



Research Assistant – Development of Soil-Fibre Fabric for Buildings in Mauritius (F/T)

Applications are invited from suitably qualified candidates for one (1) **Research Assistant (Full-Time)**, to work on the research project entitled “**Development of locally-adapted soil-fibre fabric for energy efficiency and thermal comfort enhancement in Mauritius**”, for a contractual period of 6 months.

The research assistant will carry out experimental works and simulation analyses to develop and test the performance of soil-fibre building fabric to improve energy efficiency and thermal comfort in Mauritius.

Qualifications Required:

- A first degree in Mechanical Engineering/Mechatronics Engineering/Chemical Engineering/Civil Engineering/Physics/ Mathematics or any related degree to the field of the research project of at least Second Class Upper Division (2-1).

Desired Background

- Candidates with postgraduate degree and/or project/research experience in natural fibre technology, building energy and dynamic simulations and thermal engineering are encouraged to apply.

Profile

Candidates must have:

- Good research, analytical and communication skills.
- Knowledge of programming and dynamic simulations.
- Knowledge of sensors and instrumentation as part of field works.
- Knowledge of data analysis and interpretation techniques.
- Good interpersonal skills and ability to work in a team.
- Willingness to acquire further knowledge/skills in current areas of competencies as well as to learn new concepts outside current areas of competencies.

Responsibilities & Duties

- Carry out literature review in the related field of research;
- Perform field works and installation of instrumentation, including construction of the test cells for the experimental set-up;
- Perform experimental work, data collection and conduct different tests as per relevant standards;
- Devise a detailed research proposal under the guidance of the project collaborators;
- Work on journal publications over the course of the project;

- Present the research findings at conferences and workshops as deemed appropriate by the research team members;
- Develop thermal models and establish design specifications for the targeted soil-fibre fabric;
- Report to the Principal Investigator and project collaborators;
- Assist in report writing and presentation of results obtained.

Remuneration

A monthly all-inclusive allowance of **Rs 27,400/-**, plus travelling expenses by bus.

Duration of Contract

Appointment will be offered for an initial contractual period of **6 months**. The proposed starting date is 06 January 2025.

Mode of Application

Applicants should send their applications by email to Assoc Prof Dr Mahendra Gooroochurn (m.gooroochurn@uom.ac.mu) and copied to the Dean of the Faculty of Engineering (deanfeng@uom.ac.mu) including a cover letter, a detailed *Curriculum Vitae* and photocopies of qualifications, birth certificate, marriage certificate (if applicable), testimonials and equivalence of qualifications (where applicable) by **Tuesday 10 December 2024, at latest**. The email should have the subject **“Research Assistant – Soil-Fibre Fabric”**.

Applications received after the closing date will not be considered.

The University reserves the right:

- to call for interview only the most appropriately and best qualified applicants.
- not to make any appointment as a result of this advertisement.

Date: 26 November 2024

Dean, Faculty of Engineering