



香港聲學學會  
Hong Kong Institute of Acoustics

# SOUNDING BOARD

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Report on  
The 6th Cross-Strait Acoustical Conferences  
第六屆兩岸聲學技術交流研討會議

*14-15 November 2013*

*International Tower, National Taiwan University of Science and Technology*

*By Dr. K.W. Cheng & Mr. Ken Y.K. Lam*



- *Following the previous Cross-Strait Acoustical Conferences hosted in Shanghai (2010), Hangzhou (2011) and Hong Kong (2012) respectively, in 2013, the conference was held at the National Taiwan University of Science and Technology (NTUST) in Taipei. The 1½-day meeting was successfully co-organised by the Taiwan Acoustical Association and NTUST, with over 100 acousticians from the Mainland China, Taiwan and Hong Kong participated in the event. Hong Kong's delegation comprised Mr. Tom Ho, Ir K.K. Lu, Dr. Kin Cheng, Prof. Lixi Huang and his undergraduate students Zeyi Zhang, Mr. Ken Lam, Mr. M.K. Cheung and Mr. William Fung.*
- *During the meeting, there were exchanges of a wide range of acoustics related topics. Technical papers presented in the conference included subjects like acoustical designs of hall concert halls/theatres, policies research and enforcement related to road traffic problems, and acoustical performance of household appliances, etc. A total of twelve papers were presented, and participants from HKIOA, Prof. Lixi Huang of HKU and Mr. Ken Y.K. Lam of PolyU, contributed two from their researches in duct and tyre noises respectively.*



- *After the whole-day technical sessions, participants enjoyed the conference dinner at the University's top floor, where they could enjoy the magnificent night view of 101 Tower (Taipei Financial Center Corp.). During the conference dinner, participants from Mainland China, Taiwan, and Hong Kong had further exchanges and sharing on their views and interests in a relaxing atmosphere. What a great night!*
- *On the second day, we visited the National Taiwan College of Performing Arts. We were highly impressed by the tough trainings received by their students, who had been selected to enter the college since their age of 9. Their performances were highly professional and astonishing!*
- *To sum up, the conference was successfully held and enjoyable. It was another excellent opportunity for networking among the participants from the Mainland China, Taiwan, and Hong Kong. HKIOA would like to express our sincere gratitude to the host and look forward to the next conference to be held at Yunnan in 2014.*

# **Seminar on Rail Damper Latest Development: Reduction of Noise Radiation and Corrugation Growth**

*30 September 2013*

*MTRC Theatre in Fo Tan Railway House*

*By Mr. Wilson Ho*



*Mr. Wilson Ho delivering the presentation*



*Damper sample brought to the venue for hands on demonstration*



*The seminar was attended by over 140 people*



*Mr. Ho receiving the certificate of appreciation*

- \* Jointly organised by Hong Kong Institute of Acoustics (HKIOA) and China Hong Kong Railway Institution (CHKRI).
- \* Mr. Wilson Ho, director of Wilson Acoustics Ltd (WAL), was introduced by Ir Calvin Kong, Engineering Manager of Permanent Way at MTRC. Participants were given a rare opportunity to go behind the scenes and learn about tuned mass dampers development in the world as well as the recent development in Hong Kong. The damper developed in Hong Kong is the only damper in the world providing extra-strong damping to suppress lateral pinned-pinned resonance which leads to reduction in corrugation growth rate in addition to track noise and vibration reduction. Mr. Ho anticipated that the use of rail dampers for railway noise reduction would grow exponentially within the next 10 or 20 years and it might become one of the norms for railway noise control technique. After the presentation, Mr. Ho and Mr. Kong pledged support and commitment towards the goal of improving rail systems in Hong Kong and making them quieter for the benefit of general public.
- \* The seminar was well received by over 140 participants and raised awareness among acoustic practitioners towards the recent noise control product development work in Hong Kong.

# **Report on HKIOA Delegation Visit to Shanghai**

22 – 25 August 2013  
By Dr. K.W. Cheng & Dr. C.W. Law

- With the rapid growth of demand for acoustic products/acoustic research and development in PRC, it is an auspicious moment to strengthen our cooperation with mainland acoustics professionals and academics. In fact, HKIOA has long been in cooperation with the Shanghai Acoustical Society and our Dr. Randolph Leung is currently our representative in the Editorial Board of its Journal "Technical Acoustics".
- To strengthen the collaboration, HKIOA organized a delegation visit to the Shanghai Acoustical Society with team members of our Immediate Past Chairman, Mr. Tom Ho, Past Chairman, Ir K.K. Iu, and Committee Members Dr. C.W. Law, Mr. William Fung, Dr. Randolph Leung, Mr. Wylog W.L. Wong, Dr. S.K. Lau (who is currently working in Shanghai for an acoustics company) and myself.
- We arrived at Shanghai in the afternoon of 22 August and were received by our colleagues from the Institute of Acoustics, Tongji University including Prof. Dongxing Mao, Prof. Nong-bin Gong, and friends from the Shanghai Acoustical Society, including Prof. Zhang Kui-sheng and 孟昭文理事長 via a welcoming lunch. Afterwards, we visited the famous "中科院聲學研究所東海研究站" where acoustics research related to supersonic handling and testing equipment, hearing aids and speech intelligibility were being pursued, which had won a lot of national scientific awards (Photo 1).

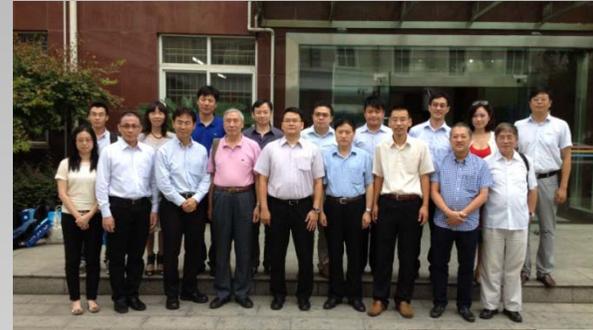


Photo 1:  
Group photo at中科院聲學研究所東海研究站

Photo 2: Souvenir given to 孟昭文理事長



Photo 3: Group photo at 上海申華聲學裝備有限公司

Photo 4: Testing lab for silencers



- In that evening, there was an official dinner hosted by the Shanghai Acoustical Society where our delegates were able to meet and further exchange with 孟昭文理事長 (Photo 2) and other members from Shanghai Acoustics Laboratory of Institute of Acoustics, including their Director, Dr. Chanqing Hu and Vice-Director, Weijie Xu.
- On 23 August, we visited “上海申華聲學裝備有限公司” where testing facilities for acoustic silencers and reverberation rooms for testing of absorptive panels/acoustic materials were newly commissioned. We were briefed on their latest acoustics products, research and development of the company (See Photos 3-7).
- On 24 August, we visited “浙江莫干山參訪第726研究所實驗基地” where underwater acoustics research and tests were being conducted. According to their staff, the site is one of the four similar underwater testing sites in PRC, with over 5,000 acres of lake surface areas underneath with background noise levels as low as 15 dB(A), and hence fits for the testing purposes (See Photo 8).
- Overall, the exchanges went well and fruitful, and delegates were not only able to gain knowledge from the Shanghai counterparts but also networked with them well. On 25 August, after a quick lunch at the Shanghai Pudong Airport, the delegation returned to Hong Kong and members were very exhausted.

Photo 5: Testing lab for silencers



Photo 6: Reverberation room for testing acoustic panels



Photo 7: Reverberation room for testing acoustic panels



Photo 8: 第726研究所實驗基地



**THE JOINT HKIOA - HKPOLYU  
SYMPOSIUM: RESEARCH,  
ASSESSMENT AND DEVELOPMENT OF  
APPLYING INNOVATION BUILDING  
DESIGNS FOR NOISE MITIGATION**

24 May 2013

Regal Hotel, Causeway Bay

By Grace Kwok



## The Event

The symposium was part of the seminar series for the 20<sup>th</sup> Anniversary of HKIOA. A group of world-renowned acousticians came together to share their precious opinions and experiences on innovative window designs for noise mitigation.

## The Day

After greeting and opening speeches by Dr. Kin Cheng, Chairman of HKIOA and Mr Kin-Fai Tang, Assistant Director of EPD, the informative presentation session was started from Prof Jian Kang, followed by Prof Yiu-Wai Lam, Mr Daniel Naish, Prof Shui-Keung Tang, Dr Eddie Siu-Kit Lau and Prof Xiaojun Qiu. The panel discussion was hosted by Mr Maurice Yeung, Principal Environmental Protection Officer, of EPD. Thought-provoking questions were raised by participants and answered by the experts, generating new ideas and direction for tackling traffic noise problem in built-up areas. This valuable symposium was finally concluded by Ms Ada Fung, Deputy Director of Housing Authority and closed by a memorable gala dinner.

## The Experts

Prof Jian Kang (Sheffield University, UK), Prof Yiu-Wai Lam (Salford University, UK), Mr Daniel Naish (Queensland Dept of Transport and Main Roads, AU), Mr Maurice Yeung (Environmental Protection Department, HK), Prof Shui-Keung Tang (The University of Polytechnic, HK), Dr Eddie Siu-Kit Lau (University of Nebraska-Lincoln, USA) and Prof Xiaojun Qiu (Nanning University, PRC). (Left to right)



## The Moment



Prof. YW Lam explained the theories behind this computational models on predictions.

Hybrid computational approach to investigate ventilated windows was being introduced by Dr. Eddie S.K. Lau



Prof. Jin Kang discussed his research results and views on innovation designs.



Mr. Daniel Naish summarised the experimental results on noise reduction performance of balconies.



Prof. S.K. Tang shared his years of research experiences on the design of acoustic windows.

## Interactions among Symposium Participants and Speakers



# Report on HKIOA 2013 AGM cum Spring Dinner

6 March 2013

Regal Hong Kong Hotel

By Dr. K.W. Cheng & Dr. C.W. Law



Dr. Kin Cheng presenting the Annual Report

Dr. Kin Cheng announcing the kick-off of the 20<sup>th</sup> Anniversary Celebration



Mr. William Fung presenting the Financial Report



Ir Maurice Yeung and Mr KK Lu sharing past memories as Chairmen



- More than 37 Members, plus 12 Executive Committee Members, together with 24 guests from other local professional institutes and organizations attended the AGM. There were also 19 proxies received prior to AGM opening.
- Following the declaration of opening at around 7:00 pm, our Chairman, Dr. Kin Cheng presented the 2012-13 Annual Report to our members. In summary, the session 2012-13 was a fruitful year of the Institute. Members were able to continue to benefit from various activities organized by the Institute or jointly organized with other professional institutions including seminars, symposium courses and social gathering etc. The size of our Institute was also steadily growing with new comers from local practitioners in the field of acoustics. Our website was revamped and more information could be found/shared with members. Our financial status was also healthy with balanced revenue and expenditures. The full 2012-13 Annual Report was available at: <http://www.hkioa.org/activities.html>

Inauguration of the new Chairman of our Student Branch of IVE (Morrison Hill)



Ir NC Cheung and Ir Richard Kwan sharing previous memories as past Chairmen



Past Chairmen and Current Executive Committee Members and Friends



Dr. CM Mak and Mr. Tom Ho sharing previous experience as past Chairmen

- As for composition of our Executive Committee, Ir Au Yeung Yiu Nam and Professor SK Tang were due to retirement. Dr. C K Chau was newly elected while Ir Au Yeung Yiu Nam was re-elected as Committee member. Taking the opportunity, Dr. Kin Cheng expressed thanks to all members for their continual support of the Institute.
- Following the closing at around 8:00pm, Spring Dinner started. Dr Kin Cheng announced that year 2013 would be the 20<sup>th</sup> Anniversary of HKIOA. A celebration committee chaired by Mr. Tom Ho had been formed, and many celebrating events would be organized in the year. During the dinner, many previous chairmen, including Ir KK lu, Ir Maurice Yeung, Mr. Richard Kwan, Ir NC Cheung, Professor CM Mak and Mr Tom Ho shared their memories in their terms of offices.
- The event was completed at around 11:00 pm after enjoying the Spring Dinner and wines. Looking ahead, 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.