# Position Details

## Research Scientist/Engineer- CSOF6

|  |
| --- |
| The following information is for applicants |
| Advertised Job Title | Research Scientist - Analytical Chemist (Pollution, Sensors and Waste) |
| Job Reference | 93193 |
| Tenure | Indefinite, Full-time |
| Salary Range | AU$121,455 - AU$142,321 per annum (pro-rata for part-time)plus up to 15.4% superannuation |
| Location(s) | Floreat / Waterford, Perth WA |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | All Candidates |
| Position reports to the | Team Leader Groundwater Contamination and Remediation |
| Client Focus – Internal | 30% |
| Client Focus – External | 70% |
| Number of Direct Reports | 1 |
| Enquire about this job | Contact via email john.rayner@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 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).

**Child Safety**

CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View our [Child Safe Policy](https://www.csiro.au/en/about/policies/child-safe-policy).

### Role Overview

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

CSIRO Environment undertakes applied and strategic research for the public and private sectors, into definition, use and management of Australia's land and water resources. Over 1000 research and support staff operate from laboratories in Perth, Adelaide, Canberra, Griffith, Albury, Brisbane and Townsville.

We are seeking a capable and enthusiastic analytical/environmental chemist to be in Perth, Western Australia to support a diverse multi-disciplinary research team addressing the characterisation and remediation of contaminated groundwater and soils. Other research staff in the team and wider group include hydrogeologists, environmental chemists, soil scientists, geochemists, microbiologists, mathematicians, modellers, and other technical staff.

You would be primarily responsible for development, testing and documentation of analytical methods and designing experimental setups (i.e. simulating environmental weathering) for a range of organic (and some inorganic) compounds in laboratory generated and environmental samples - to track contaminants and their mineralisation/biodegradation products in the environment, to develop and calibrate new sensor technology and test the effectiveness of remediation strategies at laboratory and field scales.

You would be responsible for the efficient hands-on running and QA/QC of an organic analytical laboratory, using GC, GC/MS, LC/MS and HPLC equipment for analysis of water, air, soil, sediment, non-aqueous phase liquid (NAPL) samples, and development of specialist capabilities. You must be able to produce analytical data and reports to a high standard, and when required cope with high-demand repetitious work. You would also be involved in field sampling and the design and operation of projects to assess contaminant fate and to test remediation options.

You must have successfully completed at least an honours degree in chemistry or equivalent and have knowledge and hands-on experience in the running and maintenance of analytical instrumentation and their use for analysis of environmental samples.

### Duties and Key Result Areas

* Lead an organic chemistry laboratory and associated research and have the ability to direct and manage others.
* Apply research skills in the analysis of samples from soil and groundwater environments to gain an in-depth understanding of subsurface processes.
* Conduct organic analyses of environmental samples using a range of GC, GC/MS, LC/MS, and HPLC equipment.
* Produce analytical data and reports to a high standard.
* Identify, service and troubleshoot analytical equipment.
* Conduct QA/QC for the analytical laboratory, identify sources sampling/processing/analytical errors.
* Develop, test and document new analytical methodologies for a range of organic (and inorganic when required) compounds in laboratory generated and environmental samples.
* Interact and advise field sampling campaigns to ensure sample integrity.
* Develop, design and undertake experiments to assess contaminant fate and test remediation options.
* Act as a trusted advisor, utilising knowledge of the clients’ business and understanding of their underlying needs.
* Anticipate industry and/or community needs and market direction through client liaison and networking.
* Identify and adapt quickly to changes in client needs and market directions.
* Communicate research results to clients and the scientific community through oral and written reports and prepare documentation for patent applications (where relevant).
* Advise policy makers and inform and transfer knowledge to non-scientific audiences as required.
* 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, 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 and diversity initiatives.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

* This role requires you to hold a PhD (or Master’s or Honours degree with an equivalent combination of qualifications and research experience) where the major component is related to organic analytical chemistry.
* At least five years hands-on work or research experience in using a range of GC, GC/MS, LC/MS and HPLC equipment for analysis of environmental samples such as water, soil, air, biota and NAPLs
* Evidence of research initiation and leadership and knowledge and experience in developing and implementing new organic analytical methods.
* Knowledge and experience in developing, designing and implementing new/novel experimental setups to simulate environmental processes.
* Ability to identify and troubleshoot analytical equipment problems.
* Experience in QA/QC and ability to identify sources of sampling/processing/analytical errors.
* Experience in analyses, interpretation and reporting of data to a high standard on-time.
* Experience in sample preparation prior to analysis
* Experience with analytical, spreadsheet and word-processor software
* Ability to work with limited supervision and cooperatively as part of a multi-disciplinary team.
* Evidence of initiative and the demonstrated ability to work independently.
* Understanding and commitment to Equal Employment Opportunity principles
* Current Class A driver’s licence

## **Desirable**

* Strong interest in environmental science
* Interest in fieldwork and ability to liaise with field staff.
* Experience with computer database software
* Experience with laboratory standards and protocols

## **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:** 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, goal and priorities.

Special Requirements

Appointment to this role is subject to provision of a pre-employment background check and may be subject to other security/medical/character clearance requirements.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [Environment Business Unit - CSIRO](https://www.csiro.au/en/about/people/business-units/Environment) 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