The School of Civil Engineering at The University of Queensland (Brisbane, Australia) is offering a PhD scholarships for a motivated students to contribute to research being undertaken within the Environmental Research Group related to the ARENA funded project “Tidal Energy in Australia – Assessing Resource and Feasibility to Australia’s Future Energy Mix”.

Potential students with an interest in tidal renewable energy site exploration are strongly encouraged to apply. The scholarships will be for three (3) years and valued at $26,682AUD per year. Top-up scholarships and international student fee-waivers are also available to exceptional candidates and/or through ARENA funding.

The role

The University of Queensland is involved in a three-year project funded by the Australian Renewable Energy Agency (ARENA) under the Advancing Renewable Programme titled Tidal Energy in Australia – Assessing Resource and Feasibility to Australia’s Future Energy Mix. This project is in collaboration with CSIRO and under the leadership of the Australian Maritime College (University of Tasmania) and further supported by industry partners and international research organisations in the UK and Canada.

This project will aim to map Australia’s tidal energy potential in unprecedented detail and assess the feasibility for it to contribute to Australia’s energy needs, aiding the emerging tidal energy industry to develop commercial-scale tidal energy projects. These objectives will be undertake in three components:

- Component 1 will deliver a National Australian high-resolution tidal resource assessment, which will feed into the Australian Renewable Energy Mapping Infrastructure (AREMI) online atlas;
- Component 2 comprises of focussed case studies involving field-based campaigns and high-resolution numerical site assessments at two locations: Eastern Bass Strait Tasmania and one to be decided from project outcomes;
- Component 3 will deliver a technological and economic feasibility assessment for tidal energy integration into Australia’s energy infrastructure, including examination of issues such as grid integration, competitiveness, intermittency and farm design.

There is a PhD position open to undertake research at the University of Queensland related to component 2 of this project, e.g. tidal energy site characterisation, research and development.

The person

Expression of Interest are invited from outstanding and enthusiastic engineering or science graduates

The following eligibility criteria apply to this scholarship:

- The scholarship is open to domestic (Australian and New Zealand) and international candidates;
- The Research Higher Degree must be undertaken on a full-time basis;
- Applicants must already have been awarded a First Class Honours degree or hold equivalent qualifications or relevant and substantial research experience in an appropriate sector;
- Applicants must be able to demonstrate strong research and analytical skills.
Candidates from a variety of disciplinary backgrounds are encouraged to apply, including fields such as maritime, coastal, and environmental engineering, marine and applied science (and/or relevant experience). Knowledge and skills that will be ranked highly include:

- Experience with marine instrumentation (including deployment, analysis of data)
- Experience in hydrodynamics and/or coastal processes
- Research experience related to tidal energy devices
- Expertise in tidal energy resource assessments
- GIS, Statistics, Environmental studies
- Strong communication and team-working skills
- Experience in seafloor mapping and/or geotechnical analysis desirable

Applicants must fulfil the PhD admission criteria for the University of Queensland, including English Language requirements and demonstrated excellent capacity and potential for research. Demonstration of research ability through publication output in peer reviewed international journals is desirable. Entry requirements can be found at https://graduate-school.uq.edu.au/uq-research-degrees.

Remuneration

This PhD scholarship is jointly funded by the University of Queensland and by ARENA. An additional top-up scholarship (living allowance) to the amount of $5000 per year (3 years only) will be considered for elite applicants.

The current RTP Stipend rate is AUD$26,682.00 per annum (2017 rate, indexed annually) tax-free for three years with the possibility of two 6-month extensions in approved circumstances. For further information on scholarships please refer to: https://graduate-school.uq.edu.au/scholarships

Enquiries

Enquiries related to this position should be directed to Dr Remo Cossu via email r.cossu@uq.edu.au or Dr Alistair Grinham a.grinham@uq.edu.au

To submit an application for this role, please complete an application to the PhD program online here: https://apply.uq.edu.au/. Please list Dr Remo Cossu as the supervisor and tidal energy site characterisation as the Scholarship being applied for. All applicants will be required to supply the following documents:

- A cover letter that addresses you meet the requirements for the PhD program;
- A curriculum vitae detailing education, professional experience, research experience, publications, and relevant competencies;
- Academic transcript for all post-secondary study undertaken, complete or incomplete, including the institution grading scale;
- Award certificates for all completed post-secondary study
- Evidence for meeting UQ’s English language proficiency requirements; and
- The name and contact details of three referees who can best comment on your prior research experience. UQ will contact your referees directly, but you will need to enter their details into the application form.

Please note the different closing dates below for international and domestic applicants.

Expression of Interest and Application Closing Dates

International Candidates: 2 October 2017 – for commencement in Research Quarter 1 (January) 2018.

www.civil.uq.edu.au