

SCIENTIFIC ADVANCEMENT OF MOVEABLE BIOGAS DIGESTER

On the route toward settings benchmark in sustainable technologies, Jaypee University of Information Technology is always standing in the first row. In the beginning of year 2023, JUIT received an Indian Patent dia for fabricating a novel movable biogas reactor with a capacity of 20L gas storage.

Later this reactor replaced one of the lab burners in the biotechnology lab of the university.

In the recent development a strong casing cover is fabricated with proper scientific approach for this biogas reactor which not only just protects it from any external damage but also helps in maintaining a warm temperature inside it; so that the biogas production within the reactor can speed up on an everyday basis. This casing cover is made of iron casing fitted with green fiber glass. Scientifically this green fiber glass is a best strategy to achieve thermal comfort for biogas production. This casing prominently helps in biogas production in hilly areas by trapping a significant heat inside it to fulfill heat requirement of digester. The height of this casing is designed as per the gas storage tank's extreme capacity so that it does not hurdle in biogas - storage and also support the gas tank to keep it upright.

Currently this moveable biogas digester is being installed in Rural technologies section in the Department of Biotechnology and Bioinformatics of JUIT, Wagnaghat, Solan. Prof. Sudhir Kumar of Biotechnology and Bioinformatics, Prof. Ashish Kumar of Civil Engineering Department and their team members are involved in this activity.

