

Position Description

	▼
Position Title	Research Fellow in Materials Science
Group/Portfolio	Griffith Sciences
Classification	Research Fellow Grade 1 (RF1)
Position Number	00063053
Reports To	Professor Karen Wilson
Employment Type	Fixed Term

1.0 Position Purpose

The Research Fellow will work within the Surfaces, Materials and Catalysis research group on the design, construction, and application of analytical tools for dynamic studies of electrocatalysts as part of the ARC Centre of Excellence for Green Electrochemical Transformation of Carbon Dioxide project and will report to Professor Karen Wilson.

2.0 Eligibility Requirements

- The occupant of this position will hold a PhD in a relevant field
- Experience in the application of advanced spectroscopies and/or electron microscopies for dynamic studies of the physicochemical properties of inorganic nanoparticles and porous solids in the liquid or gas phase.
- Experience in the design, construction and use of reaction cells for in-situ or operando measurements of liquid or gas phase catalysis using electron microscopy or synchrotron radiation.
- Experience in computational methods to model physicochemical processes (e.g. DFT, molecular dynamics, or Monte-Carlo simulations) or transport processes (e.g. CFD).

3.0 Key Responsibilities

- Conduct laboratory/fieldwork/research that contributes to the research objectives of the ARC Centre of Excellence.
- Maintain a good publication record of in high impact, international, esteemed peer-reviewed journals and to seek competitive funding.
- Contribute to the group research projects as appropriate to research skills.
- Contribute to teaching activities as required.
- Manage the preparation and formulation of publications, presentations and research reports arising from the research.
- Assist in mentoring and supervision of higher degree research candidates.

- Supervise Research Assistants and technical staff.
- Maintain compliance with relevant legislation and University policies and procedures, including research ethics, equity and health & safety, laboratory standards and exhibit good practice in relation to same.
- Be a leading example of the principles and values embodied in the University's Code of Conduct, and behave, act and communicate at all times to reflect fairness, ethics and professionalism.

4.0 Key Capabilities

• Griffith University identifies the attributes of resilience, flexibility, creativity, digital literacy and entrepreneurship as critical to our graduates' success, in the rapidly changing future world of work. We have established a Griffith University Capability Development Framework to provide a common language of some of the non-technical organisation skills that will support our staff to thrive now and into the future. The Capability Development Framework will assist you to understand the current skill level of this position in the non-technical but critical skill domains that are increasingly important in a changing workplace context.

To read about some of the non-technical organisation skills for this position, please see the Leads Self section of our <u>Capability Development</u> Framework.