# Position Details

## Research Scientist/Engineer – CSOF5

|  |
| --- |
| The following information is for applicants |
| Advertised Job Title | Environmental Analytical Chemist |
| Job Reference | 86004 |
| Tenure | Specified Term of 3 years Full-time |
| Salary Range | AU$102,724 – AU$111,165 per annum plus up to 15.4% superannuation |
| Location(s) | Adelaide, SA |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | All Candidates |
| Position reports to the | Team Leader, Managing Chemicals of Concern |
| Client Focus – Internal | 70% |
| Client Focus – External | 30% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Dr Jens Blotevogel via email at jens.blotevogel@csiro.au or phone +61 8 8273 8167 |
| 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).

### Role Overview

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.

The Industry Environments Research Program in CSIRO’s Land and Water Business Unit delivers environmental management and biotechnology solutions to ensure industry sustainability, clean productive futures, reduced environmental legacy, effective mitigation strategies and protection of human health and the environment. It focuses on advancing responsible industrial development within resilient environments, through environmental assessment technologies, water quality management, and securing, recovering and re-purposing waste.

The Environmental Analytical Chemist will drive success in the Environmental Assessment and Technologies Group within the Industry Environments Program by delivering integrated science on contaminants of concern in Australian environments to enable sustainable developments and stewardship of land, water, ecosystems, and communities. They will deliver science and trusted advice to government agencies, industries, and community on environmental risks of organic contaminants in the Australian environment. Key current projects include providing robust evidence for understanding risks and management of per- and polyfluoroalkyl substances (PFAS), identification & management of other contaminants of concern, managing risk to water and land quality from chemicals used in the oil and gas industry, environmental risks and management of contaminated/legacy sites and chemical risks from waste management.

### Duties and Key Result Areas

* Support projects to deliver science and impact on the assessment and management of organic contaminants of concern in Australian environments for responsible and sustainable industries (i.e., Defence, Oil & Gas, Mining, and Waste sectors).
* Undertake leading-edge scientific research on complex experimental and technological challenges.
* Develop a processing pipeline for complex data sets collected on various high-resolution mass spectrometers such as time-of-flight, Orbitrap, and Fourier-transform ion cyclotron resonance.
* Develop and maintain active national and international collaborations in order to access/share leading edge concepts and technology to advance project goals.
* Publish science findings in nationally and internationally recognized journals and communicate to a range of internal and external stakeholders (government, industry, and community).
* Effectively balance and address client and organisational needs.
* Deliver outcomes on time, on budget, and to satisfaction of client, creating client and/or end user confidence in systems, processes, technology and results.
* Draw on professional expertise, knowledge of other disciplines and research experience to recognise opportunities for innovation and generate new theoretical perspectives by pursuing new ideas/approaches and networking with scientific colleagues across a range of disciplines.
* Participate in identification of further opportunities which arise from research and initiate new lines of research.
* 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 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 relevant field such as organic chemistry, analytical chemistry, environmental chemistry, trace organic contaminants, or environmental science and engineering.
2. Demonstrated ability to undertake original, creative, and innovative research by generating and pursuing novel ideas and solutions to scientific research problems.
3. Demonstrated proficiency with non-target high-resolution mass spectrometry (e.g., QToF, Orbitrap, FT-ICR).
4. Experience in research projects that determine the sources, fate, behaviour and/or risks of organic contaminants in the environment.
5. Ability to multi-task to support simultaneous projects and work independently as well as in multidisciplinary teams.
6. A demonstrated publication history of authorship on scientific papers in peer reviewed journals and/or reports, grant applications or inventorship on patent applications.

## **Desirable**

1. Coding experience with Python, R, or similar.
2. Experience with chemical forensics and profiling techniques including statistical and machine learning approaches.
3. Experience in supervising and coaching students and technical staff.

## **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.

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 [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)