

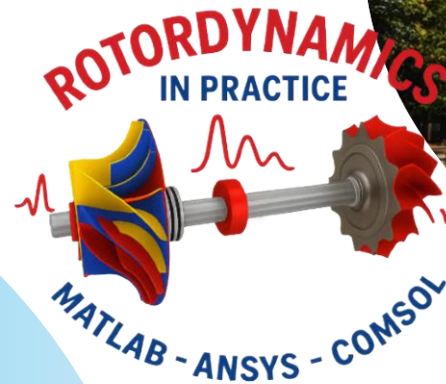
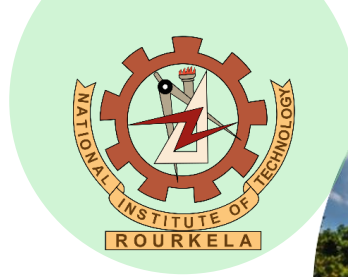
# ABOUT US:

NIT Rourkela, a premier national institution funded by the Government of India, has been elevated to a deemed university status and ranked 13th, 30th, and 34th in the NIRF 2025 rankings for Engineering, Research, and Overall categories, respectively. It is also placed in the 9<sup>th</sup> in the NIRF Sustainable Development Goals Ranking - 2025. The institute is committed to providing quality education in a diverse and multicultural environment, offering PhD and M.Tech by Research programs in 21 branches of Engineering. NIT Rourkela's research centers actively engage with government bodies and industries, including DST, DAE, CSIR, DRDO, BARC, and ISRO, for consultancy and research activities.

# ABOUT WORKSHOP:

Rotordynamics plays a crucial role in the design and analysis of rotating machinery such as turbines, compressors, pumps, and electric motors. This six-day intensive workshop aims to bridge the gap between theoretical fundamentals and real-world applications of rotordynamics and bearing design. The workshop focuses on:

- Fundamental concepts of rotordynamics and bearing systems
  - Hands-on modelling and analysis using MATLAB, ANSYS, and COMSOL
  - Practical exposure to industrially relevant simulation tools
  - Experimental studies using a rotordynamic simulator.
- This program is designed for students, faculty members, and industry professionals seeking practical insights into rotordynamic analysis and design.



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## Six Days Workshop on Rotordynamics in Practice: MATLAB – ANSYS – COMSOL (1<sup>st</sup>-6<sup>th</sup> June 2026)

Coordinator : Prof. Suraj Kumar Behera  
Co-Coordinators : Prof. Manoj Kumar Moharana  
: Prof. Hara Prakash Mishra



## RESOURCE PERSONS:

Mr. Ravindra Bucherla(ARK Infosolutions Pvt. Ltd.)  
Mr. Rajan Gupta(COMSOL Multiphysics Pvt. Ltd.)  
Prof. Manoj Kumar Moharana, NIT Rourkela  
Prof. Suraj Kumar Behera, NIT Rourkela  
Dr. Hara Prakash Mishra (BPUT, Rourkela)  
Dr. Debanshu S. Khamari ( GEC, Kalahandi)

## CONTACT DETAILS:

For any clarification, please contact  
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Rourkela 769008 (Odisha)  
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## PAYMENT DETAILS:

The fee structure for participants

Participants	Early Bird (Before 30 <sup>th</sup> April 26)	Regular
Students	Rs. 5000/-	Rs. 6000/-
Others	Rs. 10,000/-	Rs. 12,000/-
Internship Students at NITR	Rs. 500/-	Rs. 1500/-

- The registration fee includes:
  - Course material, Accommodation in institute hostels or guest house during the program.
- Travel Allowance:  
To-and-fro travel expenses from the workplace to NIT Rourkela will be reimbursed as per institute rules, subject to availability of sponsorship.

Registration fees should be bank transferred through UPI/NEFT/IMPS to the following:

- Account Number (Name): **10138951784 (CONTINUING EDUCATION NIT ROURKELA)**
- IFSC Code: **SBIN0002109**
- Bank & Branch Name: **SBI, NIT Campus, Rourkela**



BHIM UPI

"Engineering the future, one innovation at a time."

## IMPORTANT DATES:

Last date for receipt of application: 25<sup>th</sup> May 2026

Only **30** number of participants will be selected on the first-cum-first-serve basis. A notification regarding registration will be sent within 48 hours of registration.

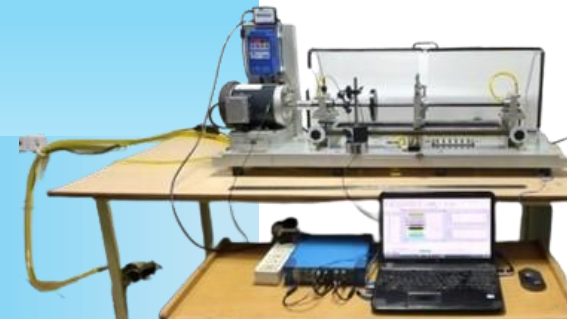
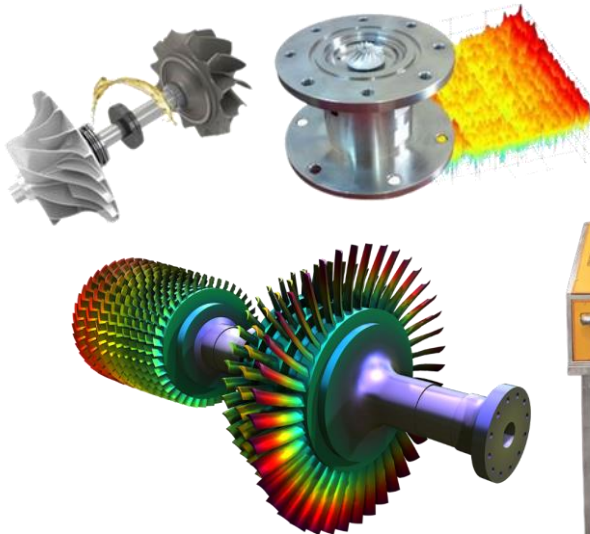
## REGISTRATION LINK:

<https://docs.google.com/forms/d/e/1FAIpQLSeFaKsu3qwag0XUi0xcEcxbfQIGvJZ0bY4hEKj8RgnuhgR0mA/viiewform?usp=dialog>



## WORKSHOP SCHEDULE :

- Day 1: Introduction to Bearings and Rotordynamics
- Day 2: Hands-on Workshop on Rotordynamic and Bearing Design using MATLAB®
- Day 3: Introduction to ANSYS® and Bearing Design
- Day 4: Rotordynamics Analysis using ANSYS®
- Day 5: Introduction to COMSOL and Bearing Design using COMSOL®
- Day 6: Rotordynamics Analysis using COMSOL® and Experimental Studies on Rotordynamic Simulator



Technical program details of Six Days Workshop on  
Rotordynamics in Practice: MATLAB – ANSYS – COMSOL

Date	Details of technical programs	Durations
<b>Day 1</b> <b>01/06/2026, (Monday)</b>	<ul style="list-style-type: none"> <li>• Design of Gas, water and oil lubricated bearings.</li> <li>• Experiments: Experimental investigation with locomotive turbocharger and bearing simulator</li> </ul>	<ul style="list-style-type: none"> <li>• Presentation: 03 Hours</li> <li>• Exercises: 02 Hours</li> </ul>
<b>Day 2</b> <b>02/06/2026, (Tuesday)</b>	<ul style="list-style-type: none"> <li>• Rotordynamics of high-speed rotors and introduction to MATLAB</li> <li>• Exercises: Hands-on exercise on Rotordynamic and bearing design using MATLAB.</li> </ul>	<ul style="list-style-type: none"> <li>• Presentation: 03 Hours</li> <li>• Exercises: 02 Hours</li> </ul>
<b>Day 3</b> <b>03/06/2026, (Wednesday),</b>	<ul style="list-style-type: none"> <li>• Introduction to ANSYS for Bearing Design</li> <li>• Exercises: Hands-on exercise on bearing design using ANSYS.</li> </ul>	<ul style="list-style-type: none"> <li>• Presentation: 03 Hours</li> <li>• Exercises: 02 Hours</li> </ul>
<b>Day 4</b> <b>04/06/2026, (Thursday)</b>	<ul style="list-style-type: none"> <li>• Rotordynamic Analysis Using ANSYS</li> <li>• Exercises: Hands-on exercise on Rotordynamic analysis using ANSYS.</li> </ul>	<ul style="list-style-type: none"> <li>• Presentation: 03 Hours</li> <li>• Exercises: 02 Hours</li> </ul>
<b>Day 5</b> <b>05/06/2026, (Friday)</b>	<ul style="list-style-type: none"> <li>• Bearing Design and Analysis using COMSOL</li> <li>• Exercises: Hands-on exercise on bearing design analysis using COMSOL.</li> </ul>	<ul style="list-style-type: none"> <li>• Presentation: 03 Hours</li> <li>• Exercises: 02 Hours</li> </ul>
<b>Day 6</b> <b>06/06/2026, (Saturday)</b>	<ul style="list-style-type: none"> <li>• Rotordynamic Analysis of Rotor–Bearing Systems using COMSOL</li> <li>• Exercises: Hands-on exercise on Rotordynamic analysis using COMSOL.</li> </ul>	<ul style="list-style-type: none"> <li>• Presentation: 03 Hours</li> <li>• Exercises: 02 Hours</li> </ul>