# Position Details

## Research Scientist/Engineer- CSOF5

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| The following information is for applicants |
| Advertised Job Title | Research Scientist/ Engineer Reservoir Engineering |
| Job Reference | 95281 |
| Tenure | Indefinite Full-time |
| Salary Range | AU$110,038 - AU$119,080 per annum (pro-rata for part-time)plus up to 15.4% superannuation |
| Location(s) | Clayton, Victoria |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian/New Zealand Citizens and Australian Permanent Residents
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| Position reports to the | Team Leader Reservoir Engineering |
| Client Focus – Internal | 50% |
| Client Focus – External | 50% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Regina Sander via email at regina.sander@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. |

**Acknowledgement of Country**

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the areas that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our [vision towards reconciliation](https://www.csiro.au/en/about/Indigenous-engagement/Reconciliation-Action-Plan).

**Child Safety**

CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View our [Child Safe Policy](https://www.csiro.au/en/about/policies/child-safe-policy).

### Role Overview

The Research Scientist/Engineer Reservoir Engineering is part of the Reservoir Engineering Team, which is made up of researchers, scientists, engineers and technicians who work together to deliver research projects relating to fluid transport and storage in the subsurface. The team has extensive experimental (laboratory) and modelling capability that is constantly evolving.

The Research Scientist/Engineer will bring fresh perspectives and innovative ideas to collectively shape the future of our research endeavours that support Australia’s decarbonisation objective and energy security. The individual will contribute to the ongoing development of our laboratory-based research focused on underground H2 and CO2 storage, H2 generation in the subsurface, as well as environmental impacts from gas storage and production processes in the subsurface. Our laboratory work is key to underpinning our modelling activities, and advance engineering solutions supporting the energy transition.

The Research Scientist/Engineer Reservoir Engineering will conduct scientific research to address real-world challenges, including laboratory-based research. Experience in performing experiments and pro-actively working in an engineering laboratory environment is essential for this role. Previous experience working in a Reservoir Engineering laboratory is highly desirable.

In addition to a background in Petroleum Engineering or related discipline, demonstrated experience in geochemistry and a sound understanding of geomechanics relating to the sub-surface will be viewed very favourably. A research background relating to hydrogen storage and transport in the sub-surface will strengthen our existing capability.

The Reservoir Engineering Team within CSIRO’s Energy Business Unit collaborates with other teams to leverage CSIRO’s capability and increase our impact. The Research Scientist/Engineer Reservoir Engineering is expected to work within diverse project teams, including external collaborators, as appropriate. Respectful and collegial behaviour is a prerequisite.

The candidate is expected to continue to maintain and grow their professional network internally and externally to enhance their work and promote CSIRO’s capability. It is expected that the successful candidate will spend ~50% of their time focussed on external engagement, including the contribution to industry/government sponsored projects and the contribution to commercial research proposals. ~50% of their time will be focussed on continuing to build and develop CSIRO’s research capability in support of our strategy.

### Duties and Key Result Areas

* Contribute to the research direction of the team by identifying research gaps and future trends, and developing project proposals for strategic research to build CSIRO’s capability.
* Work collaboratively and respectfully as part of multi-disciplinary and diverse teams to carry out tasks in support of CSIRO’s scientific objectives.
* Under the supervision of more senior researchers, assist in the planning and preparation of research proposals and carry out research investigations, requiring originality, creativity and innovation.
* Identify the most effective strategy to address a problem, and develop comprehensive design proposals and experimental protocols.
* Utilise professional expertise, interdisciplinary knowledge and research experience to identify opportunities for innovation.
* Generate new theoretical perspectives by pursuing new ideas/approaches and networking with scientific colleagues across a range of disciplines.
* Undertake activities focused on one or more elements of larger research projects.
* Apply discretion to decide and implement strategies appropriate to the successful completion of work.
* Liaise with clients to determine their needs and take personal responsibility for client satisfaction.
* Communicate and promote CSIRO’s science through publication in peer-reviewed journals and at conferences.
* Address problems promptly and in a constructive manner.
* Undertake experimental research activities and train others to ensure experiments are established in accordance with research design.
* 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.
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy and diversity initiatives.
* Other duties as directed.

## **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 Petroleum Engineering or a related discipline and relevant post-PhD experience (e.g., in a post-doctoral role).
2. Demonstrated ability to undertake original, creative and innovative research by generating and pursuing novel ideas and solutions to scientific research problems.
3. Demonstrated experience in conducting hands-on laboratory-based research in an engineering research facility.
4. Sound background in reservoir engineering fluid-rock interaction (e.g., wettability, relative permeability).
5. Demonstrated ability to translate laboratory data into numerical models and their application to real-world challenges.
6. A demonstrated publication history of authorship on scientific papers in peer reviewed journals and/or reports, grant applications or inventorship on patent applications.
7. Demonstrated ability to communicate openly and respectfully and work collaboratively as a project team member.

## **Desirable**

1. Geochemical capability – experience using geochemical modelling tools and conducting and analysing relevant laboratory experiments
2. Sound understanding of geomechanics
3. Research background in underground hydrogen storage
4. Experience in the preparation of proposals for research and external projects

## **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 responses 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 change.

Special Requirements

Appointment to this role is subject to provision of a pre-employment background check and may be subject to other security/medical/character clearance requirements.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [CSIRO](https://www.csiro.au/en/research/technology-space/energy) Energy for more information.

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

* People First
* Further Together
* Making it Real
* Trusted