

<b>Position Title</b>	Research Fellow in Electrocatalysis
<b>Group/Portfolio</b>	Griffith Sciences
<b>Classification</b>	Research Fellow Grade 1 (RF1)
<b>Position Number</b>	00063052
<b>Reports To</b>	Professor Adam Lee
<b>Employment Type</b>	Fixed Term

## 1.0 Position Purpose

The Research Fellow will work within the Surfaces, Materials and Catalysis research group on the development, characterisation and evaluation of electrocatalysts for CO<sub>2</sub> reduction to fuels and chemicals as part of the ARC Centre of Excellence for Green Electrochemical Transformation of Carbon Dioxide project and will report to Professor Adam Lee.

## 2.0 Eligibility Requirements

- The occupant of this position will hold a PhD in a relevant field
- Experience in the wet-chemical synthesis of metal and/or oxide nanoparticle or porous electrocatalysts and their deposition on solid or gas-diffusion electrodes, and hands-on experience in their characterisation by bulk and surface sensitive techniques including XRD, XPS, IR and porosimetry, and expertise in electrochemical methods including cyclic voltammetry, EIS, and chronoamperometry.
- Experience in the construction and use of electrochemical batch or flow cells for CO<sub>2</sub> reduction, and associated use of spectroscopic (IR and UV-Vis preferred) and chromatographic (GC and HPLC preferred) methods for product analysis
- Experience in conducting kinetic and mechanistic studies of electrocatalytic reactions, and developing structure-function relationships.

## 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 [Capability Development Framework](#).