# Position Details

## Research Scientist/Engineer- CSOF6

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| The following information is for applicants | |
| Advertised Job Title | Research Scientist / Microbiologist |
| Job Reference | 91437 |
| Tenure | Indefinite  Full-time |
| Salary Range | AU$121k - AU$142k per annum plus up to 15.4% superannuation |
| Location(s) | Clayton |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents only |
| Position reports to the | Team Leader Biologics Production - Microbial |
| Client Focus – Internal | 10 % |
| Client Focus – External | 90 % |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Judy Scoble via email at judy.scoble@csiro.au or phone +61 3 9662 7181 or Geoff Dumsday via email at [Geoff.dumsday@csiro.au](mailto:Geoff.dumsday@csiro.au) or phone +61 3 9545 2344 |
| 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 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 Biologics Research and Development group produces Biologics to support external clients’ research programs. The Biologics can be proteins, virus-like particles, nucleic acid and other macromolecules, but they can also be small molecule bioactive compounds produced in microbial hosts. The Biologics can be used in R&D settings, eg to further drug discovery programs, to develop biosensors and to enable development of biological assays. Production processes are developed and optimised and may be transferred to manufacturing organisations. The Biologics Production – Microbial team produces Biologics from microbial hosts (eg Escherichia coli, Saccharomyces cerevisiae, Pichia pastoris and other hosts). They design expression constructs, engineer strains, optimise production processes, and produce the biologics at scale.

As a key member of the Biologics Production – Microbial team the scientist will engage with clients to understand their requirements and develop research proposals and project budgets. They will deliver on projects utilising their own excellent technical skills, with assistance from technical staff, who they will guide and train. They will communicate with the client via meetings and written reports, and will lead technical transfer of processes to manufacturing organisations.

### Duties and Key Result Areas

* Under general direction, use professional expertise, knowledge of other disciplines and research experience and achievement to formulate, develop and complete an approved research program.
* Develop and apply knowledge of other scientific disciplines.
* Develop challenging but realistic research plans and negotiate resource requirements with research managers or clients.
* Take responsibility for smaller research projects or elements of larger projects within and/or across Business Units.
* Lead and supervise staff to ensure experiments are established in accordance with the research design and are completed within the agreed timeframes and budget.
* 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.
* Undertake feasibility studies, demonstrate a considerable degree of originality, creativity and innovation in solving problems and introduce new directions and approaches.
* 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, 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 Microbiology, Chemical Engineering, Biochemistry.
2. Demonstrated ability to undertake original, creative and innovative research by generating and pursuing novel ideas and solutions to scientific research problems.
3. Demonstrated science eminence in the area of Biologics production from microbial hosts. This will include a demonstrated publication history of authorship on scientific papers in peer reviewed journals and/or reports, grant applications or inventorship on patent applications and presentations at science or industry meetings.
4. Demonstrated experience in leading people, engaging with colleagues, providing coaching and support and enabling growth
5. Excellent track record in leading projects to successful outcomes, engaging with stakeholders, communicating proposals and results and delivering on milestones.
6. Demonstrated experience in the production of biologics (proteins, macromolecules or small molecule bioactives) in microbial hosts

## **Desirable**

1. Experience with the production of Biologics in Escherichia coli, Saccharomyces cerevisiae, Pichia pastoris or other hosts
2. Demonstrated experience in engineering strains for the production of Biologics (proteins, macromolecules or bioactive small molecules)
3. Demonstrated experience in optimising microbial production processes
4. Good knowledge of the use of bioreactors for the production of Biologics in microbial hosts
5. Demonstrated expertise in design of expression constructs for the production of biologics in microbial hosts

## **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 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 Clearance or equivalent. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
* This role has child safety obligations. Accordingly, the successful candidate will be required to obtain or provide evidence that they hold a working with children check prior to confirmation of appointment.

## **About CSIRO**

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