# Postdoctoral Fellowship – CSOF4

Role summary for potential applicants

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| Advertised Job Title**:** | Postdoctoral Fellowship – Indonesian Through Flow |
| Reference Number**:** | 42202 |
| Classification**:** | CSOF4 |
| Salary Range: | AU $78k to AU $88k plus up to 15.4% superannuation |
| Location**:** | Hobart, TAS, Australia |
| Tenure: | Specified Term of 3 years |
| 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 |
| Functional Area**:** | Postdoctoral Research Fellow |
| % Client Focus - Internal: | 5% |
| % Client Focus - External: | 95% |
| Reports to the: | Research Team Leader |
| Number of Direct Reports: | 0 |

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| **Role Overview:** |
| This position arises from establishment of Centre for Southern Hemisphere Ocean Research (CSHOR), which is a joint initiative between the Qingdao National Laboratory for Marine Science (China), CSIRO, University of New South Wales (UNSW) and University of Tasmania (UTAS). The CSHOR objective is to increase investment in ocean-climate research in order to improve our understanding of how the southern hemisphere oceans influence global and regional climate, and how the climate influences these oceans. The position will **based in CSIRO**, to work on one of many projects funded by CSHOR, to study dynamics of ENSO and the IOD, their impacts, and their response to climate change.  **Postdoctoral Fellows** at CSIRO provide opportunities to scientists and engineers, who have completed their doctorate and have less than three years relevant postdoctoral work experience. These fellowships will help launch their careers, provide experience that will enhance their career prospects, and facilitate the recruitment and development of potential leaders for CSIRO.  Postdoctoral Fellows **are appointed for up to three years** and will work closely with a leading Research Scientist or Engineer in their respective field. They carry out innovative, impactful research of strategic importance to CSIRO with the possibility of novel and important scientific outcomes. They present the findings in appropriate publications and at conferences.  The Indonesian Through Flow (ITF) interbasin exchange project postdoctoral position is aimed at using both observations of the Indonesian Throughflow and internal Indonesian Sea and a high-resolution ocean model simulation to advance understanding of the dynamical drivers of the intraseasonal to internannual variability of the ITF. |

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| **Duties and Key Result Areas:** |
| * Under the supervision of senior research scientists, Dr Bernadette Sloyan, Dr Susan Wijffels, and Dr Maxim Nikurashin, carry out innovative, impactful research of strategic importance to CSIRO that will, where possible, lead to novel and important scientific outcomes. * Use ocean observations and high-resolution model runs to explore and understand key dynamics of the Indonesian Through Flow. * Increase knowledge of key process and dynamical understanding to explain the variability of the Indonesian Through Flow and connection between the Pacific and Indian Tropical oceans. * Produce high quality scientific papers suitable for publication in peer-reviewed journals and present your work at scientific conferences. * Adhere to the spirit and practice of CSIRO’s Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals. * Undertake an appropriate training and development program developed by CSIRO. * Other duties as directed.   ***CSIRO’s postdoctoral training program***is developed between the Postdoctoral Fellow and a CSIRO scientist. The program will focus on enhancing the Fellows’ capabilities to the level expected of an independent researcher and will include on-the-job and course-based development encompassing:   * Discipline-specific techniques and protocols * Professional growth * Project management * Communication and influencing skills * Working and collaborating with others   <http://www.csiro.au/Portals/Careers/Postdoctoral-Fellowships/Postdoctoral-Fellowships.aspx> |

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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 (or will shortly satisfy the requirements of a PhD) in a relevant discipline area, physical oceanography or climate science, with a strong background and substantial experience in the analysis of global ocean observations and/or model results.   ***Please note:*** *To be eligible for this role you must have* ***no more than 3 years*** *of relevant postdoctoral experience.*   1. **Communication: High level written and oral communication skills with the ability to represent the research team effectively internally and externally, including at national and international conferences.** 2. **Publications: A record of publication in quality, peer reviewed journals.** 3. **Behaviours:** A history of professional and respectful behaviour and attitude in a collaborative environment.   ***Essential Criteria:***   1. **Demonstrated understanding of the oceans role in climate variability and key ocean processes that impact ocean variability.** 2. **Demonstrated experience with computational and statistical methods of climate science and oceanography, in particular the ability to synthesize diverse data sets to aid interpretation and draw conclusions.** 3. **Capacity to carry out original, independent, and innovative research with a minimum of direct supervision.** 4. **Sophisticated programming skills to analyse large model data sets and compare them rigorously to observations.** 5. **High level written and oral communication skills with the ability to represent the research team effectively internally and externally, including at national and international conferences and as evidenced by a record of publications in quality, peer reviewed journals**   **Desirable Criteria:**   1. **Familiarity with setting up and running numerical ocean models.** 2. **Knowledge and past experience with observational estimates of ocean mixing, and how they are derived.**   **CSIRO Values:**  As Australia’s Innovation Catalyst, CSIRO has strategic actions underpinned by behaviours aligned to Excellent science, Inclusion, Trust & Respect, Health, Safety & Environment and Deliver on commitments.  In your application and at interview you will need to demonstrate alignment with these behaviours.  **Eligibility:**  To be appointed as a Postdoctoral Fellow within CSIRO, candidates are required to have **submitted** their PhD at the time of commencement, as a minimum requirement, if PhD conferment has not been obtained. If a candidate has submitted, but their PhD has not yet been formally attained, the starting salary will be CSOF4-1 *($78,479)*. Upon CSIRO receiving written confirmation that the PhD has been awarded (within a six month period from commencement date), the salary will be increased to the negotiated level and the difference will be back-paid to the Officer’s start date.  ***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*](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 Wenju Caivia email: Wenju.Cai@csiro.au or phone: +61 3 9239 4419  Please do not email your application directly to Dr Cai. 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 Oceans and Atmosphere Flagship**  CSIRO’s Ocean and Atmosphere Flagship is uniquely placed to deliver significant economic, social and environmental benefits for Australia and the region. We seek to secure Australia’s future through our seas and skies.  **What CSIRO offers you**  Together the CSIRO Ocean and Climate Dynamics program and the University of Tasmania’s Institute of Marine and Antarctic Studies comprises the largest co-located team of bluewater and climate oceanographers in Australia. This team, including 2 CSIRO Fellows, and 3 IPCC coordinating lead authors, is renowned for sea level and ocean change research. You will benefit from direct access to this broad expertise reaching across observations through to climate modelling. In addition there is a large peer group of Ph. D. students and postdoctoral researchers to enrich you experience, including interactions with the large body of researchers contributing to the Australian Research Council’s Climate System Science Centre of Excellence. The CSIRO/IMAS team has extensive international collaborations that you can build on. We routinely organize and participate in numerous international workshops and symposia, and host many international visitors. In addition, there will be opportunity for you to participate in field work, gaining precious insight into deep ocean data collection. In our work we will target publication in high impact journals, for which we have an excellent success rate. The team has a high diversity across gender and race, and supports a flexible family-friendly workplace.  Hobart is a small and sophisticated city flanked on the west by pristine wilderness areas. It has a vibrant arts and music scene. There are many high quality schools located in the city, and quality day-care facilities close to our CSIRO site, which is located on the downtown waterfront. |