# Position Details

## Research Scientist/Engineer- CSOF7

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| The following information is for applicants | |
| Advertised Job Title | Research Scientist - Next Horizon Geophysicist |
| Job Reference | 87464 |
| Tenure | 3 year fixed term  Full-time |
| Salary Range | AU $141,949 – AU $157,055 per annum (pro-rata for part-time)  plus up to 15.4% superannuation |
| Location(s) | Perth (Kensington), WA  Whadjuk Noongar Country |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | All Candidates |
| Position reports to the | Team Leader, Targeted Data Fusion |
| Client Focus – Internal | 30% |
| Client Focus – External | 70% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Shane Mulè via email at [shane.mule@csiro.au](mailto:shane.mule@csiro.au) or +61 8 6436 8952 |
| 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).

### Role Overview

CSIRO Mineral Resources (CMR) is one of the largest minerals research and development groups globally, with a proud track record in delivering innovation and solutions across the mineral resources value chain. We thrive on innovation harnessed by the diversity of the minds and lived experiences of our team and apply our expert knowledge and specialised research to provide innovation that solves the complex problems faced by minerals companies, mining equipment, technology, and services (METS) companies, government, and other industry stakeholders. The CMR Discovery Program aims to be a truly diverse team that reflects the diversity that we see in society, and comprises an enthusiastic multidisciplinary team of STEM researchers, all focused on developing new technologies and concepts for exploration through cover and advancing orebody knowledge.

The Next Horizon Geophysicist will provide a focus on integrating deep geophysical sensing technologies in exploration. They will not be wedded to a particular method, nor commodity or resource. The successful candidate will develop, manage, and deliver projects which integrate across a range of geophysical datasets, with a focus on those sensitive to depth, such as magnetotellurics, seismics, and gravity. They will use these data along with those from shallower sensing geophysical methods such as EM, knowledge of borehole technology, and familiarity with petrophysics to develop geophysical and geological interpretations of the subsurface. The candidate will be responsible for communicating project outcomes and research plans internally and externally and will act as a mentor and trainer of the ‘next generation’ of geophysicists within the Business Unit.

While working at CSIRO, you will be able to create a dynamic career path leveraging on your own experiences and identity. You will have access to a range of world-class facilities based at local universities where CSIRO has collaborative arrangements in place, and at other CSIRO sites across Australia. CSIRO provides an attractive remuneration package that includes a generous superannuation scheme, flexible work options, travel, and multiple leave options including paid maternity and parental leave.

The team recognises that Aboriginal and Torres Strait Islander peoples have made and will continue to make extraordinary contributions to Australian culture, economy and science and we aim to promote and support the vision of ‘A science landscape in respectful partnership with Indigenous Australia delivering innovative, sustainable, holistic solutions to meet our greatest national challenges’. The position will be based at the Australian Resources Research Centre, Perth, Western Australia, on Whadjuk Noongar Country which offers world-class laboratory facilities in a dynamic research environment.

CSIRO is also a member of the Science in Australia Gender Equity (SAGE) pilot, holds Gold Employer Status through the AWEI (Australian Workplace Equality Index), which sets a comparative benchmark for LGBTIQ+ inclusion for employers across all sectors and is committed to reconciliation with Aboriginal and Torres Strait Islander Peoples’.

The role of Research Scientist/Engineer staff is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. The Research Scientist/Engineer may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. The Research Scientist/Engineer will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts.

### Duties and Key Result Areas

* Set project goals within the Business Unit’s research direction and manage the delivery of project outcomes.
* Undertake leading edge scientific research and maintain active research collaborations in order to access/share leading edge concepts and technology to advance project goals.
* Progress complex, sensitive or contentious research matters to finality.
* Lead the strategic research component of projects, contribute original ideas and concepts, and determine the most appropriate strategies to achieve project goals.
* Be recognised as a national authority in an area of expertise, such as magnetotellurics, seismics or gravity, and typically possess knowledge across a range of scientific disciplines.
* Within the relevant area of work, anticipate, plan (including long term/strategic planning) and implement change.
* Work with less experienced colleagues to ensure knowledge transfer, or training to the next generation of experts in the field.
* Lead and/or participate in a number of projects simultaneously (including multi-disciplinary or multi-Business Unit projects).
* Develop and maintain active national and/or international research collaborations in order to access/share leading edge concepts and technology to advance projects.
* Identify trends in research and development to inform portfolio analysis and influence the Business Unit’s research directions.
* Conceive ideas for new projects based on industry/community and identify potential sources of funding.
* Utilise knowledge and understanding of clients’ business and demonstrate creativity in anticipating client needs.
* Act as a trusted advisor to clients and promote an understanding of client needs amongst other employees.
* Provide scientific or engineering leadership to colleagues and students and coordinate, allocate and manage resources (people, equipment, facilities, and funds).
* Undertake feasibility studies, demonstrating a considerable degree of originality, creativity, and innovation in solving problems and introducing new directions and approaches.
* Communicate research results to clients and the scientific community through oral and written reports, which may include the preparation of documents for patent applications.
* 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 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, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. A PhD (or an equivalent combination of qualifications and research experience), in a field of research appropriate to geophysics. Recent industry and/or academic experience in a research or innovation role is required.
2. Demonstrated experience in developing and delivering original, creative, and innovative research by generating and pursuing novel ideas and solutions in geophysics and providing significant impact to the mineral exploration sector.
3. A strong record of quality publications in peer reviewed journals and/or reports, and presentations at international and national conferences.
4. Demonstrated leadership in the field, through leading teams, or teaching.
5. Proven ability to integrate across a range of geophysical datasets, with a focus on those sensitive to depth (e.g., magnetotellurics, seismics, or gravity).
6. Experience with using downhole technologies, near surface geophysical techniques and petrophysics for geophysical and geological interpretation and inversion in 1-, 2- and 3-D.
7. Proven research management experience involving geophysics, geology and petrophysical datasets and interpretation.
8. The ability to work effectively as an integral member and/or leader of a multi-disciplinary, regionally dispersed research team, and ability to foster an environment in which there is a high level of co-operation within and between teams.

## **Required Competencies**

* **Teamwork and Collaboration:** Creates and fosters an environment in which there is a high level of cooperation within and between teams. Facilitates positive team relationships to build interactions across Business Units and the organisation.
* **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:** Provides leadership that fosters an environment that encourages new ideas and provides support for the development of emerging skills. Creates trust by displaying consistency, understanding, integrity and patience. Plans, seeks, allocates and monitors resources to achieve outcomes.
* **Judgement and Problem Solving:** Resolves major conceptual scientific, technical, commercial or management problems, which have a significant impact upon the field of research, professional function, the Business Unit or the Organisation. Situations faced have little or no precedent and require original concepts and approaches.
* **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:**Is flexible in response to external change or when faced with external constraints. Identifies and promotes the opportunities arising as a result of change.

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 Clearance or equivalent. 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 [Mineral exploration and discovery](https://www.csiro.au/en/work-with-us/industries/mining-resources/Exploration) 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