



A Report on TWO DAY STATE LEVEL WORKSHOP ON

## **Automotive NVH**

Feb 25-26, 2016 Organized by

**Department of Mechanical Engineering** 

At

All India Shri Shivaji Memorial Society's College of Engineering in association with



SAVITRIBAI PHULE PUNE UNIVERSITY

## WORKSHOP SUMMARY REPORT:

## AUTOMOTIVE NVH (A TWO DAY STATE LEVEL WORKSHOP ORGANIZED BY DEPARTMENT OF MECHANICAL ENGINEERING ON 25 AND 26 FEBRUARY 2016) ~Prepared by **Dr S V Kshirsagar**, Co-ordinator of workshop

On 25<sup>th</sup> and 26<sup>th</sup> February, 2016, Department of Mechanical Engineering, AISSMS College of Engineering Pune-1, hosted a two-day workshop entitled "Automotive NVH". The workshop was sponsored by Savitribai Phule Pune University under the scheme of Quality Improvement Program.

The purpose of the workshop was to cater to the needs of faculty members in Mechanical and Automobile Engineering, Research Scholars aspiring to do research in the area of NVH, Practicing Engineers from automotive industry.

**Noise Vibration and Harshness** (NVH) subject, needless to say, is very important in Mechanical and Automobile Engineering. Modern day automotive design is incomplete without incorporation of NVH aspects. SPPU has introduced 'NVH' subject in Automobile Engineering at post-graduate level.

The expert lectures of professionals from industries like **ARAI**, **TATA MOTORS**, and Academicians from various **Research Institutes** were organized.

The 72 workshop participants represented various organizations, including institutes, consultants and research scholars from various cities of Maharashtra in this workshop.

The proceedings of the Workshop was Inaugurated in gracious presence of Cheif Guest **Dr D W Pande** (Dean & Professor COEP, Pune), **Dr P J Awasare** (BOS Co-ordinator), **Mr A U Patil** (Treasurer-AISSMS), **Mr S P Shinde** (Honary Joint Secretary-AISSMS).

The agenda began with an overview by **Dr D W Pande** of the background and context of Automotive NVH. He delivered a very impressive keynote session on various concepts of Noise, Vibration and Harshness giving in-depth knowledge as a requirement of various academic courses in Automotive and Design Engineering.

Second session on day one began with Trends in Vibration Control by **Dr S M Khot**. He delivered a very interesting session on Fundamentals of Vibrations, vibration control strategies and roll of semi-active and active suspension systems for automotive applications. Participants then shared all their difficulties in experimentations on active vibration control.

In the last and Third session of the day **Mr R K Mohanty** shared his practical experience in Modal analysis, Various NVH analysis techniques used in Automotive Industries. He then gave an interesting introduction to a new area in NVH 'Measurement techniques of Torsional Vibrations'. His session gave participants indepth state of the art knowledge on NVH measurement techniques which are popular in automotive industries.

Second day first session was an apex experience of all the participants. **Mr Chaitanya Krishna Balla** from TATA MOTORS shared exciting stories of his on NVH testing in ARAI, TATA MOTORS. He presented a case study on Noise Reduction of Single Cylinder Diesel Engine. He shared all procedures and level of the project of Noise reduction in engine which is the most complex part to be considered for modification for reduced Noise.

**Dr R B Ingle** in the last and concluding keynote session explained everything on Sound absorbing Materials. He shared his experiences of his research on Noise reduction of silencer. Which was very fascinating as the method of Noise control was done simply applying the working principles of flute.

The workshop concluded on 26<sup>th</sup> February 2016 with a Valedictory function graced with presence of **Dr S P Danao** (Principal-AISSMS COE), **Dr R B Ingle** (Professor & HoD-Cummins COE), **Prof A V Waghmare** (HoD-Mechanical Enginering). Participation Certificates were distributed to all the participants in the hands of various dignitaries.



Dr D W Pande in Session-I (Day one)

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DR S M Khot Session-II (Day one)



Mr R K Mohanty Session-III (Day one)



Mr C K Balla Session-I (Day Two)



DR R B Ingle Session-II (Day Two)



Felicitation of Chief Guest



**Inaugural Function** 



Workshop Group Photo



Organizing Committee