

Research Associate/Research Fellow in Remote Sensing Faculty of Science/Climate Change Cluster

About the role

This role presents a fantastic opportunity for an early career researcher to join a well-established and high performing team of multidisciplinary researchers. Day to day you will be tasked with undertaking research to integrate remote sensing data from satellite sensors and ground instrumentation to conduct multidisciplinary research linking highly dynamic terrestrial- aquatic-human processes; assessing their interactions, changing states and health; and sustainability in a rapidly changing world.

Reporting in to the Group Leader of the <u>Ecosystem Dynamics</u>, <u>Health and Resilience</u> group, <u>Professor Alfredo Huete</u>, you will utilise your expertise in ground based instrumentation to complement and downscale satellite data for advance geophysical parameter retrievals and to better understand spatial and temporal processes and mechanisms and their impact on the ecological resilience of terrestrial, aquatic, coastal and urban (coastal) environments. The core skill of the incumbent will be to analyse remote sensing information (optical, thermal, fluorescence, LiDAR) in the context of terrestrial-aquatic-air monitoring and interactions.

About the Institute

Since its inception in 2008, the <u>Climate Change Cluster (C3)</u> at the University of Technology Sydney has been delivering on its strategic plan to build momentum, increase impact and be recognised internationally for its research excellence.

The institute has quadrupled in size since 2008 and has expanded its research capability from ecology to include additional expertise in plant physiology, microbiology, cellular biology, microfluidics, biochemistry, molecular biology (genomics, proteomics, metabolomics), physics (biooptics), ecological modelling, chemistry, bio-informatics and remote sensing.

As the successful candidate you will have:

- a PhD in a relevant field such as remote sensing, spatial ecology, climate, or an interdisciplinary combination of these
- detailed knowledge of multi-observational optical/ thermal/ fluorescence remote sensing and associated analytical techniques, including radiative transfer modelling, bio-optical algorithm development, air quality remote sensing and integration with data from in situ environmental sensors for validation, extrapolation and upscaling, and for understanding

INTERNAL USE

mechanisms

- knowledge of quality control, data analyses, and standardization of satellite time series data streams
- a broad understanding of the terrestrial, air, and aquatic environments; their interface and interactions including a strong working knowledge of terrestrial, ocean, and coastal remote sensing products
- familiarity with image processing software (ENVI, ERDAS, ArcGIS, QGIS, etc) and ability to code (C++, R, Python)
- an excellent conceptual knowledge and hands-on experience of satellite remote sensing and field and lab instrumentation
- extensive experience in analysis and integration of remote sensing data for detecting, quantifying and assessing environmental change processes
- demonstrated experience working in a multi-disciplinary research environment, including work with ecologists and resource managers on global environmental, sustainability, and societal issues.

Remuneration

Base Salary Range: \$72,916 to \$110,988 pa Level A/B

The university offers 17% superannuation. Employee benefits include flexible work practices, child care centres, generous parental leave and salary packaging opportunities.

This appointment will be on a fixed-term, full-time basis for three years.

How To Apply

Please click on the link below to be taken to the advertisement on our careers page where you will find links with instructions on how to apply and the full position description.

https://recruitment.uts.edu.au:443/OA HTML/OA.jsp?OAFunc=IRC VIS VAC DISPLAY&p svid=83 387&p spid=2464459

Specific enquiries or issues with your application may be directed to the UTS Recruitment Team at recruitment@uts.edu.au or on +61 (0) 2 9514 1080.

Specific enquiries on the role may be directed to Professor Alfredo Huete via email at alfredo.huete@uts.edu.au

Closing Date: 16 August 2016 11.59pm (AEST)