# Position Details

## Research Projects- CSOF4

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| The following information is for applicants | |
| Advertised Job Title | Quantum Device Fabricator |
| Job Reference | 101308 |
| Tenure | Specified Term of 3 years, Full-time (part-time – min 0.8 FTE may be considered) |
| Salary Range | AU$96k - AU$109k per annum (pro-rata for part-time)  plus up to 15.4% superannuation |
| Location(s) | Lindfield, Sydney (on-site role) |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian Citizens Only |
| Position reports to the | Team Leader – Quantum Device Fabrication |
| Client Focus – Internal | 90% |
| Client Focus – External | 10% |
| Number of Direct Reports | 0 |
| Enquire about this job | Katie Green] via email at katie.green@csiro.au or phone +61 2 9413 7522 |
| 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) |

**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).

**Child Safety**

CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View our [Child Safe Policy](https://www.csiro.au/en/about/policies/child-safe-policy).

### Role Overview

The role of Research Projects staff in CSIRO is to collaborate in scientific and technological activities with other research staff by assisting with detailed planning, undertaking experimental work, and in carrying out practical elements of research workflows.

CSIRO’s Manufacturing Research Unit is seeking a hands-on, detail-driven Research Officer to join our cutting-edge Quantum Device Fabrication Team. This role is suited to a candidate with a strong background in micro- or nanoscale device fabrication, particularly someone who excels in a cleanroom environment and will enjoy a hands-on approach to developing and growing CSIRO’s world class capability in nanoscale device fabrication.

In this role, you will collaborate closely with scientists and engineers to support the development and production of advanced nanoscale electronic devices for quantum sensing applications.

Ideal candidates will demonstrate expertise in fabrication process development, experimental design, data analysis, and the preparation of high-quality technical reports.

This is a hands-on laboratory role, requiring you to be onsite five days a week**.**

### Duties and Key Result Areas

* Fabricate nanoscale and microelectronic devices according to specifications provided by the project leader.
* Troubleshoot and refine fabrication processes to improve reliability, reproducibility and performance.
* Optimise current fabrication protocols and develop new ones.
* Maintain thorough and accurate records of all fabrication processes and procedural details
* Assist in the preparation of technical reports and presentations
* Collaborate effectively across multidisciplinary research teams to advance CSIRO’s scientific objectives
* Respond to problems promptly with a constructive mindset.
* Communicate with staff, clients, and suppliers through courteous, clear communication that enhances collaborations and reflects CSIRO’s values.
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy and diversity initiatives.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. Relevant trade certificate, diploma, bachelor’s degree, or equivalent experience in device packaging, engineering, materials science, or physics
2. Minimum 3 years of hands-on experience in micro- and nanostructured thin-film device fabrication in a clean room environment
3. Proven expertise in device fabrication techniques such as photolithography, wet/dry etching, wire bonding, and encapsulation
4. Experience working to achieve tight technical specifications and deliver work to agreed timelines
5. Demonstrated high level of manual dexterity, with proven ability to work in an organised manner and to be details orientated
6. Demonstrated experience in maintaining and improving quality control processes

**Desirable**

1. Have experience in equipment maintenance and trouble shooting in a clean room and laboratory environment.
2. Experience with thin-film deposition and vacuum systems
3. Familiarity with materials/electronic characterisation tools (e.g., Atomic Force Microscopy, I-V measurements)

## **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

* 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.
* The successful candidate will be required to obtain and maintain a security clearance at the NV1 level.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) 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