Call for two PhD Scholarships on marine coastal ecosystem restoration (seagrasses and coral reefs) and integrated environmental assessment of the hazardous substances (HS) and their effects in marine coastal ecosystems as part of the Building Stronger Universities Project (BSU-IV) at the State University of Zanzibar.

Project Outline

The Danish Ministry of Foreign Affairs has granted full support to the fourth phase of the Building Stronger Universities project (**BSU-IV**) at the State University of Zanzibar (SUZA). The project is a partnership between SUZA and a consortium of Danish Universities led by University of Copenhagen. The aim of BSUIV is to strengthen SUZA's capacity to co-create and conduct participatory intervention studies that can identify effective and context-specific solutions to societal challenges of Zanzibar within environmental public health (EPH) and marine ecosystems health (MACES). The support includes funding for a total of five PhD Scholarships with a focus on participatory school/community-based mosquito control interventions (2 positions), participatory approaches to marine ecosystem restoration and marine pollution assessment (2 positions), and application of educational technologies in research-based teaching and learning (1 position). Successful candidates will be offered a full-time academic position at SUZA following completion of the PhD.

PhD Research

In this call, we offer two PhD positions: -

1. **Marine coastal ecosystem restoration (seagrasses and coral reefs)** The PhD position will focus on a) assessing the need for restoration; b) identifying suitable areas for restoration c) testing different restoration approaches and d) documenting and quantifying the success of restoration efforts. The PhD student will combine field studies of water quality with drone and underwater video-based mapping of habitats before and after restoration. Screening for suitable restoration areas will include GIS modelling and test plantations. Different restoration techniques will be investigated, and the project will include collaboration with local communities and stakeholders. The outcomes of this PhD project will be a recommendation of optimal marine restoration efforts and an assessment of their suitability for restoration of degraded marine coastal ecosystems around Zanzibar.

2. **Integrated Environmental Assessment of pollution using bioindicators, with the focus on oil pollution**. This PhD position is focused on integrated environmental assessment of the hazardous substances (HS) and their effects in marine coastal ecosystems with the focus on bioindicators of oil pollution. This PhD project will apply a combination of chemical measurements and biological effect measurements in different environmental matrices, e.g. biota, sediments and water. The data will be analyzed within the frame of integrated environmental assessment approach. This approach will be covering effects on different levels of biological organization using the coastal biota as bioindicators of pollution pressure in marine ecosystem. The outcomes of this PhD project will be a solid basis for creating an integrated environmental assessment of HS and their effects, specifically oil pollution, which can be used by national authorities to manage decisions for environmental protection, monitoring, and mitigation strategies.

Eligibility criteria

- Candidates must be citizens of Tanzania not exceeding 40 years of age at the time of application.
- Candidates are required to hold a relevant Master of Science degree within the field of natural or social a minimum GPA of 3.5.
- Candidates are expected to have essential skills in laboratory analysis.
- Candidates are expected to be able conduct field studies, laboratory analysis of field samples, and have a solid experience in biological methods in the laboratory and chemical analytical techniques in addition to experience with data analysis.
- Experience within marine ecosystems for Marine Ecosystems research for PhD position in seagrass restoration is a merit.
- Experience and previous skills on working on studies on marine pollution for bioindicator PhD position is considered a merit.
- Willingness to commit **full-time** effort to the PhD program is a requirement, including staying in Zanzibar for the study period.
- Willingness to work in a multi-disciplinary and multicultural team is a requirement.
- Experience from an international research environment is considered an advantage.
- Candidates must have strong communication skills in English, both oral and written.

- Author or co-authorship on publications related to the relevant research theme is considered an advantage.
- Successful candidates will be offered a full-time position as academic staff at SUZA following completion of the PhD.
- Female candidates are encouraged to apply.

PhD enrolment, duration, supervision, and evaluation

Successful candidates will be enrolled at an institution recognized by the Tanzania Commission for Universities (TCU) within Tanzania or alternatively, the African region. The PhD program is scheduled to commence during the academic year of 2023/24. The duration of the PhD scholarship is full-time for three (3) to four (4) years, subject to the requirement of the enrolling university. The PhD supervision will be a joint effort between faculty at the University of enrolment, SUZA, and Aarhus University (AU). Evaluation of the progress of the PhD activities will be done according to current regulations at the University of enrolment.

PhD scholarships

Available funding for each scholarship covers the following:

- Monthly stipend aligned with local tariffs.
- Tuition fees, publication fees and dissertation costs.
- Conference participation (w. oral/poster presentation).
- Air tickets, visa and other travel costs related to the PhD project.
- Overseas travel allowance, as may be deemed appropriate.

Application procedure

Applications must include the following documents:

- Cover letter describing your research interests and motivation for applying for the PhD position (max. 1 page)
- Concept note addressing the subject of the PhD call (max. 2 pages, excluding references)
- Recent CV including brief educational background, previous and/or current employer(s) and position(s) held, as well as a list of peer reviewed publications - if any (max. 2 pages)
- Copies of academic transcripts and relevant certificates issued by accredited educational institutions and authenticated by credible educational bodies.
- Letters of recommendation from two academic referees including phone numbers and e-mail addresses

All application documents must be submitted electronically to project leads Dr. Idrissa Hamad (idrissa.hamad@suza.ac.tz) and Prof. Peter Staehr (pst@ecos.au.dk) with cc. to SUZA Vice Chancellor (vc@suza.ac.tz), and Director of Research and Postgraduate Studies, Dr. Abdalla Sendaro (abdallahally@suza.ac.tz).

Application deadline

The closing date for this call is **29.09.2023.** Applications received later than this date will not be considered.

Selection interview

Please note that all shortlisted candidates are required to attend a selection interview and to give a 10 min. presentation of their concept notes as part of this interview. If necessary, the interview may be conducted online via Zoom, Microsoft Teams, or Skype. The date of the interview will be communicated within three (3) weeks of the application deadline. The final selection of the candidate will be determined by the interview committee and communicated to candidates directly via email. Only shortlisted applicants will be contacted.