



## Compact Plate Silencer

(Jointly organized by PolyU ME, ASME–HK)

Speaker: **Dr Yat Sze CHOY**

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Venue: Room EF311, The Hong Kong Polytechnic University

Time: 7:00 pm – 8:00 pm, Friday, 28 January 2011

(Registration starts at 6:45 pm)

Noise pollution is particularly serious in crowded metropolitans, and the low-frequency noise component, such as that below 200Hz in the air conditioning and engine facility is extremely difficult to deal with. This is because it cannot be absorbed by the existing sound absorbing material which is commonly used in the ventilating ductwork and the existing devices used to tackle the problem are often bulky. Therefore the need to control such low frequencies with long wavelength in a compact device is tremendous in the crowded cities. This project aims to develop a compact silencer by adopting strong fluid-structure coupling to reflect low frequency duct noise in a flow-through configuration. Such device does not impose any extra pressure loss which is usually caused by the existing silencers. The proposed silencer is composed of a light composite panel with sufficiently high bending stiffness covered with a cavity.

**Dr Yat Sze CHOY** is an Assistant Professor at Department of Mechanical Engineering, The Hong Kong Polytechnic University.

### **Registration**

The Seminar is free of charge to members of HKIOA and ASME–HK, student and staff of PolyU ME. Non-members are welcome but will be charged at HK\$100 per head to cover administrative costs. For registration, please fill in and submit the form at [http://wal.hk/hkioa/compact\\_plate\\_silencer.html](http://wal.hk/hkioa/compact_plate_silencer.html).

Registrations will be served in **first-come-first-served basis**. Enquiries please send to: who@wal.hk.