



RESEARCH FELLOW

DEPARTMENT/UNIT	Faculty of Science
FACULTY/DIVISION	School of Chemistry
CLASSIFICATION	Level A
WORK LOCATION	Clayton campus

ORGANISATIONAL CONTEXT

Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what's expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at <u>www.monash.edu</u>.

The **Faculty of Science** works through frontiers via our research, teaching and our partnerships with industry, government and individual supporters. Our five Schools offer a large and diverse range of disciplines in undergraduate and postgraduate courses. Ten Schools from other university faculties contribute to science teaching at all levels, allowing students to choose their studies from physical, biological, biomedical, behavioural, environmental, mathematical and computer sciences. In terms of research, our respected researchers are at the top of their game. Their work spans the theoretical to the applied, contributes to new knowledge and technologies, and challenges how we interact with the world. To learn more about the Faculty of Science, please visit our website: www.monash.edu/science/.

The <u>School of Chemistry</u> is located in the Faculty of Science and is one of the leading Chemistry Schools in Australia (as per national benchmarking statistics) with an international reputation for its quality research programs and postgraduate training. The School has within it, the Centre for Green Chemistry, Water Studies Centre, Centre for Biospectroscopy, a node of the ARC Centre for Electromaterials Science and members associated with two Cooperative Research Centres. The objectives of the School are to undertake and publish high quality research, promote industry and government engagement and to provide internationally recognized programs in Chemistry for undergraduate and postgraduate students. The School of Chemistry is taking a lead role in Monash's partnership with the Federal Government in the development of Green Chemical Futures (GCF) - a \$75 million investment in the future of chemical sciences. The long term objective of the GCF initiative is to produce a pipeline for the technologies and resources needed by an industry striving for a lower environmental footprint and to produce chemistry graduates of the highest calibre armed with knowledge that will help transform industry into the future.

POSITION PURPOSE

A Level A research-only academic will carry out independent and/or team research within the field in which they are appointed and to carry out activities to develop their research expertise relevant to the particular field of research.

This position is funded by an ARENA supported research project "Ammonia Production from Renewables at Ambient Temperature and Pressure". The position is responsible for developing and testing advanced cell components to achieve the project goals. The position works independently with other team staff and students to integrate materials from their projects into a demonstration device. The position takes lead responsibility for reporting project outcomes to ARENA and other stakeholders.

Reporting Line: The position reports to a professor under general direction

Supervisory Responsibilities: Not applicable

Financial Delegation: Not applicable

Budget Responsibilities: Not applicable

KEY RESPONSIBILITIES

- 1. The conduct of research under limited supervision either as a member of a team or, where appropriate, independently and the production or contribution to the production of conference and seminar papers and publications from that research
- 2. Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise
- 3. Limited administrative functions primarily connected with the area of research of the academic
- **4.** Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff
- 5. Occasional contributions to teaching in relation to her/his research project(s)
- 6. Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures
- 7. Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental, school and/or faculty meetings and/or membership of a limited number of committees
- 8. Advice within the field of the staff member's research to postgraduate students

KEY SELECTION CRITERIA

Education/Qualifications

- **1.** The appointee will have:
 - A PhD in Chemistry or a related discipline from a recognised university; and
 - a solid track record of quality refereed research publications

Knowledge and Skills

- 2. Deep fundamental knowledge in physical chemistry, with the focus on electrochemistry and catalysis
- **3.** Outstanding chemical laboratory skills and highest standards of safe laboratory work. Key skills required for this position include:
 - Advanced experience in electrochemistry techniques and equipment

- Design of electrochemical cells
- Proficiency in physical characterisation of materials
- 4. Excellent written and oral communication skills. The ability to prepare and clearly communicate the aims and outputs of research projects in a range of formats including refereed research papers, formal and informal oral presentations, and reports
- **5.** Experience in successfully supervising, mentoring and coaching to support the development of research staff and/or a demonstrated trajectory of leadership capability
- 6. Experience in supervising and working with major honours or postgraduate students within the discipline
- 7. High level organisational skills, with demonstrated capacity to establish and achieve goals on time
- 8. Well-developed computer literacy with the desirable skill set including: statistical analysis; the use of databases; advanced data plotting/analysis software like Origin, or an analogue; text, data and presentations processing

OTHER JOB RELATED INFORMATION

- Travel to other campuses of the University may be required
- 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

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.