

PhD Scholarship – Effects of organic enrichment on animal mediated sediment–seawater solute exchange

Closing Date: Open until position filled

PURPOSE

The Department of Environmental Science, Auckland University of Technology, New Zealand, seeks self-motivated and independently working applicants for a 3.5-year PhD position contributing to a [Blue Economy CRC](#) initiative that develops tools for the measurement of the depositional foot print of offshore aquaculture (Environment and Ecosystems Program: [Project 4.20.004](#)).

BACKGROUND

A fundamental assumption used to argue for the expansion of fish farms into offshore waters is that operating in deeper and more dynamic waters will increase the horizontal dispersion of organic farm wastes and so reduce the impacts on seafloor ecosystem functions. The social license for such expansion, however, will rely on our ability to quantify this advantage. It is anticipated that farm waste released in deep offshore waters will create a larger, more persistent but less intense footprint in the ecosystem than in shallow coastal waters. Depending on the properties of the receiving seafloor ecosystem, the deposition of fish waste may alter the structure and function of the benthic faunal communities, in particular, their influence on the sediment–seawater solute exchange—a process that couples benthic with pelagic ecosystem functions.

The PhD student will conduct a series of laboratory experiments to study the influence of the benthic invertebrate community on the sediment–seawater exchange of dissolved nitrogen and phosphorus as a function of organic enrichment. You will have a university degree (Master/Diploma) in Marine Ecology, Biological Oceanography, Aquatic Microbiology or related fields. We welcome experience in the taxonomic identification of benthic invertebrates and knowledge in sediment biogeochemistry. The ideal candidate features excellent communication skills, proficiency in scientific writing, and a high degree of independence. The successful candidate will join an international project team, led by Associate Professor Kay C. Vopel, including researchers from CSIRO, University of Tasmania, and Griffith University.

AMOUNT AND TYPE OF AWARD

Annual stipend. The scholarship does not include tuition fees.

TENURE

Three and a half years (42 months) subject to satisfactory progress.

GENERAL ELIGIBILITY CRITERIA

- Good communication skills in written and spoken English is essential.
- The successful candidate will demonstrate enthusiasm and have an outstanding academic record and be prepared to conduct the doctoral study at Auckland University of Technology in Auckland, New Zealand.

- Preference will be given to NZ Citizens, NZ Permanent Residents, or international students currently onshore in New Zealand.
- Commitment to enrolment in a PhD programme at AUT. Applying for a scholarship and admission into AUT are separate processes at AUT. Applicants must fulfil all conditions for admission to the Doctoral Programme in AUT. These can be found on the AUT website <https://www.aut.ac.nz/courses/doctor-of-philosophy>.
- Meet the requirements for the Doctoral programme. Requirements for entry include having completed the required academic qualifications for direct entry and meeting the requirements for English language proficiency. Minimum English language requirement for international applicants – IELTS scores of 6.5 overall with 7 in writing and all other bands 6.0 or higher. A high proficiency in English is essential.

PHD ELIGIBILITY CRITERIA

- Applicants must meet the admission criteria for a doctoral programme at AUT, for example a relevant master's degree and have completed the application for admission process as outlined below.
- Eligibility criteria for [doctoral programmes](#).

APPLICATION REQUIREMENTS

Applicants must apply by email to Associate Professor Kay C. Vopel (kay.vopel@aut.ac.nz) attaching:

- Curriculum vitae, including the contact details of two referees.
- Degree certificates and grades confirming that the applicant meets the entry requirements into the Doctor of Philosophy program.
- One scientific text in English written by the candidate (e.g., Master thesis, a paper currently in draft, or a publication in a scientific journal).

SELECTION PROCESS

Selection will be based on demonstrated strength in the following:

- the applicant's academic record.
- past research experience and publication record (if appropriate) relevant to this project.
- the referees' statements.

Shortlisted applicants will be invited to write a 2-page research proposal and a remote interview.

The Selection panel's decision will be final; if suitable applicants are not available the panel will not award the scholarship. The position may then be re-advertised.

CONDITIONS OF ACCEPTANCE AND APPOINTMENT

- The stipend cannot be released until the successful applicant is enrolled in the PhD programme at AUT.
- The successful applicant must after acceptance of the scholarship, expeditiously complete AUT enrolment in the Doctor of Philosophy and obtaining a student visa (if required). The scholarship must be taken up no later than one month from the offer of scholarship.
- The successful applicant must be prepared to commit full-time to their programme of research (for the purpose of this award full-time is 35 hours per week).
- The successful applicant will be required to sign an AUT Research Scholarship Contract.
- This scholarship may not be held in conjunction with any other scholarship without the approval of the selection panel and the Scholarships Office.
- Recipients must be resident in New Zealand to receive stipend payments. Stipends will not be paid to students living offshore. Reasonable annual holiday leave overseas of no more than four weeks is acceptable.
- Scholarship payments will not be made retrospectively.
- Recipients will not normally be approved to hold employment for more than 15 hours per week and will be expected to declare their employment. The discretion regarding whether permission is granted for the Scholar to undertake paid employment, is at the sole discretion of the University, via application through the Head of the Scholarships Office.
- The scholarship cannot be deferred.
- Recipients must be enrolled continuously in their programme of study. Suspensions or Leave of Absence for students who have already commenced their programme will not normally be approved unless there are compelling medical or personal circumstances beyond the student's control.
- Scholarship deferral and suspension requests must be made in writing to the Scholarships Office.
- The scholar must move from provisional to full registration (PGR9) within the timeframe outlined in the AUT Postgraduate Handbook.
- The University Scholarships Committee may at any time suspend or terminate the Scholarship if it determines the Scholar is not diligently pursuing the programme or making satisfactory progress or has failed to comply with any of the terms and conditions on which the Scholarship was awarded.