# Position Details

## Research Projects- CSOF4

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| The following information is for applicants |
| Advertised Job Title | Research Technician – Analytical Chemistry & Metabolomics |
| Job Reference | 97746 |
| Tenure | Specified Term until 30 June 2027Full-time |
| Salary Range | AU$93,267 – AU$105,517 per annum plus up to 15.4% superannuation |
| Location(s) | Canberra (Black Mountain), ACT |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian or New Zealand Citizens
* Australian Permanent Residents
* Australian Temporary Residents, currently residing in Australia, with an existing valid visa and unrestricted work rights for the duration of the term (at least until June 2027) and **no requirement for visa sponsorship**.
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| Position reports to the | Team Leader, Microbial Technologies |
| Client Focus – Internal | 40% |
| Client Focus – External | 60% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Louise Thatcher via email at Louise.Thatcher@csiro.au; OR Marta Gallart Diumenge via email at Marta.GallartDiumenge@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).

### Role Overview

The role of Research Projects staff in CSIRO is to collaborate in scientific and technological activities with other research staff usually by assisting with detailed planning, undertaking or assisting with experimental, observational or technology development work, and in carrying out the more practical aspects of the work.

This Research Technician position is within the CSIRO Agriculture and Food Biotic Interactions Group. The group harnesses biology at landscape scales to improve on-farm prevention, detection and control of crop pest and diseases, while minimising impacts on surrounding environments. The group has internationally recognised expertise in soil microbiology, integrated management of pests and diseases, agricultural economics and the development of biocontrol products.

The Research Technician will be a part of the high performing, multidisciplinary [Microbial Technologies Team](https://www.csiro.au/en/research/plants/Pathogens-Pests-Weeds/Microbial-technologies) based in Canberra, exploiting the strengths of beneficial microbes to develop novel crop protection solutions. The position will work with agribusiness and CSIRO initiatives to research and evaluate the biochemistry of microbial-based crop protection solutions for the control of weeds and crop sap-sucking insect pests. Activities will be a combination of laboratory and office based, including assisting the team with analytical troubleshooting and method development.

### Duties and Key Result Areas

* Generation and processing of metabolomics data with a primary focus on purification, quantification and characterisation of microbial (and plant) extracts.
* Plan and execute analysis, interpretation and communication of research, presentation at project meetings, and work with other team members and collaborators to achieve objectives, including contributions to reports or scientific publications.
* Development of new analytical methods and protocols for the purification of natural products.
* Perform instrument maintenance, calibration and development of safety work instructions for safe instrument operation.
* Maintenance and improvement of metabolomic in-house database.
* Perform roles for general laboratory functioning such as ordering goods, and ensuring laboratory equipment is maintained in a clean and serviceable condition, and meeting HSE and PC2 compliance.
* Participate in planning experiments and accept responsibility for scheduling and completion of parts of the project, including experimental design, data collection and analysis, and delivery.
* Show initiative to seek new approaches to meet experimental or technological needs when encountering new problems where methods are not defined.
* 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. Minimum qualification of Bachelor’s Degree in Science, ideally in Biological Chemistry or a relevant discipline, **and** demonstrated evidence of at least few years of relevant post degree work experience.
2. Demonstrated knowledge and experience in analytical chemistry, and targeted/untargeted metabolomics techniques.
3. Demonstrated experience in general laboratory maintenance including ordering of supplies and the calibration/maintenance of equipment.
4. Demonstrated knowledge and skills for HSE and PC2 compliance.
5. Demonstrated ability to work independently under minimal supervision while contributing to overall team performance, and proven ability to meet performance deadlines during the course of the project.
6. Strong interpersonal and oral and written communication skills, including proven ability to present outcomes of scientific research in reports and/or publications.
7. Ability to work effectively as part of a multi‐disciplinary team, including with a broad range of people from varying research backgrounds.

## **Desirable**

1. Experience in data-driven network analysis of metabolomics data and/or computational metabolomics.
2. Experience in analysis, characterisation and purification of natural products from microbes or plants would be highly advantageous.
3. Demonstrated understanding of plant pathology, and knowledge/skills in plant measurements.
4. Knowledge and experience in molecular microbiology techniques, including working with fungi and bacteria (GM desirable).

## **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:** Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
* **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.

**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.

* The successful candidate will undertake a pre-employment background check. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [Pathogens-Pests-Weeds](https://www.csiro.au/en/research/plants/Pathogens-Pests-Weeds) 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