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IIT Indore launches TEES framework for sustainable sanitation

Our Staff Reporter

INDORE

In preparation for the Ujjain Simhastha Kumbh 2028, the Indian Institute of Technology Indore (IIT Indore), in collaboration with the Bureau of Indian Standards (BIS), organised a National Workshop on Mobile Toilet Management to address strategies for safe, inclusive and sustainable sanitation during large-scale religious gatherings.

Inaugurating the workshop, director of IIT Indore, Prof Suhas Joshi, emphasised that sanitation emIIT Indore and BIS collaborate to develop safe, inclusive, and eco-friendly sanitation systems ahead of Simhastha 2028

bodies not just infrastructure but human dignity and sustainability. He stated, "With design, technology and governance working together, India can set global benchmarks in public sanitation." Sharing insights from his visit to NTU Singapore, Prof Joshi highlighted a 3D-printed toilet



project praised by Prime Minister Narendra Modi, showcasing how innovation can revolutionise sanitation systems.

A key highlight of the event was the unveiling of the TEES Framework, Technical, Economic, Environmental and Social, developed by assistant professor, IIT Indore, Dr Ashootosh Mandpe. The framework proposes sitespecific, inclusive toilet designs featuring ramps, solar lighting, smart cleaning alerts and biogas generation units. Dr Mandpe noted, "Our goal is not just to provide sanitation facilities but to build systems that enhance safety, dignity and trust for every user."

The workshop united experts from IITs, IIM Indore, CSIR laboratories and government agencies to discuss rapid deployment, renewable energy integration and BIS-aligned governance models. Over 80 participants from academia, government and industry attended.

Concluding the event, Prof Joshi reaffirmed IIT Indore's commitment to advancing sustainable sanitation and translating research into real-world impact.

Key Highlights

- IIT Indore and BIS hosted a National Workshop on Mobile Toilet Management.
- Prof Suhas Joshi emphasised sanitation as dignity and sustainability.
- Dr Ashootosh Mandpe presented the TEES Framework.
- Framework includes ramps, solar lights and biogas units.
- Over 80 experts and policymakers joined the deliberations.