# SOUNDING BOARD





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# Chairman's Message "Welcome again to HKIOA"

Tom Ho

#### Welcome again!

I am extremely honored to be elected as the Chairman of HKIOA for the second consecutive term. I will continue to try my best to uphold the traditions and values of the society with the new executive committee which took effect after the 2010 AGM.

We will continue with our usual activities such as technical visits, both local and abroad, seminars on various noise and vibration topics and Meyer Poon awards for students. We will continue to strengthen our education and professional development programs through more structured certified training courses such as Traffic Noise Measurement and Assessment, Construction Noise Management and Building Acoustics, etc.

We will continue to reach out to other Acoustical Societies in Asia. We welcome all members to join us on these fun and meaningful trips. Some of our activities are also open to non-members and we hope to share knowledge and expertise with professionals of other fields.

Most of you probably know by now that HKIOA is proud to be hosting the "Acoustics 2012 Hong Kong", a joint meeting of the 163rd meeting of the Acoustical Society of America (ASA), the 8th meeting of the Acoustical Society of China (ASC) and the 11th Western Pacific Acoustics Conference (WESPAC). This joint meeting will be held at the Hong Kong Convention and Exhibition Center (HKCEC) from May 13 to May 18, 2012. A local organizing committee was formed and very busy planning and organizing this major Acoustics event. I invite all HKIOA members to join force to make this event a successful and memorable one.

I am also pleased that more and more members are willing to serve the Institute by participating as either committee members or co-opted members, and take up various responsibilities for this term. They are M.K. Cheung, Aaron Lui, Raymond Lee and Andy Chung. With the much strengthened structure, we have also formed additional Sub-committees (SC) to look after specific areas of interest such as Soundscape, Vibrations, Environmental Noise, Traffic Noise, and Construction Noise. The respective division of responsibilities among the current team of committee members are as follows:

Chairman	Tom Ho
Hon. Secretary	KW Cheng
Hon. Treasurer	Grace Kwok
Chairman, Membership SC	CW Law

Chairman, Publication SC	CL Wong
Chairman, Information Technology SC	Andy Chung (up
	to Sep 2010)
	Wilson Ho
Chairman, Activities SC;	Wilson Ho
Chairman, Vibrations SC	
Chairman, Environmental Noise SC	SK Tang
Chairman, Building Acoustics SC	CM Mak & YN
	Au Yeung
Chairman, Industrial Noise SC	Randolph Leung
Chairman, Professional Development & Education SC	Lixi Huang
Chairman, Traffic Noise SC	Aaron Lui
Chairman, Soundscapes SC	Maurice Yeung
Chairman, Construction Noise SC	MK Cheung
Committee member	Raymond Lee
Adviser (Education)	Westwood Hong
Adviser (Institution Advancement & Discipline)	KK Iu
Adviser (External Liaison)	MY Yeung

#### Highlights of the 2010 Annual General Meeting Kin Cheng & CW Law

The HKIOA 2010 AGM was held on 18.3.2010 at Hong Kong Yacht Club. There were 33 members together with the Executive Committee attended the AGM and 9 proxies were received prior to its opening. We were also delighted to have 22 guests from other local professional institutes and organizations (including Professor Jiqing WANG from the Institute of Acoustics, Tongji University in Shanghai and his spouse) joined the Annual Dinner after the AGM.

Following the declaration of opening at around 6:45pm, our Chairman, Mr. Tom Ho presented the 2010 Annual Report to our members. In sum, the session 2009-10 was again a fruitful year for Institute. Members were able to continue to benefit from various activities organized by the Institute or jointly organized with other professional institutions including delegation visits, technical seminars and social events etc. The size of our Institute was also steadily growing with newly elected members from local practitioners in the field of acoustics, and enquires were received expressing interest in joining our Institute. Our financial status was also health with balanced revenue and expenditures. The full 2010 Annual Report was available at: http://hkioa.org/activities.html.

As for composition of our Executive Committee, Professor S.K. Tang was newly elected, Dr. Lixi Huang, and Ir. Au Yeung Yiu Nam were re-elected as Committee members while Mr. Tom Ho was also re-elected as Chairman for the new term (2010-12).

Taking the opportunity, Mr. Tom Ho announced that HKIOA had bided successfully to host the ASA/ASC/WESPAC joint meeting in Hong Kong (May 2012) with anticipated number of oversea participants over 1,000. Certainly, there would be a lot of challenges ahead for the Institute to make such big event a triumph. In closing, Tom also again stressed that continual support from our members was essential to make our future endeavor a success.

Following the closing at around 8:00pm, Professor Jiqing WANG gave the attendees an inspiring lecture. The lecture covered the evolvement of acoustical designs for "Traditional Chinese Theatrical Buildings" and different techniques for evaluations, and was well received by the attendees. Professor Jiqing WANG was also awarded by the Institute an Honorary Fellowship.

The event was completed at around 11:00pm after enjoying the Annual Dinner and wines by the attendees. Looking ahead, the HKIOA would continue its effort in organizing different kinds of functions aiming at benefiting our members while at the same time striving to uphold members' professional quality and conduct. Bidding for hosting Inter-Noise 2014 in Hong Kong could be the next target for the Institute to pursue.



## Series of Vibration Control Seminars

Wilson HO

HKIOA organized a series of vibration control seminars following the formation of the Vibration Sub-Committee. The seminars attracted participants from different sectors including the government, industries, and educational institutes.

In the 1<sup>st</sup> seminar *TBM Groundborne Noise Prediction Models*, concept of TBM Groundborne noise prediction models was presented. The prediction accuracy, pros and cons, practicability and limitations of various models were also discussed. In the 2<sup>nd</sup> Vibration Monitoring seminar, improper and correct monitoring practices were illustrated with real industrial cases to alert the VCM practitioners. The 3<sup>rd</sup> seminar on Shock and Vibration Analysis gave an introduction to shock and vibration measurement; and related applications. In the 4<sup>th</sup> seminar on Vibration Isolation of Buildings, technical and practical complexities in isolating a building were discussed. In the 5th seminar, Railway Noise Control Using Vibration Absorber, a superior vibration absorber was introduced. The principle of this absorber and the initial testing results were discussed as well.

Date	Speaker	Title	Attendance
6 Jan	Wilson Ho / Banting Wong, Wilson Acoustics Limited	Seminar 1, TBM Groundborne Noise Prediction Models	202
10 Feb	Ir Dr. Peter W. Tse, Smart Engineering Asset Management Lab.	Seminar 2, Vibration-based Condition Monitoring - Commissioning and Standards	93
27 May	Jonathan Kwan	Seminar 3, Shock and Vibration Data Analysis	67
29 June	Barry Murray, Wilkinson Murray Limited	Seminar 4, Vibration Isolation of Buildings	38
14 Oct	Wilson Ho / Banting Wong, Wilson Acoustics Limited	Seminar 5, Railway Noise Control by Vibration Absorbers	75
3 Nov	Steve Barlow, Pandrol Australia	Seminar 6, Controlling Ground Vibration Using Slab Track Fasteners on Singapore MRT	74

## Seminar on Control of Traffic Noise in Taipei

Being one of the densest metropolitan cities in the world, road traffic noise has become the most severe and challenging environmental noise problem to be tackled in Hong Kong. Over the past years, our Government has been working hard through a multi-pronged to address the problem which includes (i) pre-empting problems through outset of planning; (ii) legislative control of vehicle noise emission; (iii) addressing existing traffic noise problem through implementation of abatement measures such as retrofitting noise barriers and low-noise re-surfacing programmes; and (iv) public engagement etc. Our efforts and experience have not only benefited many Hong Kong residents, but also being recognized by other metropolitan cities in Asia Pacific, like Taipei.

Under the auspices of the Institute of Traffic and Transportation of National Chiao Tung University in Taiwan, HKIOA was invited to participate in their Seminar on Control of Traffic Noise and to share with the attendees our approaches and experience in addressing road traffic noise problem in our compacted urban setting.

On 27 April 2010, I represented the Institute and gave the talk during the seminar. The talk covered the Hong Kong's strategies and approaches to address the road traffic noise problem, its current status, and some looking ahead measures etc, and was well received by over 100 audiences therein including officials, academics, and noise professionals in Taiwan. There were other topics in the seminar such as the Taiwanese practices to regulate traffic noise, software prediction and its applications etc.

Owning to my earlier other commitments, I travelled back to Hong Kong right after the closing of the seminar. Despite my stay in Taipei was less than 24 hours to deliver the mission, I was glad that the event was successful and helped strengthening the partnership with our counterparts in Taiwan.



Traffic Noise in Taipei

Kin Cheng



Local and overseas experts participated in the **Noise Mapping Workshop** 

**Noise Mapping** Symposium and Workshop "Objectives, Target Quality and Deliverables" Aaron Lui

A first ever Regional / International Noise Mapping Workshop and Symposium were successfully held in Hong Kong on 19 and 20 August 2010. The event was oganised by Hong Kong Institute of Acoustics, and co-organised by the Chinese University of Hong Kong,

the Mechanical, Marine Naval Architecture and Chemical Division of the Hong Kong Institution of Engineers, Hong Kong Institution of Environmental Impact Assessment and American Society of Mechanical Engineers (Hong Kong Section) and supported by the Environmental Protection Department.



The Noise Mapping Symposium being held on 20 August 2010 at the agnes b. Cinema of the Hong Kong Arts Centre

The Symposium on 20 August 2010 attracted an audience of over a hundred and some were coming all the way from Mainland China and Taiwan. There were 5 keynote speakers from overseas. Among them were Dr Gaetano Licitra from Italy and Ir Simon Shilton from the UK, who shared with us their valuable insights and experience in respect of the noise policy, the technical aspects and the development of noise mapping in the European Union. Mr Fabian Probst from Germany talked about software tools for strategic and detailed noise mapping and assessment. In the Asian region, Dr Hiroyuki Imaizumi from Japan and Prof Sang-Kyu Park from Korea took us through the latest development of noise mapping in Japan and Korea respectively.

Locally, Mr Aaron Lui talked about the history and development of noise mapping in Hong Kong; Dr CW Law, Mr Christopher Hoar and Prof KC Hui talked about the tools for traffic noise prediction in 3D environment, the best practices for web-based noise modeling and various technological developments in 3D noise mapping.

There are two main objectives in hosting the events. Firstly, it is to keep the professionals involved in noise mapping and related issues abreast of the latest development and the trend in noise mapping in Europe and also the Asian countries. Secondly, it is to address the recent development and possible way forward for noise mapping applications, uncertainty, quality control, and any possible innovative approach in future for the ultimate benefits to the public. The overseas and local experts also gathered together in the Noise Mapping Workshop on 19 August 2010 for an intensive and in-depth discussion of the various subjects of concerns and obtained fruitful results.

The Noise Mapping Symposium and Workshop is timely in the sense that noise is a prevalent environmental problem in Hong Kong and it has been a world trend, indeed already a legislative requirement in Europe, to make use of Noise Mapping as a strategic tool for evaluation the noise impacts and population exposure and to assist in the development of Action Plans. Noise Mapping is an extremely useful technique for supporting the development of noise policies, engaging the public in making decisions, for conducting strategic noise planning, and evaluating abatement plans to address existing noise problems. The presentations in the Symposium were well received and there were active discussions between the speakers and the audience in the open forum session.

### The 17<sup>th</sup> International Congress of Sound and Vibration Randolph C. K. Leung

The 17<sup>th</sup> International Congress of Sound and Vibration (ICSV17) was held during July 18–22, 2010 in Cairo, Egypt. The Congress was organized by International Institute of Acoustics and Vibration (IIAV) with support from the Acoustical Society of Egypt, Ain Shams University, Nile University, and the American University in Cairo, in cooperation with International Union of Theoretical and Applied Mechanics (IUTAM), the American Society of Mechanical Engineers (ASME) and the Institution of Mechanical Engineers (IMechE). The Congress was well attended by participants from 55 countries/regions and the technical programme is comprised of 520 papers. Seven renowned acousticians were invited to give plenary keynote lectures. There were four paper presentations from Hong Kong delegates. The 18<sup>th</sup> International Congress of Sound and Vibration (ICSV18) will be held in Rio de Janeiro, Brazil – a South American cosmopolitan metropolis known worldwide for its scenic beauty and its natural resources.



The ICSV17 in Cairo, Egypt

## Meyer Poon Memorial Award 2010

The presentation and award ceremony for the 2010 Meyer Poon Memorial Award exercise were conducted on 9 August 2010 at EF305, PolyU. The presentations began at 7pm followed by the award ceremony at 9:45pm. We would like to congratulate the following students for winning this year's awards:

#### **Undergraduate category:**

Winners: LIN Xiuyi, XIE Tao, XI Qiang [Noise Attenuation by Membrane Splitter Silencer] First runners-up: CHEUNG Ka Lok, CHAN Man Chi, CHEUNG Cho Fai [Noise Analysis and Identification of Canister Vacuum Cleaner]

Lixi Huang

Second runners-up: CHEUNG Tin Yua, POON Yip Man, YIU Wai Keung Binnie [Environmental Noise Investigation

#### **Postgraduate category:**

- Winner: GUO Jing-Yi (PhD candidate, PolyU HIT) [One-dimensional Sonomyography (SMG) for Skeletal Muscle Assessment and Prosthetic Control]
- <u>First runner-up</u>: SONG Dong-Jin (MPhil candidate, PolyU RS) [Optimizing the Ultrasound Echoes of Electronic Bat Ears]
- Second runner-up: LAU Chau Ming (MPhil candidate, CityU BC) [Sound Propagation and Wind Flow around Blockages and Their Correlation]

# Membership Data (as at 23 Nov 2010)

C W Law

Membership Grade	Number
Honorary Fellow	3
Fellow	21
Member (Corporate & Overseas)	193
Associate Member	63
Student	173
Total	453