



2nd National Conference
on



Technological Advancements in Waste Management: Challenges and Opportunities - 2025 (TAWMCO – 2025)

Conference website: <https://people.iitism.ac.in/~tawmco>.



TAWMCO-2025

December 05-06, 2025
Venue: IIT(ISM), Dhanbad



Organized by



Department of Environmental Science and Engineering
Indian Institute of Technology
(Indian School of Mines), Dhanbad-826004, INDIA

(A centenary celebration of IIT (ISM) Dhanbad)

In Association with



TEXMiN^{IIT (ISM)}

TEXMiN Foundation, IIT (ISM) Dhanbad
&



EIACP(PC-RP), IIT (ISM) Dhanbad

Publishing Partner: Springer Nature



Springer

About the Conference

As India's cities and towns grow, so does the mountain of waste we generate; now over 1.6×10^5 tons every single day. What seems like a growing threat to public health and the environment is, in fact, a chance to unlock bold solutions, where science, innovation, and collaboration can transform waste into a sustainable resource. Through transformative initiatives like the Swachh Bharat Mission Urban 2.0 and GOBARdhan, the government is paving the way for the scientific recovery of waste, the development of circular economies, and the generation of clean energy from organic waste. Now, it's time for academia and innovators to step in. In support of these efforts, IIT (ISM) Dhanbad is proud to host the 2nd National Conference on Technological Advancements in Waste Management: Challenges and Opportunities 2025 on December 5-6, 2025, in Dhanbad, India. This platform aims to foster academic exchange, showcase innovative solutions, and promote scientific approaches that recognize waste as a valuable resource. Together, we can transform waste into a resource and drive India's progress toward sustainability and climate resilience.

Themes

- Industrial waste management and minimization
- Waste management in the mining sector
- Mineral processing waste management, and utilization
- Recycling and managing electronic waste
- Management and upcycling of plastic waste
- Municipal solid waste management
- Construction and demolition (C&D) waste management
- Hazardous and biomedical waste management
- Technologies for waste-to-energy conversion
- Resource recovery from waste
- Carbon Capture, Utilization, and Storage (CCUS)
- Bio-electrochemical sensors for waste management
- Biological waste treatment and energy recovery
- Industrial effluents and wastewater management
- Application of AI & ML in waste management
- Application of Remote Sensing & GIS
- Waste management policies and regulations
- Life cycle Assessment of waste
- Socio-economic aspects and circular economy
- On-ground case studies of waste management
- Other related themes

About IIT(ISM) Dhanbad



Nestled in the heart of India's mineral-rich region, approximately 260 km from Kolkata, the Indian Institute of Technology (Indian School of Mines), Dhanbad, is one of the country's most prestigious and historic institutions. Established in 1926 to meet the nation's growing demand for expertise in mining and applied geology, the institute has since evolved into a multidisciplinary hub of research, innovation, and education. It was granted IIT status in 2016, thereby joining the ranks of India's most elite technical institutes.

Ranked 15th among engineering institutions in India as per the NIRF 2024, IIT (ISM) offers a wide array of academic programs, including B.Tech, M.Tech, M.Sc., MBA, and Ph.D., across diverse fields such as engineering, sciences, and management. While maintaining its leadership in the fields of mining, petroleum engineering, and geosciences, the institute is also advancing in areas like data science, environmental engineering, and sustainable technologies.

About Department



The Department of Environmental Science and Engineering at IIT(ISM) Dhanbad was established in 2007, evolving from the Centre of Mining Environment, founded in 1987. It pioneered the first B.Tech program in Environmental Engineering through IIT-JEE, and now also offers M.Tech and Ph.D. programs in the discipline.

Renowned for its academic rigor and strong industry relevance, the department's graduates are well-placed in top organizations such as CIL, NTPC, L&T, BALCO, NALCO, HZL, and key regulatory bodies like MoEF&CC, CPCB, and SPCBs, along with leading research labs, academic institutes, consultancies, and NGOs. With state-of-the-art research facilities, ISO 9001 and OHSAS 18001 certifications, and a focus on quality, safety, and sustainability, the department is committed to advancing knowledge, fostering innovation, and addressing pressing environmental challenges through education, research, and capacity building.

Call for Abstracts, Full Papers and Posters

Researchers, scholars, and professionals are invited to submit abstracts and full-length papers aligned in line with the conference themes for oral or poster presentations. Submissions should be prepared in MS Word format and submitted via email or the designated Registration Link.

All full papers will undergo peer review by the technical committee, and the selected papers will be published by **Springer Nature**. Awards will be presented for the oral and poster presentations.

Format for preparing paper

Title: Times New Roman 16 bold, Author: Times New Roman 12 bold, Affiliation: Times New Roman 12 italic, Headings: Times New Roman 12 bold, Sub-Headings: Times New Roman 12 bold, Paragraph texts: Times New Roman 12. Figures: Fig.1, Fig.2 etc. Tables: Table 1, Table 2, etc. Figures and tables should be placed at their references in between the text. References should be cited (Kumar et al., 2025) in the main text and arranged in alphabetical order heading references.

Poster Size : 3 x 4 ft. (approx.)

For Nomination

The Organization is requested to nominate a few officers to participate in this conference. The nomination letter should reach the convener on or before November 21, 2025, via e-mail or post, along with the course fee through DD/RTGS/UPI.

Date of Conference

December 05-06, 2025

About the Venue

IIT(ISM) Dhanbad is situated in the heart of Dhanbad City. Dhanbad is often referred to as the "Coal Capital of India" due to its rich coal reserves. The city and its surrounding areas are home to numerous coal mines, making it a significant hub for coal production in the country. The weather in Dhanbad is very pleasant during December.

How to Reach IIT (ISM), Dhanbad

By Train: Dhanbad Junction Railway Station, located just 2.8 km from the IIT (ISM) Campus, is the nearest railway station. By Air: The nearest public airports to Dhanbad are: Kazi Nazrul Islam Airport, Durgapur (85 km), Birsa Munda Airport, Ranchi (140 km), Deoghar International Airport, Deoghar (110 km), Netaji Subhas Chandra Bose International Airport, Kolkata (269 km).

Accommodation

Accommodation for participants will be arranged on a first-come, first-served and payment basis at the IIT(ISM) Guest House, subject to availability. Participants may also make independent hotel bookings in Dhanbad at their convenience.

Registration

For offline participants, registration fee includes access to all sessions, registration kit, breakfast, hightea, working lunch, cultural program, and gala dinner. For online participants, registration fee includes access to all technical sessions. A participation certificate will be provided to both offline and online attendees.

Registration Fee (including GST @18% Indian, INR)	Offline Participation Amount (INR)			Online Participation Amount (INR)	
	Early Bird (before 10.10.2025)	Late Registration (before 21.11.2025)	On-Spot Registration	Early Bird (before 10.10.2025)	Late Registration (before 21.11.2025)
Students/Research Scholars	₹ 3500	₹ 4000	₹ 4500	₹ 2000	₹ 2500
Faculty & Scientist	₹ 6000	₹ 7000	₹ 7500	₹ 3000	₹ 3500
Industry Professionals	₹ 12000	₹ 13000	₹ 14000	₹ 6000	₹ 6500

Fee Payment Instructions

The registration fee is to be paid via Net Banking, DD or UPI to the account mentioned below. Once the payment is successful, participants are requested to register on the conference website: <https://people.iitism.ac.in/~tawmco>.

Registration can also be done via the given Google link. Please send the transaction details after the registration via e-mail: tawmco@iitism.ac.in

Registration Link:

<https://docs.google.com/forms/d/e/1FAIpQLSevL3IQjzU2PffNPEa5BfeiaOHrGjBjDrjo3pRamKubE3pNiQ/viewform?usp=header>

Bank Details for Payment

Net Banking

Name: IIT(ISM) SPECIAL FUND
A/C no: 0986101024892
IFSC: CNRB0000986
Bank Name: Canara Bank
Branch: Saraidhela Branch, Dhanbad
MICR code: 826015003
GSTIN: 20AAAI0686D1ZA

UPI



Sponsorship

Diamond Sponsorship	Gold Sponsorship	Silver Sponsorship
₹ 1,00,000/- (including 4 delegates free)	₹ 75,000/- (including 3 delegates free)	₹ 50,000/- (including 2 delegates free)

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₹ 1,00,000/-	₹ 75,000/-	₹ 50,000/-	₹ 30,000/-

Important Dates

Events Notification	Date
Last date for early bird registration	October 10, 2025
Last date for late registration	November 21, 2025
Last date for receipt of abstracts	October 10, 2025
Intimation of acceptance of abstract	October 15, 2025
Last date for receipt of full papers	November 21, 2025
Conference	December 05-06, 2025

Organizing Committee

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Highlights of TAWMCO-2023



CORRESPONDENCE

Prof. Vipin Kumar
 Convener, Mobile: 9471191352,
 Email: vipinmicro1@iitism.ac.in

Prof. Manish Kumar Jain
 Co-Convener, Mobile: 9431711095
 Email: manish@iitism.ac.in

Department of Environmental Science and Engineering
 Indian Institute of Technology (Indian School of Mines), Dhanbad-826004, Jharkhand
 Conference E-mail: tawmco@iitism.ac.in, Website: <https://people.iitism.ac.in/~tawmco>

For Paper/Poster Submission - Mr. Nishant Pandey, 9598304004

For Accommodation - Mr. Manish Sharma, 7992240363