University of Fort Hare
Together in Excellence

Postdoctoral Research Fellowship Position

in Fort Hare Institute of Technology

The main purpose of this postdoctoral fellowship is to conduct research in the Bio Energy Engineering focus area in the Fort Hare Institute of Technology. Specifically, in Methenogenetics of biodigesters. This position will provide supervision of postgraduate students, develop course materials for bio energy process engineering at the Honours/Masters level and assist in advancing this focus area to a centre of excellence recognized by the NRF.

Key performance areas:

- Assist postgraduate students in process engineering of various bio energy systems.
- Assist postgraduate students in analysis and prototyping of innovative bio digester systems.
- Administrative tasks in departmental, faculty and institutional committees and activities relating to learning programmes of the department.
- Report all experimental findings in accredited journals, local and international conferences
- Perform innovative independent research tasks combined with co-supervision of graduate students.
- Contribute significantly to the fundraising efforts of the Institute of Technology.

Expected outcomes:

- Co-supervise at least two students at various levels per annum.
- At least 4 peer-reviewed publications per annum.
- Access funding from TIA for the development of synthetic microbes for the enhancement of methane in biodigesters.
- Access funding from Eskom TESP for the enhanced operation in biodigesters at rural household level.
- Assist in filing for a provisional patent for these synthetic microbes

Minimum qualifications and experience:

- PhD in Microbiology, Biochemistry or Chemistry
- Expertise in Bio Energy Systems and Processes, particularly in situ microbial profiling, innovative sensor development and data acquisition systems is a major requirement
- At least 2 years relevant experience and a track record of publishing research outputs.
- At least 3 years' experience in Bio Energy Systems and Processes, particularly in situ microbial profiling and methanogenesis.
- Hands-on experience in cultivating anaerobic microorganisms.

To apply for the above position, please send a motivation letter, CV, copies of educational certificates as well as ID copy to Prof EL Meyer: emeyer@ufh.ac.za, cc: Dr OK Overen: ooveren@ufh.ac.az

CLOSING DATE: 31 August 2020