

Postdoctoral Research Fellow in Electrical Power Engineering

College/Division	College of Sciences and Engineering
School/Section	School of Engineering
Location	Hobart
Classification	Academic Level B
Reporting line	Director of the Centre for Renewable Energy and Power Systems

Position Summary

The University of Tasmania is building a vision of a place-based University with a mission to enhance the intellectual, economic, social and culture future of Tasmania, and from Tasmania, contribute to the world in areas of distinctive advantage. The University recognises that achieving this vision is dependent on the people we employ as well as creating a people-centred University that is values-based, relational, diverse, and development-focused.

We are seeking to appoint a Postdoctoral Research Fellow in Electrical Power Engineering in the [School of Engineering](#) in the [the College of Science and Engineering](#) .

The purpose of the position is to provide technical contributions to the Australian Research Council (ARC) Industrial Transformation Training Centre in Energy Technologies for Future Grids (ARC Future Grids ITTC) and the Centre for Renewable Energy and Power Systems (CREPS) through power and energy engineering research and development (R&D) activities in the area of **Electrical Power Engineering**.

The School of Engineering , through the Centre for Renewable Energy and Power Systems, has energy and power systems as a major element of its research strategy. The Centre is leading the ARC-Linkage, ONRG and Blue Economy CRC funded research projects related to isolated and remote power systems with high renewable energy penetration. These projects require a motivated and appropriately qualified researcher to contribute significantly to the research output and knowledge sharing objectives of the projects.

The ARC Future Grids ITTC is a 5 year, \$10m research and training program, bringing together 6 Universities and 15 industry partners across five Australian states to deliver innovative research that will advance Australia's transition to a clean energy future. The Centre will deliver the next generation of industry leaders and specialists in future grid technologies for renewable energy generation, transmission, and distribution.

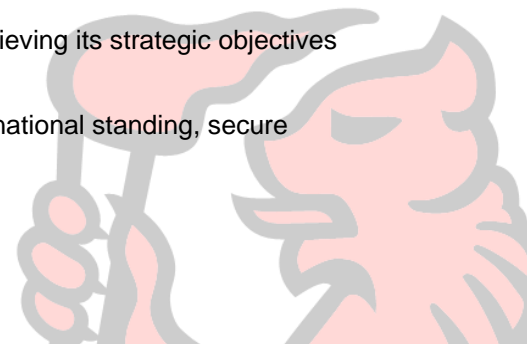
The candidate is expected to have a strong power engineering focus and will be involved in a high level of R&D activities in the fields of power system modelling and analysis. The candidate will work closely with industry partners and interact with PhD students, Chief Investigators, and Partner Investigators of the ARC Future Grids ITTC.

The Research Fellow will carry out appropriate research to the level of his/her appointment under the direction and guidance of the Director of CREPS.

We are an inclusive workplace committed to 'working from the strength that diversity brings' reflected in our Statement of Values. We are dedicated to attracting, retaining and developing our people and are committed to inclusive principles. We celebrate the range of diverse assets that gender identity, ethnicity, sexual orientation, disability, age and life course bring. Applications are encouraged from all sectors of the community. Tell us how we can make this job work for you.

What You'll Do

- Make an effective and sustained contribution to the University in achieving its strategic objectives and fulfilling its operational responsibilities.
- Undertake high-quality research of national and increasingly of international standing, secure



external competitive and other funding, publish research findings and contribute to the successful supervision of research higher degree students, in order to meet and regularly exceed the University's research performance expectations for Level B.

- Contribute to the development and maintenance of productive and effective links inside the University and locally and nationally with the discipline, relevant interdisciplinary domains, profession, industry and/or wider community
- Contribute effectively to the success of research programs run under the ARC Future Grids ITTC and CREPS, including liaising with industry partners, coordinating activities as part of the Training Centre, and communicating outcomes of the research activities to relevant industry stakeholders.
- Undertake other duties as assigned by the supervisor, Professor Michael Negnevitsky. This will include design and implementation of teaching and research facilities within the Centre for Renewable Energy and Power Systems Laboratories.

What We're Looking For (success criteria)

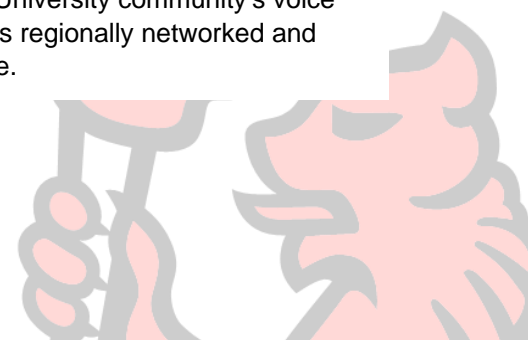
- A PhD or equivalent in Electrical Engineering with specialisation in Electrical Power Systems and/or Control Engineering.
- A good record of, and continuing commitment to, research that has achieved national recognition and made worthwhile contributions to the field of electrical power and renewable energy, demonstrated by a record of quality publications, presentations at conferences and preferably success in securing external competitive and other funding.
- Experience in University-level teaching and learning.
- A record of contributing to building and maintaining effective and productive links locally and nationally with the discipline, profession, industry and wider community.

Other position requirements

- Industry/professional experience relevant to the position.
- Demonstrated knowledge of major generation technologies and control systems including laboratory prototype development.
- Demonstrated understanding of control and protection principles, power converter control, modelling and control of grid-connected renewables and storage systems.
- Experience in the development of dynamic models of the electrical and mechanical systems for pumped storage.
- Practical knowledge in using PSS/E and/or PSCAD and/or DigSilent Power Factory.
- Experience in using real-time simulation technologies such as OPAL-RT.
- An ability to represent the University, School, CREPS and ARC Future Grids ITTC. in the public arena.

University of Tasmania

The University of Tasmania is an institution with an enduring commitment to our state and community, and a strong global outlook. We are committed to enhancing the intellectual, economic, social and cultural future of Tasmania. Our [Strategic Direction](#) strongly reflects the University community's voice that our University must be place based but globally connected as well as regionally networked and designed to deliver quality access to higher education for the whole State.



We believe that from our unique position here in Tasmania we can impact the world through the contributions of our staff, students and graduates. We recognise that achieving this vision is dependent on the people we employ, as well as creating a university that is values-based, relational, diverse, and development-focused.

Check out more here:

<https://www.utas.edu.au/jobs>

<https://www.utas.edu.au/careers/our-people-values-and-behaviours>

The intention of this position description is to highlight the most important aspects, rather than to limit the scope or accountabilities of this role. Duties above may be altered in accordance with the changing requirements of the position.

