National Training Programme

On

Sustainable Development of Waste to Biogas/ Biomethane: A Strategy for Waste Valorization and Circular Bioeconomy Implementation

NOV 26-29, 2025

Jointly Organized by

Harcourt Butler Technical University, Kanpur,

Uttar Pradesh

and

Indian Biogas Association

Indian Biogas Association (IBA)
Gurugram, Haryana

Supporting Partners:

IFGE Indian Federation of Green Energy

GASKON® Air, Gas & Liquid Engineering

A Step Towards A Sustainable Future

SATAT

सत्यमेव जयते

नवीन एवं नवीकरणीय ऊर्जा मंत्रालय

MINISTRY OF NEW AND RENEWABLE ENERGY

BIOGAS

gobardhan

कचरे से कंचन

About the University (HBTU)

Harcourt Butler Technical University (Formerly Harcourt Butler Technological Institute, Kanpur) has always been a paragon and a source of inspiration in the field of science and technology since the year 1921. Now, as per Act No. 11 of 2016 by the government of Uttar Pradesh it is upgraded to University, i.e., Harcourt Butler Technical University, Kanpur (HBTU, Kanpur). The University has been established with a view for making it a leading Residential University w.e.f. 01.09.2016 to become a "Centre of Excellence" with focus on Research and Development and Incubation in the field of Engineering, Technology, Basic & Applied Sciences, Humanities, Social Science & Management and other professional courses. HBTU, Kanpur aims to promote studies, research & innovation in engineering areas of higher education, to enhance skill development through continuing education programme and to achieve excellence in higher technical education.

About the Department (Biochemical Engineering)

The Department of Biochemical Engineering came in to its independent existence as a separate department with inception of Harcourt Butler Technical University (earlier known as H.B.T.I.), Kanpur in the month of September 2016. Earlier, the department was established in1964 as twin department of Biochemical Engineering and Food Technology and completed 56 glorious years of its journey. The department is running four year full time undergraduate (B.Tech) programme and two year full time postgraduate (M.Tech) programme for award of B.Tech and M.Tech degree in Chemical Technology with specialization in Biochemical Engineering. In addition to this the department also offers admission to Ph.D programme. The laboratories of the department are well equipped with modern facilities to meet necessities of various programmes and to acquaint the student with latest practices used in industries and research areas relevant to Biochemical Engineering and Biotechnology. The faculty members of the department are instrumental in enriching students with knowledge and skills that enable them to serve the industries and research organizations.

About IBA

Indian Biogas Association, an NPO working towards its vision of propagating biogas in a sustainable way. It is the first nationwide and professional biogas association of operators, manufacturers, and planners of biogas plants, representatives from public policy, science and research in India, and all other stakeholders of biogas ecosystem. In pursuit of its continuous effort to promote biogas in a sustainable manner, IBA endorses and supports several flagship programmes of the Government of India, namely The Swachh Bharat Mission, Gobardhan Yojana, Sustainable Alternative towards Affordable Transportation (SATAT), and National Bioenergy Programme (NBP), and Waste to Energy market, which is in line with various urban development schemes from Government such as Smart City Mission, Swachh Bharat Mission, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Pradhan Mantri Awas Yojana- Urban (PMAY-U), Heritage City Development and Augmentation Yojana (HRIDAY) Solid Waste Management rules and so on.

Background:

The Ministry of New and Renewable Energy (MNRE) has been actively promoting biogas as a clean and renewable fuel for domestic cooking, power generation (off-grid and grid-connected), and bio-CNG for transport applications. Agricultural residues, especially paddy straw in Haryana, Punjab and Uttar Pradesh, are being recognized as promising feedstocks for biogas production, offering a sustainable alternative to open-field burning that causes severe environmental and climate challenges. To scale these opportunities, the Government of India has launched several key initiatives:

- GOBARdhan (Galvanizing Organic Bio-Argo Resources Dhan) Scheme – promoting wealth creation from cattle dung and organic waste through biogas and compost production at the village level.
- SATAT (Sustainable Alternative towards Affordable Transportation) Initiative – encouraging the establishment of compressed biogas (CBG) plants and creating a sustainable supply chain for bio-CNG as a transport fuel.
- National Bioenergy Programme – supporting R&D, technology deployment, and projects in biogas, waste-to-energy, and biomass-based energy systems, with sub-components such as the Biogas Programme and the Waste to Energy Programme.

Together, these programmes highlight the urgent need for R&D and technology demonstration to enhance biogas generation and upgrading, its utilization in heat, power, and transport applications, and the production of bio-fertilizers for sustainable agriculture. Such integrated approaches will accelerate India's transition towards clean energy, reduce greenhouse gas emissions, and strengthen the circular economy.

Objective:

The main objective of the national training programme is

- ✓ To create awareness, need, and prospects of biogas technology in India.
- ✓ To introduce the importance of biogas and various aspects of biogas plant design, operation, and maintenance.
- ✓ To enlighten the various factors for bio-methane enhancements, Consortium development.
- ✓ Utilization of enriched bio-methane of bio-CNG quality and standards for off-grid and grid power generation.
- ✓ To familiarize with policy making and financing for industrial projects for biogas production and up-gradation
- ✓ To expose the latest technological advancement in the context of biogas production, enrichment, and bottling.

Themes

1. Feedstock Supply Chain in Biogas Sector
2. Basics of Biogas Process and Design
3. Biogas Operation & Maintenance
4. Biogas Upgradation and Applications
5. Carbon dioxide capturing and utilization
6. Biofertilizers/ FOM/ LFOM
7. Carbon Credits in Biogas Sector
8. Biogas Standardization, Policy & Financing
9. Case studies

Key note lectures

The training will be provided to the participants about various techniques used for biogas technology, CBG, and bioCNG. The experts will be invited from R&D/ Academic/ Financing Institutions, Ministry, and Industries for delivering lecture in the training programme.

Who can participate?

The aim of this programme is to impart training to CBG/ Biogas Project Developers, Implementers, EPCs, Consultants, Biogas Aspirants, Start-ups and SNDs/ SNAs/ BDTCs/ KVIC, Manufacturers of Biogas systems including biogas generation, enrichment, design, Operation & Maintenance, and Policy & Financing to familiarize them with the importance of biogas as a fuel and present status of biogas programme, inter-alia details about how biogas is upgraded to CBG & bioCNG. The programme is also intended for field supervisory functionaries involved in the implementation of biogas programmes.

Organizing Committee

Patron
Prof. Samsher, Vice Chancellor, HBTU

Co-Patron
Prof. G.L. Devanani, Dean, School of Chemical Technology, HBTU
Dr. AR Shukla, President, IBA & Former Adviser, MNRE

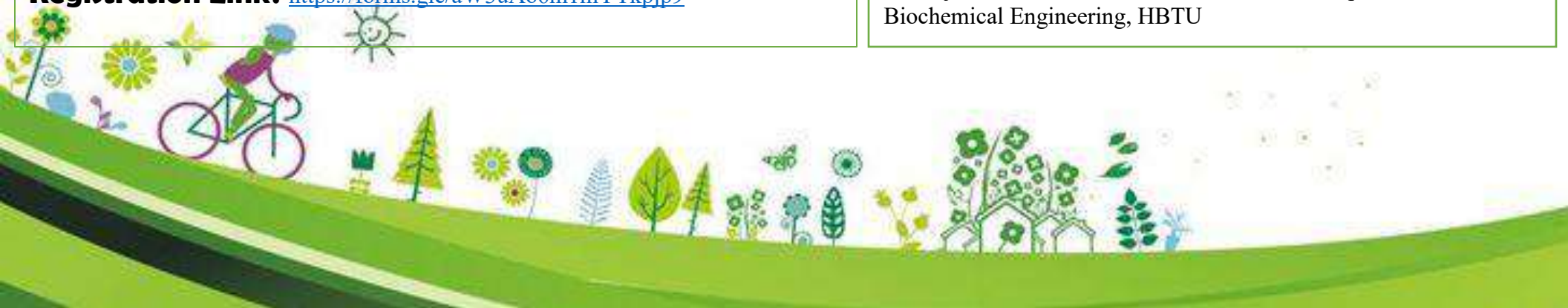
Chairman
Prof. Lalit Kumar Singh, Head, Department of Biochemical Engineering, School of Chemical Technology, HBTU

Organizing Secretary
Dr. Sachin Kumar, Associate Professor, Department of Biochemical Engineering, HBTU
Sh. Gaurav Kedia, Chairman, IBA

Coordinators
Dr. Roma Agrahari, Assistant Professor, Department of Biochemical Engineering, HBTU
Dr. Rajkamal Kushwaha, Assistant Professor, Department of Biochemical Engineering, HBTU

Venue: Seminar Room, Department of Biochemical Engineering, HBTU, Kanpur

Registration Link: https://forms.gle/aW3uAo6m1mYTkpjp9



Fees

Industries/ Stakeholders/ Government/ Faculty	INR 10,000 + 18% GST
Students/ Research Scholars/ Fellows/ Startups	INR 5,000 + 18% GST

(**No. of seats:** 30 only, based on first come first serve basis);
Reg. fee includes: *Registration kit, Refreshment and Lunch, Visit to CBG Plant*

**Accommodation will be provided on payment basis based on availability, otherwise it will be arranged by your own.*

Payment Details

Payment mode: NEFT/ IMPS
Bank: ICICI Bank
A/c Name: FC HBTU
A/c No.: 351801000991
IFSC Code: ICIC0003518

Important Dates

Submission of Application Starts:	24/10/2025
Registration Ends:	21/11/2025
Date of Training:	26-29/11/2025

Contact Details:

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