# Position Details

## Research Scientist/Engineer- CSOF5

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| The following information is for applicants | |
| Advertised Job Title | Process Engineer - High Temperature Processing System Design |
| Job Reference | 95904 |
| Tenure | Specified Term of 2 years |
| 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 | * All Candidates |
| Position reports to the | Team Leader – Process Development |
| Client Focus – Internal | 90% |
| Client Focus – External | 10% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Dr Donna Liu via email at Dongmei.liu@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. |

**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 role of Process Engineer is to support innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. The Process Engineer may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. The Process Engineer will have the opportunity to build and maintain networks, contribute to secure project funds, and pursue new ideas and approaches that create new concepts.

The position is within the CSIRO Mineral Resources’ Process Development team working to conduct strategic and applied research for a range of stakeholders across a broad range of the minerals and metals industries, particularly in the Critical Minerals domain. As a Process Engineer you will have the opportunity to contribute to building research and deliver outcomes that play a lead role in project delivery and solution generation.

The Process Development Team is part of the Processing Program which delivers science that underpins the development and delivery of research outcomes for Australia’s minerals and metals sectors and global consumers.

CSIRO’s mandate is to deliver world-class research that provides innovative solutions for industry, government and the community. The research effort is, therefore, mission-directed and impact-focussed and it is essential that the researcher has, or can readily develop, strong links with industry partners and other relevant stakeholders.

### Duties and Key Result Areas

* Within broad guidelines, use professional expertise, knowledge of other disciplines and work experience/achievement to contribute to formulate, develop and complete an approved suite of projects aligned to the impact areas of the Processing Program.
* Collaborate effectively with multidisciplinary teams as well as external partners to conduct mechanical and thermodynamic designs and construct high temperature processing systems for critical minerals.
* Contribute to the safety analysis for complex high temperature systems.
* Contribute to ensure timely project delivery including the system design and construction, conducting, interpretation, reporting and communication of research results to relevant audiences.
* 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 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 work experience) in a relevant field such as Metallurgy, Materials Engineering/Science or Chemical Engineering.
2. Proven industrial knowledge and experience in the design and construction of complex systems involving high-temperature processes.
3. Demonstrated ability to generate and pursue ideas and solutions to complex problems involved in system design through applying relevant knowledge and experience and conducting research.
4. Familiarity with safety analysis techniques, e.g. HAZOP/HAZAN, and a commitment to ensuring the highest standards of safety in all processes.
5. Evidence of working effectively with multi-disciplinary teams.
6. Demonstrated ability to develop and maintain stakeholder relationships, together with strong written and oral communication skills.

## **Desirable**

1. Demonstrated publication history of authorship on scientific papers in peer reviewed journals and/or reports, grant applications or inventorship on patent applications.
2. Evidence of having worked with the light metals group and lithium metal, in particular.

## **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.

* 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.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [[Mineral Resources](https://www.csiro.au/en/Research/MRF)](https://www.csiro.au/en/Research/MRF) 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