



Parshvanath Charitable Trust's
A. P. SHAH INSTITUTE OF TECHNOLOGY
(Approved by AICTE New Delhi & Govt. of Maharashtra, Affiliated to University of Mumbai)
(Religious Jain Minority)

DEPARTMENT OF CIVIL ENGINEERING

EXPERT LECTURE REPORT ON

Treatment Options for Managing Municipal Solid Waste in India

VENUE: - A.P. Shah Institute of Technology (Online mode)

EXPERT LECTURE DATE: - 21-08-2022

AUDIENCE: - Final Year Civil Engineering (DLO) Students and Interested Faculties

EXPERT SPEAKER: - Dr. Sudha Goel , Associate Professor, IIT Kharagpur.

ORGANISED BY: - Civil Engineering Department

FACULTY CO-ORDINATOR: - Prof. Mrunal Joshi

TOTAL STUDENTS AND FACULTIES ATTENDED: - 55

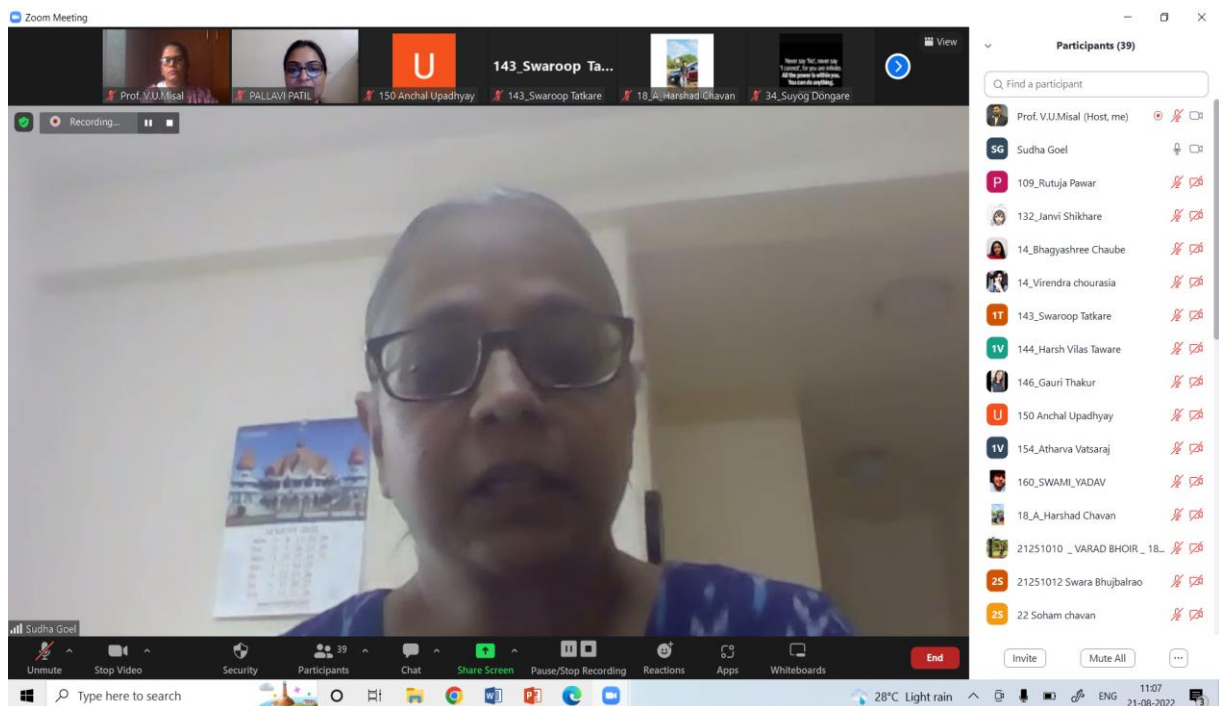
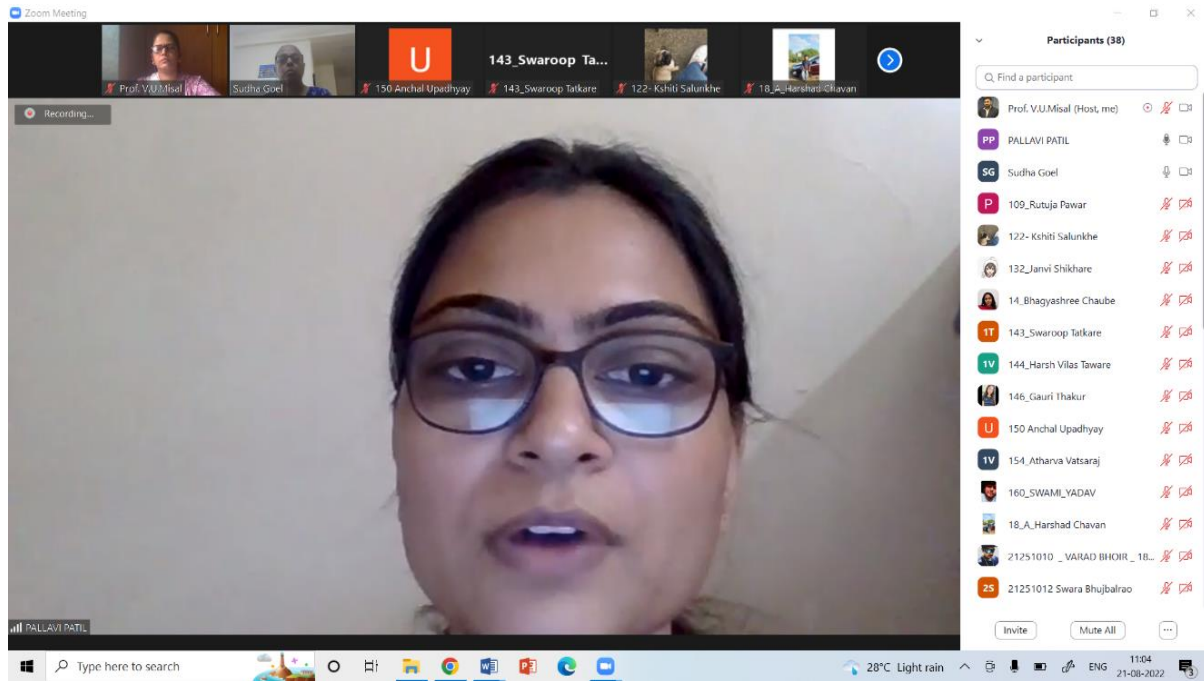
Now a day's solid waste management is becoming a problem of great concern because of huge quantities of waste generated. Proper treatment and disposal of waste is very much important from public health point of view and maintaining sanitation in community. This expert lecture was arranged to give insight to the students related to various treatment options available for managing solid wastes in India. In expert lecture mam have highlighted various simple methods or techniques that can be implemented for better waste management.

Dr. Sudha Goel madam had started her lecture by giving the overview of solid waste management system by functional elements of it. She had added the knowledge of students by sharing major gaps and highlighted the status of MSW management. She had described the various treatment facilities available, feasibility of treatment processes and the best available technology.

She emphasised more on segregation of waste at treatment plant for proper waste treatment and to have maximum efficiency of treatment. The speaker has also provided the information about pilot waste treatment plant at IIT Kharagpur campus and case study of Uttarpara composting plant and Baidyabati MSW Landfill site at Uttar Pradesh. Madam has explained Cluster Approach for managing the rural solid waste very nicely and told that that is the best option to manage the waste from rural areas. At the end of the session she provided the information about Hazardous waste and its effects on human and surrounding.

The topic was covered in a systematic manner. The lecture ended with question and answer session and vote of thanks.

A few Glimpses of the lecture



Zoom Meeting

Recording...

Prof. V.U. Misal Sudha Goel Kshiti Salunkhe B. Satish Yadav Kiran Thombre PALLAVI PATIL

What is the best treatment option?

- Factors that determine Best Available Technology (BAT) option
 - Quantity of waste generated
 - Composition of waste
 - Suitability or feasibility of BAT for specific waste or waste streams
 - Need for and availability of technical skills
 - Availability of financial resources
 - Capital costs; Operation and Maintenance costs
 - Availability of land
 - Time taken from planning to commissioning
 - Siting considerations and public acceptance
 - Environmental costs such as air pollution control equipment

5

28°C Light rain 11:27 21-08-2022

Participants (46)

Find a participant

Prof. V.U. Misal (Host, me) SG Sudha Goel 109_Rutuja Pawar 132_Janvi Shikhar 14_Bhagyashree Chaube 14_Virendra chourasia 143_Swaroop Tatkare 144_Harsh Vilas Taware 146_Gauri Thakur 150_Anchal Upadhyay 160_SWAMI_YADAV 18_A_Harshad Chavan 21251010 _VARAD BHOIR_ 18_ 25 21251012 Swara Bhujbalrao 25 22 Soham chavan C 26_Aashish chotaliya

Invite Mute All

Type here to search

Zoom Meeting

Recording...

Prof. V.U. Misal Sudha Goel Dnyanda 37_Pranali Gadgil 71 Mrugank Kelkar PALLAVI PATIL

Treatment options in India for MSWM

CPCB, 2016-17

Treatment Process	Setup	Operational	Planned
Composting	1071	983	167
Vermicomposting	382	266	50
Biogas	101	98	16
RDF	40	36	73

Number of plants (setup and operational) in India with different treatment processes (CPCB, 2016-2017 annual report).

13

AAPL Investor buys 11:50 21-08-2022

Participants (50)

Find a participant

AM Anyan Mishra B_Satish Yadav V B_Vishal Mishra BN Bhanushali Nimesh DO Div-A 03-Tejas bhadreshwara D Dnyanda DI Durvesh Ingle Kiran Thombre Kshiti Salunkhe Kushal Thool Madhuri Mulay M Mahima Chaudhari NS narzo SOA PP PALLAVI PATIL Prof. Nithya K. SP Soham Pednekar

Invite Mute All

Type here to search

References

- Hiremath, BR, Joseph A and Goel, S [2021] Treatment options for efficient municipal solid waste management.
- Sengupta D, Dubey BK and Goel, S. [2019] *Treatment and disposal of solid and hazardous waste*, Capital Books, Delhi and Springer, Germany.
- Goel, S. [2017] Solid and hazardous waste management: An Introduction in *Advances in Solid and Hazardous Waste Management*, Capital Books, Delhi and Springer, Germany.
- Goel Sudha, Ranjan VP, Bardhan, B and Hazra T and [2017] Forecasting solid waste generation rates in *Modelling trends in solid and hazardous waste management*, Edited by Prof. D Sengupta and S Agrahari, Published by Springer-Nature.



Mapping with Program Outcomes:

POs satisfied are PO1, PO6, PO7, PO8 and PO12