# Position Details

## Research Scientist/Engineer- CSOF5

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| The following information is for applicants | |
| Advertised Job Title | Research Scientist – Mineral Systems Geologist |
| Job Reference | 76303 |
| Tenure | Specified Term of 3 years  Full-time |
| Salary Range | AU $100k to AU$108k per annum, plus up to 15.4% superannuation |
| Location(s) | Perth (Kensington), Western Australia  Whadjuk Noongar Country |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Onshore Australian and New Zealand Citizens * Onshore Australian Permanent and Temporary residents (visa sponsorship may be provided to eligible onshore candidates) |
| Position reports to the | Team Leader, Mineral Footprints |
| Client Focus – Internal | 20% |
| Client Focus – External | 80% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Jessica Stromberg via email at [Jessica.Stromberg@csiro.au](mailto:Jessica.Stromberg@csiro.au) |
| 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 area 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.

As a member of the CMR Discovery Program, the Mineral Systems Geologist will work as part of a multidisciplinary group of CSIRO researchers, external clients, including industry, CRC’s, and other government agencies, on research relevant to the mineral exploration industry. The role will be focused on developing programs to delineate the geological architecture of areas, assess their fertility, map fluid pathways and possible depositional sites by integrating geophysics, geology, geochemistry, and mineralogy in 3D. With the aim of developing mineral systems analysis and mineral potential mapping methods for exploration through covered regions in various geological settings from regional to prospect scale.

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.

While working at CSIRO, you will be able to create a dynamic career path leveraging from 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.

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’.

### Duties and Key Result Areas:

* Investigate geological and mineral systems at a range of scales, focusing on advancing mineral potential mapping techniques for mineralisation through cover.
* Integrate multi-source and multi-scale geoscience datasets, in 2D and 3D, to develop novel higher-level geoscience products.
* Draw on professional expertise, knowledge of multiple disciplines (e.g. geology, geophysics, mineralogy, geochemistry, remote sensing) and research experience.
* Communicate openly and effectively with internal and external colleagues, clients, and partners to develop and progress research outcomes and maintain productive stakeholder relationships.
* Recognise opportunities for innovation and incorporate novel approaches to research to deliver high-impact outcomes of strategic relevance to the minerals industry.
* Produce high-quality technical reports and client presentations as well as scientific papers suitable for publication in quality journals and presentation in national and international forums.
* Assist in planning and preparing research proposals and carrying out independent research investigations, requiring originality, creativity, and innovation.
* Work collaboratively as part of multidisciplinary, regionally dispersed research teams to carry out tasks supporting 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 Zero Harm 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:** Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
* **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. As such, please ensure you address the essential selection criteria clearly in your application cover letter.*

1. A PhD or equivalent applied research/industry experience in the field of geosciences.
2. Demonstrated ability to interpret geology from geophysics and other geological data sets for understanding large scale tectonic/geodynamic processes that control the formation and preservation of mineral systems.
3. Experience using GIS and spatial data in order to map mineral systems at regional to small scales, targeting potential mineral deposits.
4. Demonstrated ability to work within a multidisciplinary and diverse research team, and the motivation and discipline to carry out independent research to achieve organisational goals.
5. Willingness to learn new data acquisition and processing methods that may include (state-of-the-art quantitative mineralogical equipment, drone-based measurements, LiDAR, inversion methods or machine learning).
6. A record of writing high-quality technical reports and/or publications in peer-reviewed journals.

## **Desirable:**

1. Experience working in/with the minerals industry or research projects with industry support, focusing on multi-scale data integration for mineral exploration.
2. An understanding of the geological processes that cause the formation of mineral deposit footprints in primary bedrock and regolith.
3. Experience sourcing, preparing, aggregating, and integrating small- to large-scale data sets into 2D or 3D GIS-based prospectivity/exploration targeting models utilising knowledge-driven or data-driven (machine learning, geostatistical) methods.
4. Experience with 3D geological modelling and with Python or R scripting for advanced data processing and analysis.
5. Experience in the acquisition, processing, and interpretation of multi-source geoscience data at different scales that inform geological processes through time.
6. Experience working with earth observation datasets.

Special 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. To find out more visit us at [CSIRO Online](http://www.csiro.au/)

CSIRO is a values-based organisation.  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

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