KUMASI TECHNICAL UNIVERSITY (KsTU)

POSTGRADUATE SCHOLARSHIP AT KsTU

Call for Applications: Postgraduate research in Waste-to-Energy

Project: Hybrid Waste to Energy as a sustainable solution for Ghana.

Hosts

- **Department of Chemical Engineering (MTech in Chemical Engineering)**
- **Department of Civil Engineering (MTech in Water and Environmental Engineering)**

Coordinating Department

- Centre for Renewable Energy and Energy Efficiency-Kumasi Technical University (CREK)

Background

The Centre for Renewable Energy and Energy Efficiency-Kumasi Technical University (CREK) has been set-up under the aegis of Skills Development Fund of Council for Technical and Vocational Education and Training (COTVET) to promote applied research and capacity building in renewable energy and energy efficiency in Ghana and the West African sub-Region. In achieving its mandate, Kumasi Technical University (KsTU) has partnered with the University of Rostock and West African Science Service Center on Climate Change and Adapted Land Use (WASCAL) and other German and Ghanaian institutions to implement a 400 kW Hybrid Waste-to-Energy (WTE) plant at Gyankoba in Atwima Nwabiagya Municipality of Ashanti Region. The plant is part of a four year project funded by the German Federal Ministry of Education and Research (BMBF), aimed at developing tailor-made solutions to tackle the problem of waste management as well as power management in Ghana by converting municipal waste into useful energy. The project is expected to lead to development of sustainable concepts of waste segregation and conversion of various fractions into energy through anaerobic digestion and pyrolysis. Moreover, it will create a platform for collaboration between German and Ghanaian partners, enabling transfer of technology and know-how from Germany to Ghana, adapted to suit local conditions. Ultimately, it will contribute to among others the achievement of Ghana's SDG targets in energy, waste management, job creation and climate change.

Funding

The Centre shall provide partial funding **(tuition and research grants)** to at least two MSc applicants admitted to Department of Chemical Engineering and Department of Civil Engineering. Research shall be conducted in any of the following themes:

1. Production of biogas from Municipal Solid Waste (MSW)
2. Fast pyrolysis of plastics from MSW
3. Optimisation of transport of MSW in Atwima Nwabiagya Municipality and Surrounding areas

Application Process

Candidates must first apply for admission to the MTech Programmes run by the Department of Chemical Engineering and the Department of Civil Engineering. For further information applicants should consult **https://kstu.edu.gh/media/announcements/20202021-admissions-open.**

Admitted students who are interested in carrying out their research in any of the thematic areas should subsequently apply for Scholarship to: The Programme Coordinator-Waste to Energy Project, CREK, Faculty of Engineering, KsTU. The application for funding should include a one page statement of purpose and a curriculum vitae. *Female candidates are particularly encouraged to apply.*