



HKIE-MMNC

Hong Kong Institute of Acoustics - Vibration Seminar 4: Vibration Isolation of Buildings

Speaker: **Barry Murray**
Venue: **N001, Hong Kong Polytechnic University**
Time: **6:30-7:30pm, Tuesday, 29 June 2010 (reception at 6:15pm)**

Buildings are often located close to rail tunnels and there is potential that vibration and ground-borne noise from train operations may cause disturbance. In many cases, it is possible to treat the rail track sufficiently so as to ensure no disturbance occurs, but in other cases any treatment may need to be within the building itself. The most common way of treating the building is the isolation of all or part of the building from the intruding vibration. This is commonly done by installing rubber bearings or steel spring supports within the structure under the building.

There are a number of technical and practical complexities in isolating a building. Prediction of the insertion loss of such an isolation system needs a good understanding of the response of the building structure and cannot be based on a simple system with two degrees of freedom. Apart from supporting the building on bearings or springs to take the vertical load, the system also must cope with wind and often earthquake loads.

The speaker, Barry Murray, is a Director of the acoustic consulting firm, Wilkinson Murray, and has been based in Hong Kong for over four years after many years of experience in Australia. Much of his experience has related to vibration analysis and isolation and he has pioneered the design of building vibration isolation systems in the region, including designs in Sydney, Perth and Singapore.

This is one of the seminars in HKIOA Vibration Control Seminar Series (<http://www.hkioa.org/activities.html>) in Year 2010.

Registration

The Seminar is free of charge to members of HKIOA and supporting institutes (HKPolyU ME Dept, HKIE MI & MMNC Div.). 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/vibration4.html> Registrations will be served in first-come-first-served basis. Enquiries please send to the undersigned at: who@wal.hk.

Wilson HO
Chairman, Vibration Sub-committee of HKIOA