



PLASTIC WASTE MANAGEMENT CENTRE (PWMC) Varanasi

CENTRAL INSTITUTE OF PETROCHEMICALS ENGINEERING & TECHNOLOGY (CIPET)

Department of Chemicals & Petrochemicals,
Ministry of Chemicals & Fertilizers, Govt. of India

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CIPET: PWMC, Varanasi provides one stop solutions to polymer industries for managing waste plastics through latest recycling technologies and training.

Vision

To become an apex Institute of International repute in the field of Plastic Waste Management and ensure sustainable growth



CIRCULAR FRAMEWORK

REDUCE

Do better with less

REUSE

Use longer

RECOVER

Make waste history

RETHINK

Redesign the system

REGENERATE

Harmonize with nature

Mission

- To offer specialized Skill Development Training Programs in the field of plastic recycling in order to provide qualified Human Resources with entrepreneurship qualities for plastic waste management industries;
- To develop Indigenous Technology, Applications & Handholding Entrepreneurs by Technology Transfer, Intellectual Property (IP) and Knowledge Base.
- To provide Technology Support and Consultancy Services in the fields of plastic waste recycling, value addition, testing & characterization of recycled materials & products, to the plastics processing and allied industries.



About CIPET

Central Institute of Petrochemicals Engineering & Technology (CIPET), formerly known as the Central Institute of Plastics Engineering & Technology, is a premier national institution under the Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, Government of India. CIPET is dedicated to driving excellence in **Skill Development, Technology Support, Academic, and Research (STAR)** initiatives within the petrochemicals sector. With a network of 47 centers across the country, CIPET serves the diverse needs of the polymer and allied industries, contributing to India's industrial growth and innovation.



CIPET: CSTS - Varanasi is a premier institution established through the joint efforts of the Government of India and the Government of Uttar Pradesh. Focused on skill development and academic training, the centre aims to equip unemployed and underemployed youth with technical expertise in plastics and allied industries. In response to the growing demand, it offers programs such as DPT, DPMT, and PGD-PPT, alongside specialized skill development initiatives. The centre also provides consultancy and technical services in design, CAD/CAM, tool room operations, plastic processing, and testing. It is committed to fostering entrepreneurship, conducting research, and enhancing the technical workforce for both domestic and global markets.

Plastic Waste Management Centre (PWMC) - Varanasi was established by the Central Institute of Petrochemicals Engineering & Technology (CIPET) under the Ministry of Chemicals & Fertilizers, Government of India. The centre is dedicated to recycling various types of plastic waste, including industrial, electronic, and municipal sources. With a focus on advanced recycling technologies, it provides technical support to the plastics recycling industry. The centre also aims to promote skilled manpower development and support sustainable waste management practices, fostering both employment opportunities and industry growth in the region.

FACILITIES & MACHINARIES

The **Plastic Waste Management Centre (PWMC)** is equipped with state-of-the-art facilities, including advanced systems for plastic waste sorting, automatic washing lines, lump grinders, and extruders with pelletizers. These cutting-edge technologies enable efficient recycling of a wide range of segregated plastic waste, including Category I - Rigid Plastics Packaging, Category II - Flexible Plastics Packaging, and Category III - Multilayer Plastic Packaging. PWMC is committed to supporting sustainable waste management through innovation and advanced recycling processes.



Washing Line



Single Screw Two Stage Extruder



Lump Grinder



Film Grabber



Zig Zag Classifier



Ballistic Separator

SERVICES OFFERED

- Research & Consultancy
- Technical Support Services
- Skill upgradation Training Programs
- Workshops / Seminars

Research & Consultancy:

- Value Addition to Recyclates
- Product Development Utilizing Recyclates
- Innovation in Recycling Technologies
- Performance Evaluation of Recycled Materials
- Failure Analysis of Recycled Products

Technical Support Services:

- Conversion of Plastic Waste into Pellets
- Recycling Solutions for Various Plastic Waste Streams
- Testing and Characterization of Recycled Materials and Products

Skill upgradation Training Programs:

- Identification, Sorting & Segregation waste plastics
- Plastics Waste Recycling Techniques & Process
- Plastics Waste Management and Recycling Process
- Machine Operator - Plastics Recycling (MO-PR)
- Machine Operator Assistant - Plastics Recycling (MOA-PR)

Target

beneficiaries:

Students, industrialists, municipality workers, entrepreneurs, etc.

Workshops/Seminars:

- Workshop on Plastics Waste Collection and Segregation
- Plastics Recycling Process and Waste Management
- Awareness Programme on Plastics Waste Management Rules

Course Contents:

Plastic recycling in India, compared to the global scenario, involves understanding polymer materials, their classification, and processing. It includes sorting, washing, and operating recycling equipment, with a focus on quality control of recyclates. Waste-to-energy methods like pyrolysis are also used. The process follows the Plastic Waste Management Rules and EPR guidelines to ensure compliance with regulations.

Salient Features of Training Programs:

- Theory and Practical Sessions
- Lectures with Models and Multimedia
- Guest Lectures by Industry Experts
- Hands-on Training with Equipment
- Training Materials Provided
- Course Completion Certificate



CIPET : PWMC, VARANASI

SCAN QR CODE FOR LOCATION



सिपेट CIPET

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