



THE UNIVERSITY
of ADELAIDE

**make
history.**

Acoustics and Vibration Laboratory

At the University of Adelaide, our Acoustics and Vibration Laboratory is at the forefront of research, education, and innovation. Whether you're a student, researcher, or industry professional, our state-of-the-art facility offers exciting opportunities in the field of acoustics and vibration.

What We Do

- **Cutting-Edge Facilities**

Explore our advanced equipment and world-class experimental facilities, complemented by our analytical and computational tools.

- **Research Excellence**

Our team members engage in projects spanning basic to applied research. From active vibration control to new medical instruments, the latest diagnostics and novel materials development, we're pushing the boundaries of knowledge.

- **Industry Collaboration**

We collaborate with government agencies, private companies, and industrial sponsors to address real-world challenges.



Images

Header: Anechoic chamber

Above: Large reverberation chamber

Commercial Services and Consulting

We offer a comprehensive range of services including testing to Australian, ISO, ASTM and MIL standards:

- Airborne sound insulation testing in reverberation rooms (random incidence sound transmission loss) to AS 1191 / ISO 140 / ISO 10140
- Normal incidence transmission loss testing (in an impedance tube) to ASTM E2611
- Random incidence sound absorption testing (in a reverberation room) to AS ISO 354
- Normal incidence sound absorption testing (in an impedance tube) to ASTM E1050 and ISO 10534-2
- Static airflow resistance testing for porous materials to ASTM C522-03 and ISO 9053
- Porosity and Density measurements of porous media (based on ISO 4590)
- Sound power testing in a laboratory reverberation room (both direct and comparison methods) to ISO 3741
- Sound power testing using sound pressure in anechoic and hemi-anechoic rooms to ISO 3745
- Sound power testing using sound intensity to ISO 9614
- Environmental laboratory testing to MIL-STD-810
- Hydrodynamic valve noise measurement based on IEC 60534-8-2
- Measurement of speed of sound in a fluid in a pipe to ISO 15086-2
- Vibration testing with an LDS 721 shaker, using sinusoid, random vibration, and classical shock excitations against criteria such as NASA-STD-7001B
- Noise monitoring and control.
- Bespoke sound and vibration measurements and analyses to suit your needs.

Contact us

enquiries AVL@adelaide.edu.au

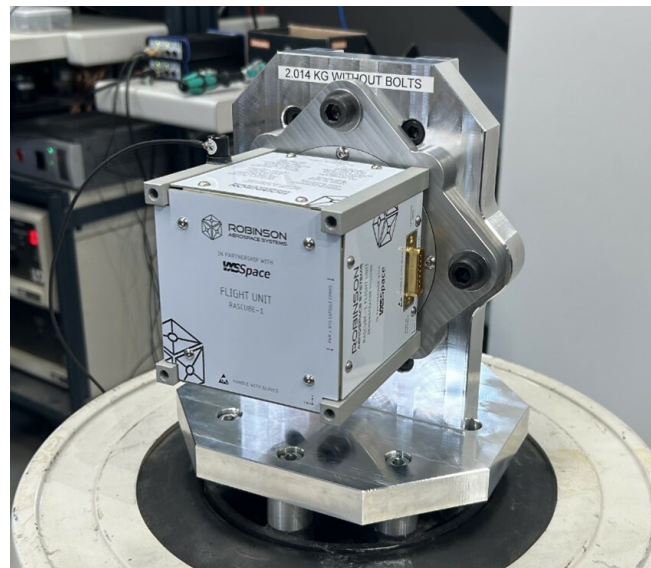
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Acoustics and Vibration Laboratory
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Above: Vibration testing of a cubesat payload.