Independent University Bangladesh (IUB)

IUB Academic Repository

Newspaper Clippings 2024 June

2024-06

IUB EEE Students Win Silver in Design Challenge in the UK

The Daily Star

https://ar.iub.edu.bd/handle/11348/1116

Downloaded from IUB Academic Repository

Monday, April 27, 2026

Dhaka Tribune

Breaking News || Breaking Barriers

Monday, April 27, 2026

E-paper

IUB EEE students win Silver Award in design challenge in UK

Solar-powered gear pump designed to increase efficiency of pumping water for irrigation

The collaged image shows the IUB EEE students who won the Silver Award in the design challenge in UK. Photo: Courtesy

Press Release

Publish : 23 Jun 2024, 10:38 AM | Update : 23 Jun 2024, 10:38 AM

A team of students from the Department of Electrical and Electronic Engineering (EEE) Independent University, Bangladesh (IUB), has won the Silver Award in the prestigious Efficiency for Access Design Challenge 2023-24, UK, for their solar-powered gear pump, which is designed to increase the efficiency of pumping water for irrigation.

The announcement was made on Tuesday during the competition's grand finale, which was held virtually from the UK by the organizers, Efficiency for Access Coalition and Engineers Without Borders UK. This remarkable result follows two consecutive Gold Award wins by two other IUB EEE student teams in the same competition in 2022 and 2023.

The silver-winning team consisted of Celestine Gomes, Sayed Alam, and Sabrine Islam.

Their innovative project design, "Design and Construction of Solar-powered Gear Pump," promises to increase water flow rates and reduce energy consumption compared to conventional pumps, making it a sustainable option for irrigation and fluid transfer in remote areas with limited access to conventional power sources.

“Water scarcity is a critical global issue, and our solar-powered gear water pumps could be a promising solution for sustainable irrigation and fluid transfer. This recognition will give us a major boost and we hope to work on scaling up this green solution,” said Celestine Gomes.

Three other teams of EEE students from IUB competed in the competition. Of them, three teams – the silver winning team and two other teams – received a total of USD 4,350 as grant from UK Aid and the IKEA Foundation to develop prototypes, which they eventually presented in the Grand Finale on Tuesday.

The three other IUB student projects were Solar-Powered Portable Oil Extractor, Solar-based Air Conditioner Using Variable Frequency Drives (VFD) and Solar-Based Biogas Production in Anaerobic Digester with IoT. All four projects were developed at IUB’s Green Energy Research Center (GERC) and supervised by the center’s Director and EEE Professor Dr Khosru Mohammad Salim. Over the past eight months, the teams were trained, guided, and evaluated by IUB alum Siam Ibne Masud, Research Assistant under Dr. Khosru and member of the 2023 Gold Award winning team of the same challenge.

Prof Dr Khosru said: "Our engineering students' embrace of green energy and technology for a sustainable future is truly remarkable. Their innovative projects and success in this competition give us hope that, despite the daunting climate challenges, there are alternatives to be optimistic about the future."

Efficiency for access is a global coalition working to promote affordable, high-performing, and inclusive appliances that enable access to clean energy for the world’s poorest people. It aims to

accelerate the growth of off-grid appliance markets to boost incomes, reduce carbon emissions, improve quality of life, and support sustainable development. The coalition is co-chaired by UK Aid and the IKEA Foundation.

For more information on the Efficiency for Access Design Challenge, visit Efficiency for Access Design Challenge. A video recording of the grand finale can be accessed here.

Copyright © 2012-2026. 2A Media Limited, All Rights Reserved.
8/C, FR Tower, Panthapath, Dhaka 1207, Bangladesh.
Editor: Reaz Ahmad, Publisher: Kazi Anis Ahmed