

**FACULTY OF ENGINEERING**  
**DEPARTMENT OF MECHANICAL AND AUTOMOBILE ENGINEERING**  
**REPORT ON**

**Guest Lecture by**  
**Mr. Shankar Ganesh Krishnamurthy**  
**on the topic**  
**MECHANICAL VIBRATION AND ELECTROMECHANICAL DAMPER**

**Date: 29<sup>th</sup> July, 2017**

**Venue: Third Block, Fourth Floor Auditorium,  
Christ University Faculty of Engineering, Kengeri Campus**

**Time: 2.00-4.00 PM**

**Attended by: 7<sup>th</sup> Semester Mechanical and Automobile Engineering**

The following report contains the details of the Guest lecture held for all 7th semester students from department of Mechanical and Automobile engineering, CUFE, on “Mechanical vibration and electromechanical damper”

**OVERVIEW OF THE EVENT**

The talk started with a small presentation on the concept of Mechanical vibration and electromechanical damper. Some of the key points highlighted during the presentation were:

- 1) Vibration was defined and the classification of vibration systems into systems with viscous damping, systems with non-viscous damping, resistive damping, capacitive damping systems etc. was introduced.
- 2) The concept of single degree of freedom vibration systems- damped and undamped was elucidated. Also the term ‘critical damping’ was defined and the significance of damping coefficient was explained.

**DEPARTMENT OF MECHANICAL AND AUTOMOBILE ENGINEERING**

- 3) A brief introduction was given on the governing equations of a spring mass system with damping along with the phenomenon of resonant vibrations.
- 4) Contact and non-contact methods of measuring the amplitude of vibration of a system were mentioned.
- 5) Damping of macro level systems using Eddy current dampers was explained and the way of harvesting energy during the damping process was pointed out.
- 6) Design details of a model eddy current based damping system for dynamic damping of vibration in a cantilever beam were given.

**FEEDBACK FROM STUDENTS**

- An opportunity to meet and interact with a knowledgeable person.
- Certain concepts were understood better which are related with the associated subject.
- Well directed and the mentality of students were very well understood.
- All queries were well answered leaving no option of dilemma in students.
- Well managed given the time constraint in hand.

**Mr. Darshan introducing the guest**

**Dr. Palpandian giving vote of thanks for the guest**

**Group photo of faculties with the guest**

**Student participation in the guest lecture**

**DEPARTMENT OF MECHANICAL AND AUTOMOBILE ENGINEERING**



**DEPARTMENT OF MECHANICAL AND AUTOMOBILE ENGINEERING**

