# Research Scientist/Engineer – CSOF5

Role summary for potential applicants

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| Advertised Job Title**:** | Research Scientist in Ecosystem Change Ecology |
| Reference Number**:** | 19461 |
| Classification**:** | CSOF5 |
| Salary Range: | AU $92,591 to AU $100,199 plus up to 15.4% superannuation |
| Location**:** | Floreat (Perth), Western Australia |
| Tenure: | Indefinite |
| Relocation assistance**:** | Will be provided to the successful candidate if required. |
| Applications are open to: | Australian Citizens Only  Australian Citizens and Permanent Residents Only   * All Candidates * *For Specified Term positions, we will accept applications from Temporary Residents with working rights for the length of the term, who do not require sponsorship.* |
| Functional Area**:** | Research Scientist / Engineer |
| % Client Focus - Internal: | 0% |
| % Client Focus - External: | 100% |
| Reports to the: | Team Leader |

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| **Role Overview:** |
| This position represents an exciting opportunity for a highly motivated scientist to join the Ecosystem Change Ecology team based in Perth, Western Australia. This multidisciplinary team generates knowledge on the mechanistic links and synergistic interactions between landscape change, species invasions and native species decline in terrestrial ecosystems. Working in both agricultural and natural systems, we undertake research and develop theory to underpin more effective policy and management actions for conservation, invasion and production challenges in the face of rapid global change.  Our location provides an exceptional opportunity to work on highly endemic and unique ecosystems across temperate and tropical climates, including the National Heritage-listed and remote Kimberley region, and the Southwest Australia Ecoregion, one of the world’s biodiversity hotspots. The team delivers to both the Land & Water and the Health & Biosecurity Business Units in CSIRO, has strong links with the University of Western Australia via collaborative research and student supervision, and undertakes research with a network of collaborators and on behalf of clients both in Australia and overseas.  The role of a Research Scientist 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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| **Duties and Key Result Areas:** |
| * Undertake laboratory, controlled condition and field-based research to address challenges in both conservation and invasion biology in terrestrial systems. * Incorporate novel approaches to scientific study by adapting and/or developing original concepts and ideas into existing and future research. * Produce quality scientific papers suitable for publication in high quality journals and for presentation at national and international conferences. * Contribute to the team by leading research projects, including the negotiation and securing of external funding requirements. * Communicate professionally, effectively and respectfully in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation. * Work effectively as part of a multi-disciplinary, often regionally-dispersed research team, to undertake independent scientific investigations and carry out associated tasks. * Under the guidance of Senior Research Scientists, work collaboratively and honestly with internal and external colleagues, clients and partners to help define and satisfy objectives for small to medium research projects. * Provide coaching, mentoring and on-the-job training to technical staff and students to ensure experiments are established in accordance with research design. * 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:***   1. **Education/Qualifications:** A doctorate and/or equivalent research experience in a relevant discipline area, such as plant-animal interactions, plant ecology, plant ecophysiology or ecosystem function in the context of biological threats and/or environmental change. 2. A minimum of 2 years relevant postdoctoral research experience, or equivalent.   ***Essential Criteria:***   1. Demonstrated quantitative skills investigating pattern and process in terrestrial ecosystems, including strong statistical and data analysis skills, such as point pattern analysis and/or big data analytics. 2. Demonstrated ability to secure and lead projects focused on plant ecology research, requiring demonstrated field-based and laboratory research experience in a relevant area, such as plant-animal interactions, plant ecophysiology or ecosystem function in the context of biological threats and/or environmental change. 3. Demonstrated ability and desire to conduct fieldwork across a range of terrestrial ecosystems, including in remote locations. 4. A record of science innovation and creativity, including the ability and willingness to incorporate novel ideas and lateral thinking into scientific investigations to investigate complex issues and ill-defined problems and develop appropriate solutions to research challenges. 5. **The ability to work effectively as part of a multi-disciplinary, regionally-dispersed research team, and carry out independent individual research, to achieve organisational goals.**   **Desirable Criteria:**   1. Demonstrated understanding of global environmental change impacts on plants, including landscape modification and climate change. 2. Demonstrated research experience in one or more of the following fields: invasion science, ecosystem processes, molecular biology, plant chemoecology, biogeography, invertebrate ecology, spatial modelling, theoretical or genetic approaches to understanding ecosystem function and services, or community ecology. 3. Demonstrated ability and desire to supervise students.   **To be appointable to this position you must also demonstrate the following capabilities:**   * **Communication:** Strong written and oral communication skills including the ability to publish research results, prepare reports and present the results of scientific investigations at national and international conferences and stakeholder meetings. * **Publications: A solid record of publication in high quality, peer reviewed journals.** * **Collaboration: A history of professional and respectful behaviours and attitudes in a collaborative environment.**   **CSIRO is a values based organisation. You will need to demonstrate behaviours aligned to our values of:**   * Integrity of Excellent Science * Trust & Respect * Creative Spirit * Delivering on Commitments * Health, Safety & Sustainability   **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, then responding will enhance your application so please take the time to provide relevant succinct answers. Applicants who do not provide the information when requested may not be considered.  If you experience difficulties applying online call 1300 301 509 and someone will be able to assist you. Outside business hours please email: [csiro-careers@csiro.au](mailto:csiro-careers@csiro.au).  **Referees**: If you do not already have the names and contact details of two previous supervisors or academic/ professional referees included in your resume/CV please add these before uploading your CV.  **Contact:** If after reading the selection documentation you require further information please contact:  Dr Bruce Webbervia email: [bruce.webber@csiro.au](mailto:bruce.webber@csiro.au) or phone: +61 8 9333 6802  Prof Raphael Didham via email: [raphael.didham@csiro.au](mailto:raphael.didham@csiro.au) or phone: +61 8 9333 6762  *Please do not email your application directly to Dr Webber or Prof Didham. Applications received via this method will not be considered.*  **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 Business Units:**  **CSIRO Land & Water** provides the science to underpin Australia's economic, social and environmental prosperity through stewardship of land and water resources ecosystems, and urban areas. 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. Find out more at: <http://www.csiro.au/en/Research/LWF/About>  **CSIRO Health & Biosecurity** helps to protect Australia from biosecurity threats and risks posed by serious exotic and endemic pests and pathogens. We're strengthening Australia’s biosecurity system with targeted research to tackle major pest and disease threats; quantifying the risk offshore, enhancing surveillance and detection systems and providing smart, cost effective responses to deal with exotic, emerging and established pests and diseases on shore. Find out more at: <http://www.csiro.au/en/Research/BF/About> |