# Position Details

## Research Scientist/Engineer- CSOF5

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| The following information is for applicants |
| Advertised Job Title | Research Engineer in Biosecurity Management |
| Job Reference | 67880 |
| Tenure | IndefiniteFull-time |
| Salary Range | LES4 € 42149 (pro-rata for part-time) |
| Location(s) | Montpellier, France |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | European Citizens and French Permanent Residents Only |
| Position reports to the | Research Director |
| Client Focus – Internal | 20% |
| Client Focus – External | 80% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Dr Raghu Sathyamurthy via email at Raghu.Sathyamurthy@csiro.au or phone +61 7 3833 5762 |
| 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. |

### Role Overview

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

### This position is an exciting opportunity for an early career (up to 5 years post-PhD), highly motivated researcher with skills in leading and developing collaborative projects aimed at ecologically managing pests weeds and diseases relevant to supporting Australian agriculture and natural ecosystems to join the Managing Invasive Species and Diseases Program of the Health and Biosecurity Business Unit of CSIRO.

### This program focuses at the CSIRO European Laboratory on multi-disciplinary research projects to a) identify, test, deploy and evaluate biological control agents for weeds and pest insects and b) develop collaborative projects with French and US partners in pre-border and post border management strategies for emerging pest and disease threats in animal and plant health. This position will be the principal locally-based researcher providing scientific oversight of all research based at CSIRO-EL under the guidance of A-based project leaders, while assisting in the development of new projects under the CSIRO-EL 2020-2030 strategy and facilitate the use of the facility for research by other CSIRO Business Units as relevant.

### The successful candidate will, for the first few years, conduct ongoing innovative research using the latest advances in plant-insect interactions to develop science-based biological control solutions for a range of weed and insect targets. This research may involve: i) exploration for natural enemies in the native range of the target weeds/pests, ii) selection of candidate biocontrol agents using biogeography and population genetics of targets and agents, iii) host specificity and risk analysis of selected agents, iv) mass-rearing and release approaches that increase likelihoods of establishment in the field and v) evaluation of agent efficacy on the weed/pest populations and of flow-on impact on the ecosystems. You will lead components of existing projects, have the opportunity to develop, secure funds and lead new projects, provide scientific leadership and collaborate with scientists across the world.

### Duties and Key Result Areas:

* Incorporate novel approaches to scientific study by adapting and/or developing original concepts and ideas into existing and future research.
* Under the guidance of senior colleagues, develop new research projects, including negotiation and securing of external funding requirements.
* Devise strategy and assume overall scientific responsibility for research and interpreting results to deliver on project-related outputs.
* Undertake research (including experimental design and data analyses) in laboratory, controlled environment conditions and field to:
1. Identify and select promising biological control agents for specific target weeds/pests,
2. Demonstrate their safety (host-specificity) and efficacy,
3. Develop efficient rearing methods and release strategies that increase likelihood of establishment and
4. Evaluate their impact on the weed/pest population and the flow-on benefits to impacted ecosystems.
* Contribute to fieldwork across a range of ecosystems, including in remote locations in Europe and overseas.
* Interact positively or work collaboratively with internal and external colleagues, partners and customers to build productive relationships and collaborations regionally, nationally and internationally, to enhance impact of the science or create new business opportunities.
* Provide coaching, mentoring and on-the-job training to post-doctoral fellows, technical staff and students to ensure high quality research results.
* Produce scientific papers suitable for publication in high quality international journals and for presentation at national and international conferences.
* 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’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 Making Safety Personal goals.
* Other duties as directed.

## **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:** 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 changes.

## **Selection Criteria**

#### Essential

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

1. A doctorate and/or equivalent research experience in applied pest, weed and disease management including proven expertise and experience in weed/insect biological control.
2. Demonstrated theoretical, conceptual and practical knowledge relevant to biological control and other forms of applied pest, weed and disease management, including a strong empirical background in experimental research in insect-plant interactions and statistical and data analysis skills.
3. Demonstrated ability to develop and lead projects or components of large multi-disciplinary projects focused on delivering science-based solutions for external stakeholders.
4. Demonstrated laboratory and field-based research experience in plant-insect interactions and other aspects of pest, weed and disease management.
5. Demonstrated ability and willingness to conduct fieldwork across a range of ecosystems, including in remote locations in Europe and overseas.
6. Fluency in both written and spoken French and English.
7. A record of science innovation and creativity, including incorporating novel ideas and lateral thinking into scientific investigations to develop appropriate solutions to research challenges.
8. Experience in working effectively as part of a multi-disciplinary, multi-location research team, and lead independent individual research, to achieve project goals.

## **Desirable:**

1. Demonstrated research experience in molecular taxonomy, phylogeny and/or population genetics.
2. Demonstrated research experience in one or more of the following fields, especially within the context of biological control: invasion biology, weed science, insect science, host-pathogen interactions, ecosystem processes, chemical ecology, biogeography, invertebrate ecology and community ecology.
3. Demonstrated experience with working in quarantine facilities and obtaining and managing permits to conduct biological research.
4. Demonstrated ability and willingness to supervise students, technical staff and post-doctoral fellows.

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.

## **About CSIRO:**

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Find out more about CSIRO [Health and Biosecurity](https://www.csiro.au/en/Research/BF)