



GENERAL MANAGER, MONASH CENTRE FOR ELECTRON MICROSCOPY

DEPARTMENT/UNIT	Monash Centre for Electron Microscopy
FACULTY/DIVISION	Office of the Deputy Vice-Chancellor (Research) and Senior Vice-President
CLASSIFICATION	HEW Level 10B
DESIGNATED CAMPUS OR LOCATION	Clayton campus

ORGANISATIONAL CONTEXT

Monash is a university of transformation, progress and optimism. Our people are our most valued asset, with our academics among the best in the world and our professional staff revolutionising the way we operate as an organisation. For more information about our University and our exciting future, please visit www.monash.edu.

The **Office of the Deputy Vice-Chancellor (Research) and Senior Vice-President** is responsible for the development, implementation and continuous improvement of the University's research vision within the changing landscape of higher education, ensuring delivery of accountabilities within the context of the University's strategic plan. Reporting to the President and Vice-Chancellor and as an integral member of the University's executive team, the DVCR further advances the University's research performance, diversifies research funding, oversees research infrastructure strategy, and fosters interdisciplinary and transdisciplinary areas of excellence, collaboration and innovation within Monash and with global research partners.

The **Monash Centre for Electron Microscopy (MCEM)** is a central university research platform and is part of the national grid of Microscopy Australia facilities. Its mission is to enable and advance research excellence at Monash University and beyond through the provision of a world-class research capability in electron microscopy for the determination of the structure of matter down to the atomic scale.

MCEM achieves this via its dual academic and research support role, namely:

- the execution of world class research in the field of electron microscopy, and
- the provision of advanced instrumentation, expertise and training in electron microscopy to researchers across all fields of science and engineering (except biology)

The Centre provides a research capability to several hundred registered users from Monash University, other universities, government research agencies and industry. It plays an important role in educating postgraduate students in electron microscopy, as well as providing a key complementary facility to the adjacent Ramaciotti Centre for Cryo-Electron Microscopy and the Australian Synchrotron and Melbourne Centre for Nanofabrication

(MCN), which are within walking distance. To learn more about MCEM please visit our website:
www.monash.edu/researchinfrastructure/mcem.

MCEM has a suite of advanced instruments, including the Thermo Scientific Spectra- ϕ , a next generation S/TEM with outstanding spatial and energy resolution, multiple fast detectors and unique electron-optical elements to optimise performance in S/TEM; a double-aberration-corrected Titan³ 80-300kV with pixelated detectors; plus 1 other FEGTEM, 1 TEM, 2 FEG-SEMs and a FIB/ESEM plus an extensive range of supporting computing, software and specimen preparation equipment. In addition, later this year MCEM will install a Thermo Scientific Helios 5 UX FIB-SEM Triple beam microscope including high speed EDX & EBSD and ToF-SIMS and a Thermo Scientific Verios 5 UC FEGSEM. It is also in the process of procuring an in-situ mechanical/heating FEG-SEM and high performance analytical FEG-SEM. The replacement value of MCEM's suite of instrumentation is approximately ~\$49million.

The MCEM is located in an award-winning ultra-stable building purpose-designed to optimise instrument performance.

POSITION PURPOSE

The **General Manager, Monash Centre for Electron Microscopy (MCEM)**, is responsible for the delivery of a world class electron microscopy research platform through the effective operational management of MCEM. The role will maximise the Centre's research impact by managing the delivery of high-level expertise in electron microscopy, optimum instrument performance and capability and outstanding research training programmes to the research community.

The General Manager will work closely with the Director to provide operational and strategic management and direction. The incumbent will play a leading role in implementing and monitoring the strategic priorities for the Centre and in managing complex and specialist technical operations, staffing, financial and resource management.

The General Manager will have responsibility for maintaining and overseeing the running of the facility in a way that maximizes the impact MCEM has on research at Monash University, nationally and internationally. The incumbent will apply broad and high-level expertise in electron microscopy to triage and manage technical and training solutions that meet the needs of the research community across a wide range of disciplines in science and engineering, while achieving optimum efficiency, effectiveness and research impact.

The General Manager will be responsible for the oversight, monitoring and reporting on all aspects of the operations of the MCEM to its stakeholders.

The General Manager will support the Director to promote, develop, build and monitor relationships with key stakeholders, including Monash University, Microscopy Australia, government, industry and the broader academia.

Additionally, the incumbent will manage the processes for procurement, installation, and disposal of complex, multi-million-dollar instrumentation and will oversee and ensure the maintenance of the stability requirements in the MCEM high-performance, ultrastable building, which is critical for optimum instrument performance.

Reporting Line: The position reports to the Director, Monash Centre for Electron Microscopy, and works with a high degree of autonomy under broad direction

Supervisory Responsibilities: This position provides direct supervision to approximately 7 staff and oversees a team of approximately 12 staff plus casuals

Financial Delegation: Yes, in accordance with the University delegations schedule

Budgetary Responsibilities: Yes, in line with Key Responsibilities

KEY RESPONSIBILITIES

1. Undertake the strategic leadership role of General Manager, MCEM, and lead in the development, implementation and operation of the facility, in line with the platform business model and in consultation with the Director of MCEM
2. Lead the development and management of systems and processes that deliver a world-class research capability in electron microscopy to support and enable the research community and to maximise research impact
3. Provide financial, legal and administrative leadership to MCEM
4. Provide and apply broad and high-level scientific and technical expertise to assess the electron microscopy needs of researchers. Develop, coordinate and manage effective access, training and client programs to address these needs, while making optimum use of resources
5. Manage the development and implementation of teaching and training programs and workshops in electron microscopy and related techniques provided by MCEM to its user community
6. Lead, develop and manage a team of expert scientific and professional staff, including effective utilisation of staff resources, developing, coaching and mentoring employees and managing performance to deliver a high impact research capability to the research community in a collaborative and collegiate atmosphere
7. Develop and establish systems, policies and procedures to ensure professional and efficient management of business processes, including administration of users, access, induction, training and licensing procedures, booking systems, prioritisation of use, provision of information, user compliance and invoicing/reporting
8. Lead the development and implementation of annual business plans and budgets and contribute to the development and implementation of a business strategy. Develop access and pricing strategies in line with the Platform business model and for approval by the MCEM Management Committee. In collaboration with FIRM, provide advice to the Director regarding facility finances, particularly regarding annual budget, fee-for-service, commercial contracts, equipment maintenance schedules, staff salaries, instrumentation consumables and facility resources
9. Lead and prepare reports on the financial status, performance monitoring, compliance and KPI data for delivery to the MCEM Management Committee, Microscopy Australia and other funding agencies, as required. Lead the development and management of systems and databases to acquire all data necessary for operational purposes, assessment and reporting
10. Lead the development and implementation of optimum systems, contracts and services to maintain MCEM's complete suite of instrumentation to ensure sustained high performance, longevity and maximum availability
11. Contribute to the preparation of funding applications for new instrumentation to support current and future research needs. Provide expertise and manage the processes for procurement, installation, and disposal of complex, multi-million-dollar instrumentation. Negotiate purchases within financial delegation
12. Oversee and ensure that the high-performance specifications of the MCEM ultrastable building are maintained and protected from changes to the internal and external environment to ensure on-going optimum instrument performance. Monitor and report on impact of internal and external factors that could affect microscope performance (electromagnetic field, vibration, acoustic noise, power stability and reliability, high-purity gases, air conditioning, chilled water, monitoring and alarms etc.). Provide expert advice to internal and external parties on environmental requirements for high-performance electron microscopy
13. Liaise with the research community to monitor and evaluate the quality, suitability and performance of the research capability MCEM provides and to identify future needs and opportunities
14. Develop strategies that promote the role of MCEM in providing a high-quality electron microscopy capability to the research community

15. Proactively represent, promote and profile the activities and outcomes of the Monash Centre for Electron Microscopy, including promoting collaboration and research productivity and ensuring the website is maintained
16. Ensure standard operating procedures, safe working documents and training materials are developed, implemented and maintained in accordance with Occupational Health and Safety requirements and best practice. Ensure compliance with regulatory requirements and University policy, procedures and protocols relevant to the services conducted
17. Other duties as directed from time to time

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
 - PhD in science, engineering or other relevant discipline; or
 - an equivalent combination of relevant experience and/or education/training.

Knowledge and Skills

2. Expertise in the management of complex electron microscopy facilities to the highest standard, with a focus on enabling research excellence and operational efficiency within a collegiate environment
3. High-level expertise in electron microscopy and its application to a wide range of scientific disciplines
4. Extensive expert knowledge of electron microscope instrumentation, its maintenance, optimisation and operation
5. Proven leadership skills with a demonstrated ability to set strategic direction, undertake strategic planning, develop business plans, provide advice and implement initiatives to deliver on organisational objectives
6. Demonstrated extensive budget and financial management, monitoring and reporting, systems improvement, business analysis and quality control within a complex environment
7. Proven experience in human resources management and skills; particularly the ability to lead, coach and motivate scientific and professional staff towards the achievement of strategic organisational objectives
8. Proven exceptional project management experience in strategic planning and integration of policies and guidelines in a complex organization
9. Exceptional analytical and conceptual skills, with the ability to develop creative solutions to complex problems
10. Extensive experience in leading the development and implementation of policy and reporting processes within the higher education sector, and demonstrated experience to assess and improve the quality of administrative processes
11. High level planning and organisational skills and experience in establishing priorities, meeting deadlines whilst working under pressure and managing an organisational project risk in a large and complex organisation
12. Excellent communication skills, both verbal and written, including the ability to communicate and advocate at all levels on complex issues
13. Exceptional interpersonal skills with the demonstrated ability to build and maintain effective working relationships and networks with a broad range of internal and external key stakeholders, with the ability to influence key outcomes and adapt communication styles

OTHER JOB RELATED INFORMATION

- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted
- Travel to other campuses of the University may be required
- Occasional travel may be required to attend national and/or international conferences and/or to visit international collaborators

GOVERNANCE

Monash University expects staff to appropriately balance risk and reward in a manner that is sustainable to its long-term future, contribute to a culture of honesty and integrity, and provide an environment that is safe, secure and inclusive. Ensure you are aware of and adhere to University policies relevant to the duties undertaken and the values of the University. This is a standard which the University sees as the benchmark for all of its activities in Australia and internationally.