

**DEPARTMENT OF MECHANICAL ENGINEERING****SEMINAR****Online**

Title: Droplet-based triboelectric nanogenerator for energy harvesting

Speaker: Mr. Jiaming Zhou (PhD candidate)
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Date: 29 April, 2022 (Friday)

Time: 11:00 a.m. (Hong Kong Time)

Zoom meeting: 1) Link to join the meeting:

<https://hku.zoom.us/j/99783629387?pwd=NWRNZVlBelhLMHVZdTgxRFRaWDFxQT09>

2) Meeting ID: 997 8362 9387

3) Password: 285890

Abstract:

As the main energy supply for people's daily life, the energy created by nuclear and coal plays a vital role in the history of human development. However, at the same time, they also hinder environmental protection and sustainable development. With the growing awareness of the energy crisis, renewable green energy has been proposed as a promising solution. Among all types of energy, water energy has attracted significant interest due to its abundance and recyclability. Herein, we carried out a droplet-based triboelectric nanogenerator (TENG) to harvest the small-scale water energy, water droplet. Unlike the alternating current generated by the traditional TENG, which needs to use a rectifier system to provide external energy, the TENG we developed can generate direct current and directly use it for power supply. This TENG is expected to be used in wearable devices as well as flexible sensors.

ALL INTERESTED ARE WELCOME

For further information, please contact Dr. D.M. Shin at 3917 8061.

Research area: Energy