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A Workshop on "Health Monitoring of Structures", from 09th August 2024 to 10th August 2024.

A Workshop on "Health Monitoring of Structures "was organized by the Department of Civil Engineering , MVJCE, from from 09th August 2024 to 10th August 2024, in Seminar Hall 4. 40 Students and 11 Faculty members of the Civil Engineering Department have participated in the Workshop.

The workshop was structured into theoretical sessions, case studies, and practical demonstrations. Key topics covered included:

- a) Introduction to SHM: Principles, techniques, and the importance of SHM in civil engineering.
- **b) Applications of SHM:** Real-world examples where SHM has been successfully implemented to detect structural issues and optimize maintenance schedules.
- c) Non-Destructive Testing (NDT) in SHM: The use of NDT methods in monitoring structural health.
- d) Practical Sessions: Hands-on experience with SHM equipment, data collection, and analysis..

The primary objective of the workshop was to provide participants with a comprehensive understanding of Structural Health Monitoring (SHM) – an essential discipline in ensuring the safety, durability, and sustainability of civil infrastructure.

The Workshop was started with the arrival of the dignitaries on the dais. Dr. Chandramouli S V, Lead Structural Consultant at EGIS Bhuvaneshwar, Expert Structural Consultant at PMCBS Jaipur and SCMCES Bengaluru. With over 22 years of experience, Dr. Chandramouli specializes in SHM, advanced rehabilitation, and structural analysis. He has contributed to numerous SHM projects globally and is recognized for his expertise in sensors, data analysis, and software packages. He has also published over 40 papers and was awarded "Best Professor in Civil Engineering Studies" at PES University. The Master of Ceremony was Prof. Asra Fathima (Assistant Professor, Department of Civil Engineering, MVJCE).

The initial sessions is on introducing the fundamental principles of Structural Health Monitoring. Dr. Chandramouli discussed various SHM techniques and their applications, their importance in modern civil engineering. Students learned about different methods used in SHM, including both traditional and advanced technologies. The workshop provided several case studies where SHM had been successfully implemented to detect structural issues, prevent failures, and optimize maintenance schedules.

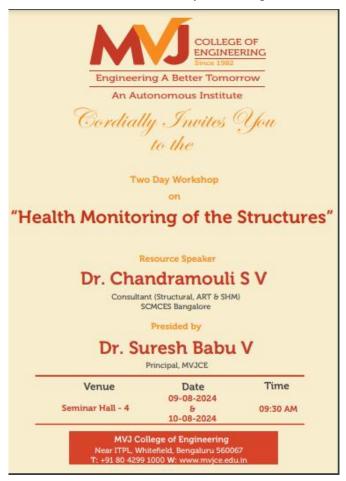
Immediately after the Keynote speech, Practical Sessions are started for the students. Dr. Chandramouli demonstrated how NDT techniques are integrated into SHM processes to monitor the condition of structures without causing damage. The session included live demonstrations of NDT equipment, giving students hands-on experience with the tools used in the industry. Day 1 (09th August 2024): Around 40 Students of 6th, 4th Semester UG students and 2nd Semester PG students were taken for the Practical Sessions (01.30 am to 4 pm).

Day 2 (10th August 2024): Around 37 Students of Students of 6th, 4th Semester UG students and 2nd Semester PG students were taken for the Practical Sessions

On 10th December 2021, Vote of thanks was proposed by Dr. Kasi Rekha, extending gratitude to the esteemed Key speaker for his presence and an excellent workshop session, to the Management of MVJCE for providing an opportunity to organize such events, to the Principal Dr.Suresh Babu, Vice Principal Dr. M Brindha and Dean of Academics Dr Shrinivas L Gombi for their constant support and encouragement, faculty of Civil Engineering Department and all the Civil Engineering students for their participation. She also thanked the IThelpdesk, non-teaching staff and technicians for their contribution.



Banner for two day workshop



Invitation of workshop



Dr. Chandramouli S V delivering the session on 'Infrastructure Development in India, during the workshop on Health Monitoring of Structures



Students interaction with the chief guest during the session



Dr. Chandramouli S V giving practical sessions related to SHM to students



Students observing the working of equipments used in SHM



Faculty and guest speaker Dr. Chandramouli S V along with the organizing team of the workshop on Health Monitoring of Structures, after the event at the seminar hall 4

Outcome of the Event:

Students gained a understanding of SHM principles, techniques, and their critical role in ensuring the safety and durability of infrastructure. The hands-on sessions provided practical experience, allowing participants to work with SHM equipment, collect real-time data, and analyze it effectively. Use of SHM and other equipment leads to lifelong learning which satisfies the Program Outcomes PO11 and PO12.