# Position Details

## Research Projects- CSOF4

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| The following information is for applicants |
| Advertised Job Title | Mineral Processing Project Scientist |
| Job Reference | 75470 |
| Tenure | Specified Term of 3 years Full Time |
| Salary Range | AU$85,361 to AU$96,573 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Brisbane, Pullenvale, QLD |
| 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 | Research Team Leader |
| Client Focus – Internal | 25% |
| Client Focus – External | 75% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Dr Mark Pownceby via email at mark.pownceby@csiro.au or phone +61 3 9545 8820 |
| 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. |

### Role Overview

Research Projects staff in CSIRO 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 carrying out the more practical aspects of the work.

The Mineral Processing Scientist will be involved in all aspects of comminution, beneficiation and data collection and analysis, focusing particularly on processing and upgrading iron ores. The role will be as a member of the broader Carbon Steel Materials Group of the CSIRO Mineral Resources Business Unit. The applicant will be expected to contribute to high-level mineral processing science application and development.

The Mineral Processing Scientist will have access to a range of traditional characterisation, comminution and beneficiation equipment as well as state-of-the-art pilot facilities. For a more detailed overview of facilities, see: [www.csiro.au/ironoretour](http://www.csiro.au/ironoretour)

The position will involve providing mineral processing scientific and commercial outcomes for external and internal stakeholders.

### Duties and Key Result Areas:

* Conduct and participate in laboratory and pilot-scale experimental work.
* Collect and interpret experimental data from beneficiation circuits and provide input to project direction.
* Allocate activities, direct tasks for junior staff, and manage resources to meet objectives.
* Maintain and upgrade laboratory and pilot-scale equipment.
* Communicate research outcomes through reports, publications in relevant scientific journals, presentations at conferences and liaise with customers to ensure their satisfaction.
* Work collaboratively with colleagues within the team, the Mineral Resources business unit and across CSIRO to reach objectives.
* Adhere to the spirit and practice of CSIRO's Values, Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.
* Other duties as directed.

## **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.

## **Selection Criteria**

#### Essential

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

1. Relevant bachelor's or master's degree or equivalent relevant work experience in Mineral Processing, Metallurgy, or Chemical Engineering.
2. Demonstrated experience in applied research (or similar) related to process mineralogy and mineral comminution and beneficiation.
3. Experience in the management of scientific equipment and tailoring data collection and analysis approaches to solve specific problems.
4. Demonstrated ability to liaise with customers and/or colleagues to establish their requirements and ensure customer satisfaction and carry out tasks autonomously in support of scientific research.
5. Demonstrated strong communication skills and the ability to work effectively as part of a multi-disciplinary, regionally dispersed team.
6. Demonstrated ability & willingness to contribute novel ideas and approaches in support of scientific investigations.
7. Willingness and ability to travel and work in industrial or mining environments when required.

## **Desirable:**

1. Experience in processing of iron ore.
2. Experience in process control equipped with appropriate statistical designs and data analysis (e.g. using software such as Design Expert) for plant trials and other key experiments for the whole transformation of ore: comminution, classification, heavy medium separation, gravity and magnetic separation techniques.
3. Experience in flowsheet and process modelling, including commercially available software packages (e.g. CFD using Ansys Fluent software, Flowsheet processors/Data reconciliation by mass balance software such as USIM PAC, Limn, BILCO, etc.).
4. Experience working with materials at high temperatures and under different gaseous atmospheres.

Special Requirements

Appointment to this role may be subject to conditions including provision of a national police check and other security/medical/character clearance requirements.

* The successful candidate will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

## **About CSIRO:**

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

* 1. People First
	2. Further Together
	3. Making it Real
	4. Trusted

We solve the most significant challenges through innovative science and technology. To find out more, visit us [online](http://www.csiro.au/)!

Find out more about CSIRO [Mineral Resources](https://www.csiro.au/en/Research/MRF)