POSITION DESCRIPTION

Senior Technical Officer, Mass Spectrometry

POSITION DETAILS

Position Title	Senior Technical Officer, Mass Spectrometry
Classification	HEW Level 6
Position Number	7013382
School/Office	Research Integrity and Infrastructure
Division	Research Innovation

POSITION PURPOSE

This role provides advanced technical expertise for the Mass Spectrometry Research Facility (MSRF), ensuring high-quality delivery of analytical services and supporting multi-disciplinary research. By overseeing instrument operations, developing advanced analytical workflows, delivering laboratory services to internal and external users and ensuring research project throughput, it enables impactful research aligned with Western Sydney University's strategic goal of delivering world-class research infrastructure and outcomes. The role also contributes to new analytical method development, actively supporting the publication of new methods and research findings as well as delivering high-quality sample analysis and training others to achieve the same.

The position reports to the Mass Spectrometry Research Facility Manager.

KEY ACCOUNTABILITIES

- Conduct day-to-day technical operations of the MSRF, ensuring optimal performance, calibration, and maintenance of high-end LC-MS/MS and GC-MS instrumentation.
- Support regular stock takes, audits, and reorganisations of spaces, assets, materials, equipment, and storage areas, under the direction of the Facility Manager.
- Procure, prepare and maintain the laboratory material inventory required for facility services, and maintain accurate maintenance records for all instruments.
- Working with the Research Facility Manager, plan capital equipment upgrades, assess emerging technologies, and optimise resource utilisation that will further the capability of the facility for its user base.

- Provide direction, instruction and training to facility users to ensure user proficiency and the safe and proper use of instrumentation and ensuring compliance with safety and data management protocols.
- Provide high-quality sample analysis, ensuring high standards of documentation, including method validation reports and quality assurance procedures, enabling reproducible and publishable research outcomes.
- Design, develop, and implement advanced analytical methods and workflows supporting proteomics, metabolomics, and multi-omics research projects.
- Support the fee-for-service activity that supplements the operational cost for research users.
- Maintain skill and knowledge base through on-the-job training and externally provided instrumentation training to ensure a high quality of facility service.
- Liaise with academic staff, research partners, and external collaborators to deliver tailored technical solutions and facilitate collaborative research outputs.
- Drive continuous improvement initiatives, contributing to strategic planning and reporting on facility performance metrics.
- Support the continuous update of facility documentation, standard operating procedures and risk assessments, compliance documentation and work health and safety policy adherence.

QUALIFICATIONS, EXPERIENCE AND SKILLS

Essential:

- Postgraduate qualification in Analytical Chemistry, Biochemistry, or related field, or equivalent combination of education and experience.
- Extensive hands-on expertise with mass spectrometry platforms (e.g., AB SCIEX 7500+, Waters Synapt G2Si, Waters Xevo TqMS) and advanced sample preparation techniques.
- An aptitude for using scientific software packages with a proven ability to troubleshoot complex instrumentation issues and implement sustainable technical solutions.
- Demonstrated leadership or supervisory skills driven by a high level of oral, interpersonal and written communication skills in a research facility environment.
- Strong organisational skills with the ability to manage multiple priorities and deliver results under tight deadlines whilst working well with team members and interdisciplinary collaborators.
- Demonstrated initiative in problem-solving and stakeholder engagement.

Desirable:

- Experience with use of Thermo Fisher GC and GCMS Orbitrap.
- Experience with quantitative proteomics, lipidomics, and metabolomics workflows.
- Knowledge of regulatory compliance and laboratory accreditation standards.

KEY RELATIONSHIPS

Reports to: Research Facility Manager – Mass Spectrometry Research Facility

Supervises: Technical Officer(s), HDR student technical trainees (as required)

Internal: Academic staff,
HDR students,
Research Services & Infrastructure technical teams,
School of Science, School of Medicine, and HIE research groups.

External: Equipment vendors, industry collaborators, external research partners.

CHALLENGES

- Managing competing facility priorities and multiple stakeholders' demands while maintaining high operational standards in a busy multi-user research facility.
- Leading technical innovation and adopting emerging technologies in a rapidly evolving field.
- Ensuring operational continuity in an environment with diverse user expertise levels.
- Maintaining advanced instrumentation performance under high sample throughput conditions.
- Ensuring leadership of the facility in the absence of the Facility Manager

UNIVERSITY EXPECTATIONS

All employees are expected to comply with Western Sydney University's Code of Conduct, Work Health and Safety and Wellbeing Management System, Enterprise Agreement, and principles of Equal Employment Opportunity and anti-discrimination.

Approved by: Office for People
Date: 21/04/2026