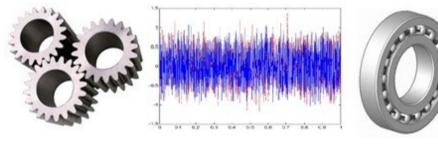
# TEQIP-III Sponsored Short Term Course on Research and Development in Condition Monitoring of Rotating Machines (10-12 December 2018)





# Course Coordinator Dr. Anand Parey



Discipline of Mechanical Engineering INDIAN INSTITUTE OF TECHNOLOGY INDORE

# **About this Course**

One of the goals of maintenance engineer is to determine what needs to be repaired and when. Rotating machines like compressors, pumps, gears etc. are very common in any industry. Failure of these rotating machines causes huge monitory losses. Condition monitoring of rotating machines can help in preventing the catastrophic failure of these machines thereby saving down-time and monitory losses. Noise and vibration monitoring are two most widely used techniques for fault diagnosis of rotating machines. Acoustic emission, wear debris analysis, thermography etc. are some other techniques for condition monitoring of rotating machines. This short-term course is aimed at providing the state-of —the-art knowledge to the participants on above-mentioned aspects of condition monitoring of rotating machines. Participants will be given an opportunity to explore some of the equipment and facilities available at IIT Indore in the field of condition monitoring.

### **COURSE CONTENTS:**

The lectures will cover following topics:

- Basics of Condition Monitoring
- Basics of Vibration
- Basics of Noise
- Basics of Acoustic Emission, Wear Debris Analysis and Thermography.
- > Measurement of Noise and Vibration
- Frequency Analysis (Detection and classification of faults).
- > Analysis of gear vibration signals.

**Training/Demonstration and Hands-on Sessions**: A hands-on sessions of total 3 hours duration will be conducted on bearing and gear fault diagnosis simulator.

#### WHO SHOULD ATTEND?

- Condition monitoring Engineer/ Maintenance Engineer/Manager/Supervisor.
- Professionals working in R & D organizations.
- Faculty from Engineering/Polytechnic colleges.
- Research scholars, post graduate and undergraduate students working in the field of noise, vibration and condition monitoring.

### **REGISTRATION FEE:**

# No registration fee for participants from TEQIP institutes

Rs. 10,000\* (for industry personnel)

Rs. 5,000\* (for faculty members)

Rs. 2,000\* (for students)

The course fee includes study material, breakfast, lunch, and tea for the entire course duration.

\*including service tax

MODE OF PAYMENT: Through demand draft drawn in favor of Registrar, IIT Indore

**ACCOMMODATION**: Accommodation can be arranged, if required, in hostel/guest house @ Rs.250 per day subject to the availability. Limited seats are available. Participants will be selected on first-come-first serve basis. . Please send request for hostel accommodation to the course coordinator.

**NUMBER OF SEATS: Limited** 

**MODE OF PAYMENT:** Through demand draft drawn in favor of **Registrar**, **IIT Indore** or through online payment/ bank transfer.

## For Online payment/ Bank Transfer

Bank Name: Canara bank

Branch: IIT Indore, Khandwa Road, Simrol, Indore

Account number: 1476101027440

IFS Code: CNRB0006223

**ACCOMMODATION**: Accommodation can be arranged, if required, in hostel @ Rs.250 per day subject to the availability. Limited seats are available. Participants will be selected on first-come-first serve basis. Please send request for hostel accommodation to the course coordinator.

#### **IMPORTANT DATES:**

The soft copy of completely filled registration form (along with the DD/Online payment slip for the course fee) should be sent to the following email ID on or before **07 December 2018**.

# Address for correspondence

Dr. Anand Parey
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Mechanical Engineering Discipline
Indian Institute of Technology Indore
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# **REGISTRATION FORM**

Name:
Designation:
Institution/Organization:
Address:
E-mail id:
Phone/Mobile No.:
Accommodation Required: Yes / No
Payment details
Cheque / Demand Draft no dated
bankamount in Rs drawn at

Signatur

e of the applicant with date