



# UNIVERSITY OF MAURITIUS

## VACANCY

Applications are invited from suitably qualified candidates (Mauritian residents) for the post of **Research Assistant** (Full-Time), to work within the Pole of Natural Fibres & Bio Composites at the Faculty of Engineering under a project entitled “**Enhancing livelihood of vulnerable groups through circular economy and development of green products as replacement of single-use plastics**”, for an initial contractual period of six (6) months, renewable under mutual agreement. This project is fully funded by the Global Environment Facility/Small Grants Programme (“GEF SGP”), implemented by United Nations Development Programme (UNDP) on behalf of the GEF Partnership and executed by UNOPS.

### Qualifications Required:

- BSc (Hons) Microbiology, or BSc (Hons) Applied Biochemistry, or BSc (Hons) Biotechnology, or BSc (Hons) Chemistry, or BEng (Hons) Chemical Engineering (Minors: Energy or Environmental Engineering), or BEng (Hons) Mechanical Engineering or BEng (Hons) Mechatronics Engineering.
- Good knowledge of chemistry (the candidate has to possess **at least grade B** in Chemistry as Main/Principal subject at HSC/‘A’ level).

### Profile:

Candidates must have:

- Good communication skills including report writing.
- Knowledge of basic statistics and statistical analysis of experimental data.
- Relevant knowledge of cost analysis.
- Good interpersonal skills and ability to work in a team.
- Ability to work within agreed timelines and to communicate clearly and effectively.
- Willingness to acquire further knowledge/skills in current areas of competencies as well as to learn new concepts outside current areas of competencies.

### Main Responsibilities & Duties:

- Organise and participate in consultative meetings & focus group discussions in order to identify the needs for specific green functional products which would need to be developed in replacement of current petroleum based plastics as well as the international norms and standards which would need to be adhered to.
- Assist in the preparation of relevant materials for presentations on the business opportunities of using natural fibres for product design and development.
- Organise & participate in a number of formal meetings/short seminars with different target groups for sensitisation about the potential of natural plant fibres.
- Identify the pre-processing and eco-friendly pulp treatments required to transform banana fibres into a range of green functional products.

- Perform relevant main duties (such as collection of banana agro-wastes from fields, fibre extraction, chemical & other treatments, Mechanical Engg testing, etc.).
- Design, conduct and run experimental work to process banana fibres, and to manufacture prototypes of different green functional products.
- Assist in the preparation of training materials (handouts, powerpoint presentations and video recording).
- Assist in the preparation of the contents for the e-portal.
- Preparation of a progress report as well as the final report.
- Assist in the presentation of results obtained.
- Attend seminars and workshops as deemed appropriate by the research team.
- Any other cognate duties as defined by the Principal Investigator.

**Remuneration:**

A monthly basic salary of Rs 27,400/-, plus travelling expenses, based on bus fares.

**Duration of Contract:**

Appointment will be offered for an initial contractual period of six (6) months, renewable under mutual agreement. The proposed starting date will be 1<sup>st</sup> March 2023.

**Mode of Application:**

Letter of application together with a detailed Curriculum Vitae and scanned copies of qualifications, birth certificate, testimonials and equivalence of qualifications (where applicable) should reach the Dean of the Faculty of Engineering on the email address deanfeng@uom.ac.mu (Attention: Associate Professor H Ramasawmy) and copied to haree@uom.ac.mu by 10<sup>th</sup> February 2023, at latest. The subject of the e-mail should be clearly marked “**Enhancing livelihood of vulnerable groups through circular economy and development of green products as replacement of single-use plastics**”.

Applications received after the closing date will not be considered.

The University of Mauritius 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.
- to conduct a written/aptitude test as and when required.

19 January 2023

Dean of Faculty of Engineering