

Information Sheet

PhD Stipends in Marine Bioacoustics at CMST - Curtin MAURITIUS

The Centre for Marine Science and Technology at Curtin University has 4 PhD scholarships on offer in marine bioacoustics.

Project:

These scholarships are part of a 4-year research project entitled “The Quieter Western Indian Ocean” (QWIO), funded by the Fonds Français pour l'Environnement Mondial (FFEM). The project is a partnership of the Wildlife Conservation Society (WCS), the African Aquatic Conservation Fund, Curtin University, Globice, Quiet Oceans, and others. The aims of the QWIO project are two-fold: 1) to study and assess underwater noise from shipping and maritime services and its potential effects on targeted species among large cetaceans (baleen whales and sperm whales), sharks, and sea turtles in the South-Western Indian Ocean, and 2) in consultation with regional governments, ship owners, ports and relevant international authorities, to identify and initiate concrete and practical measures to reduce the risks of noise impacts and collisions.

The 4 PhD theses will comprise (depending on student interest and skills) any of the following: underwater ship noise (measurement, modelling, mapping, management, minimisation, mitigation), marine soundscapes (characterisation, quantification, sources, sound budgets, geographic and temporal variability, trends, modelling, prediction), and large whale bioacoustics (species diversity, vocal behaviour of humpback whales, blue whales, and/or sperm whales, passive acoustic monitoring, sound production, song structure, song variability, dialects, spatial and temporal distribution, migration, relative abundance, acoustic ecology, risk of ship strike, effects of noise). The intention is to fill two of the four PhD stipends with a project focused more on physical acoustics and ocean noise/soundscapes, and the other two focused more on organismal biology and bioacoustics, looking at the possible impacts of noise on species ecology. The composition of the above topics in the theses will therefore vary among the students. There will be the need to fulfil specific QWIO objectives during the course of the PhD program (as guided by the supervisors), but the theses will not necessarily be restricted to those objectives.

Location:

Students will be enrolled at Curtin University Australia. However, they will be based at Curtin Mauritius (Moka, Mauritius). Opportunities for fieldwork exist from Mauritius, to Reunion, Madagascar, and eastern Africa.

Supervision:

Students will be supervised by Prof Christine Erbe (Centre for Marine Science and Technology, Curtin University), Dr Salvatore Cerchio (African Aquatic Conservation Fund), Dr Violaine Dulau (Globice), and Tim Collins (WCS)—depending on the PhD topics.

Scholarships:

Each scholarship includes a tuition fee scholarship for 3.5 years and an annual living cost stipend of EUR 9,000, for 3.5 years.

Eligibility:

As a preference of the funder, students would ideally be citizens of one of the Nairobi Convention signatory states: Comoros, France, Kenya, Madagascar, the Republic of Mauritius, Mozambique, Seychelles, Somalia, Tanzania, or the Republic of South Africa. However, applicants from the broader Indian Ocean will be considered.

Students must obtain a student visa for Mauritius.

Essential Criteria:

- Given the focus on underwater acoustics and bioacoustics, and depending on the chosen thesis project, students would ideally have a degree (Honours or Masters) in Physics, Engineering, Computer Science, Data Science, or a related field, or a degree in Biological Sciences with experience in Organismal Biology, Bioacoustics, Acoustic Ecology, or a related field. Students with experience in both disciplines may be strongly favoured.
- Strong command of English is required. Students will have to pass an IELTS prior to enrolment, with a minimum grade of 6.5 overall and a minimum of 6 for any of its components (i.e., speaking, writing, reading, and listening).
- Experience programming in MATLAB or R.

Desirable Criteria:

- Prior experience in acoustics, marine science and offshore fieldwork is valuable.

How to apply:

Please email your expression of interest, including CV, summary of research skills and experience, reason you are interested in this project, and choice (focus) of project (e.g., ship noise, soundscape, ecology) to Christine Erbe: info@cmst.curtin.edu.au, subject: QWIO Scholarship.

Dates: Applications close 31 January 2023. Theses would ideally commence by April 2023.