

Position Title:	Senior Research Officer (NMR)
Position Classification:	Level 7
Position Number:	314228
Faculty/Office:	Faculty of Science
School/Division:	Chemistry & Biochemistry/Centre for Microscopy, Characterisation and Analysis
Centre/Section:	Centre for Microscopy, Characterisation and Analysis
Supervisor Title:	Technical Operations Manager
Supervisor Position Number:	310882

About the University

Over 100 years ago, The University of Western Australia was founded with the aim of advancing the welfare and prosperity of its community.

UWA has risen to changing social and economic challenges, while achieving international standards, educating world-class graduates, producing ground breaking research and engaging in our community.

Delivering practical benefits to the community has always been at our core. We do this through the creation and sharing of knowledge, to foster a deeper understanding of our subject, ourselves and the world around us. That's because we believe that understanding is the key to a better future. Through understanding comes progress and through progress we can help create a better future for all.

UWA is already ranked in the top 1% of the world's universities, but our goal is to be recognised as on the world's top 50, for education as well as research.

The University of Western Australia has an international reputation for excellence and enterprise and has been rated as one of the best comprehensive universities in Australia. It is one of the country's leading research institutions as demonstrated by our Nobel Laureate and is the only WA member of the prestigious "Group of Eight" research universities.

The University is undergoing a period of transformational change to gain greater efficiencies, improve value, services and satisfaction. In this period of change the University remains focussed on being a world leader. The attraction and retention of the world's best employees is critical to achieving the University's strategic aim of being in the top 50 universities by 2050.

Vision and Values

The University of Western Australia vision is achieving international excellence.

Its core values underpinning our activities are a commitment to:

- A high performance culture designed to achieve international excellence
- Academic freedom to encourage staff and students to engage in the open exchange of ideas and thought
- Continuous improvement through self-examination and external review
- Fostering the values of openness, honesty, tolerance, fairness, trust and responsibility in social, moral and academic matters
- Transparency in decision making and accountability
- Equity and merit as the fundamental principles for the achievement of the full potential of all staff and students

All staff are expected to comply with the Code of Ethics and the University's Code of Conduct and demonstrate a commitment to its Equity and Diversity and Safety principles and the General Capabilities of personal effectiveness, working collaboratively and demonstrating a focus on results. Details of the University

All staff are expected to demonstrate a commitment to Equity & Diversity and Safety principles

Details of the University policies on Equity and Diversity can be accessed at <http://www.equity.uwa.edu.au> or by telephoning 6488 2252. Details of the University policies on Occupational Safety and Health can be accessed at <http://www.safety.uwa.edu.au/policies> or by telephoning 6488 3938.

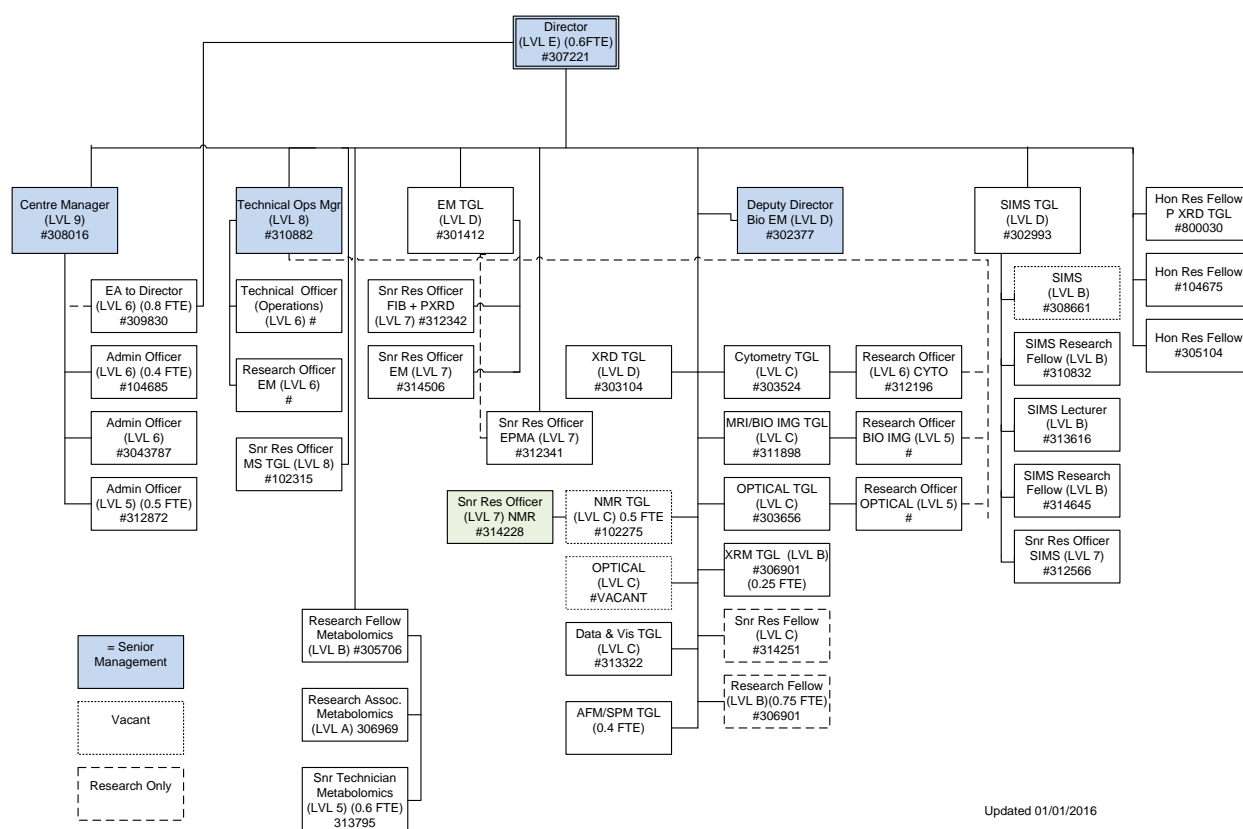
policies on these can be accessed at http://www.hr.uwa.edu.au/publications/code_of_ethics, <http://www.equity.uwa.edu.au> and <http://www.safety.uwa.edu.au/policies>.

About the work area

The CMCA is the University's microscopy, characterisation and analysis core facility. Its goal is to facilitate and provide research excellence through a focus on world-class facilities matched with high-level academic and technical expertise and a concept-to-publication user pathway.

The Centre comprises ~35 academic, research, technical and administrative staff supporting a diverse range of instrument platforms including SIMS, electron microscopy and microanalysis, optical and confocal microscopy, flow cytometry, cell sorting, NMR, XRD, mass spectrometry, small animal imaging, AFM, and micro-CT. The appointee will join the Centre's Ion Probe Facility, which is home to two state-of-the-art ion microprobes: a Cameca NanoSIMS 50 and a Cameca IMS 1280. The Facility is a flagship of the Australian Microscopy and Microanalysis Research Facility (AMMRF), a national infrastructure joint venture that provides high-end analytical capabilities to enable world-class research. The Facility seeks to maintain its world-class reputation for specialised, high-quality SIMS analysis through domestic and international collaborative research.

Organisation chart



Role statement

As the appointee, you will provide a high level of technical expertise to support all researchers who require access to NMR spectroscopy, both from within the School of Chemistry and Biochemistry and external to this.

This appointment will primarily involve the day-to-day operation of the NMR instrumentation, where you will provide user training and support and also participate in collaborative research opportunities.

Under the supervision of the academic staff, you will provide support to researchers in all aspects of their projects, including experimental design, sample preparation, data acquisition and interpretation. You will also take responsibility for the archiving and transfer of data, maintaining the laboratory in good working order, and performing routine maintenance on the instrument, including liquid N₂ and He top-ups as necessary.

It is expected that the individual, under limited direction of the academic supervisor, will contribute to the development and delivery of training programs, provide on-going support to, and develop collaborations with, researchers making use of relevant CMCA facilities leading to published research outcomes. On a day-to-day basis academic supervision will be provided by the leader of the NMR facility, supplemented by the Technical

Operations Manager of the CMCA and you will work closely with and support the NMR requirements of other academic staff in the CMCA and the School of Chemistry & Biochemistry, and beyond.

Key responsibilities

- Contribute to the efficient running of the NMR facilities, in particular with the day-to-day operation of the instruments, under the supervision of the academic lead;
- Support collaborative research by contributing to experimental design, sample preparation, data acquisition, data processing and interpretation;
- Train new users and support them with conduct of experiments, advice and direction concerning experimental protocols, and with the interpretation of results;
- Provide access to the NMR facilities in support of the teaching requirements of the School of Chemistry & Biochemistry, as required;
- Manage and maintain the instruments at optimal operating condition by performing routine maintenance and coordinating repairs with the academic staff and the equipment vendor; and
- Other duties as directed.

Specific work capabilities (selection criteria)

- A relevant degree with substantial research/technical experience in a relevant subject area and a higher-degree by research preferred;
- Substantial experience of hands-on NMR spectroscopy, data collection, experiment design and interpretation;
- Evidence of the capacity to operate high-end NMR instrumentation at an advanced level;
- Demonstrated capacity to provide clear instruction to students and researchers;
- Demonstrated ability to support interdisciplinary research projects from concept through to publication;
- Knowledge and experience in related analytical techniques (e.g., mass spectrometry) or demonstrated capacity to learn and apply new analytical techniques;
- Excellent written and verbal communication skills;
- Excellent organisational skills and demonstrated ability to set priorities and to meet deadlines;
- Ability to work independently, show initiative and contribute as a senior member of a team; and
- Proficiency in a range of computing skills including word processing, spreadsheets, databases, internet and email.

Special Requirements

There are no special requirements.