



Research Assistant -“Risk Management Framework for Improving Solar Photovoltaic System Bankability in Mauritius” (Full-Time)

Applications are invited from suitably qualified candidates for the post of **Research Assistant (Full-Time)** to work on a Higher Education Commission (HEC) funded project entitled: “Risk Management Framework for Improving Solar Photovoltaic System Bankability in Mauritius”.

The project aims at developing a holistic risk management framework for improving solar photovoltaic (PV) bankability in Mauritius. It will allow a thorough investigation of inherent risks in all phases of a PV project cycle and will explore a multitude of relevant PV business models. This project will serve as a reference for all stakeholders and help in identifying and mitigating risks, improving technical reliability and soundness of PV projects, assessing the impact of risks on life cycle cost of PV systems, electricity generation, levelised cost of electricity (LCOE) and hence assess the risks associated with business models. The results will help in the mitigation of risks in existing and new projects as well in the development of new types of business models.

The selected Research Assistant will work on the development of a comprehensive database of PV systems, their technical and financial details, site and weather characteristics and risks associated in the life cycle of the projects.

The research assistant is expected to:

- Perform a literature review.
- Assess the current status of PV development in Mauritius with respect to system types and business models.
- Develop questionnaires, online forms and support tools for data collection.
- Conduct interview of stakeholders.
- Perform data collection through online survey and face to face interviews with stakeholders.
- Develop a database detailing types of PV systems, business model (connection mechanism and schemes, financing mechanism and cost structure), technical details, solar energy at site, technical risks, PV system failures and external risks to PV systems.
- Document and report the work carried out.

Qualifications Required:

- A first degree in Electrical and Electronic Engineering/Electronic and Communication Engineering /Mechatronics Engineering/Mathematics/Physics/Computer Science or any related degree to the field of the research project.

Profile

Candidates must have:

- Sound research aptitudes, very good communication, and writing skills.
- Good organization and problem solving skills.
- Good IT and analytical skills.
- Knowledge of Solar Energy, Renewable Energy and Photovoltaics.
- Practical experience with development of database.
- Knowledge of Cloud platforms.
- A basic knowledge of Risk Assessment.

Responsibilities & Duties

- Carry out literature review in the related field of research.
- Perform data collection through site visits and interviews.
- Develop a database of relevant PV systems data.
- Report to the Principal Investigator and project collaborators.
- Document and report the work carried out.
- Assist in report writing and presentation of results obtained.
- Work on journal publications over the course of the project.
- Present the research findings at conferences and workshops as deemed appropriate by the supervisors.

Remuneration

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

Duration of Contract

Appointment will be offered for a contractual period of three (3) months (Full-Time) and renewable every three (3) months for up to twelve (12) months. The proposed starting date will be **3rd November 2022**.

Mode of Application

Letter of application together with a detailed *Curriculum Vitae* and photocopies of qualifications, birth certificate, marriage certificate (if applicable), testimonials and equivalence of qualifications (where applicable) should reach **the Dean of the Faculty of Engineering (Attention: Dr Y K Ramgolam, Principal Investigator), University of Mauritius, 80837 Réduit, Mauritius** by email address (*y.ramgolam@uom.ac.mu*) and copied to (*deanfeng@uom.ac.mu*) by **Monday 17 October 2022, at latest**.

The email should be referenced as **“Research Assistant – Risk Management Framework for Improving Solar Photovoltaic System Bankability in Mauritius”**.

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: 27 September 2022

Dean, Faculty of Engineering