# Position Details

## Research Projects- CSOF5

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| The following information is for applicants | |
| Advertised Job Title | Senior Experimental Scientist |
| Job Reference | 78542 |
| Tenure | Indefinite  Full-time |
| Salary Range | AU$102,724 – AU$111,165 pa plus up to 15.4% superannuation |
| Location(s) | Waterford, Western Australia (Whadjuk Noongar Country) |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents Only |
| Position reports to the | Team Leader – Base Metals |
| Client Focus – Internal | 20% |
| Client Focus – External | 80% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Denis Shiers via email at [Denis.Shiers@csiro.au](mailto:Denis.Shiers@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. |

### Acknowledgment of Country

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the area 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.

The Senior Experimental Scientist will lead all activities in the Titanium–Vanadium (Ti/V) space, along with management of variety of projects and other staff to deliver outcomes for a long-standing existing industry partner.

CSIRO recognises that Aboriginal and Torres Strait Islander peoples have made and will continue to make extraordinary contributions to Australian culture, economy and science and that it is everyone’s responsibility to promote and embed the vision of ‘A science landscape in respectful partnership with Indigenous Australia delivering innovative, sustainable, holistic solutions to meet our greatest national challenges’.

While working at CSIRO, you will be able to create a dynamic career path leveraging from your own experiences and identity while being supported to deliver against CSIRO’s strategies. You will have access to a range of world-class facilities based at local universities where CSIRO has collaborative arrangements in place, and at other CSIRO sites across Australia.

### Duties and Key Result Areas

* Lead projects where needed, managing yourself and others to fulfil existing obligations and expected future projects which target the recovery of vanadium, iron and titanium from titanomagnetites.
* Perform as shift supervisor on various pilot plant operations and offer specialised input into the design and safe operation of these as needed.
* Design, plan and safely undertake experiments, laboratory analysis or technology development activities (some non-routine) using a range of techniques, often working on several parallel tasks, both independently and as part of a team.
* Develop novel techniques to produce enhanced results, providing researchers with new or improved approaches to research or technological problems.
* Lead teams and/or collaborate with staff from other teams as required.
* Initiate and maintain collaborative relationships with external researchers and experts, manage contracts and transfer technology to industry.
* Liaise with clients to determine their needs and take personal responsibility for client satisfaction.
* Address problems promptly and in a constructive manner.
* Participate in work that is highly involved because of the unique or unusual features and complications, requiring the creation of original user experiences, the design & development of original technologies, and/or the development of original experimental or observational techniques and insightful interpretation of data.
* Participate in project scoping and planning, making significant contributions to the research or technological direction, and may advise on the level and type of services that are provided.
* 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.
* 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, 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.
* Maintaining confidentiality in relation to commercially sensitive information (including intellectual property) of CSIRO and/or research or commercial partners.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. Relevant tertiary qualifications in Chemistry, Metallurgy, Mineral Processing or Engineering.
2. Significant hands-on experience in the mining industry and/or mining-related research.
3. Demonstrated project management experience, including client liaison.
4. Pilot plant experience, including experience as a metallurgical shift supervisor.
5. A demonstrated history of maintaining health and safety requirements while working in a hazardous environment.
6. Scientific/technical knowledge in the areas of planning and managing reductive roasting, pressure leaching, acidic/high-temperature digestion operations.
7. Ability to work unsupervised safely with a high level of organisational and time management skills.

## **Desirable**

1. Experience with titanium sulphation processing.
2. Experimental and technical expertise in nickel leaching capability including (but not limited to) alternative technologies such as the Direct Nickel process.
3. Hands-on experience with filtration, settling, flocculation and sample preparation/assays.
4. Practical experience with laboratory instruments, e.g., automatic titrators, UV-Visible spectroscopy, AAS, WHIMS, LIMS.
5. Experimental proficiency in a range hydrometallurgical processing activities.
6. Competency in MS Office programs including Word, Excel, PowerPoint.

## **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.

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

## **About CSIRO**

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