### POSITION DESCRIPTION



#### **IDENTIFICATION**

Position Title: Post-Doctoral Fellow Position Number: LSP075

Section: Mechanical Engg Department: STEMP

Location: Laucala Campus Category: Research Staff

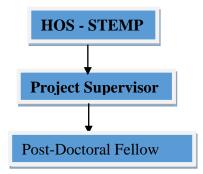
Current Incumbent: N/A

Date of substantive appointment: N/A

Reports To: Prof. M. R. Ahmed Supervised by: HoS, STEMP

#### ORGANIZATION CONTEXT

Organization chart given below is the reporting line of Post-doctoral Fellow.



#### **PURPOSE**

The appointee will work full-time on the Clean Energy Access in Remote Pacific Island Communities (CLEARPICS) project funded by Carbon Trust, UK to SPC. The project is aimed at increasing the access to electricity with the inclusion of some of the most remote and rural communities in Fiji, Vanuatu, Solomon Islands and PNG.

#### NATURE AND SCOPE

The School of Information Technology, Engineering, Mathematics and Physics is one of the largest schools in the University of the South Pacific and is sufficiently resourced to pursue excellence in teaching and research.

The School offers undergraduate and postgraduate programmes in Engineering, Computing Science, Information Systems, Mathematics and Physics. The School staff are actively involved in research in different areas of Engineering, Computing Science, Information Systems, Mathematics and Physics.

The appointee will be expected to work with the researchers while mainly supervised and guided by Prof. M. R. Ahmed and will be required to keep SPC informed of his activities and progress. She/he will be based at the main Laucala campus in Fiji but will be required to travel within Fiji and to Vanuatu, Solomon Islands and PNG for his research work.

#### POSITION DIMENSIONS

Details of staff and total level of costs within the organization under the position's overall control.

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**Staff Responsible for:** 

Directly: Not Applicable (N/A)

Indirectly: N/A

Total Level of Costs: N/A

**Limits of Authority:** 

Financial: N/A Non-Financial: N/A

## **Key Relationships /Internal and External Contacts:**

External	Purpose of contact
<ul> <li>Secretariat of the Pacific Community</li> </ul>	<ul> <li>Consultations and Reporting</li> </ul>
(SPC)	<ul> <li>Liaison and Consultations</li> </ul>
<ul> <li>Departments of Energy of Fiji, Vanuatu,</li> </ul>	
Solomon Islands and PNG	
<ul> <li>Rural communities in the above countries</li> </ul>	
Internal	Purpose of contact
<ul> <li>Project Supervisor (Prof. M. R. Ahmed)</li> </ul>	<ul> <li>Liaison, Consultations and</li> </ul>
• STEMP HoS	Collaborations.
STEMP Staff	
USP staff	

### KEY RESULT AREAS / KEY ACHIEVEMENT AREAS

Aim: <u>KRAs</u> to have a logical heading. KRAs: 4 – 6.in total <u>Key tasks</u>: 4-5 tasks per KRA. <u>Performance Measures</u>: Identify the performance standards for someone doing the job at the 100% level. Use both quantitative and qualitative measures, Measures the KRA as a whole, not every task. Maximum 3 measures for each KRA Include KRA for Corporate Responsibilities which is generic to all positions

Key Result Areas Jobholder is responsible for	Performance Measures Jobholder is successful when
<ul> <li>KRA – Research</li> <li>Carry out a market intelligence survey and produce necessary data for the dissemination of off-grid solar and mini-grid to the rural areas of these countries.</li> <li>Develop different models for financing the spread of off-grid solar systems in these countries.</li> <li>Prepare a high-level market report on off-grid and mini-grid potential for these countries by collecting data from these countries as well as with some partners in other countries.</li> <li>Based on research and interviews, four country reports mapping out the potential for off-grid solar markets in detail with relevant GIS data</li> <li>Map out current geographies of mini-grid projects across the four pilot countries (Solomon Islands, Vanuatu, PNG and Fiji), including information on their size, energy source, age, governance system, project developers, project owners, and current state of</li> </ul>	<ul> <li>Acceptance of the report by SPC after approval by the Supervisor</li> <li>Market potential mapping reports on Off-grid and mini-grid successfully completed.</li> </ul>

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operations.

- Create a map of livelihood activities across offgrid areas in the targeted PICTs. Specifically, the maps will focus on mapping out agricultural activities and crops, fishing communities and potential markets for productive use of energy.
- Develop models from experiences in Africa, Asia, and from successful experiences in some of the PICTs, while being attuned to the data collected from the first step of the work package.
- Research the various innovative approaches that mini-grid developers and operators have adopted across Africa, Asia and the Pacific Region.
- Prepare a report based on existing experiences, mapping out potential different models for mini-grid projects across the PICTs, attuned to the data collected in the earlier phases of the project.

#### **TERMS & CONDITIONS**

Salary: Post-Doctoral Fellow: FJ \$78,200 to FJ \$102,893 per annum

**Length of Contract**: 3 Years (fixed) **Market Loading:** Not Applicable

**Other Benefits:** As per the University Policy and Procedure as applicable

### POSITION SPECIFICATION

**Qualifications** (or equivalent level of learning)

Essential	Desirable
A PhD degree from a recognized     University in the area of energy.	<ul> <li>Demonstrated experience in energy sector.</li> <li>Experience working in the South Pacific.</li> <li>Experience of writing technical reports.</li> </ul>
Some relevant industrial or research experience.	
Candidates with a Master's degree (by thesis) may be considered if they have a good research and publications record.	
Preference will be given to applicants from	

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Pacific Island Countries.	

**Knowledge / Experience** 

Essential	Desirable
<ul> <li>Demonstrated ability and competence in research;</li> <li>Demonstrated ability to work as a member of a research team;</li> <li>Demonstrated ability to work collaboratively with other colleagues, and</li> <li>Excellent English written and oral communication skills.</li> </ul>	<ul> <li>Some experience in administration.</li> <li>Evidence of writing high-quality research reports and papers.</li> <li>Outstanding record of research and high quality publications</li> </ul>

## **Key Skills / Attributes / Job Specific Competencies**

The following levels would typically be expected for the 100% fully effective level:

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Expert level	Excellent analytical and numeracy skills
	Excellent communication skills
	Excellent organizational skills
	Full IT competence and IT skills
	Excellent judgement skills
	Self-starter and Problem solver
	Excellent research skills
	Team player
Advanced level	N/A
Working level	N/A
Awareness level	N/A

APPROVAL Supervisor name: Professor Bibhya N. Sharma			
Supervisor's Signature:	Date: 22/8/2024		
Staff Name: _Prof. M. Rafiuddin Ahmed	Staff ID: H11000162		
Staff Signature:	Date: 22/8/2024		