



Senior Technical Officer

Department/Unit	School of Earth Atmosphere and Environment
Faculty/Division	Faculty of Science
Classification	HEW Level 7
Work location	Clayton campus
Date document created or updated	February 2018

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 **School of Earth, Atmosphere and Environment** is located in the Faculty of Science (<http://www.monash.edu/science/>) and has close collaborations with other Schools, such as Physics, Chemistry and Biology, and with other Faculties, such as Business and Economics, Arts, and Engineering. The School has strong links with outside institutions such as CSIRO, The Australian Synchrotron, and Geoscience Australia as well as a large number of research institutes and universities globally. The School is multidisciplinary with a range of research groups in Solid Earth Sciences, Atmospheric and Climate Sciences, and Environmental Sciences. A detailed list of research groups and current and future topics can be found on the School's webpage: <https://www.monash.edu/science/schools/earth-atmosphere-environment/research>

The School has a suite of world-class research facilities in geochemistry supported by full time technicians: <https://www.monash.edu/science/schools/earth-atmosphere-environment/facilities/research-laboratories>. The School also benefits from access to state-of-the-art user facilities for materials and biological research such as the Monash Centre for Electron Microscopy, the Monash X-ray Platform, the Monash Isotopia Lab, the Monash Micro Imaging Facility and the Australian Synchrotron, which is located immediately adjacent to Monash's Clayton campus.

Position purpose

The Senior Technical Officer is responsible for overseeing and delivering high-quality technical services within the School of Earth, Atmosphere and Environment that assist in the development of major research projects across the broad field of geochemistry. Working with other technicians to meet and support the strategic plans and goals of the school, the Senior Technical Officer performs a range of significant and complex technical activities that play a critical role specifically supporting the delivery of Professor Peter Cawood's research programs. This includes overseeing and undertaking equipment maintenance, developing operating procedures, data analysis, operational and budget planning, whilst ensuring a compliant and safe operating environment.

The Senior Technical Officer is a subject matter expert and provides strategic and operational advice to clients and delivers of efficient technical services with a focus on operational excellence.

Reporting Line: The position reports to Professor Peter Cawood under broad direction

Supervisory Responsibilities: Not applicable

Financial delegation Not applicable

Budget responsibilities: Not applicable

Key responsibilities

1. Oversee and administer the operation and maintenance of high-quality technical services or programs relating to the use of the mass spectrometers within the School, reporting on and minimising risks, undertaking data analysis, interpretation of results and reporting in accordance with operational standards, policies, timeframes and regulatory compliance requirements
2. Provide specialist and technical advice and/or training and supervision to clients, staff, students and other stakeholders in the operation and maintenance of the School's laser ablations systems, including the development of new instrumental techniques and compliance with technical standards and protocols
3. Develop and maintain up-to-date specialist or technical knowledge of new and innovative methodology, equipment, technology, data management and analysis in the field of specialisation, which will include the delivery of extremely high quality and reliable geochemical and isotopic analyses, and contribution to the School's reputation for scientific excellence in research and training both nationally and internationally
4. Undertake tasks in support of technical service or program which will include providing advice on, developing and supporting the research programs of Professor Cawood's and the School's teaching and research mission in the broader Earth sciences, geochemistry in particular, including publication of research results and collaborative assistance where required
5. Provide support for budget management for the research technical service or facility, including planning, contributing to funding proposals and developing budget reports
6. Oversee and co-ordinate the day-to-day technical operations including; conducting experiments, testing or data collection activities, ensuring OHSE and a safe operations, maintaining equipment and materials, waste disposal and ordering of supplies
7. Build and sustain partnerships, collaborations and networks with academic and other staff, relevant research/technical bodies, service providers and functional areas

Key selection criteria

Education/Qualifications

1. The appointee will have:
 - a degree qualification in a relevant field of geochemistry, chemistry, with subsequent significant experience or
 - extensive experience and management expertise in technical or administrative fields; or
 - an equivalent combination of relevant experience and/or education/training

Knowledge and Skills

2. Demonstrated experience in overseeing a successful technical service, program or facility, with a focus on operational excellence, with expertise in isotope geochemistry clean laboratory procedures and proficiency in operation of Inductively Coupled Plasma (ICP) Mass Spectrometers (MS) and laser ablation systems
3. Demonstrated expertise in developing new analytical techniques, and the ability to adapt existing techniques, to meet specific user needs for ICPMS analyses and high proficiency in sample preparation techniques for ICPMS analyses and laser ablation systems

4. Highly-developed planning and organisational skills, with experience establishing priorities, implementing improvements and meeting deadlines
5. Demonstrated experience in supporting a safe operating environment, implementing OHS requirements, developing operating procedures and providing authoritative oversight of complex technical processes and use of specialised equipment
6. Demonstrated analytical, research and problem solving skills and the ability to identify and recommend solutions to challenging issues. Proven experience in geochemical laboratory procedures and/or associated applications, preferably through peer-reviewed publications
7. Highly-developed interpersonal and communication skills with the ability to prepare professional documentation for various audiences and provide expert advice in areas of specialist or technical knowledge
8. Demonstrated relationship management skills, including the ability to interact with, negotiate with and gain co-operation from internal and external stakeholders

Other job related information

- On-call (Emergency / safety related matters)
- There may be peak periods of work during which taking of leave may be restricted

Legal compliance

Ensure you are aware of and adhere to legislation and University policy relevant to the duties undertaken, including: Equal Employment Opportunity, supporting equity and fairness; Occupational Health and Safety, supporting a safe workplace; Conflict of Interest (including Conflict of Interest in Research); Paid Outside Work; Privacy; Research Conduct; and Staff/Student Relationships.