

CONDITION MONITORING USING AI TOOL WORKSHOP ON

“AI based Technique to Predict the Multiple Defects of the Two-stage Gearbox”

(June 23, 2025)

FUNDED BY

SERB-DST Anusandhan National Research
Foundation (ANRF)

[Under the Scientific Social Responsibility (SSR),Policy of SERB]



Online Mode

ORGANISED BY

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ABOUT PDPM IIITDM JABALPUR

PDPM IIITDM Jabalpur was established in 2005 with a focus on education and research in IT-enabled design and manufacturing. The Institute offers UG, PG, and PhD programs in computer science and engineering, electronics and communication engineering, mechanical engineering, design, and PhD programs in mathematics, physics, and literature. The Institute has been declared an Institute of National Importance. The Institute campus is developed on 250 acres of land near the airport in Jabalpur.

ABOUT THE WORKSHOP

The basic aim of the workshop is disseminate knowledge on the use of the AI tools for the identification of gear faults using sound signals. The workshop aims to provide knowledge of the AI tools in the field of condition monitoring, gearbox faults, and their identification. The workshop further focuses on the collection of the sound signal and the identification of the faults based on the sound signals. An online demonstration of the signal collection, classification, and identification of the fault will also be demonstrated.

Workshop on Gear Box Condition Monitoring using AI Tools (June 23,2025)

TOPICS OF WORKSHOP

- Condition Monitoring
- Defect in Gear Box
- Detection of the faults based on the sound signal
- AI Technique for Predictions of Faults

HANDS-ON EXPERIENCE ON

- Gear faults modeling and simulation
- Modeling of Two Stage Gear Box defects
- Real time data collection of defective of Gear Box
- AI Technique for Predictions of Faults

RESOURCE PERSONS

The programme will be conducted by IITDM Jabalpur. Various eminent experts and academicians in the related fields from IITs/NITs/IIITs/CSIR Labs as well as leading industries and research organizations will deliver lectures during the workshop.

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REGISTRATION DETAILS

Please fill the registration form using the following link:

<https://docs.google.com/forms/d/e/1FAIpQLSeXj-UltYIBLRo9pzymGzuGZqScrq8-wBx3k9dvd5KuA7jq4g/viewform?usp=header>

SPECIAL NOTES

- **No registration fee** for participants.
- The workshop will be held in an online mode. A separate link will be shared with the registered participants.
- A certificate will be provided to the participants attending the 80% or more sessions.

List of Experts

- Prof. Pavan Kumar Kankar, IIT Indore
- Dr. Shivdayal Patel, IITDM Jabalpur
- Dr. Jay Govind Verma G H Raison College of Engineering and Management, Nagpur

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PARTICIPATION ELIGIBILITY

UG/PG students, Ph.D. scholars, JRF/SRF/RA, faculty members, as well as professionals from research organizations and industries are welcome to register.

IMPORTANT DATES

Registration Open: June 20, 2025

Last Date of Registration: June 22, 2025

Date of the Workshop: June 23, 2025

Contact us

For further details contact:

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