# Position Details

## Research Scientist/Engineer- CSOF5

|  |  |
| --- | --- |
| The following information is for applicants | |
| Advertised Job Title | Research Scientist - Hydrogeologist/Hydrogeochemist |
| Job Reference | 83341 |
| Tenure | Indefinite  Full-time |
| Salary Range | AU$102k to AU$111k pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Brisbane (Dutton Park) QLD |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * All Candidates |
| Position reports to the | Research Leader Sustainable Groundwater Futures Team |
| Client Focus – Internal | 30% |
| Client Focus – External | 70% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Rodrigo Rojas via email at Rodrigo.Rojas@csiro.au or phone +61 7 3833 5600 |
| 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

The role of Research Scientist Staff in CSIRO is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. You may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. You 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.

The Research Scientist - Hydrogeologist/Hydrogeochemist position will be part of the Sustainable Groundwater Futures team based in Brisbane. This team sits within the Groundwater Management Group in the Water Security Research Program in the CSIRO Land and Water Business Unit.

The role suits an early career researcher who will further develop Hydrogeology and Hydrogeochemistry research demands in Water Security and in regional groundwater resource characterization and assessment. This is particularly so in the context of resource developments and changing climatic conditions. This capability integrates skills across geology, hydrogeology, hydrogeochemical evolution at large scale, and hydrochemical and environmental tracer data analysis to address relevant groundwater management challenges.

This position will support deliverables towards Australian Government’s federal initiatives including: national water infrastructure investments that will improve the reliability and security of water for Australia’s regions, and developing safe disposal solutions to our domestic radioactive waste.

### Duties and Key Result Areas

* Conduct research into the fundamental hydrogeological and hydrogeochemical processes that occur during water-rock interactions; potentially couple this knowledge with groundwater flow and solute transport models to develop frameworks for a multitude of groundwater processes in subsurface
* Conduct innovative research on groundwater recharge, inter-aquifer leakage and groundwater-surface water exchanges via combination of geological and hydrogeological knowledge supported by analysis of hydrochemical and environmental tracer data
* Develop creative and innovative approaches and ideas to enhance the value of hydrogeochemistry to identify and characterise new water sources, inter-aquifer/aquitard connectivity, and definition of flowpaths in heterogeneous subsurface
* Study hydrogeochemical processes that control the movement of contaminants released by human activities (e.g. mining, disposal of radioactive waste) through integration of geological and geochemical assessments;
* Conduct targeted field investigations to characterize groundwater and surface water systems across different settings in Australia.

## **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 responses 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 change.

## **Selection Criteria**

#### Essential

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

1. A PhD in a relevant field such as geology, hydrogeology, groundwater hydrology, environmental science, or other relevant geo-science domain.
2. Demonstrated 3-5 years of experience in hydrogeological characterisation using multiple lines of evidence including hydrogeochemical and environmental tracer data analysis, groundwater resources assessment, groundwater hydrology, surface water-groundwater system evaluation.
3. Strong written and oral communication skills coupled with the ability to present results of scientific investigations at national/international conferences and stakeholder meetings.
4. A demonstrated publication history of authorship on scientific papers in peer reviewed journals and/or reports, conference proceedings, grant applications or inventorship on patent applications.
5. The ability to work effectively as part of a multi-disciplinary, regionally dispersed research group, and carry out independent individual research to achieve organisational goals.
6. Demonstrated ability to undertake original, creative and innovative research by generating and pursuing novel ideas and solutions to scientific research problems.
7. A driver’s licence.

## **Desirable**

1. Familiarity with hydrogeological fieldwork and HSE protocols.

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.
* 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/
* To be willing and able to undertake fieldwork as required.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. To find out more visit us [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 [Land and Water](https://www.csiro.au/en/Research/LWF)