# Position Details

## Research Projects – CSOF3

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| The following information is for applicants | |
| Advertised Job Title | Renewable Energy Laboratory Scientist |
| Job Reference | 86075 |
| Tenure | Indefinite  Full-time or Part-time (minimum 0.8 FTE) |
| Salary Range | AU$66,163 to AU$84,207 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Newcastle, NSW |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents |
| Position reports to the | Team Leader, Photovoltaics Development |
| Client Focus – Internal | 50% |
| Client Focus – External | 50% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Mr Kenrick Anderson via email at [Kenrick.Anderson@csiro.au](mailto:Kenrick.Anderson@csiro.au) or phone +61 2 4960 6273; or  Contact Dr Benjamin Duck at [Benjamin.Duck@csiro.au](mailto:Benjamin.Duck@csiro.au) or phone +61 2 4960 6011 |
| 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 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.

As part of the Solar Technologies Group in CSIRO’s Energy Business Unit, the role will work within a multidisciplinary engineering and scientific team to develop ground-breaking technology. Active projects include development of next generation solar cells, hydrogen production using renewable energy industrial scale solar thermal to produce decarbonised electricity.

This role is offered on a full-time or part-time basis (minimum 0.8 FTE).

### Duties and Key Result Areas

* Under limited supervision, design and perform straightforward experiments and routine laboratory analyses on thin films for solar applications, design new processes or apparatus by adapting existing techniques and components to meet special circumstances or undertake modifications to methods requiring some innovation.
* Conduct literature reviews, investigations and inspections in the laboratory including associated analysis possibly involving statistical, graphical or software environments such as Python 3+.
* Develop, test and modify nano structure materials for photovoltaic applications.
* Perform some non-routine technology development activities using a range of techniques, often working on a number of parallel and competing tasks.
* Work with discretion to decide on the timing of operations within the work team’s plan and plan ahead to meet experimental and/or project demands.
* Independently test possible solutions to resolve identified problems.
* Take responsibility for maintaining laboratory or consumables, scheduling and instructing staff in the use of shared equipment.
* Respond courteously and efficiently to client requests, maintaining clear communication regarding mutual expectations and monitoring client satisfaction.
* 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 Zero Harm goals.
* Assisting Solar Group with logistics and operation of site forklift
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. Relevant bachelor’s degree or equivalent relevant work experience in Chemistry, Physics, Chemical Engineering, Renewable Energy Engineering, or similar field.
2. Demonstrated experience in fabrication of thin films using one or more techniques.
3. Exposure to various analytical techniques, i.e. Current-Voltage testing, UV Vis spectroscopy, Electrochemical techniques, Gas Chromatography and X-ray Powder Diffraction.
4. Good oral and written communication skills including the ability to communicate outcomes to stakeholders.
5. Proven ability to work collaboratively as part of a multi-disciplinary team and carry out tasks safely and successfully in support of project goals.

## **Desirable**

1. Exposure to data analysis using Python.
2. Exposure to clean-rooms, dry-rooms, glove box systems commonly utilised in semiconductor fabrication.
3. Skilled in utilising small hand tools including experience in soldering.
4. Have a current forklift license or willing to be trained on forklift operation.

## **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.

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 Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

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

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

Find out more about CSIRO [Energy](https://www.csiro.au/en/Research/EF)