

## **Vacancy for Research Student - (Fulltime)**

Applications are invited for one research position of Department of Civil Engineering, University of Moratuwa for the research project of “Optimizing Mechanical Properties of Floor Tiles and Concretes Using Sugarcane Bagasse Ash” under the ADB competitive research grant scheme.

### **Title of the research project:**

Optimizing Mechanical Properties of Floor Tiles and Concretes Using Sugarcane Bagasse Ash

### **Introduction:**

This research project is mainly focused on development of a material composite for concretes with the addition of sugarcane bagasse ash which is well known waste material in sugar industry. Sugarcane bagasse ash (SCBA) waste is ultimately disposed of as soil fertilizer in sugarcane-producing companies in Sri Lanka. This is not a safe solution for final disposal of this abundant waste, because it causes significant changes in the physico-chemical characteristics of the soils and environmental problems. Thus, efforts should be done in order to find a permanent solution for the final disposal and valorization of this solid waste material in an ecological and economical way. Candidate will mainly involve in the concrete composite development with the optimization of mechanical properties in SCBA enhanced concretes and he/she will get the chance to work with relevant industries for sample preparation and testing work.

**Grant Amount: LKR 18,450,000/=**

### **Investigators:**

- Prof Kaveenga Koswattage
- Prof. Sujeewa Lewangamage
- Dr. Hasitha Damruwan
- Dr. Sumudu Herath
- Mr. Buddhika Sampath Kumara

### **Educational Qualifications:**

- Must be a graduate in Civil Engineering field from a recognized university in Sri Lanka with a 1<sup>st</sup> class or 2<sup>nd</sup> class upper division or 2<sup>nd</sup> class lower division.
- Knowledge and experience of using Finite Element (FE) Analysis software such as ANSYS/FEMAP/MIDAS/ ABAQUS is an added advantage.
- Publications in a peer reviewed journal or online journal or conference is an added advantage.

### **Period of appointment:**

- 12 months

### **Remuneration:**

- Monthly allowance of Research Student (Registered for a Masters degree) - **Rs. 60,000/=**

**Closing date of application:**

- August 24, 2022

Interested researchers are requested to forward (email) a CV with names and contact details of two nonrelated referees on or before the closing date to **hasithad@uom.lk**

More information could be obtained by contacting Dr. Hasith Damruwan on 071-321-6026/  
077-880-1002.