# Position Description

## Research Projects – CSOF4

The following information is for applicants

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| Advertised Job Title**:** | Process Engineer |
| Job Reference: | 61917 |
| Relocation Assistance**:** | Will be provided to the successful candidate if required. |
| Applications Are Open To: | Australian/New Zealand Citizens and Australian Permanent Residents Only |
| Percentage of Client Focus - Internal: | 50% |
| Percentage of Client Focus - External: | 50% |
| Reports to the: | Team Leader – Process Development |
| Number of Direct Reports: | 0 |
| Name and Contact Details For Applicant Enquiries | If after reading the position details above you require more information please contact: **Warren Bruckard** via email: [warren.bruckard@csiro.au](mailto:warren.bruckard@csiro.au) |
| Contact Details For Applying | Call 1300 984 220 or email [careers.online@csiro.au](mailto:careers.online@csiro.au). |
| How to Apply: | Please apply online at [jobs.csiro.au](https://jobs.csiro.au/) and enter the requisition number**.** Internal applicants please apply via ‘Jobs Central’ through the ‘People Hub’ icon |

## Role Overview:

CSIRO Mineral Resources works closely with our partners to deliver innovation to grow Australia's resource base, increase minerals processing productivity and drive the industry's social, economic and environmental performance for the benefit of the nation.

The role of the Process Engineer is to support a growth area which has capacity to deliver an ongoing revenue stream to the CSIRO Mineral Resources Processing Program. There are a large number of opportunities being progressed with minerals industry clients, manufacturers and engineering service companies globally, across alumina, gold and other commodities. Projects usually involve a mix of contracted and strategic technology development and testing.

## Duties and Key Result Areas:

* Your primary responsibility is to contribute to fluids measurement and process optimisation projects in the Processing Program through:
  + Hands-on laboratory usage of various types of fluids measurement equipment;
  + Custom design and assembly of mechanical prototypes and experimental rigs for laboratory testing, including method development, maintenance and troubleshooting;
  + Fieldwork such as set-up of fluids measurement instrumentation, data acquisition, and sample analysis;
  + Data processing and analysis, data quality assurance and control, data review and interpretation;
  + Preparation of technical reports, memoranda, plans, and proposals, with involvement in the preparation of papers and presentations for industry/conferences also expected.
* Communicate 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 with colleagues within the team, the business unit and across CSIRO, to reach objectives;
* Adhere to the spirit and practice of CSIRO’s Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals; and
* Other duties as directed.

## Competencies:

1. **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.**
2. **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.**
3. **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.**
4. **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
5. **Independence: Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).**
6. **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:

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

1. Bachelor’s degree in Mechanical Engineering or equivalent with a 2-3 years of relevant scientific or industrial experience.
2. Ability to communicate effectively in a fluent and courteous manner, both orally and in writing, offering factual information supported by data, definitions, examples, illustrations or other aids, which will assist in conveying meaning.
3. Solid understanding of mechanical engineering concepts, as demonstrated by academic results and / or relevant experience.
4. Demonstrated ability to investigate underlying issues of complex and ill-defined problems and develop an appropriate response by adapting/creating and testing alternative solutions.
5. Demonstrated ability to work agilely and effectively as part of both large and small multi-disciplinary teams, and to proactively seek and consider the ideas and opinions of others from within and outside the team to help form decisions, plans or actions.
6. Demonstrated preparedness to change ideas or perceptions based on new information, contrary evidence or other people's points of view, and prepared to try out different approaches.
7. Demonstrated ability to recognise and make immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).

## Desirable Criteria:

1. Knowledge of, and preliminary experience with, fluid dynamics and flow measurement techniques, especially optical and laser based flow diagnostic measurement techniques.
2. Practical experience in design and fabrication of industrial mechanical or mechatronic components and systems.
3. Demonstrated ability to train, instruct or supervise other staff to complete allocated tasks and activities.
4. Work experience in industrial and/or research environment, in sectors such as minerals, materials, chemicals and energy.
5. A passion for developing scientific and engineering knowledge for the benefit of Australia.

## Special Requirements:

To be eligible for this position you must:

• Be able to pass full industrial mine-site medicals with zero medical restrictions.

## About CSIRO:

We imagine. We collaborate. We innovate. 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)

**CSIRO MINERAL RESOURCES**

CSIRO Mineral Resources works with industry to grow Australia’s resource base, increase productivity and drive environmental performance. We also provide critical scientific analysis that underpins a growing national dialogue on how resources impact society and the environment.