



DELHI TECHNOLOGICAL UNIVERSITY

Formerly, Delhi College of Engineering

Govt. of NCT of Delhi
Shahbad, Daulatpur, Main
Bawana Road, Delhi - 110042



REPORT

Event Name:	An expert Lecture conducted for awareness on “International Mother Earth Day”
Title:	New Perspectives in Solid Waste Management: A Step Towards Circular Economy
Date of Event:	22.04.2026
Venue:	Seminar Hall, Third Floor, Dept. of Env. Sci. & Engg., DTU
Organizer:	Department of Environmental Science & Engineering, Delhi Technological University in association with Paryavarnam-DTU
Participants:	78

DELHI TECHNOLOGICAL UNIVERSITY

LET'S CELEBRATE OUR PLANET!

INTERNATIONAL MOTHER EARTH DAY 2026

"OUR POWER, OUR PLANET"

INSIGHTFUL SESSION ON
NEW PERSPECTIVES IN SOLID WASTE MANAGEMENT:
A STEP TOWARDS CIRCULAR ECONOMY

22th APRIL, 2026

Chief Patron
Prof. Prateek Sharma
Hon'ble Vice Chancellor, DTU

Chairperson
Dr. Geeta Singh
Head, Dept. of Env. Sci. & Engg., DTU

Coordinator
Mr. Ravi Pratap Singh Jadon
Assistant Professor, Dept. of Env. Sci. & Engg., DTU

Speaker
Prof. Athar Hussain
Professor (CED) & Dean, Faculty of Infrastructure Technology, NSUT, Delhi

Organized by
Department of Environmental Science & Engineering, DTU

In collaboration with
Paryavarnam DTU

11:00 AM onwards **SEMINAR HALL, 3rd Floor, Dept of Env. Sci. & Engg, DTU (LW4-TF1A)**

Introduction

The Department of Environmental Science & Engineering, Delhi Technological University (DTU), in association with Paryavarnam-DTU, organized an expert lecture on the occasion of *International Mother Earth Day* on 22nd April 2026. The event was conducted under the global theme “*Our Power, Our Planet.*”

The program featured an expert session by Prof. Athar Hussain, Professor (Civil Engineering Department) and Dean, Faculty of Infrastructure Technology at Netaji Subhas University of Technology (NSUT), New Delhi. The session focused on “New Perspectives in Solid Waste

Management: A Step Towards Circular Economy,” aiming to promote awareness about sustainable waste practices and environmental responsibility.

The Chief Patron for the event was Prof. Prateek Sharma, Hon'ble Vice Chancellor of DTU. The session was chaired by Dr. Geeta Singh, Head of the Department of Environmental Science & Engineering, DTU, and coordinated by Mr. Ravi Pratap Singh Jadon, Assistant Professor, Department of Environmental Science & Engineering, DTU.

Objectives of the Programme

- To create awareness about solid waste management and circular economy concepts
- To emphasize the importance of source segregation in waste management
- To highlight challenges related to waste generation and pollution in urban areas
- To promote sustainable practices for resource conservation
- To sensitize students towards environmental protection and responsible living

Relevance

The programme aligns with the following NAAC criteria:

Criterion 3: Research, Innovations and Extension

- Promotes awareness through expert-led environmental outreach
- Encourages sustainable waste management practices

Criterion 2: Teaching-Learning and Evaluation

- Facilitates experiential learning through expert interaction

Criterion 7: Institutional Values and Best Practices

- Promotes environmental sustainability and responsible behavior
- Encourages adoption of circular economy principles

Extension Activity / Outreach Initiative

- Enhances awareness and student engagement in environmental issues

Key Highlights of the Program

The lecture delivered by Prof. Athar Hussain was insightful and focused on practical as well as futuristic approaches to solid waste management.

1. Circular Economy in Solid Waste Management

The speaker emphasized that waste should be viewed as a resource rather than a burden. With proper systems, nearly 100% of solid waste can be reused or recycled, contributing to a circular economy.

2. Status of Waste Generation and Challenges

He presented data on increasing waste generation in Indian cities and highlighted issues such as poor waste handling practices, lack of strict implementation, and environmental hazards.

3. Importance of Source Segregation

A major focus was on segregation at the household level. The speaker pointed out that while the informal sector currently performs segregation, implementing it at the source would significantly improve efficiency across the waste management chain.

4. Environmental Concerns and Case Studies

A concerning example from East Delhi was discussed, where informal e-waste burning leads to severe pollution. This was compared to pollution levels at major landfill sites like Bhalaswa and Okhla.

5. Resource Depletion and Environmental Risks

The speaker warned about the growing scarcity of clean air and water, predicting that these resources may become expensive in the coming decades. He also discussed the limitations of RO systems and the impact of polluted water on agriculture and public health.

6. Technological Integration in Waste Management

The lecture highlighted the potential of AI/ML and ANN models in optimizing solid waste management systems and improving efficiency.

7. Innovative Waste Utilization Practices

Examples such as using jaggery to produce enzymes and utilizing fly ash in cement industries were shared to demonstrate practical waste-to-resource solutions.

8. Delhi's Environmental Status

Delhi's position as one of the most polluted cities was discussed, emphasizing the need for strict enforcement of environmental regulations and sustainable practices.

9. Interactive Session

The lecture concluded with an engaging discussion where students raised questions regarding water safety, waste segregation, and environmental sustainability.

Participation and Outcome

The event witnessed active participation from students, faculty members, and research scholars of the department.

Learning Outcomes:

- Enhanced understanding of circular economy and waste management concepts
- Increased awareness about environmental challenges and resource depletion

- Improved knowledge of source segregation and sustainable practices
- Motivation among participants to adopt environmentally responsible behavior

Sustainable Development Goals (SDGs) Alignment

SDG 11: Sustainable Cities and Communities

- Focus on efficient waste management and pollution reduction

SDG 12: Responsible Consumption and Production

- Emphasis on reuse, recycling, and waste minimization

SDG 13: Climate Action

- Addresses environmental pollution and promotes sustainable solutions

SDG 6: Clean Water and Sanitation

- Highlights the importance of water quality and conservation

SDG-Based Outcome

- Strengthened awareness of environmental sustainability
- Encouraged responsible consumption and waste management practices
- Increased engagement in sustainability initiatives

Conclusion

The expert lecture was highly informative and impactful. Prof. Athar Hussain provided valuable insights into solid waste management and the importance of transitioning towards a circular economy.

The session effectively highlighted the role of individuals and institutions in addressing environmental challenges and reinforced the need for sustainable practices such as the “3 Rs”- Reduce, Reuse, and Recycle. It inspired participants to contribute actively towards environmental protection and sustainable development.

Feedback

The session was well-structured, informative, and engaging. The speaker effectively explained complex environmental issues using real-world examples and practical insights. The interactive discussion further enhanced understanding and left participants with a heightened sense of responsibility towards environmental conservation.

Glimpses of the Event:

