# Position Details

## Research Projects- CSOF5

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| The following information is for applicants | |
| Advertised Job Title | Research Officer – Thin Film Scientist |
| Job Reference | 77200 |
| Tenure | Indefinite |
| Salary Range | AU$100k to AU$108k pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Sydney (Lindfield) NSW |
| 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 Devices and Materials Team |
| Client Focus – Internal | 90% |
| Client Focus – External | 10% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Dr. Wendy Purches on +61 2 9413 7477 or wendy.purches@csiro.au or Dr. Avi Bendavid on +61 2 9413 7109 or avi.bendavid@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](mailto:careers.online@csiro.au) or call 1300 984 220. |

### 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. At senior levels, Research Projects staff may be involved in providing consulting services, science, and technology management and/or industry liaison.

The Research Officer – Thin Film Scientist role will join the Quantum Devices and Materials Team in the Devices & Engineering System Program in CSIRO’s Manufacturing Business Unit. The role will play a key role in the development of epitaxial thin films for advanced electronic devices and other applications. The position will contribute to the development and growth of CSIRO’s physical vapour deposition capabilities and will work with a range of researchers and industrial collaborators.

This role is offered on a full-time, part-time (minimum 0.8 FTE) or job share basis (if circumstances permit).

### Duties and Key Result Areas

* Run epitaxial thin film research and development program for the synthesis of coatings to meet specification for industrial applications.
* Take responsibility for thin film production and characterisation/quality control activities, and interpret results and implement action plans.
* Troubleshooting and basic equipment maintenance, including laser and vacuum components.
* Communicate with and co-ordinate equipment engineers for major and periodic equipment maintenance.
* Participate in project scoping, budgeting, and planning.
* Undertake data analysis and internal reporting (both written reports and oral presentations).
* Produce comprehensive and easily understood safe work instructions for various equipment.
* Prepare risk assessments and other operational documentation as required.
* Develop know-how to enhance the impact of CSIRO’s epitaxial thin film capability.
* Initiate and maintain collaborative relationships with external researchers, industry associates and manage contracts and transfer technology to industry.
* Demonstrate high levels of initiative, ingenuity, and skill to carry out experimental work in collaboration with other team members, technical staff and scientists.
* Have a significant role in communicating research or technological results in internal and external forums and, where applicable, contribute to and/or generate scientific papers.
* Maintain confidentiality when working with commercially sensitive/confidential 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, 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 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 team 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:** 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:** 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. Relevant skills and knowledge derived from tertiary education and/or relevant work experience in Thin Films, Materials Science, Device Electronics, Physics, Chemical Engineering or Nanotechnology.
2. Proven experience in performing hands-on experimental R&D in a thin film science.
3. Sound experience in operating and maintaining advanced high vacuum equipment (preferably coating equipment).
4. Demonstrated impact on outcomes in R&D setting – for example, development of commercial IP, commercial product, or process development.
5. Good attention to detail, especially when carrying out experimental work.
6. Good oral and written communication skills coupled with the ability to work effectively with a range of stakeholders.
7. A history of professional and respectful behaviours and attitudes in a collaborative environment.

## **Desirable**

1. Experience in thin film characterisation (such as XRD, AFM, and optical techniques).
2. Experience operating and/or maintaining a laser system.
3. Electronic device fabrication (such as photolithography).
4. Experience interfacing equipment/machines with computers.

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 required to obtain and maintain a security clearance at the Baseline level.

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* 1. People First
  2. Further Together
  3. Making it Real
  4. Trusted

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