

Technical Seminar

The Development of Quiet Railways

Abstract

In Hong Kong, more than 5 million passenger journeys are made every day by railway transport. The railway network passes through populated areas in form of tunnel, at-grade and viaduct sections, where in many cases residential buildings are in close proximity to the alignment. In order to comply with the Noise Control Ordinance (using industrial noise Technical Memorandum), several new technologies and practices have been developed in Hong Kong since year 2000 as more than 10 new railway lines were built during this period and noise awareness in the public area rose significantly. In this seminar, the following technical challenges and arena development will be presented.

- Multi-plenum system of West Rail Line and Ma On Shan Line;
- Wheel-rail profile match design and surface smoothing;
- Traction equipment noise control;
- Trackform vibration isolation;
- Noisy wheel auto-detection system;
- Rail damper application (physical sample will be shown);
- Acoustic camera application (live demonstration at seminar).

Date: 13 September 2017 (Wednesday) / Time: 7:00 to 8:30 pm

Venue: Technological and Higher Education Institute of Hong Kong (THEi), Room LT2, 20A Tsing Yi Road, Tsing Yi Island, N.T., Hong Kong

*****The seminar will be conducted in Chinese supplemented by English*****

~ All attendees will receive an attendance certificate for their CPD log ~

About the Speaker

Wilson Ho is the Director of Wilson Acoustics Limited, specializing in railway noise control, TBM groundborne noise assessment and trackform vibration isolation design. He has made significant contributions to the development of noise control for the new railway lines in Hong Kong in the past 20 years. He is the inventor of Multi-Directional Tuned Mass Rail Damper which is the world's only damper that produces extra strong retarding forces able to reduce corrugation growth rate, in addition to noise reduction.

Richard Kwan is a seasoned professional in the environmental and noise control fields. His 35 plus years of experience spans across the wide spectrum of specialist contractor, government authority, consultancy and project proponent. Richard works on major infrastructure projects and for the past 13 years led the environmental efforts of MTR on all new railway projects.



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