



REDI

RESEARCH ENGAGEMENT | DEVELOPMENT | INNOVATION

MASS SPECTROMETRY FACILITY

Western Sydney University has established a high-tech Mass Spectrometry Facility available to staff, students and industry. The facility offers access to advanced Mass Spectrometry, either direct sample analysis (infusion of samples in solution) or coupled to ultra high performance liquid chromatography (nanoflow or conventional).

The Mass Spectrometry Facility provides:

- Access to mass spectrometry and chromatography instrumentation
- Development and validation of mass spectrometric methods
- Application of these new technologies to assist with your research
- Student Training and advice in the use of mass spectrometry and associated data analysis
- Sample analysis on a fee-for-service or collaborative basis.

Waters Xevo TQ MS triple quadrupole mass spectrometer

For identification and quantification of small to medium sized molecules.

This instrument has ESI, APCI and ASAP sources available. It has a mass range of m/z 2-2048, a maximum resolution of 2000 and a digital dynamic range of 4×10^6 . It can deliver MS2 signal-to-noise ratios of $>500:1$ for pg quantities of analytes.

Waters Xevo QToF MS quadrupole time-of-flight mass spectrometer

For identification and quantification of small to large molecules at very small concentrations.

This instrument can be fitted with various ESI sources: microflow, nanoflow and Triziac nanotile. It has a resolution of $>10,000$ and exact mass RMS of 2 ppm, linear dynamic range of 10^4 , and is capable of quantifying analytes in femtomolar concentrations. It is fitted with a Waters Nano Acquity UPLC, for separation of compounds at nanolitre per minute flow rate. Such high resolution instruments are capable of providing accurate mass information. Popular applications include proteomics, metabolomics and lipidomics.



FOR MORE INFORMATION ON
HOW TO ACCESS MASS SPEC
PLEASE CONTACT:

The Mass Spec Facility

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westernsydney.edu.au/redi