

## credentials + experience

- became one of four principals of Aercoustics Engineering Limited in 1992.
- since 1990 has provided ground borne vibration expertise to the **Toronto Transit Commission**, including several major rail vibrations studies: **TTC Rail Vibration Study**, one of the largest ever undertaken, which involved detailed measurement of vibration into nearby structures; **TTC Rail Fixation Study**, which quantified the vibration differences made by new subway rail fasteners and predicted the impact at critical locations, and a study of streetcar rail isolation.
- responsible for mounting several complete buildings on rubber bearing pads to isolate them from subway vibration, including the **Royal Conservatory of Music** which is designed to achieve threshold of hearing noise levels and is located immediately beside the Toronto subway and large ice rink reciprocating compressors; and **20 Gothic Avenue**, a 8 storey condominium building located immediately above the subway.
- isolated sensitive equipment including magnetic resonance imaging [MRI] equipment from subway vibration for the **Toronto General Hospital**.
- an accomplished rock and ice climber, he has published several guidebooks.
- Member of the **Canadian Acoustical Association, Acoustical Society of America, American Society of Heating, Refrigerating and Air-Conditioning Engineers, American Society of Mechanical Engineers.**
- B.A.Sc., Mechanical Engineering, University of Toronto, 1983  
M.A.Sc., Mechanical Engineering, University of Toronto, 1985