# Research Scientist/Engineer – CSOF5

Role summary for potential applicants

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| Advertised Job Title**:** | Research Scientist – Hydrologist (Hydroclimate Forecasting) |
| Reference Number**:** | 52391 |
| Classification**:** | CSOF5 |
| Salary Range: | AUD $95,369 to AUD $103,205 plus up to 15.4% superannuation |
| Location**:** | Clayton, Vic |
| Tenure: | Specified Term of 3 years |
| Relocation assistance**:** | Will be provided to the successful candidate if required. |
| Applications are open to: | All Candidates |
| Functional Area**:** | Research Scientist / Engineer |
| % Client Focus - Internal: | 40% |
| % Client Focus - External: | 60% |
| Reports to the: | Team Leader – Water Forecasting |
| Number of Direct Reports: | 0 |

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| **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.The Hydrologist (Hydroclimate Forecasting) will be part of a strong hydrological forecasting, hydroclimate science and hydrological modelling capability in the Water Forecasting Team (based in Melbourne) in the Water Resource Management Program in CSIRO Land and Water. The appointee will contribute to innovative research and deliver to high impact external projects on water forecasting, hydrological prediction under change, water resources assessment, and integrated basin modelling. The appointee will also contribute to multi-disciplinary projects across CSIRO and its partners, in Australia and overseas. The appointee will develop strong science expertise in the above disciplines, as well as actively contribute to developing at-scale research ideas and business opportunities. |

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| **Duties and Key Result Areas:** |
| * Lead, manage and contribute to projects in the water forecasting discipline (hydrological and statistical modelling, forecast post-processing and evaluation, application of forecasts for water resources management).
* Contribute water forecasting science to projects in water resources assessment and prediction, integrated basin modelling, and at-scale multi-disciplinary projects.
* Sustain strong scientific recognition through publication metrics, leadership in national and global hydrological science forums, and national and international reputation.
* Work closely with industry customers to deliver strong research outcomes, leading to adoption and impact from new practice and/or knowledge.
* Work closely with CSIRO Land and Water leaders to develop research ideas and business opportunities.
* Work effectively as part of a team that is regionally and internationally dispersed, in the hydrological science discipline, integrated water resources management, and multi-disciplinary projects.
* Communicate effectively and respectfully with all staff and customers in the interests of good business practice, collaboration, and enhancement of CSIRO's reputation.
* Adhere to the spirit and practice of CSIRO’s Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
* Other duties as directed.
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| **Selection Criteria:** |
| *Under CSIRO policy only those who meet all essential criteria can be appointed****Pre-Requisites:**** **A PhD qualification plus several years postdoctoral research experience, or equivalent relevant research experience in science or engineering.**

***Essential Criteria:***1. **Demonstrated experience in hydrological science with strong expertise in Bayesian statistical modelling, ensemble forecasting and verification, and/or the application of forecasts for water resources management.**
2. **Demonstrated experience in scientific programming, data visualisation, and high performance computing.**
3. **Demonstrated experience in managing, using and creating large climate and hydrological datasets, and in dealing with data that cover large spatial (such as continental) and temporal (such as decadal) scales.**
4. **Strong written and oral communication skills including an ability to publish research results, write reports and make scientific presentations to audiences with scientific and non-scientific background.**
5. **Demonstrated ability to work in a multi-disciplinary team in order to meet deadlines and respond productively to changing requirements, and an ability to work independently to define and carry-out specific work goals.**

**Desirable Criteria:**1. **Experience in operational water forecasting**
2. **Experience in transferring research to operational deployment**

**As Australia’s Innovation Catalyst, CSIRO has strategic actions underpinned by behaviours aligned to**:* Excellent science
* Inclusion, trust & respect
* Health, safety & environment
* Delivery on commitments.

**In your application and at interview you will need to demonstrate alignment with these behaviours.*****Other special requirements:***Appointment to this role may be subject to conditions including security/medical/character clearance requirements. Applicants who are not Australian Citizens or Permanent Residents may be required to undergo additional security clearance processes; which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test).- <http://www.ielts.org/default.aspx> |

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| **Other Information:** |
| **How to Apply**Please apply for this position online at [www.csiro.au/careers](http://www.csiro.au/careers). You may be asked to provide additional information (online) relevant to the selection criteria, if so, please take the time to provide relevant succinct answers. Prior to submitting your application please upload one combined document containing both your cover letter and CV, that best demonstrates your ability to meet the requirements of the role as outlined in this document. (Maximum 2MB).**Referees**: Please provide contact details of two previous supervisor or academic/professional referees in your resume/CV. We will ask your permission before making contact. **Contact:** If after reading the selection documentation you require further information please contact: Dr David Robertsonvia email: David.Robertson@csiro.au or phone: +61 3 9545 2431Please do not email your application directly to Dr Robertson. Applications received via this method will not be considered.If you experience difficulties applying online call 1300 984 220 for assistance. Outside Australian business hours please email: csiro-careers@csiro.au. **About CSIRO**Australia is founding its future on science and innovation. Its national science agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) is a powerhouse of ideas, technologies and skills for building prosperity, growth, health and sustainability. It serves governments, industries, business and communities across the nation. Find out more! [www.csiro.au](http://www.csiro.au). **CSIRO Land and Water is delivering the knowledge and innovation needed to underpin the sustainable management of our land, water, and ecosystem biodiversity assets. Through an integrated systems research approach we provide the information and technologies required by government, industry and the Australian and international communities to protect, restore, and manage natural and built environments.****Land and Water is a national and international partnership led by CSIRO and involving leading research providers from the national and global innovation systems. Our expertise addresses Australia’s national challenges and is increasingly supporting developed and developing nations response to complex economic, social, and environmental issues related to water, land, cities, and ecosystems.** **Find out more:** <http://www.csiro.au/en/Research/LWF> |