# Position Details

## Research Scientist/Engineer- CSOF5

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| The following information is for applicants |
| Advertised Job Title | Research Scientist – Fuel Cell & Electrolysis Technologies |
| Job Reference | 79170 |
| Tenure | IndefiniteFull-time |
| Salary Range | AU$102,724 to AU$111,165 pa + up to 15.4% superannuation |
| Location(s) | Melbourne (Clayton), VIC |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents Only |
| Position reports to the | Team Leader, Electrochemical Energy Systems |
| Client Focus – Internal | 60% |
| Client Focus – External | 40% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Nawshad Haque via email at nawshad.haque@csiro.au  |
| How to apply | Apply online at <https://jobs.csiro.au/> Internal applicants please apply via **Jobs Central**If you experience difficulties when applying, please email careers.online@csiro.au or call 1300 984 220. |

### Role Overview

The role of Research Scientist Staff in CSIRO is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. You may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. You will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts.

Based at CSIRO’s Clayton site, the Research Scientist will be a part of the Energy Technologies program and will work on a range of applied research projects. Their focus will be on electrochemical energy systems for the production of renewable fuels such as hydrogen, ammonia and low emissions energy applications. In addition to being an important member of the wider team, this role will also have responsibilities in external engagement and project development activities. The Research Scientist will be expected to develop their own research domain to augment and grow CSIRO’s capabilities in the priority areas.

### Duties and Key Result Areas:

* Under limited direction about research project objectives and general approach, undertakes scientific or engineering research requiring originality, creativity and innovation and the application of scientific or engineering knowledge, expertise and skills in a limited area.
* Demonstrates basic ability in research planning and execution and the capacity to think in terms of fundamentals and create hypotheses.
* Develop, design and deliver client-focussed research projects, or components of research initiatives.
* Work as part of the wider research group on key experimental or modelling aspects of research projects.
* Contribute to, and possibly lead, the production of client reports and scientific papers.
* Engage externally to ensure that our research priorities are aligned with industrial needs.
* Act as a trusted advisor, utilising knowledge of client’s business and understanding of their underlying needs.
* Anticipate industry and/or community needs and market direction through client liaison/networking and identify and adapt quickly to changes.
* Communicate research results to clients and the scientific community through oral and written reports, which may include the preparation of documents for patent applications.
* Communicate openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work collaboratively as part of a multi-disciplinary, often regionally dispersed research team, and business unit to carry out tasks in support of CSIRO’s scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.
* Other duties as directed.

## **Required Competencies:**

* **Teamwork and Collaboration:** Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other teams as well as industry colleagues.
* **Influence and Communication:** Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others reactions.
* **Resource Management/Leadership:** Allocates activities, directs tasks and manages resources to meet objectives. Provides coaching and on the job training, recognises and supports staff achievements and fosters open communication in the team.
* **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
* **Independence:** Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
* **Adaptability:**Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of changes.

## **Selection Criteria**

#### Essential

*Under CSIRO policy only those who meet all essential criteria can be appointed.*

1. PhD degree in Electrochemistry or Materials Science with a strong background in electrochemistry and fuel cells/electrolysers backed with previous experience and publication record in the relevant field*.*
2. Sound working knowledge of electrochemical instrumentation / diagnostics such as electrochemical impedance spectroscopy, current-voltage characterisation as applied to high and low-temperature fuel cells and electrolysers.
3. Experience with synthesis and characterisation of functional electrocatalysts for low and high temperature electrochemical systems.
4. Growing reputation, network and experience in relevant fields associated with chemical processing and energy technologies.
5. A track record of delivering client-focussed research projects, with demonstrated research project management skills.

## **Desirable:**

1. Ability to contribute to design of research equipment and systems, and to conduct HAZOP analysis on major laboratory and pilot scale research rigs.
2. Experience in methods and techniques for fabrication of electrolyte components and cells for electrochemical reactors such as solid oxide electrolysis and fuel cells.
3. Demonstrated commitment to effective risk management processes and procedures across all areas of workplace operations.
4. Demonstrated experience in development and presentation of strategic and technical proposals, project reports, conference papers and presentations for a range of relevant industry, research, and community stakeholders.

Special Requirements

Appointment to this role may be subject to conditions including provision of a national police check as well as other security/medical/character clearance requirements.

* The successful candidate will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

## **About CSIRO:**

We solve the greatest challenges through innovative science and technology. To find out more visit us [online](http://www.csiro.au/)!

CSIRO is a values-based organisation.  In your application and at interview you will need to demonstrate behaviours aligned to our values of:

* 1. People First
	2. Further Together
	3. Making it Real
	4. Trusted

Find out more about CSIRO [Energy](https://www.csiro.au/en/Research/EF)