# Position Details

## Research Projects- CSOF6

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| The following information is for applicants | |
| Advertised Job Title | Senior Process Engineer |
| Job Reference | 93260 |
| Tenure | Indefinite  Full-time |
| Salary Range | AU$121,455 - AU$142,321 per annum (pro-rata for part-time)  plus up to 15.4% superannuation |
| Location(s) | Newcastle and client sites |
| 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 | Zero Emissions Team Leader |
| Client Focus – Internal | 60% |
| Client Focus – External | 40% |
| Number of Direct Reports | 4 |
| Enquire about this job | Please email Paul.Feron@csiro.au [About us – Sustainable Carbon Technologies (csiro.au)](https://research.csiro.au/sct/about-us/) |
| 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. |

**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 Sustainable Carbon Technologies (SCT) Group is a multidisciplinary team with over 20 years of experience in carbon capture, utilisation that is currently expanding into new areas and products.

Technologies under development that have reached technology readiness levels for industrial demonstration include our unique point source CO2 capture and direct air CO2 capture (DAC). Future demonstrations will incorporate novel technologies for CO2 utilisation as they emerge from the laboratory research.

The SCT group is looking for an experienced and versatile Senior Process Engineer to lead the design, operation, project management and troubleshooting of pilot scale processes at CSIRO Newcastle, as well as on the clients’ industrial sites. This role would report to the Senior Principal Research Scientist.

### Duties and Key Result Areas

* Design of process equipment and complete process flowsheets and PIDs.
* Specification of equipment and liaison with suppliers
* Management of the fabrication and installation of process equipment.
* Lead process operations including managing other process operation staff.
* Process troubleshooting and implementation of corrective measures.
* Ensuring health and safety requirements of both CSIRO and clients are met during process design and operation.
* Reporting of process operation results to research staff and clients.
* Apply specialist expertise to solve complex problems within a discipline or across a diverse range of projects.
* Be responsible for activities such as developing and delivering novel technologies, developing and implementing project plans, analysing, validating and reporting results within the constraints of various project plans.
* Address ill-defined problems and make critical choices between options that require knowledge of the most recent scientific and/or technological developments or novel methodologies.
* Maintain an awareness of trends in research, technology and cross-functional technological/scientific innovations to target opportunities for uptake of research or technology.
* Initiate projects in consultation with clients or CSIRO project teams and secure necessary resources.
* May lead or coordinate CSIRO’s contribution to collaborative projects involving other organisations.
* Ensure that commitments to client or end-users are met and typically have a leading role in the effective transfer of new technology to industry and the community.
* Be accountable for the quality of the results delivered, the alignment of the project activities with the business, research and/or technology directions.
* Play a key advisory role in decisions concerning scientific and/or technological direction.
* Maintain a sound understanding of the client’s business or a market opportunity, negotiate work requirements with clients or project teams and ensure that client and project team needs are met.
* Act as a trusted advisor and demonstrate creativity to determine and anticipate client or project needs.
* Identify and adapt quickly to changes in client or project needs and changes in the external environment.
* Gain the support of influential clients for the goals of their project(s).
* Represent the organisation in external scientific or technological forums as required and may establish and lead such forums.
* 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 and inclusively as part of a multi-disciplinary, research team to carry out tasks in support of CSIRO’s scientific and commercial objectives.
* 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. Relevant bachelor’s degree or equivalent relevant field work experience in Chemical, Mechanical or Process Engineering.
2. Experience in the design, scaling up and operation of chemical plant in an industrial environment and/or pilot research environment.
3. Experience in the development of process flowsheets and PIDs and design of process equipment and instrumentation.
4. Experience in project, team, and contract management (+10 years).
5. Understanding of the standards of health and safety required in the workplace and safe work instruction for industrial plant environment under WHS Act and Regulations.
6. Availability for regular field work and plant operation on location.

## **Desirable**

1. Proficiency in process modelling and design tools/software (e.g. ASPEN Plus suite, ProTreat)
2. Previous work experience in CO2 Capture and Utilisation.

## **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 team 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, goals and priorities.

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.

Include if relevant:

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [About us – Sustainable Carbon Technologies (csiro.au)](https://research.csiro.au/sct/about-us/) 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