

WELCOME TO THE **NOISE, VIBRATION & HARSHNESS SOUND QUALITY** LABORATORY



University
of Windsor

The Noise, Vibration and Harshness Sound Quality (NVH-SQ) Research Group at the University of Windsor:

- Conducts world-class research exploring the fundamentals of environmental, industrial and transportation noise and sound quality
- Focuses on noise attenuation techniques including active noise control as well as more traditional approaches
- Has leading-edge applications for sound quality and psychoacoustic analyses
- Possesses state-of-the-art Semi-Anechoic facilities for consumer product testing and qualification
- Performs full acoustic analysis including Sound Intensity for product development and troubleshooting, Modal analysis, Noise Source Identification, and Acoustic Material Testing
- Provides Sound Quality and Psychoacoustics analysis and application and coordinates architectural acoustic design, evaluation and testing
- Has expertise in Automotive, Environmental and Electronic Packaging NVH
- Developed automotive glass technologies for subwoofer application
- Creates alternative non-stationary loudness calculation techniques
- Evaluates automotive cabin noise perception for the hearing impaired
- Provides application of spherical beam-forming for buzz, squeak and rattle (BSR) detection
- Conducts structural transfer path analysis of road induced noise to automotive cabin
- Provides modal analysis of transportation vehicle (passenger cars to large military armoured vehicles)

To learn more about how you can get involved with the NVH-SQ Research Group, contact Dr. Colin Novak in the Department of Mechanical, Automotive and Materials Engineering by email at novak1@uwindsor.ca or call 519.253.3000 ext. 2634.