ABCM
Associação Brasileira de Engenharia e Ciências Mecânicas

Organizing Secretariat:
ABCM Campinas

Sponsor

SIEMENS

SHORT COURSE ON VIBRATION OF MACHINES

The short course will be handled by

Dr. **Rajagopal Subbiah** in the

CPV (Casa do Professor Visitante) at

UNICAMP from 9h00 to 17h00.

The official language of the course is English.

The number of participants is limited to 40.

Supported by

UNICAMP

Faculty of Mechanical Engineering

August 24-26th, 2011

UNICAMP
Campinas

REGISTRATION

The on-line registration is avaiable in ABCM site and the deadline is August 15th, 2011:
http://abcm.org.br/contato/boleto.asp

A bank xxx (boleto) is automatically generated by ABCM system.
The payment must be identified by the complete name of the participants followed by the code SCVM.

Registration fee:

ABCM associates	R$ 260,00
ABCM non-associates	R$ 600,00
ABCM associates students	R$ 100,00

Obs: the registration fee includes the material of the course, lunch and coffee-breaks.

Who Will Benefit:

Targeted audiences include researchers from academy and industry, field service and machine design engineers and managers from a variety of industrial organizations. The industries include: Automotive, Industrial Motors, Compressors, Large Steam Turbines, Gas Turbines, Large Electrical Generators, Exciters, Chemical Plants, Paper and Sugar mills etc. Machines operated in these industries experience vibration issues such as Shaft Misalignment, Mass Imbalance, Bearing Instability, Steam/Gas Whirl, Bearing Support Pedestal issues and Foundation Degradation etc. This course is, therefore, tailored to provide the participants with simple and step-by-step methods that will explain the failure mechanisms in machines and the corrective actions as well.

The Lead Instructor is Dr. Raj Subbiah.

He has a Ph.D. from Concordia University, Montreal, Canada.
His specialized areas are: Rotor dynamics, Fluid-film Bearings, Steam and Gas Seal Dynamics, Structural Vibration and Life Assessment. He has more than 30 years of experience in Rotor Dynamics and Vibration related problems both in academic and industrial environment.
He is a member of the ISO committee on vibration of machinery and has contributed significantly through development of standards. He has published more than 100 papers, technical reports and articles. Dr. Subbiah is a senior technical advisor for Siemens Energy, USA.

Scope:

The objective of this course is, therefore, to provide sound theoretical background that will lead to better understanding of vibration problems experienced in rotating machines in various industries. At the end, case studies of real life problems and the solutions will be discussed.

The participants are expected to have an understanding of the vibration theory for a better grasp of the materials taught in this course.

PROGRAME

August 24th, 2011
8h30-9h00 Oppening Section
Topics

1. Vibration Basics
2. Structural Vibration
3. Introduction of Bearings
4. Rotor Kit- Laboratory Demo

August 25th, 2011
Topics

5. Mathematical Models of rotor-bearing-pedestal-foundation Systems Structural Vibration
6. Mechanical coupling of long blades and rotors
7. Rotor Dynamic impact by bearing supports
8. Torsional Vibration Theory

August 26th, 2011
Topics

9. Discussion of Various Vibration Standards
10. Review of Measurement Data
11. Case Studies

Discussion of course high lights and participant's machinery issues by all participants