# Position Description

## Research Scientist/Engineer – CSOF6

The following information is for applicants

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| Advertised Job Title**:** | Senior Application Specialist |
| Job Reference: | 59314 |
| Location | Clayton, VIC |
| Relocation Assistance**:** | Will be provided to the successful candidate if required. |
| Classification**:** | CSOF6 – Senior Research Scientist |
| Salary Range: | AU $111,663 to AU $130,848 plus up to 15.4% superannuation |
| Applications Are Open To: | [ ]  Australian Citizens Only[x]  Australian/New Zealand Citizens and Australian Permanent Residents Only* [ ]  All Candidates
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| Percentage of Client Focus - Internal: | 25% |
| Percentage of Client Focus - External: | 75% |
| Reports to the: | Research Group Leader, Computational Modelling |
| Number of Direct Reports: | 0 |
| Name and Contact Details For Applicant Enquiries  | Dr Gary Delaney, gary.delaney@data61.csiro.au. Please do not email your application directly to Dr. Delaney. Applications received via this method may not be considered by the selection panel. |
| Contact Details For Applying | Call 1300 984 220 or email careers.online@csiro.au.  |
| How to Apply: | Please apply online at [jobs.csiro.au](https://jobs.csiro.au/) and enter the requisition number**.** Internal applicants please apply via ‘Jobs Central’ through the ‘People Hub’ icon  |

## Role Overview:

The role of Research Scientist Staff in CSIRO is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. You may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. You 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.

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| The successful applicant will be a member of the Computational Modelling Group’s DEM applications team and will work with collaborators and customers to develop leading edge simulation solutions to a range of important industrial applications. They will use our particle based simulation software to create insights into particle and fluid flow applications, for both publication and for commercial contracts. |
| An exciting opportunity exists for an early to mid-career researcher to work at the leading edge of discrete particle method (DEM) modelling. The successful applicant will work with an established DEM development team to create cutting edge simulations of important applications in industrial systems. As part of the application team you will work with our research collaborators and customers to solve real world problems with leading edge simulation systems.  |

## Duties and Key Result Areas:

This position will involve research on particle and fluid flow applications using our in-house computational modelling system. Specifically the applicant will:

* Contribute to commercial projects
* Contribute to business development, project management and administrative tasks as needed by projects and groups
* Contribute to strategic research projects
* Publish in high impact journals and high profile conferences
* Contribute to development of research networks and collaborations to improve delivery of strategic and commercial projects
* Act as a trusted advisor, utilising knowledge of client’s business and understanding of their underlying needs.
* Anticipate industry and/or community needs and market direction through client liaison/networking, and identify and adapt quickly to changes.
* Within broad guidelines, use professional expertise, knowledge of other disciplines and research experience/achievement to formulate, develop and complete an approved research program with general direction as to the aims of their activities.
* Communicate research results to clients and the scientific community through oral and written reports, which may include the preparation of documents for patent applications.
* Provide advice to policy makers and inform and transfer knowledge to non-scientific audiences.
* Lead and supervise staff to ensure that experiments are established in accordance with the research design and are completed within the agree timeframes and budget.
* Undertake feasibility studies, demonstrating a considerable degree of originality, creativity and innovation in solving problems and introducing new directions and approaches.
* 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, often regionally dispersed research team, and business unit to carry out tasks in support of CSIRO’s scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

## Competencies:

1. **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.**
2. **Influence and Communication: Identifies critical stakeholders and influences them via an influential third party, for example through an established network, to gain support for sometimes contentious proposals/ideas.**
3. **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.**
4. **Judgement and Problem Solving:** Anticipates and manages problems in ambiguous situations. Develops and selects an appropriate course of action and provides for contingencies. Evaluates, interprets and integrates complex bodies of information and draws logical conclusions, synthesises proposals and defends options with reasoned arguments.
5. **Independence: Assesses the risk and opportunity of identified strategies, options and actions. Overcomes problems and setbacks in achieving goals. Invariably includes consideration of value-added future impact on bottom line when determining the optimal and efficient use of resources.**
6. **Adaptability:** Demonstrates flexibility in thinking and adapts to, and manages, the increasing rate of organisational change by adjusting strategies, goal and priorities.

## Selection Criteria:

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

1. Relevant bachelor’s degree and/or equivalent work experience in Engineering, Physics or related area
2. Bright, energetic, dynamic self-starter with a strong desire to learn new skills and who can demonstrate initiative
3. Highly developed problem-solving ability with a demonstrated record in gaining insight into complex physical and/or industrial systems through the application of simulation software
4. Demonstrated ability and desire to work in, and with, multi-disciplinary teams
5. Strong organizational and project management skills, including a demonstrated ability to meet demanding deadlines and respond creatively and rapidly to new requirements
6. Evidence of well-developed written and verbal communication skills

## Desirable Criteria:

1. Experience in large scale modelling of physical systems using DEM
2. Experience modelling large scale industrial comminution devices using DEM, in particular in consulting projects with industry
3. Expert in use of Linux and high-performance computing environments​

## About CSIRO:

We imagine. We collaborate. We innovate. To find out more visit us [online](http://www.csiro.au/)!

Find out more about the CSIRO [Data61](https://data61.csiro.au/)