

A Report on Guest lecture "Thermal Analysis in Building" Organized by Department of Civil Engineering In association with ASCE MITS Student Chapter On 19.04,2024



Submitted by: Dr. Nakkeeran, Assistant Professor, Department of Civil Engineering. Resource Person Details: Dr. Jayakeerti Muralidharan, Building Physics Engineer, McCann & Partners, UK. Dignitaries Present: Dr. Dipankar Roy, Professor & Head of Civil Engineering department and ASCE Faculty Advisor & Dr. Nakkeeran, Assistant Professor, Department of Civil Engineering. Report received on 10.05.2024 Mode of Conduct: Online

**Resource Persons:** 

The speaker Dr. Jayakeerti Muralidharan currently he is working at McCann and partners in the UK as a Building Physics Engineer, a distinguished expert in the field of thermal analysis and sustainable building design. Master of Science in Environmental Design of Buildings Cardiff University, Cardiff, Wales. Research Title - Evaluating and Analysing the Impact of knowledge transfer in sustainable construction.



## **Objective of the Course:**

The session focuses on the thermal analysis of buildings is typically to provide students with an understanding of how heat flows within buildings and how it affects energy consumption, comfort, and indoor air quality. Students may learn about various thermal analysis techniques, software tools, and design strategies to optimize building performance and energy efficiency.



## **Program Details:**

The ASCE MITS Student Chapter, Department of Civil Engineering, MITS in collaboration with AICTE, MOE's Innovation Cell (GOI), Institution's Innovation Council (Ministry of Education Initiative), MITS Innovation Cell, have organised a Guest lecture on "Thermal Analysis in Building" 19th April 2024 from 10: am to 11: 00 am.

The online event started with the welcome speech by Dr. Nakkeeran followed by Dr. Dipankar Roy and followed by the session of resource person. There was a good response with nearly 70 students participated from the Department of Civil Engineering. A few professionals are also showed their interest and attended this session . The lecture session was supported by the respected management of MITS, Madanapalle, AICTE, MOE's Innovation Cell (GOI), Institution's Innovation Council (Ministry of Education Initiative), MITS Innovation Cell and ASCE MITS Student Chapter. The session maintained the expected quality from the resource persons and were open to discuss and reply to the queries of the participants. At 11: 00 am, the session was concluded and followed by a vote of thanks given by Dr. Nakkeeran 1, Sr. Assistant Professor, Department of Civil Engineering.

We thank AICTE, MOE's Innovation Cell (GOI), Institution's Innovation Council (Ministry of Education Initiative), MITS Innovation Cell and ASCE MITS Chapter for their continuous support to make this event a success.

## **Outcome:**

Students will proficiently analyze thermal dynamics within buildings, discerning heat flow patterns and their impacts on energy usage, occupant comfort, and indoor air quality. They will adeptly utilize diverse thermal analysis techniques, software tools, and design methodologies to enhance building performance and energy efficiency. Equipped with this knowledge, graduates will contribute to sustainable architecture and construction practices, designing and retrofitting structures to minimize environmental impact while maximizing comfort and resource efficiency.

## **Feedback Analysis:**

