## Activity Report

Name of Event: Two day workshop on Upscaling and Field scale application of bioelectrochemical systems for wastewater treatment and bioenergy recovery

Date & Venue of Event: 26-27 February, 2020. IIT Kharagpur.

**Course Content:** Course content of the workshop included the latest advancements in the field of bio-electrochemical systems. Special emphasize was given on the upscaling of this novel technology for improving wastewater treatment efficiency and extract higher power from these systems. Considerable efforts were directed towards converting this technology from lab scale to field scale.

**Expected Benefits derived & how it will be helpful to the college:** Bio-electrochemical system (BES) has the potential to offer sustainable wastewater treatment and simultaneously recover valuables. This technology is likely to evolve as a way of treating sewage, industrial or agricultural wastewater and at the same time produce electricity, hydrogen or other chemicals of high value. Microbial fuel cells (MFC) which are one of the popularly adopted configuration of BES can be fabricated in GNDEC for carrying out research in wastewater treatment and resource recovery. An onsite bioelectric toilet can also be constructed in GNDEC to demonstrate the treatment of toilet wastewater and to produce electricity for illumination of toilet cabin.

Signature of Participant