# Position Details

## Research Projects- CSOF6

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| The following information is for applicants | |
| Advertised Job Title | Research Mining Engineer - Blasting |
| Job Reference | 68982 |
| Tenure | Specified Term of 36 months  Full-time |
| Salary Range | AU$113,338 to AU$132,811 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Pullenvale QLD |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian Citizens and Permanent Residents * New Zealand Citizens who usually reside in Australia |
| Position reports to the | Research Director Hard Rock Mining |
| Client Focus – Internal | 0% |
| Client Focus – External | 100% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Dr Ewan Sellers via email at [ewan.sellers@csiro.au](mailto:ewan.sellers@csiro.au) or phone +61 7 3365 5640 |
| 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. |

### 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. At senior levels, Research Projects staff may be involved in providing consulting services, science and technology management and/or industry liaison.

The role of the Research Mining Engineer – Blasting is to develop technologies in Mine to Mill value chain optimisation and support the development and implementation of novel Hydrogen Peroxide Explosive technologies in Mining3’s Research Programs. Specifically, in the fundamental areas of Explosives and Blasting engineering; Rock breakage and fragmentation applied to mining industry needs including drilling, blasting, excavation and downstream processes.

### Duties and Key Result Areas

* Initiate and participate in innovative projects in Mining3’s Research Programs.
* Provide technical input to Mining3 projects in modelling of Mine to Mill and value chain optimisation, Blasting and Rock Breakage and other Mining3 projects when required.
* Support the development and field implementation of novel explosive products including customer interactions, risk assessments and development of loading techniques.
* Preparation and execution of detonation tests at the blasting range.
* Sell, plan, execute projects in blasting and value chain material tracking and optimisation.
* Communicate with mining industry personnel regarding current and potential project development.
* Contribute towards and lead funding applications to support the research.
* Work with colleagues and postgraduates in the development of joint research projects.
* Act as project leader for appropriate Mining3 Projects.
* Prepare research publications and reports.
* Present the results of the research at conferences and seminars.
* Travel to mine sites to participate in Centre research projects.
* Be accountable for the quality of the results delivered, the alignment of the project activities with the business, research and/or technology directions.
* Play a key advisory role in decisions concerning scientific and/or technological direction.
* Maintain a sound understanding of the client’s business or a market opportunity, negotiate work requirements with clients or project teams and ensure that client and project team needs are met.
* Act as a trusted advisor and demonstrate creativity to determine and anticipate client or project needs.
* Identify and adapt quickly to changes in client or project needs and changes in the external environment.
* Gain the support of influential clients for the goals of their project(s).
* Represent the organisation in external scientific or technological forums and may establish and lead such forums.
* 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, and business unit to carry out tasks in support of CSIRO’s scientific objectives.
* Adhere to the spirit and practice of CSIRO’s 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 team as well as industry colleagues.
* **Influence and Communication:** Identifies critical stakeholders and influences them via an influential third party, for example through an established network, to gain support for sometimes contentious, proposals / ideas.
* **Resource Management/Leadership:** Sets up and maintains effective and efficient work teams and manages performance and resources, to achieve objectives. Chooses appropriate management strategies and communication styles to maintain high levels of motivation and productivity. Gives feedback for development purposes and provides support and direction for improvement.
* **Judgement and Problem Solving:** Anticipates and manages problems in ambiguous situations. Develops and selects an appropriate course of action and provides for contingencies. Evaluates, interprets and integrates complex bodies of information and draws logical conclusions, synthesises proposals and defends options with reasoned arguments.
* **Independence:** Assesses the risk and opportunity of identified strategies, options and actions. Overcomes problems and setbacks in achieving goals. Invariably includes consideration of value-added future impact on bottom line when determining the optimal and efficient use of resources.
* **Adaptability:**Demonstrates flexibility in thinking and adapts to and manages the increasing rate of organisational change by adjusting strategies, goals and priorities.

## **Selection Criteria**

#### Essential

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

1. Relevant Bachelor’s degree in Mining Engineering and extensive relevant work experience.
2. A current driver’s licence.
3. Experience in Mine to Mill optimisation.
4. Experience in blast instrumentation, measurement and modelling of blast movement.
5. Experience working with Hydrogen Peroxide based explosives and loading systems.
6. Experience in mining operations.
7. Experience in explosive company involving Risk and QA/QC management of explosives loading systems.

## **Desirable**

1. Have shotfirer or research shotfirer ticket.
2. Proficient in the use of necessary software applications to record, report, present and interpret data relevant to the Mining3’s various activities.
3. Experience in developing research proposals.
4. Demonstrated experience in managing research teams.
5. Field experience and ability to communicate with personnel at different operational levels.
6. International operational experience.
7. Strong conceptual and analytical skills.
8. Ability to deal with ambiguity and uncertainty, to work collaboratively, be self-motivated and to demonstrate initiative.

Special Requirements

Appointment to this role may be subject to conditions including provision of a national police check as well as 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.
* The successful candidate must be willing and able to travel to mine sites and undertake any medicals, police checks, or training required.

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