# Position Details

## Research Scientist/Engineer- CSOF6

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| The following information is for applicants | |
| Advertised Job Title | Senior Research Scientist - Hydrogen and Gasification Energy Technologies |
| Job Reference | 77276 |
| Tenure | Specified Term of 3 years  This role is offered on a full-time or part-time (minimum 0.8 FTE) basis |
| Salary Range | AU$115k to AU$135k pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Brisbane (Pullenvale) QLD |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | All candidates |
| Position reports to the | Team Leader, Hydrogen and Gasification Innovations |
| Client Focus – Internal | 30% |
| Client Focus – External | 70% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Mark Kochanek via email at mark.kochanek@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](mailto: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 Queensland Centre for Advanced Technologies (QCAT) in Brisbane, the Senior Research Scientist will be a part of the Low Emissions Technologies program and will work on development and delivery of a range of applied research projects. The focus of the role will be on gasification and thermochemical processing to produce hydrogen or other 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 bring their own research experience and networks to augment and grow CSIRO’s capabilities in the priority areas.

This role is offered on a full-time or part-time (minimum 0.8 FTE) basis

### Duties and Key Result Areas

* Develop, design, and deliver client-focussed research projects, or components of large-scale research initiatives.
* Work as part of the wider research group on key experimental or modelling aspects of research projects in the Low Emissions Technologies program.
* 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.
* Within broad guidelines, use professional expertise, knowledge of other disciplines and research experience/achievement to formulate, develop and complete an approved research program with general direction as to the aims of their activities.
* Communicate research results to clients and the scientific community through oral and written reports, which may include the preparation of documents for patent applications.
* Provide advice to policy makers and inform and transfer knowledge to non-scientific audiences.
* Lead and supervise staff to ensure that experiments are established in accordance with the research design and are completed within the agree timeframes and budget.
* Undertake feasibility studies, demonstrating a considerable degree of originality, creativity and innovation in solving problems and introducing new directions and approaches.
* Maintain confidentiality when working with commercially sensitive information.
* 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, regionally dispersed research team to carry out tasks in support of CSIRO’s scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Values, 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:** Identifies critical stakeholders and influences them via an influential third party, for example through an established network, to gain support for sometimes contentious proposals/ideas.
* **Resource Management/Leadership:** Sets up and maintains effective and efficient work teams and manages performance and resources, to achieve objectives. Chooses appropriate management strategies and communication styles to maintain high levels of motivation and productivity. Gives feedback for development purposes and provides support and direction for improvement.
* **Judgement and Problem Solving:** Anticipates and manages problems in ambiguous situations. Develops and selects an appropriate course of action and provides for contingencies. Evaluates, interprets and integrates complex bodies of information and draws logical conclusions, synthesises proposals and defends options with reasoned arguments.
* **Independence:** Assesses the risk and opportunity of identified strategies, options and actions. Overcomes problems and setbacks in achieving goals. Invariably includes consideration of value-added future impact on bottom line when determining the optimal and efficient use of resources.
* **Adaptability:**Demonstrates flexibility in thinking and adapts to, and manages, the increasing rate of organisational change by adjusting strategies, goal and priorities.

## **Selection Criteria**

#### Essential

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

1. A PhD (or an equivalent combination of qualifications and research experience) in a relevant field such as Chemical Engineering, Industrial Chemistry, or similar areas*.*
2. Established reputation, network and experience in relevant fields associated with chemical processing and energy technologies.
3. Demonstrated ability to secure funding with industry and/or government bodies to develop and deliver client-focussed research projects, with demonstrated project management skills.
4. A track record of scientific or technical impact in the bioenergy, hydrogen, or related industry sectors.
5. Demonstrated commitment to the following:
   1. Identification and implementation of relevant and rigorous safety protocols associated with design, development, and operation of complex research facilities
   2. Effective risk management processes and procedures across all areas of workplace operations.
6. A sound understanding of the fundamental aspects of combustion, gasification and/or pyrolysis of solid feedstocks and related industrial chemical processes.
7. High-level oral and communication skills coupled with the demonstrated experience in the development and presentation of strategic and technical proposals, project reports, conference papers, peer reviewed journal articles and/or presentations for a range of relevant industry, research, and community stakeholders.
8. Demonstrated ability to undertake original, creative and innovative research by generating and pursuing novel ideas and solutions to scientific research problems.
9. Demonstrated ability to work effectively as part of a research team plus the discipline to carry out self-motivated research.

## **Desirable**

1. Demonstrated ability to contribute to design of high-pressure/high temperature research equipment and systems, and to conduct HAZOP analysis on major laboratory and pilot scale research rigs.

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.
* If the successful candidate is not an Australian Citizen or Permanent Resident, they may be required to undergo additional security clearances, which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test).- https://ielts.com.au/

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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)