# Position Description

*Graduate Mechanical Engineer*

## Research Projects – CSOF3

The following information is for applicants

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| Advertised Job Title**:** | Graduate Mechanical Engineer |
| Job Reference: | 61758 |
| 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 – Fluids Engineering Solutions |
| Number of Direct Reports: | 0 |
| Name and Contact Details For Applicant Enquiries  | Mark Cooksey email: mark.cooksey@csiro.au  |
| Contact Details For Applying | Call 1300 984 220 or email 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 Graduate Mechanical Engineer is to support a growth area which has capacity to deliver an ongoing revenue stream to the CSIRO Mineral Resources Processing Program. The position will also be responsible for contributing to slurry mixing and erosion projects in the 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:

* Day-to-day running of the laboratory, including execution of model scale experimental work, programming of data acquisition and analysis systems, co-ordination of maintenance and contractor works, facilitation of industry visits to the laboratory
* Design and construction of mechanical prototypes and experimental rigs for laboratory testing in collaboration with team members
* Experimental design and data analysis
* Memo and report writing, 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
* Other duties as directed.

## Competencies:

1. **Teamwork and Collaboration: Proactively seeks and considers the ideas and opinions of others from within and outside the team to help form decisions, plans or actions.**
2. **Influence and Communication: Puts forward ideas by presenting factual information supported by data, definitions, examples, illustrations or other aids, which will assist in conveying meaning.**
3. **Resource Management/Leadership: Provides instruction and assists other staff to complete allocated tasks and activities.**
4. **Judgement and Problem Solving:** Identifies and considers the implications of a range of available alternatives in order to select the most appropriate response to problems of a familiar or recurring nature.
5. **Independence: Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).**
6. **Adaptability:** Willingness to change ideas or perceptions based on new information, contrary evidence or other people's points of view. Prepared to try out different approaches.

## Essential Criteria:

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

1. Bachelor’s degree in Mechanical Engineering or a similar qualification
2. A sound understanding of mechanical engineering concepts, as demonstrated by strong academic results
3. The ability to investigate underlying issues of complex and ill-defined problems and develop an appropriate response by adapting/creating and testing alternative solutions
4. The ability to communicate effectively in a fluent and courteous manner, both orally and in writing, offering information supported by data, definitions, examples, illustrations or other aids, which will assist in conveying meaning
5. The 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. A willingness 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. The 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
2. Demonstrated ability to train, instruct or supervise other staff to complete allocated tasks and activities.
3. Work experience in industrial and/or research environment, in sectors such as minerals, materials, chemicals and energy
4. A passion for developing scientific and engineering knowledge for the benefit of Australia.

## 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)