



Position Description – Technologist –Thin Film and Plasma Processing

Position Details

Position Title: Technologist –Thin Film and Plasma Processing

College/Portfolio: STEM College **School/Group:** Technical Services, College Operations

Campus Location: Primarily based at CBD campus, and the potential to work across other RMIT campuses as required.

Classification: HEW 7 **Time Fraction:** FTE 1.0 (flexible work arrangements will be considered)

Employment Type: Continuing

Reporting Line: Technical Coordinator

RMIT University

RMIT is a global university of technology, design and enterprise, committed to creating transformative experiences for students and making a meaningful impact through research, innovation, and engagement. For more information on RMIT University follow the links below.

<https://www.rmit.edu.au/about>

<https://www.universitiesaustralia.edu.au/university/rmit-university/>

<https://www.rmit.edu.au/about/facts-figures>

Our campuses in Melbourne (City, Brunswick, Bundoora, and Point Cook) are complemented by international campuses in Vietnam and a centre in Barcelona, Spain. We proudly acknowledge the Woi Wurrung and Boon Wurrung peoples of the eastern Kulin Nation on whose unceded lands our campuses are located.

We are deeply committed to reconciliation and Indigenous self-determination, embedding these values throughout our policies, culture and structures.

<https://www.rmit.edu.au/about/our-locations-and-facilities>

Why Join RMIT?

Our people are at the heart of everything we do. At RMIT, we value innovation, collaboration and impact. Our values are the heart (durrung) of who we are and what we stand for at RMIT. They guide what we do, how we make decisions, and how we treat each other.



Inclusion Imagination Integrity Courage Passion Impact

Learn more about our values: <https://www.rmit.edu.au/about/our-strategy/values>

Organisational Accountabilities

RMIT is committed to the safety, wellbeing and inclusion of all staff and students. As a staff member, you are expected to comply with all relevant legislation and RMIT policies, including those related to: Equal opportunity, Occupational health and safety, Privacy and trade practices & Child safety standards:

Appointees are responsible for completing all required training and ensuring that they and their team members remain up to date on relevant compliance obligations.

Staff are expected to understand and support RMIT's child safe practices as part of their professional responsibilities. More about our child safety commitment: <https://www.rmit.edu.au/about/our-locations-and-facilities/facilities/safety-security/child-safety>.

Leadership at RMIT

At RMIT, leadership is not defined by position or hierarchy—it is a shared responsibility demonstrated by all staff, regardless of role or title. Leadership is grounded in our six core values, which guide and shape how we work together, make decisions, and create impact.

Effective leadership means consistently integrating these values into everyday actions and interactions, whether influencing a project outcome, supporting a colleague, or leading a team. All staff are expected to embody the principles of the *Be–Know–Do* Leadership Model:

Be – We are open and authentic, inclusive and empowering. We are purpose driven role models and communicators.

Know – We are self-aware, and understand our stakeholders, our sector and priorities.

Do – We set clear direction and expectations, we develop ourselves and others and promote mutual accountability to deliver results.

At every level, leadership at RMIT is about influence, contribution, and mindset. It is reflected in how we empower others, foster collaboration, and drive positive change through capability-building and alignment to strategic goals.

The STEM College

The STEM College holds a leading position and expertise in the science, technology, engineering, mathematics, and health (STEM) fields. We are uniquely positioned to influence and partner with industry, as never before.

STEM College is a community of exceptional STEM researchers, teachers, inventors, designers and game-changers, supported by talented professional staff. We offer higher education programs across all STEM disciplines at the Bachelor, Master and PhD levels, and ensure our students experience an education that is work-aligned and life-changing.

The College is renowned for its exemplary research in many STEM areas including advanced manufacturing and design; computing technologies; health innovation and translational medicine; nano materials and devices; and sustainable systems. Our brilliant researchers attract funding from government and industry sources.

Industry is at the heart of what we do. It ensures our research has real world impact, and our students are truly work-ready. We have established new hubs of industry-connected digital innovation and endeavour and are engaging with global STEM organisations at scale.

Our diversity and shared values empower our work, and we are proud of the College's inclusive, caring culture. We offer a safe, dynamic work environment, and support every member of our community of achieve their potential. The College appointed Victoria's first ever Dean of STEMM, Diversity & Inclusion in 2020, and this role drives gender equity, diversity and inclusion strategies across the College.

STEM College employs 1,000 staff who deliver onshore and offshore programs to approximately 20,000 students.

We are here to positively impact the world and create the next generation of STEM leaders.
The Micro Nano Research Facility

The Micro Nano Research Facility (MNRF) is a shared research facility within RMIT's STEM College supporting multidisciplinary micro- and nanotechnology research. Its specialist laboratories provide capabilities for the design, modelling, fabrication, packaging and characterisation of micro- and nanoscale devices. MNRF provides access to advanced infrastructure and technical expertise for RMIT researchers and students, industry and external collaborators, and forms part of the Australian National Fabrication Facility (ANFF) Victorian Node.

Position Summary

The Technologist - PVD and Thin Film Processing supports the safe and effective operation of allocated MNRF laboratories, equipment and processes for research, teaching, industry and external users. Under the broad direction of the Senior Technical Manager and MNRF leadership, the position exercises independent technical judgement in delivering agreed facility priorities and contributes to user support, training, safety, equipment management and continuous improvement.

The position provides specialist technical leadership in plasma processing including plasma assisted etching, cleaning and surface modification; and thin-film processing across sputtering, electron-beam and thermal evaporation systems. It also undertakes broader technical and operational duties across MNRF, including support for related processes and facility activities, following appropriate training and within the scope of the position's classification and competence.

Key Accountabilities

- **Facility operations and service delivery:** Coordinate and deliver technical support for research, teaching, industry and external-user activities, and support the day-to-day operation of allocated MNRF laboratories. This includes user support, inductions and access, equipment and consumables management, purchasing, laboratory services, housekeeping, record keeping, usage reporting and coordination of maintenance and infrastructure requirements. Support external and industry activities in accordance with agreed scope, timelines, confidentiality, quality and facility requirements. Undertake other technical and operational duties across MNRF that are consistent with the classification and the incumbent's competence, as directed by the Senior Technical Manager.
- **Thin-film and plasma process leadership:** Provide specialist technical leadership for assigned PVD thin-film deposition and plasma processing systems. Develop, qualify, optimise and document safe and reproducible processes; support experimental design, semiconductor process integration, data generation and interpretation of relevant process and thin-film characterisation results; and maintain controlled recipes, equipment logs, qualification records and technical data to support traceability, reproducibility, knowledge transfer and continuity of facility services.
- **Equipment and infrastructure management:** Manage the operation, availability and lifecycle of assigned equipment and supporting infrastructure. Diagnose faults, undertake routine and preventive maintenance and first-line repairs within technical competence, coordinate specialist servicing and equipment requalification, and contribute to procurement, commissioning, upgrades and decommissioning. Provide technical oversight of associated high-vacuum, process gas, pumping, exhaust and abatement systems in collaboration with relevant specialists.
- **Training and competency:** Develop and maintain competency-based equipment training, assessment and authorisation processes; deliver individual and group training; maintain accessible technical documentation; share specialist knowledge; and cross-train other technical staff to reduce single-person dependency and support continuity of facility operations across related MNRF equipment and processes within the incumbent's competence.
- **Safety, compliance and documentation:** Maintain a high standard of occupational health and safety compliance across assigned laboratories and processes, including current SOPs, SWIs, risk assessments, chemical registers, training materials and other required records, and ensure laboratories, equipment and work practices remain safe and fit for purpose.
- **Collaboration and continuous improvement:** Work with the Senior Technical Manager, MNRF leadership, academics and the wider technical team to plan and improve facility services in line with agreed priorities. Build effective relationships with researchers, students, industry, government, suppliers and external partners; contribute to equipment and infrastructure projects, technical

reports, publications and research outputs where appropriate; and monitor and report on relevant operational measures, including equipment availability, downtime, maintenance completion, user training, utilisation, consumable costs and service delivery performance.

Key Selection Criteria

Essential:

- **PVD thin-film and plasma process expertise:** Demonstrated substantial hands-on expertise in PVD thin-film deposition, including magnetron sputtering, electron-beam evaporation and/or thermal evaporation; expertise in plasma process including PECVD, ICP-RIE, DRIE using the Bosch process, together with experience developing, optimising, transferring and documenting processes. This should include applying relevant thin-film characterisation data to control factors such as deposition rate, thickness, uniformity, adhesion, film stress, composition, contamination and repeatability, and maintaining process records that support traceability and reproducibility.
- **Equipment and infrastructure capability:** Strong practical knowledge of high-vacuum deposition equipment and associated technologies, including pumping systems, vacuum measurement, leak diagnosis, deposition sources, power supplies and process gas delivery. Demonstrated ability to diagnose faults, undertake routine and preventive maintenance and first-line repairs, coordinate specialist servicing, and verify or requalify equipment following intervention.
- **Shared-facility operations and service delivery:** Demonstrated experience supporting a semiconductor cleanroom, shared micro/nanofabrication facility or comparable advanced research laboratory, including balancing user needs, equipment availability, safety, service quality, cost, documentation and competing operational priorities. Experience should include user support and access, equipment and consumables management, purchasing, records, service coordination, operational reporting and maintenance of safe, reliable and fit-for-purpose laboratory spaces.
- **Training, communication and user support:** Demonstrated ability to develop and deliver technical training, assess and authorise user competency, maintain accessible technical documentation, transfer specialist knowledge and cross-train colleagues. Demonstrated ability to communicate complex technical information and work collaboratively with researchers, academics, technical staff, students, industry users and service providers to translate varied research and operational needs into safe and practical technical solutions.
- **Safety and risk management:** Strong knowledge and demonstrated application of laboratory OHS requirements, risk controls and technical documentation associated with cleanroom operations, vacuum equipment, electrical and RF systems, hazardous materials, compressed and process gases, exhaust and abatement systems.
- **Planning, problem-solving and continuous improvement:** Highly developed technical problem-solving, planning, documentation and stakeholder-engagement skills, with demonstrated ability to work under broad direction, exercise independent technical judgement, manage changing and competing priorities, contribute to equipment or infrastructure projects, use operational information to improve services, and work effectively as part of a multidisciplinary shared-facility team.

Desirable:

- Experience with related deposition, etching or thermal processes such as ALD , LPCVD, other CVD techniques, or furnace processing.
- Experience in micro/nanofabrication or semiconductor process integration across multiple unit processes.
- Experience with semiconductor back-end processes such as wafer dicing, lapping, polishing, bonding, packaging or precision machining.
- Demonstrated ability to diagnose, troubleshoot complex scientific instrumentation, including mechanical, electrical and electronic systems, with experience in PLCs, industrial control systems and equipment maintenance.
- Experience with high-hazard gas delivery, exhaust, abatement or environmental-control systems beyond routine user-level operation.
- Experience supporting collaborative, industry-funded or externally accessed research and development activities.

- Experience mentoring or supervising technical staff, or providing technical leadership across a multidisciplinary team.
- Familiarity with laboratory management systems, equipment booking systems, quality frameworks and shared research infrastructure environments.

Qualifications

A tertiary qualification at degree level or higher in engineering, materials science, physics or a related discipline, together with at least three years of subsequent relevant experience in a similar laboratory or facility environment. A relevant postgraduate qualification or PhD would be highly regarded. A valid Working with Children Check is mandatory.

Note: Appointment to this position is subject to passing a Working with Children Check.

Working with Children Check

Appointment to this position is subject to holding a valid Victorian Working with Children Check and other checks as required by the specific role. Maintaining a valid Working With Children Check is a condition of employment at RMIT.