## Position Description

Research Projects – CSOF 4 or CSOF5

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| The following information is for applicants |
| Advertised Job Title | Research Technician - Energy Resources |
| Job Reference | 100545  |
| Tenure and Work Schedule | Indefinite, full-time. We will explore options for part-time, job-share and flexible work arrangements based on needs of the role and individual circumstances. |
| Salary Range | CSOF 4: AU$96k - AU$109k per annum (pro-rata for part-time) plus 15.4% superannuation CSOF 5: AU$114k – AU$123k per annum (pro-rata for part-time) plus 15.4% superannuation |
| Location(s) and Office Arrangements | Perth (Kensington) - Boorloo |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Internal CSIRO Employees
* Australian/New Zealand Citizens and Australian Permanent Residents
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| Position reports to the | Team Leader – Direct Air Capture Team |
| Client Focus – Internal | 50% |
| Client Focus – External | 50% |
| Number of Direct Reports | 0  |
| Enquire about this job | Contact Colin Wood, colin.wood@csiro.au |
| Support and Workplace Adjustments | We offer a range of reasonable supports and workplace adjustments. Please let us know via email at nicole.poole@csiro.au or phone 02 9490 5618 if we can help you to equitably participate in our recruitment process or the role itself. |
| How to apply | Apply online at <https://jobs.csiro.au/> Internal applicants please apply via **Jobs Central**We encourage you to reach out if you require any support or experience difficulties when applying - please email careers.online@csiro.au  |

**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).

**About CSIRO**

As Australia's national science agency, CSIRO is solving the greatest challenges through innovative science and technology. Many of our iconic innovations were once considered impossible until someone, just like you, joined us and took on the challenge.

As one of the world’s largest multidisciplinary mission-driven research organisations, we are focused on the issues that matter the most: for our quality of life, for the economy and for our environment. We believe diverse teams are more effective and deliver more innovative outcomes. When we all focus on the big things that really matter, and work in partnership with our communities and [Indigenous Australia](https://www.csiro.au/research/indigenous-science), Australian science and technology can solve seemingly impossible problems and create new value for all Australians. Visit [CSIRO.au](file:///C%3A/Users/lui008/OneDrive%20-%20CSIRO/Desktop/LIFE/LEADERSHIP/Inclusive%20Recruitment/PD%20and%20Job%20Ads/CSIRO.au) for more information.

CSIRO Energy is committed to a just and responsible transition of Australia’s energy industry towards a low carbon future, leveraging our natural advantages. Research in the Energy Resources Program supports decarbonisation of the oil and gas sector and other emissions-intensive industries by helping to de-risk the large-scale deployment of carbon capture and storage (CCS). We are also researching safe ways to store hydrogen and other forms of low emissions energy in the subsurface to support a zero emissions future.

**Role Overview**

The Research Technician will join a multidisciplinary team of scientists and engineers at CSIRO’s world-class core flooding and petrophysical laboratories, based at the Australian Resources Research Centre (ARRC) in Kensington, Perth (Boorloo). These state-of-the-art facilities feature advanced x-ray imaging and nuclear magnetic resonance spectroscopy, enabling detailed observation of fluid behaviour in high-pressure environments.

Bringing relevant technical expertise, the role will support the delivery of innovative solutions for industry, advancing large-scale carbon capture and storage (CCS) and developing next-generation measurement systems for characterising deep subsurface geology.

Under supervision, the successful candidate will service and maintain high-pressure equipment used to inject fluids, for example, brines, supercritical CO₂, and flammable gases, into rock core samples under simulated deep-Earth conditions. This ongoing role will support safe, efficient, and continuously improving research aligned with Australia’s energy transition goals.

To be appointed at the senior level (salary range of ~AUD $ 114-123k), the candidate must demonstrate higher level technical qualifications and have a successful track record in relevant roles requiring a higher level of autonomy and responsibility.

**Duties and Key Result Areas**

* Inspecting and maintaining pumps, pressure vessels, fluid transfer systems and testing rigs used in core flooding and petrophysics laboratories. Safe commissioning of new equipment. Contribution to facility Risk Assessments, Hazops and Safe Work Instructions.
* Assisting scientists and engineers to perform experiments on high pressure/elevated temperature test systems in the laboratory in order to deliver projects of significant budget scope and complexity to external clients.
* Help to troubleshoot and resolve problems with experimental rigs and associated test and measurement systems, liaising with internal or external experts for advice and guidance where necessary.
* Contribute to design of new laboratory systems to improve efficiency and safety of operations.
* Work to foster a positive team environment with safety and wellbeing at the centre, keeping up to date with all necessary training and protocols.
* It is expected that there will be opportunities for participation in fieldwork (e.g. at CSIRO’s In Situ Laboratory) and site visits to other CSIRO laboratories/facilities to exchange information with peers and to gain practical experience of new systems and technologies.

## **Selection Criteria**

#### Essential

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

1. A degree in a relevant discipline such as Mechanical, Chemical, Petroleum, or Instrumentation and Control Engineering, or other related scientific fields.
2. Experience with safe handling of high-pressure fluids and gases and in servicing, commissioning and maintaining high pressure equipment, e.g., hydraulic systems, fluid transfer and pressure control pumps, pressure vessels, reaction vessels, high pressure pipelines etc.
3. Experience with material compatibility and safety of gases and corrosive fluids under high pressure and high temperature conditions.
4. Experience with technical equipment, including proficiency in diagnosing faults and performing repairs and system upgrades.
5. Demonstrated track record of working safely and effectively in a team environment and demonstrated commitment to health, safety and wellbeing of staff.

**Desirable**

1. Specific experience with industrial, well-site or laboratory systems that handle carbon dioxide at high pressure, high temperature conditions (i.e., supercritical CO2 and/or H2).
2. Experience with measurement, instrumentation and control systems for high pressure, elevated temperature flow systems (e.g. pressure transducers, level meters, temperature sensors, process heaters etc.).
3. Experience with certification of pressure vessels or similar safety registration protocols.
4. Relevant trade qualifications for the role.
5. Exposure to core flooding systems or experience in building physical models to represent fluid flow in porous media.
6. Background in instrumentation, system automation, and the development and integration of interface tools for efficient control, monitoring, and data acquisition.
7. Specific safety training and certification relevant to the role.

**Not sure if you meet all the criteria?**

While it is CSIRO policy that the successful candidate must meet all the essential criteria, there are many ways to demonstrate this. Don’t let the list discourage you. If you are unsure about applying, please reach out to the contact on page 1 of this document so we can discuss the role further.

## **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:** 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:** 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.

**Setting you up for Success**

We understand that not everyone works in the same way and sometimes people may require reasonable support and adjustments to perform at their best. Whether related to the recruitment process and or the role itself, this may include options such as providing different methods of communication, flexible hours or physical adjustments to work methods. If you feel comfortable, we encourage you to share any support and adjustments you may need to carry out the inherent requirements of the role. Please let us know via email nicole.poole@csiro.au or phone 02 9490 5618 if we can help you to equitably participate in our recruitment process or the role itself

**Life at CSIRO and flexible working arrangements**

We [work flexibly at CSIRO](https://www.csiro.au/en/careers/life-at-csiro/Flexible-work), offering a range of options for how, when and where you work.  We can discuss flexible work arrangements with you during the recruitment process. CSIRO also offers a range of leave entitlements, [benefits](https://www.csiro.au/en/careers/life-at-csiro/Benefits) and [career development](https://www.csiro.au/en/careers/life-at-csiro/Career-development) opportunities. To learn more, visit [Careers at CSIRO](https://www.csiro.au/en/careers).

We celebrate the uniqueness of our workforce and are committed to creating [diverse and inclusive teams](https://www.csiro.au/en/careers/life-at-csiro/Diversity-inclusion-belonging) where everyone feels they belong. CSIRO is an equal employment opportunity organisation dedicated to recruiting people based on merit and reflecting the diversity of the community we serve. We recognise true diversity encompasses all ages, nationalities, abilities, cultures, genders, sexualities, faiths, levels of education, diversity of thought and many more aspects of identity. By empowering diverse teams, our community is reflected in the solutions we create.

**CSIRO Values**

CSIRO is a values-based organisation committed to values-based leadership.

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| **Value** | **Descriptor** | **Behaviour** |
| **People First** | Our priority is the safety and wellbeing of our people. We believe in, and respect, the power of diverse perspectives. We seek out and learn from our differences.  | * Respectful
* Caring
* Inclusive
 |
| **Further Together** | We achieve more together than we ever could alone. We listen and collaborate, in teams, across disciplines, across boundaries. We embrace ambiguity and use discussion and persistence to generate unique solutions to complex problems. | * Accountable
* Authentic
* Courageous
 |
| **Making it Real** | We do science with real impact. We thrive when taking on the big challenges facing the world. We take educated risks and defy convention. We celebrate successes and failures and leverage them to learn as we strive to be the force for positive change. | * Partnering
* Cooperative
* Humble
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| **Trusted** | We’re driven by purpose but remain objective. We fight misinformation with facts. We earn trust everywhere through everything we do. We trust each other and we hold each other accountable. Together our actions drive Australia’s trust in CSIRO. | * Curious
* Adaptive
* Entrepreneurial
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**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).

Special Requirements

The successful candidate will undertake a pre-employment background check. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.