



## ***Presentation Topics and Abbreviated Paper Titles***

### Strategies for Solving Practical Problems

- Vehicle Noise and Vibration Development (Neville)
- Spin-Torsional NVH Test Facility (Abe)
- Structure-Borne Noise in HVAC Systems (Comparin, Williamson, Seel)
- Noise Controls in Mining and Construction (Hayden)
- Ride Analysis in Vehicles (Srivastava)

### Experimental Structural Dynamics

- Structural Damage Prognosis (Adams)
- Chatter Recognition (Schmitz)
- DSP Methods for Rotating Machinery (Blough)
- Consumer Technology in Testing (Dillon)
- MIMO-FRF (Phillips, Allemang)
- Frequency Domain Parameter Estimation (Fladung, Phillips, Allemang)

### Computational Structural Dynamics

- Model Updating (Kundra)
- Structural Dynamic Modifications (Nakra)
- Updated Models (Modak, Kundra, Nakra)
- Parametric Instability in Pipes (Jayaraj, Ganesan, Padmanabhan)

### Aerospace Structures

- Acoustic Signature of an Unmanned Air-Vehicle (Sadavisan, Gurubasavaraj, Sekar)
- Model of Nose Wheel Landing Gears (Suryanarayan, Sura)
- Spinning Flexible Space Tethers (Han, MacDonald)
- Aircraft Landing Gear Simulation (Rook)

### Duct & Flow Acoustics

- Pod Silencers (Munjal)
- Trailing Edge Noise in a Motorized Impeller (Laucle)
- Hybrid Silencers (Lee, Selamat)
- Effect of Nonlinearities in Noise Control Predictions (Selamet, Dickey)
- Response of Hydrophone Array (Bhujanga Rao, Laxman)

## ***Workshop Topics***

- Experimental Structural Dynamics
- Mufflers and Intake/Exhaust Systems
- Structure-borne Noise
- Vibration and Acoustic Materials
- Smart Materials and Active Control
- Vehicle Vibration and Acoustics

### Active Control and Smart Structures

- Active/Passive Techniques for Vibration Suppression (Garg, Anderson)
- Active Control of Shells (Kumar, Ganesan, Swarnamani, Padmanabhan)
- Piezolaminated Smart Structures (Narayanan, Balamurugan)
- Vibration in Piezo Positioners (Devasia, Leang)
- Novel Sensing and Control Technique (Washington, Isler)
- Modal Control Strategies (Singh, Pruthi, Agarwal)
- Magnetostrictive Actuators and Sensors (Dapino)
- Virtual Reality Environment (Akl, Baz)

### Vibration and Acoustic Materials

- Viscoelastic Damping in Automobiles and Airplanes (Rao)
- Damping in Fiber-Reinforced Composites (Chandra, Singh, Gupta)
- Polyurethane Foam Modeling (Deng, Bajaj, Davies)

### Mid & High Frequency Calculations

- Minimizing Structure-borne Sound in Mechanisms (Manik, Mathuria)
- Variability in SEA (Lyon)
- Response of Spacecraft Equipment Panels (Renji, Nair, Narayanan)

### Vibration Isolation

- Nonlinear Isolators (Mallik)
- Multi-Dimensional Isolation System (Singh, Kim)
- Isolation Technology for Rotorcraft Transmissions (Vinayak)

### Machinery Noise & Vibration

- Planetary Gears with Thin Rims (Kahraman, Umrani)
- Data Base for Transmission Noise (Houser, Sorenson, Harianto)
- Serpentine Belt Drive Vibrations (Parker)

### Turbomachinery Vibration

- High Speed Turbo-Machines (Goyal, Ghosh, Murthy)
- Vibration in Superheated Steam Turbines (Gupta)
- Turbomachine Blade Damping (Rao, Saldanha)
- Rotor Vibration Control (Gupta)

## ***United States Participating Institutions\****

### **Academia**

The Ohio State University  
Purdue University  
Penn State University  
The University of Washington  
The University of Iowa  
Virginia Tech  
Duke University  
University of Maryland  
Michigan Technological  
University  
University of Cincinnati  
The University of Toledo

### **Industry**

General Motors  
Ford Motor Company  
Boeing  
United Technologies  
Dow Chemical  
Owens Corning  
Delphi Automotive  
GE Aircraft Engines  
Goodrich Aircraft Wheels  
and Brakes  
Lear Corporation  
Copeland Corporation  
The Modal Shop, Inc.  
RH Lyon Corp.

### **National Agencies**

National Science Foundation  
National Institute of Standards  
and Technology  
National Institute of Occupational  
Safety & Health  
U.S. Army Research Office

## ***Indian Participating Institutions\****

### **Academia**

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Indian Institute of Science  
Bangalore  
Indian Institute of Technology  
Madras  
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Indian Institute of Technology  
Bombay (Mumbai)  
Indian Institute of Technology  
Roorkee  
B.R.A. Regional Engineering  
College, Jalandhar  
Motilal Nehru Regional  
Engineering College

### **Industry**

QuEST India Pvt. Ltd.,  
Bangalore  
Vimanapura PO, Bangalore  
Duncans Industries Ltd,  
Kanpur

### **National Labs**

Naval Science & Technology  
Laboratory  
Aeronautical Development  
Establishment Bangalore  
BHEL, Corporate R&D,  
Vikasnagar, Hyderabad  
Combat Vehicle Research and  
Development Establishment,  
Chennai

\* As of November 7, 2001

### ***Contact Information***

Hild Peersen  
Symposium Coordinator  
Dept. of Mechanical Engineering  
The Ohio State University  
206 West 18<sup>th</sup> Ave.  
Columbus, OH 43210-1107, USA

Phone: +1 614 292 9044  
Fax: +1 614 292 3163  
E-mail: [peersen.1@osu.edu](mailto:peersen.1@osu.edu)

[www.AutoNVH.org](http://www.AutoNVH.org)

## ***Symposium Coordinators***

USA: Rajendra Singh and Ahmet Selamet, The Ohio State University

India: B.C. Nakra, I.I.T. Delhi

## ***Organizing Committee***

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## ***Directions to The Ohio State University and the Symposium Site***

Driving directions to Ohio State University

[http://www.osu.edu/visitors/directions\\_2.html](http://www.osu.edu/visitors/directions_2.html)

Map of the Symposium site ( will also be posted on the web site  
[www.AutoNVH.org](http://www.AutoNVH.org) under India-USA Symposium)

Building 004 Symposium Lecture Halls  
Building 075 Mechanical Engineering Building

<http://www.osu.edu/map/engineering.html>

Location of the Holiday Inn

Yellow building in the right corner

<http://www.osu.edu/map/northdorms.html>

Overview map of Ohio State University

<http://www.osu.edu/map/index.html>

## ***Registration Form***

Name: \_\_\_\_\_ E-mail: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Country: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

- Symposium Attendee
- Tour Attendee (must also attend the symposium and certain restrictions may apply)  
    \_\_\_ Thursday      \_\_\_ Friday

Registration Fee: (payable via check to The Ohio State University or credit card)

Symposium Fee: \$200.00

- I am including the full amount

Circle Card type: Visa / Master Card # \_\_\_\_\_

Exp. Date: \_\_\_\_\_ Signature: \_\_\_\_\_

Amount to be charged: \_\_\_\_\_ Name appearing on card: \_\_\_\_\_

Mail or fax to: Hild Peersen; India-USA Symposium; Dept. of Mechanical Engineering; 206 West  
18<sup>th</sup> Ave; Columbus, OH 43210-1107; USA Fax #: +1 614 292 3163

More detailed information will be sent upon receipt of the registration form.

## ***Hotel Information***

A block of rooms have been reserved at the following hotel that is within walking distance to the symposium site:

The Holiday Inn on Lane Avenue                      \$89.00 per night (plus taxes)  
328 West Lane Avenue  
Columbus, OH 43201

Phone: +1-614-294-4848

Fax: +1-614-294-5366 (Holiday Inn reservation form is on the next page)

Both king executive rooms and double rooms are available for the same rate.

**Note:** The special rate is available until the reserved rooms run out.

Indicate you are with the ***India-USA Symposium*** when you call or fax in the attached form.

Other hotels within a 5-minute drive (convenient parking at OSU is available):

University Plaza Hotel                      +1 614 267 7461                      www.universityplazaosu.com  
Please mention the ***India-USA Symposium*** to receive the special \$85 a night symposium rate. This hotel is also in close proximity to a variety of restaurants.

**Holiday Inn® On The Lane**  
**CONVENTION RESERVATION REQUEST**

328 W. Lane Avenue  
 Columbus, Ohio 43201  
 (614) 294-4848  
 FAX (614) 294-3390

I will be attending the \_\_\_\_\_ Convention.

CONVENTION CODE ( ) ARRIVAL DATE \_\_\_\_\_ DEPARTURE DATE \_\_\_\_\_  
 Name \_\_\_\_\_ (# OF ROOMS) ACCOMMODATIONS RATE  
 Home Address \_\_\_\_\_ LAST / FIRST ( ) One person/one bed \$ \_\_\_\_\_  
 City, State, Zip Code \_\_\_\_\_ ( ) Two persons/one bed \$ \_\_\_\_\_  
 Daytime Telephone # ( ) \_\_\_\_\_ ( ) Two persons/two beds \$ \_\_\_\_\_

**Convention Check In - 4:00 P.M. Check Out - 12 NOON**  
 RESERVATIONS AND DEPOSITS MUST BE RECEIVED BY \_\_\_\_\_  
 Rate is exclusive of State & Local Tax.  Rollaway Bed - \$5.00

**A ONE-NIGHT DEPOSIT FOR EACH ROOM RESERVED MUST ACCOMPANY THIS FORM FOR CONFIRMATION.**

Check deposit enclosed for \$ \_\_\_\_\_ or deposit guaranteed to credit card.

American Express  MasterCard  VISA  Discover  Diners Club  JCB

*In the event of cancellation, refunds or credits can be issued if we are notified 72 hours in advance of your arrival date. Specific room requests and locations can be requested, but not guaranteed.*

Account # \_\_\_\_\_ Exp. \_\_\_\_\_