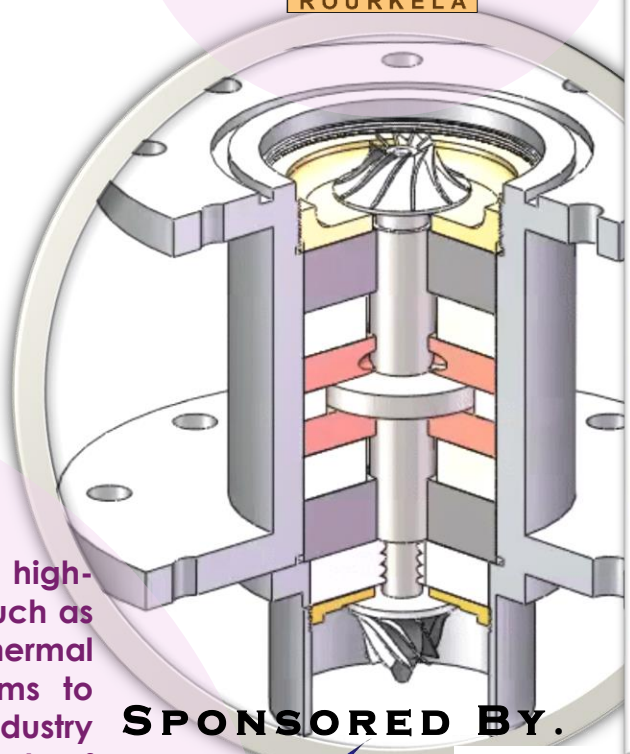
About Us:

NIT Rourkela, a premier national institution funded by the Government of India, has been elevated to a deemed university status and ranked 16th, 29th, and 37th in the NIRF 2023 rankings for Engineering, Research, and Overall categories, respectively. It is also placed in the 291-300 group in the QS World University Ranking: Asia 2024. 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:

Gas bearings play a crucial role in high-speed, high-precision rotating machinery, offering advantages such as low friction, high load capacity, and improved thermal stability. This one-day workshop cum training aims to provide professionals, researchers, and industry practitioners. The workshop will focus on key aspects of gas-lubricated bearings, including their design principles, performance characteristics, and applications in turbomachinery, aerospace, and micro-mechanical systems. Participants will gain insights into different types of gas bearings, such as foil bearings, along with their advantages over conventional lubrication methods. A hands-on training session will be conducted to familiarize attendees with computational modeling, experimental techniques, and performance evaluation of gas bearings.

Sponsored By.

SERB INDIA

One day Workshop cum Training on Gas Bearings (23rd March 2025)

MENTORS:

Prof. Suraj Kumar Behera, NIT Rourkela
Mrs. Srusti Priyadarshini, NIT Rourkela
Mr. Sudhananda Pani, NIT Rourkela

CONTACT DETAILS:

For any clarification, please contact
Prof. Suraj Kumar Behera
Department of Mechanical Engineering
National Institute of Technology, Rourkela
Odisha, India,769008
Tel: +91-661-246-2508 (O)
Mob: +91-9040893760
Rourkela 769008 (Odisha)
Email ID: beherask@nitrkl.ac.in

Workshop schedule :

1. Introduction to Gas Bearings

- Overview of gas-lubricated bearing technology
- Types of gas bearings and applications in aerospace, turbomachinery, and precision engineering

2. Design and Performance Analysis

- Fundamentals of gas bearing design
- Numerical modeling and simulation techniques

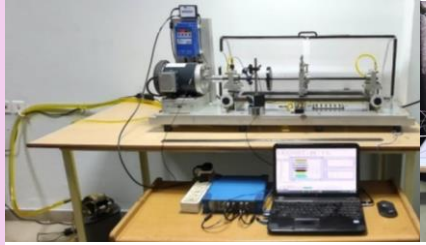
3. Experimental Techniques and Testing

- Overview of test rigs
- Rotordynamic Fault Simulator, Balancing Machine etc.

4. Discussion, Q&A, and Future Trends

- Open discussion on challenges and advancements
- Emerging trends in gas bearing research and development
- Networking session for collaboration opportunities

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



REGISTRATION LINK:

https://forms.gle/hMYHM7G2ycqjireR9

PAYMENT DETAILS:

This One-Day Workshop cum Training on Gas Bearings is being offered free of charge for all TEN participants. There are no registration fees or hidden costs associated with attending the workshop. Transportation, boarding and lodging will be borne by the participant themselves.

IMPORTANT DATES:

Last date for receipt of application: 20th March 2025
Last Day for Confirmation : 20th March 2025