

# Position Details

# Research Projects- CSOF3

THE FOLLOWING INFORMATION IS FOR APPLICANTS	
Advertised Job Title	Microbiologist/Biochemist
Job Reference	80261 and 80301
Tenure	Full-time, Indefinite (for 80261), and 3 years specified term (80301)
Salary Range	AU\$66k to AU\$84k pa + up to 15.4% superannuation
Location(s)	Melbourne, Clayton, Victoria
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 - Industrial Biotechnology
Client Focus – Internal	0%
Client Focus – External	100%
Number of Direct Reports	0
Enquire about this job	Contact Geoff Dumsday via email at geoff.dumsday@csiro.au or phone +61 3 9545 2344
How to apply	Apply online at <a href="https://jobs.csiro.au/">https://jobs.csiro.au/</a> Internal applicants please apply via Jobs Central If you experience difficulties when applying, please email <a href="careers.online@csiro.au">careers.online@csiro.au</a> or call 1300 984 220.

#### **Role Overview**

Research Projects staff in CSIRO 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.

The Research Projects Officer – Microbiologist/ Biochemist will be part of CSIRO Manufacturing's Industrial Biotechnology Team. The team functions in a complex, highly competitive commercial environment and has a research program directed towards the use of organisms and enzymes to

manufacture a wide variety of different biological products. Leveraging state of the art equipment and infrastructure, a diverse array of skills and working in collaboration with many internal and external stakeholders, the team develops products and processes with diverse applications for the pharmaceutical, food, agricultural and chemicals industries.

The Research Projects Officer – Microbiologist/ Biochemist in the Industrial Biotechnology Team will be responsible for assisting senior research to produce Biologics (including protein and small molecule bioactives) in microbial hosts using bioreactors and a range of associated microbiological techniques.

## Duties and Key Result Areas:

- Carry out experiments requiring the operation of bioreactors with a range of working volumes as well as setting-up operation of other complex laboratory equipment.
- Performing small scale screening to select optimum host strain and expression conditions to maximise the yield of biologic
- Under technical direction, undertake experiments, laboratory analyses, preparation of equipment and technology development activities (some non-routine) using a range of techniques, often working on a number of parallel and competing tasks.
- Assist with the design and implementation of experimental plans, method development and day-to-day operation of laboratory equipment as required.
- Ensure a safe working environment in which work is completed in compliance with gene technology regulations.
- Under supervision, undertake a range of technical tasks requiring skills developed through experience.
- Maintain accurate experimental records, draft reports and present results in written and oral communications with clients and team.
- Oversee the activities of less experienced staff and provide guidance on experimental/ technological techniques and protocols.
- Maintain confidentiality when working with commercially sensitive information.
- 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, often regionally dispersed research team, and business unit to carry out tasks in support of CSIRO scientific objectives
- Adhere to the spirit and practice of CSIRO's Values, Code of Conduct, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
- Other duties as directed

# **Required Competencies:**

- **Teamwork and Collaboration:** Proactively seeks and considers the ideas and opinions of others from within and outside the team to help form decisions, plans or actions.
- Influence and Communication: Puts forward ideas by presenting factual information supported by data, definitions, examples, illustrations or other aids, which will assist in conveying meaning.

- **Resource Management/Leadership:** Provides instruction and assists other staff to complete allocated tasks and activities.
- Judgement and Problem Solving: Identifies and considers the implications of a range of available alternatives in order to select the most appropriate response to problems of a familiar or recurring nature.
- **Independence:** Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
- Adaptability: Willingness to change ideas or perceptions based on new information, contrary evidence or other people's points of view. Prepared to try out different approaches.

#### **Selection Criteria**

#### **Essential**

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

- 1. Relevant tertiary qualifications or equivalent relevant work experience in Biotechnology, Chemical Engineering, Microbiology or Biochemistry or related field.
- 2. Demonstrated microbiology expertise and experience including cultivation of microorganisms and aseptic techniques and a strong understanding of microbiological principles.
- 3. Demonstrated experience in the production of biologics in microbial hosts.
- 4. High degree of mechanical aptitude with the willingness to complete repetitive tasks and mechanical aptitude and willingness to complete repetitive tasks
- 5. Evidence of mechanical aptitude and ability to problem solve and troubleshoot experimental, equipment and process issues.
- 6. The ability to effectively manage several competing priorities simultaneously and carry out non-routine tasks independently.
- 7. High level written and oral communication skills with the ability to represent the research team effectively internally and externally, including the presentation of research outcomes.
- 8. Proven ability to investigate and solve complex problems, and present logical alternative solutions which can be discussed, tested and adopted.
- 9. High level of motivation to fulfil commitments in a timely manner without compromising quality.

#### Desirable

- 1. Experience in working with expression hosts such as E coli, Pichia pastoris, and Saccharomyces cerevisiae for protein production.
- 2. Experience in producing small molecule bioactive from microbial or yeast fermentation systems.
- 3. Experience in operation of stirred tank bioreactors to maximise biologics production.
- 4. Understanding of GMP or other quality management systems.

#### **Special Requirements**

Appointment to this role may be subject to conditions including the 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.
- 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. To find out more visit us <u>online</u>!

CSIRO is a values-based organisation. In your application and at the interview you will need to demonstrate behaviours aligned to our values of:

- People First
- Further Together
- Making it Real
- Trusted

Find out more about CSIRO Manufacturing