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PRESS-RELEASE

IIT (ISM) Marks Day 3 of Centenary Week With TAWMCO-2025, Spotlight on Waste-to-Wealth & Sustainable Energy

The third day of the **Centenary Foundation Week of IIT (ISM) Dhanbad** today witnessed the grand inauguration of the **2nd National Conference on Technological Advancements in Waste Management: Challenges and Opportunities (TAWMCO-2025)** at **Penman Auditorium**, marking a significant step toward the day's central theme of **Environmental Conservation and Sustainable Renewable Energy**. The event commenced with the welcome of dignitaries and the release of the conference.

The inaugural session saw the gracious presence of **Shri Sanjiv Kumar Singh, CMD, Hindustan Copper Limited**, as the **Chief Guest**, along with **Shri D. S. Mishra, Former Chief Secretary, Uttar Pradesh as Chief Speaker**, and **Prof. Vijai K. Gupta of Dublin City University, Ireland**, as **Guest of Honour**, while **Prof. Sukumar Mishra, Director, IIT (ISM)** presided over the ceremony.

The proceedings opened with the welcome address by **Prof. Vipin Kumar**, followed by remarks from **Prof. Alok Sinha**, HoD ESE, setting the tone for deep reflections on sustainability and technological innovation.

Delivering the presidential address, **Prof. Sukumar Mishra** described IIT (ISM)'s completion of 100 years as the beginning of its "**adult phase**", a period of heightened social expectations, greater responsibility, and expanding national influence. He stressed the rising need for **interdisciplinarity, quantification-driven research, and innovative frameworks** that shape national development. The Director highlighted how emerging platforms such as **TEXMiN** are significantly enhancing the institute's global research presence and appreciated the departments for nurturing a culture of creativity and hybrid digital-traditional inquiry.

Addressing the gathering, **Prof. Vijai K. Gupta** asserted that **waste is not a problem but a vast, underutilized resource**, capable of yielding energy, fuels, biomaterials, and high-value compounds. He cited international examples demonstrating how nations transform waste streams—ranging from household and municipal waste to pharmaceutical residues—into profitable energy and material cycles through **thermochemical, biochemical, and microbial technologies**. Calling for India to adopt **AI-driven waste sorting, advanced processing systems, and frontline research platforms**, he emphasized the critical contribution of teachers who inspire scientific curiosity and societal progress.

Shri Sanjiv Kumar Singh underscored that **copper is central to India's sustainability journey**, calling it a "**divine and infinitely recyclable metal**" essential for the country's clean energy transition, electric mobility, and robust infrastructure. He elaborated on Hindustan Copper Limited's efforts in **tailings management, waste reprocessing, recycling innovation, and industry-academia collaborations**, urging researchers to explore the enormous opportunity locked within mining waste. Reaffirming HCL's commitment to **sustainable mining** and national development, he assured continued support to India's ambitious goals leading up to **2047**.

Shri D. S. Mishra reflected on India's remarkable transformation in waste management since the launch of **Swachh Bharat**, noting that the world today views waste through the lens of opportunity. He emphasized that **nature generates no waste—humans do**, and therefore society must embrace the principles of **reduce, reuse, and recycle** to transition into a circular economy. He encouraged the responsible management of plastics, the promotion of **waste-to-wealth pathways** such as biogas, and the adoption of nature-inspired systems that ensure long-term sustainability.



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद Indian Institute of Technology (Indian School of Mines), Dhanbad

The day also featured a rich lineup of academic and cultural engagements across the campus, including **plenary talks, panel discussions, and success stories** from departments such as Computer Science & Engineering, Mathematics & Computing, Electronics & Communication Engineering, and Physics. Visitors also witnessed **AI-powered digital twin dashboard demonstrations**, lively activities at the **Children's Activity Centre** for students up to Class V, engaging events for senior school students organized by the **Scolomin Club**, and vibrant cultural performances by **Manthan**, the student cultural society. The inaugural session concluded with a vote of thanks delivered by **Prof. M. K. Jain**, followed by the national anthem and group photography, bringing to a close a day that celebrated innovation, sustainability, and the spirit of the centenary year.

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