



Position Details

Research Scientist/Engineer- CSOF5

THE FOLLOWING INFORMATION IS FOR APPLICANTS

Advertised Job Title	Battery Safety Scientist/Engineer
Job Reference	99252
Tenure	Specified Term of 3 years Full-time
Salary Range	AU\$114,219 - AU\$123,605 per annum (pro-rata for part-time) plus up to 15.4% superannuation
Location(s)	Clayton, VIC.
Relocation Assistance	Will be provided to the successful candidate if required
Applications are open to	<ul style="list-style-type: none">All applicants
Position reports to the	Group Leader, Infrastructure Technologies VIC.
Client Focus – Internal	50%
Client Focus – External	50%
Number of Direct Reports	0
Enquire about this job	Contact Nathan White via email at nathan.white@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 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](#).

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](#).

Role Overview

The role of Research Scientist/Engineer staff is to conduct innovative research leading to scientific achievements that are aligned with CSIRO's strategies. The Research Scientist/Engineer may be engaged in scientific activity ranging from fundamental research to the investigation of specific

industry or community problems. The Research Scientist/Engineer 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.

CSIRO's new battery abuse and safety testing facility will add to CSIRO's long history of battery and energy technology research, fire safety testing and engineering. You will be joining a team of experienced professionals to help establish our battery safety testing facility for cells and small battery packs. You will be responsible for the establishment of the testing protocols for battery safety testing including the safety procedures and workflow required to test and certify against recognised standards. You will perform hands-on testing of lithium-(ion) batteries and other battery technologies for their safety and reliability characteristics and report the outcomes to both internal and external clients. You will transfer the knowledge and capability developed in this area to the rest of the CSIRO team.

Duties and Key Result Areas

- Identification and selection, for standards-based safety and abuse testing of Lithium (Ion) Batteries.
- Commission and test new equipment including developing the appropriate protocols for tests to be undertaken including data storage methods.
- You will collect the required data and generate plots, tables and statistical data, for inclusion into test reports.
- Creation of test protocols within CSIRO Laboratory Information Management System (LIMS)
- Development of certification documentation and related templates which satisfy Australian safety regulations.
- Assist with the development of safe working processes, procedures and instructions.
- Conduct test experiments on a range of cell sizes for internal and external stakeholders/customers.
- Ensure new and existing equipment meets operational requirements, and appropriate standards.
- Work with laboratory management to facilitate ISO 17025 accreditation.
- Identification of technical training and skills required to operate in this testing field.
- Maintain current knowledge in the fields of expertise, update management on status and emerging trends of emerging expertise as related to equipment standards and legislative requirements. Present results in a meaningful format, prepare reports for external stakeholders.
- 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.
- Adhere to the spirit and practice of CSIRO's Values, Code of Conduct, Health, Safety and Environment procedures and policy and diversity initiatives.
- Transfer the knowledge and capability developed in this area to the rest of the CSIRO team
- Other duties as directed.

Selection Criteria

Essential

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

1. Engineering degree plus a Master of Science (MSc) or Master of Engineering (MEng) qualifications (or will shortly satisfy the requirements of a masters) in a relevant discipline area, such as Materials Science, Materials, Mechanical or Mechatronic Engineering, Chemistry or other related area. Where working experience specifically in the field of Battery fire safety and abuse testing can be demonstrated to be equivalent or greater than a Master level degree then this will also be considered.
2. Understanding of international safety and abuse testing standards as they apply to battery sizes in consumer equipment.
3. Demonstrated laboratory skills using testing equipment in electrical, mechanical or fire safety engineering or similar.
4. In-depth knowledge of battery test standards/protocols.
5. Be a detail-oriented, organised, fast learner, possess good communication skills, and work well in a team environment.
6. Have demonstrated experience in the contributing to the evaluation of risks and safe working practices for the testing of equipment under abuse / failure conditions.
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 at national and international conferences.

Desirable

1. Demonstrated hands-on experience with Lithium-ion battery safety testing equipment.
2. Experience testing to standards related to Lithium-ion batteries.
3. Experience with electrical testing equipment.
4. Knowledge of Australian dangerous goods codes and regulations as they apply to batteries.
5. Experience with a Laboratory Information Management System (LIMS).
6. Experience with Accelerated Rate Calorimetry (ARC) testing of batteries.
7. Experience with gas analysis techniques, i.e. FT-IR, GC-MS or other relevant methods.
8. Experience with software programming platform (python or equivalent).
9. Remain productive, positive and resilient in complex, ambiguous and/or uncertain environments.
10. The ability to work effectively as part of a multi-disciplinary, potentially regionally dispersed research team, plus the motivation and discipline to carry out autonomous research.

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 responses 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 change.

Special Requirements

Appointment to this role is subject to provision of a pre-employment background check and may be subject to other security/medical/character clearance requirements.

About CSIRO

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](#) 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