guidance, in particular BS 6472-1:2008, the ANC guidelines, and BS 5228-2:2009, were briefly presented. The in-depth results of the project are awaited with interest.

The committee needs to be energised and is still hoping for some “new blood” to help organise meetings. Thanks go to Arup and BDP for hosting the meetings and all those who provide the backup at the venues.

Scottish Branch

The Scottish Branch started the year with our Annual General meeting on Tuesday 25 January 2011 at Heriot Watt University. This was preceded by an interesting meeting on ‘domestic noise and the new Scottish sound insulation standards’. This included a discussion on the proposed IOA accreditation scheme for sound insulation testers. Robert Osborne, Chief Executive of the ANC attended the meeting and provided an overview of the ANC scheme.

The IOA accreditation scheme was approved by Council in June 2011 and Professor Robert Craik was appointed as the Chair of the IOA Sound Insulation Test Accreditation Board. The approved IOA scheme differs from the ANC scheme in that it is exclusively an accreditation of the individual tester rather than being linked to an organisation

2011 has been a year of significant change in terms of Scottish planning and noise guidance, with PAN 1/ 2011 and TAN-Noise replacing PAN 56. The new standard prompted much discussion amongst members during a meeting at Edinburgh Napier University on 1 June 2011. Feedback was provided to Scottish Government in relation to concerns which may be addressed as part of a future revision. Thanks to Richard McKenzie for hosting the meeting.

The branch’s activities for the year concluded with a meeting on the revision of BS 8233 at Edinburgh Napier University on 25 November 2011. Thanks to Colin English for leading us through the issues being considered in the revision process.

The Chair, Secretary, Treasurer and Young Person’s Representative of the Scottish Branch remain unchanged. Many thanks to Andy Watson for continuing to look after Scottish Branch financial matters, to Nicola Robertson for her continued commitment as Young person’s Representative and to Committee members for their support during 2011.

Southern Branch

The branch enjoyed a discussion chaired by Colin English of TECP on the forthcoming revision of BS 8233. The discussion was well attended by consultants and included a lively debate regarding strengths and weaknesses of the document.

A series of evening meetings are being planned for 2012 – members willing to discuss a relevant topic are asked to contact either Steve Gosling or Nigel Cogger in the first instance.

South West Branch

The branch held four meetings during 2011, beginning with a very interesting talk organised by Mike Wright, Chair of the IOA Musical Acoustics Group. A talk, Organ Builder – An Intuitive Acoustician?, was given by Lance Foy in Truro, Cornwall. Lance was appointed to rebuild the Truro Methodist Church organ in 1981. Lance introduced the organ and discussed the changes made over the years. This was followed by a recital by Philip Davey, organist, accompanist, composer and teacher, Director of Music Truro Methodist Church. The branch also visited Truro Cathedral where they could experience all three organs, the most famous of these, the “Father Willis” organ, is widely regarded as one of the finest instruments in the country. A fabulous start to the branch’s trips!

This was followed by a trip to Rockfon in Bridgend, Wales, where the branch was given a tour of their factory and demo room, and a talk based around Rockfon’s regulatory and industry knowledge.

The branch was then given an opportunity to recalibrate their ears during a “Soundwalk” around Bristol city centre, where those attending were able to assess how the changing environment affects the local soundscape. The walk enabled the group to consider how the soundscape of a location has a specific emotional or psychological impact, and further, to consider soundscape enhancement. The annual social meeting followed.

At the final meeting the branch discussed the revision to the BS8233 standard, with the branch making their comments on the revision to the BSI. Colleagues from RIBA and the CIEH were invited to this discussion.

Welsh Branch

2011 was a quiet year for the Welsh Branch. The branch organised a conference in January that explored Statutory Nuisance and Planning. The event boasted high profile speakers including the head of the Planning Inspectorate in Wales and was held in the Millennium Stadium. The event was well attended and was considered a success by those who attended.

Yorkshire and North East Branch

The branch held two meetings in 2011.

At the University of Bradford Dr Joe Venor gave a talk on vibro-acoustic simulation methodologies. He outlined the use of various vibro-acoustic prediction techniques for the prediction of noise and vibration levels in various diverse situations.

Professor Kirill Horoshenkov resigned as Secretary, the Chairman thanked him for the immense amount of work he has put into the branch.

A meeting was held on Tyneside at Armstrong World Industries, where a presentation on acoustic ceiling tiles was followed by a factory tour.

TABLE 1 MEMBERSHIP

Grade	2010	2011
Hon Fellow	33	34
Fellow	186	179
Member	1655	1698
Associate Member	811	742
Affiliate	82	67
Technician Member	77	78
Student	74	79
Totals	2977	2931
Key Sponsor	3	3
Sponsor	56	51

TABLE 2 GROUP MEMBERSHIP

Group	2010	2011
Building Acoustics	1171	1206
Electro acoustics	296	311
Environmental Noise	1474	1500
Measurement & Instrumentation	427	455
Musical Acoustics	259	286
Noise and Vibration Engineering	940	968
Physical Acoustics	164	183
Senior Members		81
Speech & Hearing	190	193
Underwater Acoustics	137	156
Young Members		116

TABLE 3 BRANCH MEMBERSHIP

Branch	2010	2011
Central	135	148
Eastern	259	262
Irish	142	131
London	728	732
Midlands	402	395
North West	392	378
Overseas	321	315
Scottish	169	163
South West	291	265
Southern	485	456
Welsh	45	67
Yorkshire & North East	215	213

TABLE 4 DETAILS OF EMPLOYMENT

Employment Category	2010	2011
Architectural Practice	31	42
Consultancy	1388	1397
Education	209	244
Industry/Commerce	345	369
Public Authority	433	390
Research & Development	185	219
Retired	134	146
Other	86	88

TABLE 5 MEETINGS ATTENDANCE IN 2011

Topic, Date & Venue	Attendance
Planning and Statutory Nuisance 26 January Cardiff	43
Tour of Olympic Site 7 February London	30
Acoustic Challenges in Green Buildings 16 February Watford	27
The Art of being a Consultant 12 April London	48
Auditorium Acoustics 2011 20-22 May Dublin	101
Government Planning Policy 24 May Salford	46
Sound Power Measurement 1 July Southampton	21
ICBEN 2011 24-28 July London	264
Acoustics 2011 14-15 September Glasgow	106
Ambient Noise in North European Seas 3-5 October Southampton	83
RS2011 17-18 November Brighton	90

TABLE 6

INSTITUTE PERSONNEL AT 31 DECEMBER 2011

<p>COUNCIL</p> <p>Officers</p> <p>President President Elect Immediate Past President Honorary Secretary Honorary Treasurer Vice Presidents Engineering Groups & Branches International</p>	<p>Prof T J Cox MIOA Prof B M Shield HonFIOA Mr J F Hinton OBE FIOA Dr N D Cogger FIOA Dr M R Lester FIOA</p> <p>Mr R A Perkins MIOA Mr G Kerry HonFIOA Dr W J Davies MIOA</p>	<p>Ordinary Members</p> <p>Ms L D Beamish MIOA Mrs A L Budd MIOA Mr K Dibble FIOA Dr E E Greenland MIOA Prof J Kang FIOA Mr R Mackenzie MIOA Mr G A Parry MIOA Mr A W M Somerville MIOA Mr D L Watts FIOA</p>
<p>Committees & Sub Committees</p> <p>Education Diploma in Acoustics and Noise Control, Board of Examiners Certificate of Competence in Environmental Noise Measurement Certificate of Competence in Workplace Noise Assessment Certificate of Proficiency in Anti-Social Behaviour (Scotland) Act 2004 (<i>IOA/REHIS</i>) Certificate in the Management of Occupational Exposure to Hand Arm Vibration Engineering Division Medals & Awards Meetings Membership Publications Research Co-ordination</p>		<p>Chairman</p> <p>Mr S W Kahn MIOA Mr S J C Dyne FIOA Dr M E Fillery FIOA Mr G Brown MIOA Mr S Williamson MIOA Mr T M South MIOA Mr R A Perkins MIOA Prof T J Cox MIOA Mr J P Newton MIOA Dr B J Tunbridge MIOA Mr A Lawrence MIOA Prof K Attenborough FIOA</p>
<p>Specialist Groups</p> <p>Building Acoustics Electroacoustics Environmental Noise Measurement & Instrumentation Musical Acoustics Noise and Vibration Engineering Physical Acoustics (<i>Joint with the Institute of Physics</i>) Senior Members' Group Speech & Hearing Underwater Acoustics Young Members' Group</p>	<p>Chairman</p> <p>Mr R O Kelly MIOA Mr P R Malpas MIOA Mr S C Mitchell MIOA Mr R G Tyler FIOA Mr M Wright MIOA Dr M G Smith MIOA Prof V F Humphrey FIOA</p> <p>Mr R J Weston MIOA Dr E E Greenland MIOA Dr P F Dobbins FIOA Ms L D Beamish MIOA</p>	<p>Secretary</p> <p>Mrs A L Budd MIOA Ms H M Goddard FIOA Ms N D Porter MIOA Mr M J Armstrong MIOA Vacant Mr M D Hewett MIOA Prof M Lowe</p> <p>Mr M R Forrest MIOA Dr G J Hunter MIOA Dr R A Hazelwood MIOA Ms E Keon MIOA</p>
<p>Regional Branches</p> <p>Central Eastern Irish London Midlands North West Scottish Southern South West Welsh Yorkshire & North East</p>	<p>Chairman</p> <p>Mr R A Collman MIOA Mr C L Batchelor MIOA Dr M R Lester FIOA Mr J E T Griffiths FIOA Mr P J Shields MIOA Mr P E Sacre MIOA Mr A W M Somerville MIOA Dr N D Cogger FIOA Ms H G Kent MIOA Mr G O Mapp MIOA Mr D Daniels MIOA</p>	<p>Secretary</p> <p>Mr M Breslin MIOA Mr C M Pink AMIOA Mr S Bell MIOA Mrs N Stedman-Jones MIOA Mr K Howell MIOA Mr P J Michel MIOA Ms L Lauder MIOA Mr S J Gosling MIOA Mr D C Pope MIOA Mr J M Keen AMIOA Vacant</p>
<p>Chief Executive: Mr K M Macan-Lind</p>		