# Position Details

## Research Projects- CSOF4

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| The following information is for applicants | |
| Advertised Job Title | Iron Ore Processing Research Projects Officer |
| Job Reference | 96020 |
| Tenure | Specified Term until 30 June 2026  Full-time |
| Salary Range | AU$89,680 - AU$101,459 per annum (pro-rata for part-time)  plus up to 15.4% superannuation |
| Location(s) | Pullenvale, QLD (Turrbal, Jagera and Yugara Country) |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * All Candidates |
| Position reports to the | Research Team Leader – Sintering and Pelletising |
| Client Focus – Internal | 75% |
| Client Focus – External | 25% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Dr Liming Lu via email at liming.lu@csiro.au or phone +61 7 3327 4529 or Lauren Williamson at [lauren.williamson@csiro.au](mailto:lauren.williamson@csiro.au) or phone +61 7 3327 4336 |
| 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 Research Projects staff in CSIRO is to collaborate in scientific and technological activities with other research staff usually by assisting with detailed planning, undertaking or assisting with experimental, observational or technology development work, and in carrying out the more practical aspects of the work.

CSIRO Mineral Resources (CMR) is one of the largest minerals R&D groups in the world, with ~350 employees, and has a proud track record of supporting industrial innovation across the minerals value chain.

We apply our expert knowledge and specialised research to deliver technologies and solutions that solve complex and challenging problems faced by minerals and METS (mining equipment, technology, and services) companies, governments, and other industry stakeholders.

As part of the Sintering and Pelletising team, this role will contribute to the delivery of research projects related to the decarbonisation of the iron ore and steel industries as well as delivery of industry projects supporting Australia’s Iron Ore Producers.

This role will focus particularly on sintering and pelletising processes, iron ore reduction as well as metallurgical testing of lump and agglomerated products. The successful applicant will be involved in the installation, commissioning, and maintenance of new testing equipment. The role will also contribute to the development of scientific reports, journal articles and safety documentation.

The Iron Ore Processing Research Projects Officer will have access to a range of characterisation, solid/gas reactors and metallurgical testing equipment as well as state-of-the-art pilot scale facilities. For a more detailed overview of facilities, see: [www.csiro.au/ironoretour](http://www.csiro.au/ironoretour)

### Duties and Key Result Areas

* Under general direction conducting literature review, laboratory and pilot-scale iron ore sintering/pelletising tests and reduction research
* Installation and commissioning of new testing equipment, as well as setting up maintenance schedules and carrying out maintenance tasks accordingly.
* Carrying out standard and non-standard metallurgical testing and relevant research relating to feed materials for blast furnace and direct reduction processes.
* Ensuring adherence to established sintering/pelletising testing and product evaluation protocols.
* Collecting and processing experimental data on an ongoing basis.
* Developing and maintaining expertise in the area of high temperature processing of iron ores relevant to the Mineral Resources's research activities.
* Supervision and coordination of junior staff and providing guidance on experimental/technological techniques and protocols.
* Assisting with review and updating of the safe work instructions of laboratory facilities and activities.
* Show initiative to seek new approaches to meet experimental or technological needs when encountering new problems where methods are not defined.
* Making significant contributions to the interpretation, publication and communication of research or technological results
* Participate in the identification and definition of research and/or technological problems with colleagues.
* Participate in planning projects and accept responsibility for scheduling and completion of major parts of the project, including evaluation of options, experimental design, data collection and analysis, user and customer research, user experience and/or software design, implementation and delivery,
* 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, 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. Relevant higher tertiary qualification (Bacherlor’s and Masters or PhD) or equivalent relevant work experience in Mineral Processing, Metallurgy, or Chemical Engineering.
2. Demonstrated ability to collect, analyse and report data to solve engineering/scientific problems under limited supervision
3. Ability to work in a team environment, utilise resources effectively, meet deadlines and adapt to a dynamic work environment while maintaining work quality and performance.
4. Well-developed oral and written communication skills to comprehend and convey detailed instructions/procedures and experimental/scientific outcomes.
5. Experience in commissioning, operating and maintaining laboratory and pilot-scale high temperature research equipment.
6. Willingness and ability to travel and work in industrial or mining environments when required.
7. Competency to conduct experiments and laboratory activities during test work programs.

## **Desirable**

1. Work experience in iron ore processing or steel industry and knowledge or research experience in iron ore agglomeration and solid gas reactions.
2. Ability to systematically examine laboratory and pilot-scale equipment operation conditions and diagnose faults.
3. Experience with supervising or coaching junior staff and providing work instruction in a laboratory environment.
4. Current Drivers Licence.

## **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 response by adapting/creating and testing alternative solutions.
* **Independence:** Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
* **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.

Special Requirements

* Appointment to this role is subject to provision of 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.
* 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/

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [CSIRO Mineral Resources](https://www.csiro.au/en/about/people/business-units/mineral-resources) 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