

### Duration and Venue:

**Duration:** It will be a two (2) days workshop starting from 4<sup>th</sup> January, 2024 (Thursday) to 5<sup>th</sup> January, 2024 (Friday). The participants must report the workshop venue at 8 A.M.

**Venue:** Seminar Room, Mechanical Sciences Building, National Institute of Technology Rourkela

### Resource Persons (tentatively)

Prof. Roger M. Groves, TU Delft  
Dr. Tanmoy Bose, NIT Rourkela  
Dr. Ganesh Kolappan Geetha, IIT Bhilai  
Dr. Suresh P, NIT Warangal  
Dr. Kautav Barat, National Aerospace Laboratory  
Dr. Avijit Metya, National Metallurgical Laboratory  
Dr. Avijit Mondal, NETRA-NTPC  
Dr. Rabindra N. Mahapatra, NIT Meghalaya  
Mr. Srinivasagan Balamurugan, TATA Steel

### Who may benefit

Workshop participants include faculty/PhD/M.Tech students working or, have interest on the nondestructive testing of different materials. Industry personals are also welcome to join.

### Accommodation

Free campus Accommodation and food expenses at Institute guest house will be provided for offline delegates. Hostel accommodation will be provided free for first 30 students.

### Course Fee

The workshop is sponsored by SERB-DST. So, no course fee will be charged from the workshop participants.

### Patron

Prof. K. Umamaheshwar Rao, Director, NIT Rourkela

### Chairman

Prof. Saroj Kumar Patel, Head, Department of Mechanical Engineering, NIT Rourkela

### Convener

Dr. Tanmoy Bose  
Assistant Professor, Department of Mechanical Engineering, NIT Rourkela, Odisha-769008

### Registration Details

Please register for the workshop using form [https://docs.google.com/forms/d/e/1FAIpQLSct5EZDf71XmaADMHjggwl\\_28Lfm7r4kkYZHp1TDmMvnc4Rg/viewform?usp=pp\\_url](https://docs.google.com/forms/d/e/1FAIpQLSct5EZDf71XmaADMHjggwl_28Lfm7r4kkYZHp1TDmMvnc4Rg/viewform?usp=pp_url) else mail to the convener.

### Contact person

Dr. Tanmoy Bose  
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Mobile: 8436520880



## Science and Engineering Research Board

*funded*

### Two day Workshop (Hybrid mode)

(04.01.2024-05.01.2024)

*on*

### Research in Nondestructive testing methods and Industry practice



*by*

**Dr. Tanmoy Bose**  
Assistant Professor

Department of Mechanical Engineering  
National Institute of Technology Rourkela





## About National Institute of Technology (NIT) Rourkela

National Institute of Technology (NIT) Rourkela was founded as Regional Engineering College, Rourkela in 1961. It is a prestigious institute with a reputation for excellence at both undergraduate and postgraduate levels, fostering the spirit of national integration among the students, a close interaction with industry and a strong emphasis on research, both basic and applied. The city of Rourkela is an abuzzing industrial city, cosmopolitan by nature and is well connected to all parts of the country by road and rail. Rourkela is also connected with Bhubaneswar and Kolkata by air. Please visit <https://www.nitrkl.ac.in/> for more details about NIT Rourkela.

## Mechanical Engineering Department

The department of Mechanical Engineering Department of NIT, Rourkela is known for

research in diverse fields. M.Tech degree is offered across four specializations which are Machine Design, Fluid & Thermal, Cryogenic and Manufacturing. B.tech degree is offered in Mechanical Engineering only. The department currently houses more than one hundred research scholars pursuing projects on diverse fields. Many research and development projects are being pursued by the department faculties which are sponsored by government agencies like SERB, DST, BRNS, DRDO, ISRO, DAE, CSIR, BARC, CPRI along with private industries.

## Workshop Theme

This two-day workshop is directed towards an amalgamation of recent technical research carried out by the reputed institutes like IITs, NITs in the field of nondestructive testing and the industry practice of the NDT methods. So, the participants are expected to understand the recent developments happening in the field of NDT for inspection of advanced materials. This part of the topic will be covered by the renowned faculty members of the reputed institutes. The workshop will also add industry certification techniques so that industrial practice can be added to the core curriculum of the academic institutes. This will produce students who can interpret the NDT inspections and take appropriate decisions, making industry ready.

## Highlights

- ✓ Vibro-thermography
- ✓ Guided wave inspection
- ✓ Nonlinear guided wave
- ✓ Wave mixing
- ✓ Waveguide
- ✓ Ultrasound inspection of crack and delamination
- ✓ International certification
- ✓ Industry practice of NDT

## How to Reach

**Road:** It is well connected to nearby cities like Bhubaneswar, Sambalpur and Ranchi through road.

**Rail:** It is an important station in the Kolkata-Mumbai route. So, it is well connected with all Indian cities through train.

**Air:** Rourkela has a recently developed airport which is connected with Kolkata and Bhubaneswar.

## Local Attractions

- Hnauman Vatika
- Mandira Dam
- Vaishno devi Temple
- Vedvyas Temple
- Indira Gandhi Park



