

COMPILED REPORT

Guest Lecture on

Structural Health Monitoring in India

Title of the Guest Lecture: “Structural Health Monitoring in India”

Target Audience: **B. Tech II and III Year Students**

Date: **07/02/2025**

Speaker: **Dr. Venkata Dilip Pasupuleti, Associate Professor, Department of Civil Engineering Mahindra University, Hyderabad.**

Resource Person Profile



Dr. Venkata Dilip Kumar Pasupuleti is a faculty member in Department of Civil Engineering at École Centrale School of Engineering, Mahindra University, which is in collaboration between Mahindra Group and École Central Paris (now Centrale Supélec). He did his masters and Ph.D. from International Institute of Information Technology, Hyderabad (IIIT Hyd). He has published more than 100 research papers and is currently guiding 4 Ph. D's students. He has visited more than 20 countries to present his research work and for special training sponsored by UNESCO and JICA.

He has delivered more than 100 Invited lectures all over India on “Importance and Fundamentals of Civil Engineering”, “Applications of AI in Civil Engineering” and “Understanding Structural Health of India – A Need”. He has founded and started Center of Excellence, “Center for Sustainable Infrastructure and Systems (CSIS)”, an interdisciplinary research center with the blend of Civil Engineering and Computer Science at Mahindra University with his co-faculty. He is currently working on structural health assessment and monitoring using wireless sensors for reinforced concrete structures, steel structures and heritage structures, earthquake resistant structures, repair, retrofitting and rehabilitation, and biomimic Structures.

He has received best researcher award at ICAEIT 2017, International Conference held in Malaysia and has research collaboration with universities from Germany, Portugal, Malaysia, South Korea, and Japan.

He is a professional member of Indian Concrete Institute (ICI), Earthquake Engineering Research Institute (EERI), and The Institution of Engineers (India) (IEI).

The Department of Civil Engineering, JBIET organized an insightful guest lecture on the topic "**Structural Health Monitoring in India**" on 07 February 2025. The lecture was delivered by **Dr. Venkata Dilip Pasupuleti, Associate Professor, Department of Civil Engineering Mahindra University, Hyderabad**, a renowned expert in the field of civil engineering with vast experience in infrastructure monitoring and maintenance.

The primary aim of the lecture was to provide students with an understanding of the principles, techniques, and current developments in the field of Structural Health Monitoring (SHM), particularly in India. The session also highlighted the growing importance of SHM in ensuring the safety, durability, and cost-efficiency of infrastructure projects.

The session began with a foundational overview of Structural Health Monitoring, its definitions, and relevance in today's infrastructure lifecycle. The speaker discussed the role of SHM in preventive maintenance and failure prediction. Various modern techniques such as sensor networks, wireless monitoring systems, fiber optic sensors, and AI-based data analytics were introduced. Practical implementation and challenges in Indian infrastructure were also elaborated.

The speaker presented several case studies, including monitoring of bridges and other important structures. Notable examples included SHM applications in the various parts of Telangana.

The session concluded with insights into the future scope of SHM in India, government initiatives, and potential career paths for students interested in this emerging interdisciplinary field.

POSTER OF THE EVENT



JB INSTITUTE OF ENGINEERING & TECHNOLOGY

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Department of Civil Engineering

Guest Lecture on

"Structural Health Monitoring in India"

Current Trends and Future Directions

07th February 2025, 11:30 AM to 12:30 PM

Venue: Placement Seminar Hall, JBIET, Hyd.



Coordinator
Mr. Maruthi Shivagal
Assistant Professor

HOD
Dr. Aditya Kamineni
Associate Professor

Dr. Venkata Dilip Pasupuleti
Associate Professor
Department of Civil Engineering
Ecole Centrale School of Engineering,
Mahendra University, Hyd.

Photos



Lecture by Dr. Venkata Dilip Pasupuleti

Attendance Sheet

J. B. INSTITUTE OF ENGINEERING AND TECHNOLOGY

UGC Autonomous
Department of Civil Engineering

Guest Lecture on "Structural Health Monitoring in India"

Speaker: Dr. Venkata Dilip Pasupuleti, Associate Professor, Mahindra University, Hyderabad.

Date: 07-02-2025

Time: 11:30 AM to 12:30 PM

Faculty Coordinator: Mr. Maruti, Assistant Professor, Civil Engineering, JBIET

List of Civil Engineering Students who have Attended the Lecture

Sl.No.	Roll No.	Name of the Student	Year (II/III)	Signature
1	24675A0102	M. Akshaya	II	M. Akshaya
2	24675A0105	C. Akshaya	II	C. Akshaya
3	23671A0106	S. Jishitha	II	Jishitha
4	24675A0111	G. Renuka	II	Renuka
5	24675A0103	N. Nandini	II	N. Nandini
6	23675A0104	N. Leeya	III	Leeya
7	23675A0108	D. Harshavardhini	III	Harshavardhini
8	23675A0114	Afreen	III	Afreen
9	23675A0118	Durga	III	Durga
10	23675A0111	K. Priya	III	K. Priya
11	23675A0105	J. Rupa Sree	III	J. Rupa Sree
12	23675A0103	E. Roopa Sree	III	E. Roopa Sree
13	23675A0106	B. Tharun Teja	III	B. Tharun Teja
14	23675A0101	M. Abhilash	III	M. Abhilash
15	23675A0121	B. Rajendra chary	III	Rajendra chary
16	23675A0109	P. Anirudh	III	P. Anirudh
17	22671A0104	M. Srini	III	M. Srini

19	23675A0120	N. Hruthik Raj	III	N. Hry
19	23675A0116	M. Shiva	III	Shiva
20	23675A0115	M. SAI KUMAR	III	M. SAI KUMAR
21	23675A0117	M. Naresh	III	M. Naresh
22	23675A0112	D. Manohar Reddy	III	D. Manohar
23	23675A0113	B. Sai Ganesh	III	B. Sai
24	24675A0109	P. Saichandu	II	P. Saichandu
25	24675A0110	G. Madhu balaji	II	G. Madhu
26	24675A0101	B. Ganesh	II	B. Ganesh
27	23671A0103	T. Shiva	II	T. Shiva
28	24675A0115	MOHAMMED TUNAI	II	MOHAMMED TUNAI
29	24675A0105	Kaishna Vamshi	II	Kaishna Vamshi
30	24675A0106	K. SHANMUKH SAI	II	K. SHANMUKH SAI
31	24675A0104	P. Marideepak	II	P. Marideepak
32	23675A0110	K. Vishwa Vivek	III	K. Vishwa Vivek
33	22671A0106	V. Vishnu	II	V. Vishnu
34	22671A0101	B. Keshava	II	B. Keshava
35	23675A0105	D. Ram Lakshitha	III	D. Ram Lakshitha
36	23675A0119	B. Madhu	III	B. Madhu
37	22671A0103	L. Madhu Sudhan Reddy	III	L. Madhu Sudhan Reddy