



# Acoustic Camera Application in Hong Kong

Jointly Organized by the Hong Kong Institute of Acoustics and  
Department of Mechanical Engineering of The Hong Kong Polytechnic University  
Supported by: HKIE MMNC Division

Speaker: Mr. Wilson Ho (Director of Wilson Acoustics Limited)  
Venue: Room HJ 302, The Hong Kong Polytechnic University, Hung Hom, Kowloon  
Date & Time: 28 Sep 2017 (Thur), from 18:30 to 20:00 (reception starts at 18:00)

## **Programme Highlights:**

Acoustic Camera is a sound level analyser visualising the source location in 2D and 3D. Sound wave propagation is determined by beamforming analysis on signal intensities and delays from multiple microphones. The results are output in acoustic overlay format on the image - transforming the complex sound field into a colourful visualization. Acoustic cameras were originally used to visualise vibration modes of a solid plate more than a century ago. In the last two decades, their applications are thriving all over the world due to the advancements in computing power and acoustic sensors which allow for real-time analyses with more than 100 microphones.

The seminar will provide an introduction to the principles of acoustic camera and its applications in the acoustics consultancy industry of Hong Kong. Some examples are highlighted as follows.

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

We invites experts and interested persons in different aspects of noise measurement, acoustic design, noise control, environmental impact assessment and management to join this seminar.

## **Registration**

For registration, please fill in and submit the form, on first-come first-served based, before 5pm on 26 Sep 2017 at <http://www.wal.hk/hkioa/acousticcamera>. The seminar is free of charge for HKIOA members, PolyU students and staff, and members of supporting institutions. Other interested persons are welcome to join by paying an administrative fee HK\$100/person on-site.

**Activities Sub-committee of HKIOA**