Hong Kong Institute of Acoustics

SOUNDING BOARD

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International Noise Awareness Day (INAD) 26 April 2017

The event was co-organized by the HKIOA Women in Acoustics Sub-Committee and the HKU Voice Research Lab, Faculty of Education, a seminar was given on 26 April 2017 at HKU with a view to raising public awareness of noise on public health and well-being. Participants spent a fruitful afternoon with 3 guest speakers, followed by a panel discussion.

Dr. Daniel Y.T. FONG, Associate Professor of HKU, shared the research findings on the relation between noise and sleep health. The research studied the impact of nocturnal noise on nonrestorative sleep in relation to noise sensitivity and other factors including demographics, lifestyles and psychological status. Although the study showed people in Hong Kong tends to be more tolerance to noise than people in U.S., there is still need to raise the awareness of noise impact on non-restorative sleep that may affect physical and psychological well-being.



A group photo of all participants and speakers for the event



A facilitated discussion session during the session

International Noise Awareness Day (INAD) 26 April 2017



Speakers and HKIOA Committee Members



The seminar was well received

Prof. Kin-che LAM, Adjunct Professor of CUHK, shared his insightful idea of taking into account soundscape in the modern planning in order to manage the potential health risk associated with noise pollution and to craft a quality acoustic environment for human appreciation and wellbeing. Prof. Lam provided a holistic view of how soundscape planning could manage both wanted and unwanted sound sources, a step ahead of conventional noise controls; which mainly focus on reducing discomfort noise sources.

Last but not least, Dr. K.K. LAU, Principal Environmental Protection Officer of EPD, presented the achievements and challenges that the Authority experienced in managing the noise environment in Hong Kong. Given the higher expectation from the public than the past, EPD has strived to tackle the challenges in many ways. Provision of noise barriers/enclosures, low noise road surfacing and multiplenum railway design has shown progressive improvement in protecting people from excessive road traffic/rail noise, despite the increase in population, road length and number of vehicles. Other measures involves intervene in planning process, law enforcement, administrative schemes, partnership programme, etc. By Natalie Ng & Felice Wong

HKIOA Certificate Courses on Noise Control, Road Traffic Noise Assessment, Architectural Acoustics Design, Road Traffic Noise & Railway Noise Measurement 2017 – 4 July to 26 October 2017

The HKIOA proudly organized a certificate course on various topics of noise and acoustics, and supported by HKIE-MMNC, HKIQEP and ASME-HK, from 4th July 2017 to 26th October 2017. The schedule this year was tight, with courses being run almost 3 days per week during the period. A total of 23 sessions and 6 assessments were conducted, on topics including Road Traffic Noise Assessment, Noise Control & Management, 3D Noise Modeling, Noise Monitoring and Measurement, Architectural Acoustics Design and Railway Noise Measurement.

This year we have pleasure to have invited many experienced acoustics professionals to be our speaker for the courses. They included Mr. Henry CHAN from AEC Ltd, Mr. James CHOI from ANEWR Consulting Ltd, Tom HO from S & V Samford Instruments Co. Ltd, Mr. Wilson HO and Mr. Richard KWAN from Wilson Acoustics Ltd, Prof. KC LAM from CUHK, Ir CK LEE, Mr. Benson LEE, Mr. Joe LEUNG, Mr. Aaron LUI & Mr. CL WONG from the Environmental Protection Department, and Dr. FC TSANG from Ramboll Environ Hong Kong Ltd.



Participants were taking the exam after the course

HKIOA Certificate Courses on Noise Control, Road Traffic Noise Assessment, Architectural Acoustics Design, Road Traffic Noise & Railway Noise Measurement 2017 – 4 July to 26 October 2017



Mr. Richard Kwan, one of the experienced acoustics professionals teaching in the course

Same as previous years, the certificate courses were well received. A total of 50 enrollments was recorded this year with many positive feedbacks from participants. In particular, they indicated that the courses were useful in enhancing and refreshing their knowledge on noise control and statutory requirements. We all look forward to have more active participation from existing/potential members in the coming year.



By Ken WONG

The biggest event of the year, the annual International Congress and Exposition on Noise Control Engineering conference ("INTER-NOISE 2017") was held in our hometown, Hong Kong, this year. HKIOA was one of the organizers for this prestigious event, together with Hong Kong Polytechnic University, with our Mr. Tom Ho as one of the co-chairs. This year conference titled "Taming Noise and Moving Quite" spanned over four days between 27 and 30 August 2017 housed at the Hong Kong Convention and Exhibition Centre.

Five keynote speeches, 824 oral presentations plus 115 posters covering all aspects of acoustics as well as Noise and Vibration control were delivered at this wellattended conference. In addition, there were also more than 38 exhibitors and sponsors presenting their latest technologies and instrumentations.



Opening ceremony for INTERNOISE 2017: (from left to right): Professor Jun Yang (Acoustical Society of China), Ms. Grace Kwok (HKIOA) (Hon Treasurer), Ms. Marion Burgess (President, International INCE), Mr. KS Wong (Secretary for the Environment, HKSAR Government), Mr. Tom Ho (HKIOA) (Co-Chair), Prof. Li Cheng (HK PolyU) (Co-Chair) & Dr. Daliang Chen (NVH Branch of the Society of Automotive Engineering, China)

Organized by International Institute of Noise Control and Engineering ("I-INCE"), the Inter-Noise conferences aim to disseminate information on the field of noise control engineering and thus to promote progress in both, technological approaches and problem awareness. The series was first launched in Washington, D.C. in 1972 and had since been held in cities around the world.







Prof Steffen Marburg

Kicking-off the congress on Day One was Dr. Xin Zhang, the Swire Professor of Aerospace Engineering and a chair professor at HKUST, giving us his keynote speech on "Computational Aeroacoustics Study of Leading Edge Noise". Dr. Xin shared the recent progress made on gust response of airfoil angle of attack, and chamber, as well as effects of airfoil geometry on turbulence interaction noise.

Further keynote speeches were given by Prof. Brigitte Schulte-Fortkamp of Technische Universität Berlin, presenting "Soundscape and Noise Management-A Matter of Life Quality"; Prof. Steffen Marburg, chair of the TC Computational Acoustics of the European Acoustics Association, on "Convention Boundary Element Techniques: Recent Developments and Opportunities".



Dr Paul Donavan

Dr. Jian Pang, vice president and chief engineer of Changan Auto Global R&D Centre, on "Trend of Automobile Development and Its Challenge for Noise and Vibration Control"; and the closing I-INCE lecture by Dr. Paul Donavan, senior consultant and principal in the acoustical consulting firm of Illingworth & Rodkin, who has talked "Using Quieter Pavement to Move Quietly – Experiences in Tire-Pavement Noise Reduction".

INTER-NOISE 2017 was not bound within the halls and meeting rooms alone, HKIOA organized two technical visits during the 4-day conference. First, a site visit to Tseng Kwan O –Lam Tin Tunnel (Lam Tin section) was held on 28 Aug 2017, focusing on noise and control at a construction site, including: technical sharing on effectiveness of breaker damper and acoustic blankets with a noise reduction of 6 to 8 dB(A), on-site demonstration of acoustics camera to identify breaker noise sources distribution, inspection of a 5m high retractable noise barrier.



INTERNOISE-2018 will be held in August 2018 in Chicago, USA.

A second technical visit was to the Tuned Mass Rail Damper Testing at Shatin Industrial Centre on 29 Aug 2017. The venue hosted testing facilities that investigates in track decay rate and vibration characteristics. Visitors were also given an overview of railway damper development and its application in Hong Kong.

In summary, HKIOA was very proud to have been the organizer of INTER-NOISE 2017, which was an overwhelming success and was well-received by all participants. It was a privilege to facilitate the congress where the world's top minds could meet and exchange ideas and latest development in the field of acoustics.

Next year congress, INTERNOISE-2018 will be held in August 2018 in Chicago, USA.

By Zoe Yip, Kenneth Chow & Felice Wong

Joint HKIOA and HKPU Seminar Application of Acoustic Camera in Hong Kong 28 September 2017

A seminar on the "Application of Acoustic Camera in Hong Kong" was jointly organized by the HKIOA and the Department of Mechanical Engineering of Hong Kong Polytechnic University on 28 September 2017.

Mr. Wilson Ho, the Director of Wilson Acoustics, shared his knowledge on the principles of acoustic camera and experience in its application.

Case studies in following areas were also shared and discussed with the audience:

- Partition acoustic insulation test and identification of noise leakage locations
- Construction tunnel portal door noise leakage detection for immediate mitigations



Mr. Wilson Ho, the speaker of the seminar

Joint HKIOA and HKPU Seminar Application of Acoustic Camera in Hong Kong 28 September 2017

- Train and tram noise source detection
- Hydraulic breaker noise visualisation of noise control effectiveness
- Localise an unknown noise source in urban area affecting the community for months

Wilson shared this knowledge and experience on this interesting topic with over 50 participants from the government departments, consultants, project proponents and academic institutes. Wilson also facilitated a discussion session engaging our participants for constructive exchange of views and ideas on this technology.



Presentation of the appreciation certificate by Ms. Grace Kwok, the Chairlady of HKIOA, to the appreciation certificate to the speaker, Mr. Wilson Ho

New Membership Functions in the HKIOA Website

In August 2017, an upgrading of the HKIOA website was conducted mainly to include a new Membership function in order to serve you better. Membership accounts have been created for each of you, as a member, so that you could just go to the webpage (<u>http://hkioa.org/login.php</u>) and retrieve the first-time password for your account using the password retrieval function. The retrieval is almost done instantaneously but for those who are unable to receive the password in a minute, you are advised to check the trash or spam mail folder.

After your first time login, you are advised to change the password immediately for security purposes and update your personal information as well. For any further changes to your personal data, you may just log in to your account again and make the changes anytime you wish.

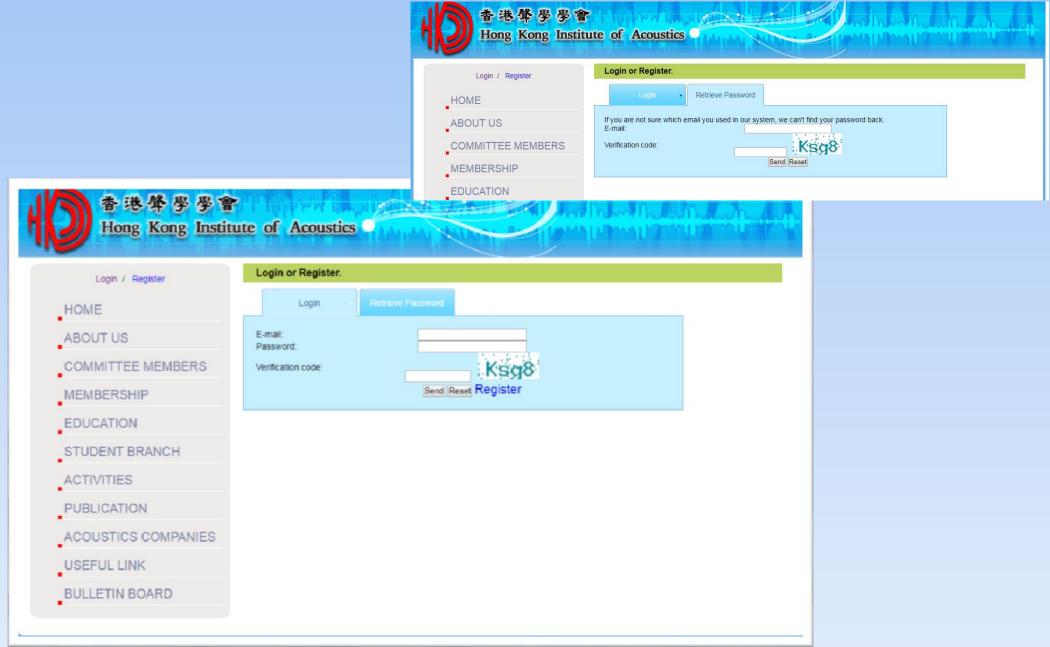
Please note that your account is linked to a unique email address, which cannot be changed instantly online. If, however, you wish to change your email address, please write to us at <u>membership.hkioa@gmail.com</u>, and we will create a new account for you.

The system would also allow you to use your credit card to pay for HKIOA membership subscription and fees for any paid activities as well.

We hope the above enhancement would give greater convenience to you and help us communicate more effectively with you.

By Aaron Lui

New Membership Functions in the HKIOA Website



A screen shot of the upgraded page of the HKIOA website

Application for New Membership of HKIOA

To demonstrate the professional competence of our members, the Institute's Executive Committee has recently decided that an applicant for Corporate Membership (i.e. Fellow and Member) be requested to attend an interview for assessment of his/her professional experience or contribution, for any application received on or after 1 Jan 2018.

In order to enhance transparency in the assessment for different classes of membership, more information about the criteria for assessing educational qualifications will also be included in the relevant webpage on membership.

Besides, from 1 Jan 2018, a non-refundable application fee of HK\$300 will also be imposed (except for student membership).

Details on the above development will soon be announced on the webpage. Members and friends, please stay tuned for the updates in this regards.