

WORKSHOP ON EXPERIMENTAL STRUCTURAL DYNAMICS, STRUCTURAL HEALTH MONITORING AND NON-DESTRUCTIVE EVALUATION



At
IIT Delhi

Date: 09 March, 2013

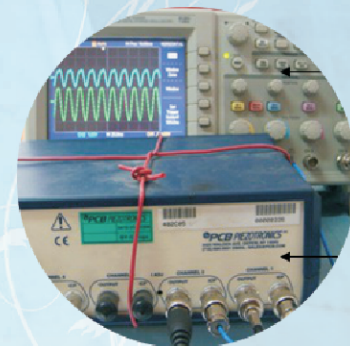
Time: 10:00am to 5:00pm

Venue:

IV LT 2, IIT DELHI

Indian Institute of Technology (IIT) Delhi

Hauz Khas, New Delhi – 110016



Host Organizations:

SMART STRUCTURES AND DYNAMICS LABORATORY

DEPARTMENT OF CIVIL ENGINEERING, IIT DELHI

www.ssd.iitd.ac.in

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NEW DELHI

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WORKSHOP ON EXPERIMENTAL STRUCTURAL DYNAMICS, STRUCTURAL HEALTH MONITORING AND NON-DESTRUCTIVE EVALUATION

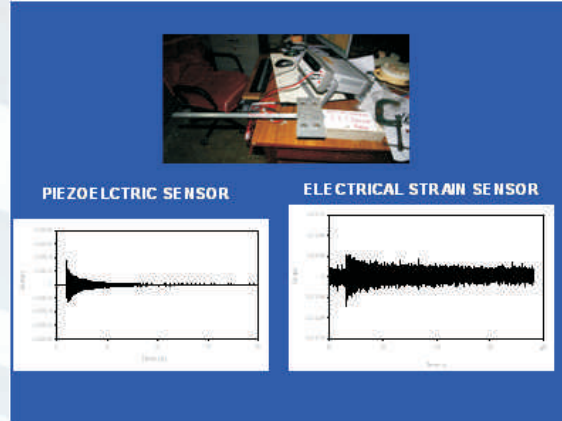
ABOUT THE SHORT COURSE

This short course will focus on the theoretical and the practical aspects of structural dynamics, health monitoring and non-destructive evaluation of structures. It will touch upon modern tools and sensing technologies necessary for health monitoring/NDE of structures. The idea of structural health monitoring (SHM) has been receiving considerable attention worldwide due to the fact that civil infrastructures form the back bone of any modern economy. These days, more and more structures are being instrumented so that they can be continuously monitored and any possible malfunctioning be detected in advance, before it gets transformed into a catastrophe.



The speakers will cover a detailed introduction about structural dynamics, available sensor technologies (accelerometers, strain gauges, piezo - transducers and fibre-Bragg grating sensors), non-destructive evaluation of concrete and the algorithms with case studies chosen across the world. **The course will cover practical sessions for hands on experience of the participants with existing as well as the new sensing technologies developed at IIT Delhi.**

The short course will be of immense interest to practicing civil, mechanical, aerospace and instrumentation engineers.



COVERAGE

- Basic Concepts of Structural Dynamics
- Overview of Sensing Technologies for Structural Health Monitoring
- Non-destructive Evaluation of Concrete
- Damage Detection using Low-Frequency Vibration techniques
- Electro-Mechanical Impedance (EMI) Technique for Health Monitoring and NDE
- Practical Sessions

FACULTY

Prof. T. K. Datta (IITD),
Prof. Suresh Bhalla (IITD),
Prof. B. Bhattacharjee (IITD),
Prof. Deshdeep Sahdev (IITK).

WHO MAY PARTICIPATE?

- Civil Builders/Contractors.
- Key Personnel from Test Centers.
- Practicing Engineers- government and private-in civil/ mechanical/ aerospace.
- Faculty members of Engineering Colleges
- Scientists from government R&D organizations.
- Government Officers (Ministries)
- Research Scholars and M. Tech students

DATE AND VENUE:

Date: 09 MARCH, 2013

Time: 10:00am to 5:00pm

Venue: IV LT 2, IIT DELHI

FEES:

(FOR CORPORATE PERSONNEL / ACADEMIC)

Rs. 2500/- (Rupees Two Thousand Five Hundred Only) per participant.

(FOR STUDENTS)

Rs. 2000/- (Rupees Two Thousand Only) per participant.
Registration is limited to 50 eligible applicants.

The registration will be on first-cum first serve basis.

The fee will be payable by DD/cheque in favour of “**Quazar Technologies Pvt. Ltd.**” Payable at **New Delhi**.

Last date for registration: **15th February, 2013**



Prof. T. K. Datta



*Ph.D. (IIT Bombay)
Professor, Department of Civil Engineering*

Research Areas of Interest:

Earthquake Engineering, Wind Engineering, Offshore Dynamics, Structural Control.

Prof. Suresh Bhalla



*Ph.D. (NTU, Singapore)
Associate Professor
Department of Civil Engineering, IIT Delhi*

Research Areas of Interest

Structural health monitoring; Smart materials and structures; Non-destructive evaluation; System identification; Adaptation and transfer of aerospace technologies to mechanical and civil engineering systems; Bio-mechanics; Tensegrity structures; Development of scientific design approach for bamboo based structures.

<http://web.iitd.ac.in/~sbhalla/>

Prof. B. Bhattacharjee



*B.Tech (Hons.) [IIT Kgp]
M.Tech & Ph. D. [IIT Delhi]
Professor, Department of Civil Engineering*

Research Areas of Interest:

Durability of Concrete, Rebar Corrosion, Cement Based Composites, Construction Technology, Building Science.

<http://web.iitd.ac.in/~bishwa/Home.html>

Special Invitation to:

Prof. Deshdeep Sahdev



*Ph.D.(Case Western Reserve University)
Department of Physics, IIT Kanpur
Alumus of Cornell University and University of Pennsylvania*

Research Areas of Interest:

Civil Engineering & instrumentation, Hi-tech instrumentation.

http://www.iitk.ac.in/phy/New01/profile_DS.htmlv

WORKSHOP

ON

EXPERIMENTAL STRUCTURAL
DYNAMICS, STRUCTURAL HEALTH MONITORING
AND NON-DESTRUCTIVE EVALUATION

09 March, 2013

Name : _____

Designation : _____

Organization : _____

Address : _____

Email : _____

Phone : _____

Mobile : _____

Fax : _____

Fees Payable to "Quazar Technologies Pvt. Ltd." Payable at
New Delhi.

Draft / Cheque No.: _____

Dated: _____

Drawn on: (Bank) _____

Rs _____

Signature of applicant

WorkShop Coordinator

Dr. S. Bhalla
Department of Civil Engineering
Indian Institute of Technology (IIT) Delhi
Hauz Khas, New Delhi – 110016
Ph: 2659 1040

Organized By:

Quazar Technologies Pvt. Ltd.
New Delhi

Collaboration with:

Smart Structure & Dynamic Lab.
Indian Institute of Technology Delhi(IIT)
New Delhi

For Registration:

Please fill the above registration form &
send it to:

Mr. Vikash Kumar Singh
Quazar Technologies Pvt. Ltd.
5, Sarvapriya Vihar Market, Sarvapriya Vihar
Hauz Khas, New Delhi – 110016

Phone: +91-11-41828927, +91-8130222075
e-mail: support@quazartech.com,
vksingh.qt@gmail.com

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