



## भारतीय प्रौद्योगिकी संस्थान भुवनेश्वर Indian Institute of Technology Bhubaneswar

### Press Release

#### **IIT Bhubaneswar organizes workshop on Designing Structures for Fire Safety Experts delve into use of modern technologies for designing fire-safe structures**

**Bhubaneswar, 13<sup>th</sup> July 2024:** Indian Institute of Technology (IIT) Bhubaneswar has recently organized a one-day international workshop on Designing Structures for Fire Safety. The workshop was organized in collaboration with the Odisha State Disaster Management Authority (OSDMA), as part of the Scheme for Promotion of Academic and Research Collaboration (SPARC) Scheme, Ministry of Education, Govt. of India. The workshop was inaugurated by Prof. Venkatesh Kodur, Distinguished Professor, Michigan State University, USA and Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar.

This workshop gave a thorough introduction to the principles, practices, and strategies of fire safe design in modern constructions. Topics included designing steel and concrete structures for fire safety and using Big Data and AI for knowledge discovery in fire engineering. Another research-focused discussion covered the instability of thin-walled structures due to fire induced localized thermal loading. Through the demonstration of case studies and practical exercises, participants gained an opportunity to learn to integrate fire safety considerations into the design process, ensuring that buildings not only comply with regulations but also enhance occupant safety and resilience in case of a fire.

In his address, Prof. Venkatesh Kodur, referring to the engineering and construction marvels of the ancient civilizations, stressed that there is a need to address both quality control and combat the hazards through advanced structural designing of the critical infrastructure, which are essential for the survival of the society. He also emphasized on research and development in the field of civil engineering, with special focus on the fire safety designing.

Prof. Karmalkar, Director said: "While IIT Bhubaneswar is entering the third phase of infrastructure development, this workshop is very relevant." Commenting on the applicability of the research, he said that 'a lot of technology is outside the purview of research papers, and lies with the experts who practice it.'

Prof. Sumanta Halder, Head, School of Infrastructure highlighted the significance of the workshop and congratulated the team for organizing this relevant workshop. Prof. Dinakar Pasla, Dean-Sponsored Research & Industrial Consultancy (SRIC) mentioned the initiatives of SRIC towards the strengthening the research ecosystem of IIT Bhubaneswar.

Several keynote sessions were delivered by different stakeholders. Prof. Kodur, Dr. Malay Pradhan from OSDMA, Prof. M.Z. Naser from Clemson University (USA) and Prof. Rajesh Kumar from BITS Pilani were the eminent speakers in the workshop.

The workshop was organized by Prof. Sarat Kumar Panda and Dr. Santhoshkumar G., Faculty members from School of Infrastructure, IIT Bhubaneswar. In conjunction with this workshop, a 15-days Short Course on "Structural Fire Engineering" is being conducted at the School of Infrastructure from 9<sup>th</sup> to 23<sup>rd</sup> July 2024, with Prof. Kodur as the Course Instructor.

Major Participants of the workshop were from OSDMA, Industrial Infrastructure Development Corporation (IDCO), PWD Department, Odisha, RITES, AIMIL Limited, OUTF, Bhubaneswar and IIT Bhubaneswar.

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