



JOINT HKCA-HKIOA SYMPOSIUM CUM EXHIBITION ON 27 JULY 2016 & SITE VISITS ON 28 & 30 JULY 2016

BBQ - "BUY & BUILD QUIET" SYMPOSIUM



The floor language is Cantonese (with simultaneous interpretation between Cantonese and English).

The meeting materials are in English.

研討會語言爲廣東話(並設有廣東話/英語即時傳譯)。會議資料爲英語。

INTRODUCTION 簡介

An event proudly presented by the HKCA and HKIOA A Symposium that would identify solutions for your construction noise problems An opportunity that acoustic professionals, noise control practitioners, architects, building and

civil contractors, site engineers and developers cannot afford to miss.

Hong Kong is a small but dynamic city. Many construction activities for new infrastructural projects as well as redevelopments are all over the territory. While the construction methods employed are of world class, they need to be compatible with various environmental and noise mitigation requirements. In order to prevent noise nuisances from the course of works, in particular for those fast-track projects which are often conducted in a round-the-clock manner, conscientious efforts are needed to address the rising expectation from the local communities and stakeholders through better site management, more environmentally friendly practices and wider use of guiet technologies.

In this symposium, international world-renowned experts will share their views and experiences in this important issue. They will keep you abreast of the latest policy development in tackling construction noise, the most updated practices in noise management, and innovative quiet construction / demolition methods. It is believed that key noise issues encountered in most construction projects would be addressed.

An exhibition showing a variety of quiet methods will also be held starting from the first coffee break. Coffee and snack will be provided there during the coffee breaks.

A certificate of attendance will be awarded to participants. This symposium may be considered to meet in part of the Continual Professional Development (CPD) requirements of the Hong Kong Institute of Acoustics.

You are cordially invited to join this abundant event and share your expertise with other participants on this subject.

SYMPOSIUM AND EXHIBITION 研討會 暨 展覽

Date: Wednesday, 27 July 2016

Venue: Grand Ballroom, 1/F,

Crowne Plaza Hong Kong Kowloon East, 3 Tong Tak Street, Tseung Kwan O,

Hong Kong

Time: 9am – 5pm

SITE VISITS 實地考察

Date: Thursday, 28 July 2016

Venue: Development at T.P.T.L. 225, Pok Yin Road, Pak Shek Kok, New Territories

Time: Morning

Date: Saturday, 30 July 2016

Venue: 86 Ping Che Road, Fanling, New Territory

or

Liantang / Heung Yuen Wai Boundary Control Point, North Portal, New Territory (FULL)

Time: Morning

The gathering time and location will be further noticed.

LANGUAGE 語言

The floor language is Cantonese (with simultaneous interpretation between Cantonese and English via headphones). The meeting materials are in English.

ORGANIZERS 主辦機構

- The Hong Kong Construction Association (HKCA)
- The Hong Kong Institute of Acoustics (HKIOA)

MAJOR SUPPORTING ORGANIZATION 主要支持機構

Environmental Protection Department (EPD)



SUPPORTING ORGANIZATIONS 支持機構

- Development Bureau, The Government of the HKSAR
- Civil Engineering and Development Department, The Government of the HKSAR
- The Hospital Authority
- BEAM Society Limited
- Real Estate Developers Association
- Hong Kong Green Building Council Limited
- American Society of Mechanical Engineers, HK Section
- The Hong Kong Institute of Architects
- Hong Kong Institute of Construction Managers
- The Hong Kong Institute of Environmental Impact Assessment
- Hong Kong Institute of Qualified Environmental Professionals Limited
- MTR Corporation Limited
- Civil Division, The Hong Kong Institution of Engineers
- Environmental Division, The Hong Kong Institution of Engineers
- Mechanical, Marine, Naval Architecture & Chemical Division, The Hong Kong Institution of Engineers











土木分部

CEDD









Environmental Division 環境分部











Mechanical, Marine, Naval Architecture & Chemical Division 機械、輪機、造船及化工分部

THE SYMPOSIUM PROGRAMME (TENTATIVE) 研討會議程 (暫定)

Symposium and Exhibition - 27 July 2016 (Wednesday)

Time	Programme/Topic/Activities		
08:30 - 09:00	Registration		
00.00	region and in		
09:00 - 09:15	Welcome Notes		
	Chairmen OC from HKCA and HKIOA		
09:15 – 09:30	Keynote Address Secretary for the Environment		
09:30 – 10:00	Low Noise Construction in Germany		
10.00	Mr. Christian Fabris, Scientific Officer, Federal Environment Agency, Germany		
10:00 – 10:30	Construction Noise and Vibration Management to maintain operational and		
	social licenses		
10:30 – 10:50	Mr. Chris Middleton, Senior Solutions Specialist, Brüel & Kjær EMS, Denmark		
10.30 – 10.50	Coffee Break (Opening of Exhibition)		
10:50 – 11:20	Noise and Vibration Control in Arch SD Projects		
	Ir Leung Kwok-tung, Assistant Director (Structural Engineering),		
	Architectural Services Department		
11:20 – 11:50	Quiet Construction – HA's Perspective		
11:50 – 12:20	Mr. Lau Wai-tat, Chief Project Manager, Hospital Authority Acoustic Design Approach and Noise Control Management of Asset		
11.00 12.20	Enhancement Projects		
	Ir Chris Kwan, Senior Project Manager, Link Asset Management Limited		
12:20 – 12:40	Panel Discussions		
12:40 – 14:00	Lunch Break		
12.40 - 14.00	Editori Break		
14:00 – 14:30	Boosting a Better Acoustical Environment with the Green Building Rating		
	Tool		
14:30 – 15:00	Ir C F Leung, Green Building Faculty Member, Hong Kong Green Building Council Construction Noise Permit – A Driving Force for Quiet Construction		
14.30 – 15.00	Dr. Kin Cheng, Senior Environmental Protection Officer,		
	Environmental Protection Department		
15:00 – 15:20	Coffee Break		
15:20 – 15:50	Construction Noise Control for Mega Tunnel in Hong Kong Mr. Roger Lee, QSE Manager, Dragages		
15:50 – 16:20	Construction of Total Noise Enclosure for 24hrs TBM mining works next to		
10.20	residential area		
	Mr. Peter Leung, Deputy Project Manager, Chun Wo – SELI Joint Venture		
16:20 – 16:40	Panel Discussions		
16:40 – 16:50	Closing Remarks		
10.40 - 10.50	Chairlady of HKIOA		

Complimentary and Optional Site Visits

(Seats are limited and registration will be processed on a first-come-first-serve basis.)

Date/Time	Site	
28 July 2016 (Thursday) AM	Development at T.P.T.L. 225, Pok Yin Road, Pak Shek Kok, New Territories Construction of 605 sqm perimeter sheet pile wall and 1648 nos driven steel H piles adjoining populated residential area with the use of noise mitigation piling enclosure and piling dampers.	
30 July 2016 (Saturday) AM	86 Ping Che Road, Fanling, New Territory Demonstration of Sound Power Level (SWL) measurement of a large size Cable Excavator under normal operation with 6 microphones at upto 11.4m of height according to European measurement standard for Quality Powered Mechanical Equipment (QPME).	
30 July 2016 (Saturday) AM (FULL)	Liantang / Heung Yuen Wai Boundary Control Point, North Portal, New Territory Construction of twin tunnels of 14.5m diameter by TBM and Drill & Blast in a highly sensitive area. Noise mitigations for 24-hour continuous excavation and rubble unloading on open basin with extensive noise enclosure/barrier and tunnel portal doors.	

Arrangement for Inclement Weather

This site visit programme will be cancelled if

- 1. Tropical Cyclone Warning No. 8 or above, or Black Rainstorm Warning Signal is pre-warned or announced; or
- 2. Typhoon signal no. 3, or the Yellow / Red / Black rainstorm signals are hoisted at 7:00 a.m. on that day.

REGISTRATION 報名

The registration fee per person is

- HK\$1,500 for general participants
- HK\$1,200 for members of HKCA or HKIOA

Registration fees include meeting materials, lunch, coffee breaks and certificate.

Site visit programme is complimentary to participants on first-come-first-serve and number of participants for site visits are limited.

Completed registration form and cheque payable to <u>HONG KONG INSTITUTE OF ACOUSTICS</u> <u>LIMITED</u> should be sent to:

Ms Yoyo Shek

Hong Kong Institute of Acoustics

c/o Allied Environmental Consultants Ltd.

19/F., Kwan Chart Tower, 6 Tonnochy Road, Wanchai, Hong Kong

(Tel: (852) 2815 7028, fax: (852) 2815 5399, email: hkioa_symposium@aechk.com)

Registration should be made on or before 20 July 2016. First-come-first-serve.

SYMPOSIUM ORGANIZING COMMITTEE 籌委會成員

Mr. Barry Sin (HKCA) (Co-chairman)
Ms. Grace Kwok (HKIOA) (Co-chairman)
Mr. Louis Chan (EPD) (Co-chairman)
Mr. M K Cheung (HKIOA) (Secretary)

Mr. Tommy Lee (HKCA) Mr. Henry Lam (HKCA)

Mr. Patrick Tang (HKCA)

Mr. Charles a Vira (LIKCA)

Mr. Stephen Yim (HKCA)

Mr. Wilfred Zhang (HKCA)

Mr. Wilson Ho (HKIOA)

Mr. CL Wong (EPD)

Dr. CW Law (EPD)

Low Noise Construction in Germany

Mr. Christian Fabris, Scientific Officer, Federal Environment Agency, Germany



Mr. Christian Fabris was born and educated in Germany. He graduated as an engineer (Dipl.-Ing.) for media technology from Ilmenau University of Technology in 2008. Since he has been working as scientific officer for the German Environment Agency in Dessau. His expertise comprehends noise abatement of mobile machinery and consumer products, acoustical measurement standards and instruments and rating of environmental noise. He represents the German government in the official Noise Expert Group for the European "Outdoor Noise" Directive relating to noise emissions by equipment for use outdoors. He is vice chairman of the German working group on standards related to the measurement, abatement and data collection of noise emissions by machinery and sites. He has composed the low noise emission requirements for relevant products in each criteria document for the well-known environmental label "Blue Angel". He is currently concerned with noise planning of construction sites, noise abatement of heat pumps in sensitive areas in Germany and a harmonized labelling of product noise in the international "Buy Quiet" programme. He repeatedly contributes different articles and presentations about "German Noise Policy", "Construction Noise", etc. to international conferences like Internoise, ICBEN or NOISE-CON. He is 35 years old and married with two children.

Construction Noise and Vibration Management to maintain operational and social licenses Mr. Chris Middleton, Senior Solutions Specialist, Brüel & Kjær EMS, Denmark



Mr. Chris Middleton has over 13 years' experience in noise and vibration management solutions. Starting with Lochard in 2004 and joining Brüel & Kjær in 2009 when the companies merged to form the Environment Management Solutions division with systems in over 350 customers globally. Chris has contributed to many airport noise management system projects including: Heathrow, Amsterdam, Frankfurt, Chicago, Los Angeles, Sydney, Incheon, Hong Kong & Beijing. Chris is based in Brüel & Kjær Melbourne office and is currently responsible for best practice industry solutions to noise and vibration management in the Asia region. This includes projects for AECOM's Hong Kong MTR project, BHP Billiton Boddington mine, Hyundai Engineering and Construction, Origin Energy and Auckland city Council. Chris' past includes over 25 years in the Information Technology sector as trainer, software developed, business analyst and account manager.

Noise and Vibration Control in Arch SD Projects

Ir Leung Kwok-tung, Assistant Director (Structural Engineering), Architectural Services Department



Ir Leung Kwok-tung is the Assistant Director (Structural Engineering) of the Architectural Services Department. Ir Leung graduated from the Hong Kong Polytechnic in 1981, he became a chartered structural engineer in 1985, and obtained MSc degree in Civil Engineering, with distinction, from the University of Hong Kong in 1990. Ir. Leung worked in the Architectural Services Department since 1984 and assumed his present post of Assistant Director (Structural Engineering) in 2012. As Head of the Structural Engineering Branch of the Department, Ir. Leung oversees the planning, design, procurement and construction of the structural engineering works for the new development projects and as well maintenance works for the public buildings and facilities under the purview of Architectural Services Department. Ir. Leung has more than 30 years' experience in various types of building projects including major development like Tamar Government Complex and Cruise Terminal Building. On the technical side, he is especially interested in seismic resistant design, tensioned fabric structures, prefabrication modes and buildability design. Ir. Leung has been serving the Hong Kong Institution of Engineers since 2012, and he is the Vice Chairman of the Structural Division of the Hong Kong Institution of Engineers.

Quiet Construction - HA's Perspective

Mr. Lau Wai-tat, Chief Project Manager, Hospital Authority



Mr. Lau Wai-tat started his professional career in the Architectural Services Department, HKSAR, and was the Head of the Environmental and Subvented Schools Group before serving the Works Branch of the Government in the capacity of the Assistant Secretary (Works Policy). He then worked for a construction company as a director overseeing both the local and overseas construction business development for five years. Mr. Lau then joined the Hospital Authority in 2002 and was initially responsible for the development and implementation of the strategies of maintenance and minor projects for all the public hospitals, clinics and other premises managed by the Authority in Hong Kong. He is at present the Chief Project Manager of the Hospital Authority leading and supervising the implementation of some megasized hospital capital works projects with values over billions. Mr. Lau is professionally qualified in building surveying, construction, facility management and housing management. He holds a BSc (Hons) in Estate Management, an MSc in Real Estate Development, another MSc in Environmental Management, an MBA and other academic qualifications in safety and asbestos management.

Acoustic Design Approach and Noise Control Management of Asset Enhancement Projects Ir Chris Kwan, Senior Project Manager, Link Asset Management Limited

Ir. Chris Kwan is currently Senior Project Manager, team leader of Project E&M department of Link Asset Management Limited (LINK REIT). He has extensive experience on budget planning, project management and master programme development at design and construction stage. In 2013, Chris was appointed as Link advisor of task group on Energy Efficiency Certificate Scheme (EECS) to share technical experience on energy audit. The objective of EECS is to develop score card system in accordance and compliance with Building Energy Efficiency Ordinance (BEEO Cap.610), Code of Practice for Energy Audit (EAC) and BEAM Plus / Interior standard for over +100 Link properties. Chris has extensive project experiences on Grade-A office and he is working as Chief E&M project manager of Link's first commercial development at NKIL 6512 Kowloon Bay and premium commercial tower with retail podium at No.700 Nathan Road, Mong Kok. Before joining Link REIT, Chris was Associate and Project Engineer in E&M consultant firm, Ove Arup & Partners HK Limited. He had participated in a variety of building projects to the building services engineering design and energy audit on commercial office, recreational and residential buildings in Hong Kong / Macau and PRC. Chris is currently a Chartered Engineer, Registered Energy Assessor (REA), BEAM Professional and BESTOO Authorized Assessor, HKGBC. In 2012, Chris was elected as Outstanding PolyU BSE Alumni of the Hong Kong Polytechnic University.

Boosting a Better Acoustical Environment with the Green Building Rating Tool Ir C F Leung, Green Building Faculty Member, Hong Kong Green Building Council



Ir C F Leung is currently the Director - Green Building & IAQ of Business Environment Council Limited ("BEC") and a Green Building Faculty member of Hong Kong Green Building Council. Ir Leung is a Registered Professional Engineer, Chartered Engineer, Chartered Environmentalist and a corporate member of the Hong Kong Institute of Acoustics. Ir Leung's expertise spans across green building assessments, carbon audits and indoor environmental quality advisory, etc. He has been involving in a large number of building-related projects, ranging from large private and public housing estates, commercial offices, shopping centres, hospitals to university buildings. Ir Leung is also involved in the development of BEAM Plus Manuals and delivers training for BEAM Professionals and BEAM Affiliates. Prior to joining BEC, Ir Leung has worked in the acoustics field where he gained solid experience in architectural and environmental acoustics. He was responsible for designing the acoustics treatment, supervising the site installation, as well as testing and commissioning for the tunnel ventilation and environmental control systems of railway projects. He also provided practical solutions in mitigating the noise from the building services system and controlling the reverberation time in various types of premises. Ir Leung is an Environmental Engineer by training and has a Bachelor of Engineering degree from The University of Hong Kong and a Master of Science degree from The Hong Kong Polytechnic University.

Construction Noise Permit – A Driving Force for Quiet Construction

Dr. Kin Cheng, Senior Environmental Protection Officer, Environmental Protection Department



Dr. Kin Cheng is a Senior Environmental Protection Officer with the Environmental Protection Department, HKSAR Government. He is a veteran acoustics professional with over 19 years of experience in the field of environmental noise. His career with the Government involved a wide variety of work including the development of noise legislation, management of calibration laboratory and enforcement. He had also written and co-authored a number of papers and articles in international conferences related to environmental noise. He was also a past Chairman of the Hong Kong Institute of Acoustics and contributed to the development of local acoustics profession.

Construction Noise Control for Mega Tunnel in Hong Kong

Mr. Roger Lee, QSE Manager, Dragages



Mr. Roger Lee is the QSE Manager of Dragages Hong Kong Ltd. He is now working in the government civil works project under Contract No. CV/2012/08: Liantang/ Heung Yuen Wai Boundary Control Point, Site Formation and Infrastructure Works -Contract 2. With a background in mechanical engineering, Mr. Lee further completed his Master Degree from University of London in Occupational Safety & Health and Diploma in Acoustics & Vibration Control from Hong Kong Polytechnic. He started his career in the field of Occupational Safety and Environment in the construction industry in 2003, undertaking many mega civil and tunneling projects. The recent ones are: Hong Kong West Drainage Tunnel, Kwun Tung Line Extension (Yau Ma Tei to Ho Man Tin Station) and the Liantang/ Heung Yuen Wai Boundary Control Point. During the execution of these mega-projects, there are numerous environmental challenges, especially in the field of acoustic control. Mr. Lee has ample practical experience in managing construction noise, starting from employing quiet machines to engineering controls such as noise enclosures, walls and barriers. In 2013, Mr. Lee also helped organize an EPD visit to Japan, meeting contractors and plant suppliers to share experience in quiet construction techniques, construction plants and good practices.

Construction of Total Noise Enclosure for 24hrs TBM mining works next to residential area *Mr. Peter Leung, Deputy Project Manager, Chun Wo – SELI Joint Venture*



Mr. Peter Leung graduated from Leeds Metropolitan University (United Kingdom) with an honours degree in Civil Engineering. Since that time he has gained over 10's experience in a broad range of Engineering related environment in the UK and overseas. Whilst in the UK, he was employed by several renowned international public and private contractors including British Army - Royal Engineers, Carillion, and Balfour Beatty. In April 2011, Peter relocated to Hong Kong work for Gammon Construction Limited one of Hong Kong's biggest contractors. Initially working for Gammon Construction's Civils division as a Senior Project Engineer, he worked on several prestige projects with a total value of HK\$3.0 billion such as the MTR Express Rail Link project, Contract 811-B - West Kowloon Terminus Approach Tunnel. After two years Peter moved to Chun Wo Building Construction Limited as a Deputy Project Manager where he was assigned to the Chun Wo – SELI JV's, MTR Shatin to Central Link Project 1107 - Diamond Hill to Kai Tak Tunnels Project. On this project he was tasked with the supervision of many different activities including supporting the TBM operation at ground level, construction of entrenchment works (450 FW and SW water main and DSD box culvert), Temporary Noise Enclosure for 24 hours TBM operation and community liaison with the local residents.

REGISTRATION FORM 報名表格

BBQ - "BUY & BUILD QUIET" SYMPOSIUM

SYMPOSIUM CUM EXHIBITION ON 27 JULY 2016 & SITE VISITS ON 28 & 30 JULY 2016

Please print or typ	oe	
Title: Mr. / Mrs. /	Miss / Prof. / Dr. / Ir * (* Ple	ease delete as appropriate)
Surname:		
First name:		
Company/ Organ	ization:	
Address:		
		Fax:
Email:		
Membership:	☐ HKCA ☐ HKIOA ☐ Non-member	,
Membership num	ber:	<u> </u>
Complimentary a	and Optional Site Visits	
☐ I wish to enrol Pak Shek Kok, I		uly 2016 (Development at T.P.T.L. 225, Pok Yin Road,
☐ I wish to enroll	for the site visit on 30 July	2016 (86 Ping Che Road, Fanling, New Territory)
Please note that sea basis.	ats are limited for site visits an	nd registration will be processed on a "first-come-first-served"
ACOUSTICS Ms Yoyo She Hong Kong II c/o Allied En 19/F., Kwan (Tel: (852) 28	S LIMITED should be sent took nstitute of Acoustics vironmental Consultants Lt Chart Tower, 6 Tonnochy I 815 7028, fax: (852) 2815 8	

- Registration fee will include meeting materials, lunch, coffee breaks and certificate.
- The Organizing Committee reserves the right to change the programme without advance notification.