

## Learning objectives

- ✓ To provide young researchers a platform for interacting with the distinguished professionals of 3D Printing.
- ✓ To develop awareness about the latest development of 3D Printing in diversified fields such as health, aerospace, automotive, food industry and electronics.
- ✓ To demonstrate hand-on- training of 3D Printers and part fabrication from digital file to physical part.
- ✓ To give hands-on training on software used for 3D Printing such as software for the generation of part with various lattice structure, and slicers.
- ✓ To enhance the skills of research scholars in the area of reverse engineering.

## Training Sessions

- ✓ Hands on training on 3D modelling, Process flow of 3D Printing.
- ✓ Overview to various 3D Printers and visit to Additive Manufacturing Lab.
- ✓ Hands on training on various software used for additive manufacturing.
- ✓ Hands on training to process patient specific data and fabrication.
- ✓ Hands on training on fabrication of parts using reverse engineering.
- ✓ Training of slicing algorithms and STL repairing algorithms.

## Organizing Committee

### **Patron**

**Prof. K. Umamaheshwar Rao**  
(Hon. Director, NIT Rourkela)

### **Chariman**

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

### **Convenor**

**Dr. Rudranarayan Kandi,**  
Assistant Professor,  
Department of Mechanical Engineering,  
NIT Rourkela

### **Co-Convenor**

**Prof. Susanta Kumar Sahoo,**  
Professor,  
Department of Mechanical Engineering,  
NIT Rourkela

**Dr. Rachna Sehrawat,**  
Assistant Professor,  
Department of Food Processing Engineering,  
NIT Rourkela

### Address for Communication

Dr. Rudranarayan Kandi,  
Department of Mechanical Engineering,  
NIT Rourkela, Contact:+91-7008203434,  
Email: [meeventnitrkl@gmail.com](mailto:meeventnitrkl@gmail.com)



## **KARYASHALA**

A one-week High-End Workshop  
on

**3D Printing: A Technology With its  
Diverse Potential in Multidisciplinary**

**Sectors**

**(3DPTECH)**

**19<sup>th</sup> -25<sup>th</sup> February 2024**

**(Offline Mode)**

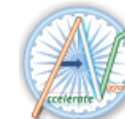


**Organized By**

**Department of Mechanical Engineering,  
National Institute of Technology,  
Rourkela, Odisha-769008**

**Sponsored Organization**

**Science and Engineering Research Board  
(SERB), Government of India under  
Accelerate Vigyan Scheme**



### About Institute

National Institute of Technology (NIT) Rourkela is an institution of national importance funded by Ministry of Human Resource Development. It is one of the premier national level institutions for technical education in the country. The main objective of the institute is to produce quality engineers and scientists in graduate, post-graduate and doctoral levels in various branches of Engineering and Science. NIT Rourkela was ranked 601-800 in the world by the Times Higher Education World University Rankings of 2024 and 67<sup>th</sup> in Southern Asia. In India, it was ranked 16 among engineering colleges by the National Institutional Ranking Framework (NIRF) in 2023. For details about the institute please visit us at [www.nitrkl.ac.in](http://www.nitrkl.ac.in)

### About the Department

Mechanical engineering in National Institute of Technology Rourkela covers a host of subjects: properties of materials, structural design, material processing, manufacturing, heat engines, refrigeration and air conditioning, industrial management, robotics and much more. The Department is known for research in most of these fields. The main foci of research are on manufacturing, mechanical vibration, robotics, CAD/CAM, precision engineering, Metal forming, CFD, Industrial refrigeration and Cryogenics. The major sponsors are BRNS, DST, ISRO, ARDB, BRFS, HBL

Power Systems and Lechier India Private Limited.

### About the KARYASHALA

The KARYASHALA scheme by SERB Government of India is meant for skill development training on topics required for scientific research work. It is an effort to improve the research productivity of promising PG and Ph.D students from universities and colleges. This program aims to provide opportunities to acquire specialized research skills. For more details about the program please visit <https://acceleratevigyan.gov.in/programs/abhyaas/karyashala>.

### Eligibility

Applications are invited from **Undergraduate (Final Year) Postgraduates, Ph. D scholars** and interested **faculty members**.

### Important details

- ✓ **No registration fee** is applicable.
- ✓ Travel allowance train 3rd AC/Sleeper/Bus fare (as per the GOI rules) will be provided.
- ✓ Shared accommodation will be provided.
- ✓ **Only 25 candidates** will be selected on **First-come, First-serve** basis to participate in the workshop.
- ✓ Participant has to upload **No Objection certificate** while registering for this workshop as per the format given.
- ✓ Certificate of participation would be issued to all participants.

### Format of No Objection Certificate

Date: \_\_\_\_\_

To Whom It May Concern,  
This letter is to certify that [*Student's Full Name*], a [*UG/PG/PhD*] student of Dept. of [*Name of the Department*] from [*School/Institution Name*], has sought permission to attend a workshop titled “3D Printing: A Technology With its Diverse Potential in Multidisciplinary Sectors”, which is scheduled to take place from 19<sup>th</sup> Feb, 2024 to 25<sup>th</sup> Feb, 2024 at NIT Rourkela. We hereby confirm that we have no objection to the student attending the workshop and encourage their participation in such educational events that can further enhance their knowledge and skills.

Signature of the applicant

Date and place : \_\_\_\_\_

Recommended and forwarded

Signature of the Head of the Department /  
Head of the Institution with seal

### Registration

[Click Here](#) / Scan the QR code to register.

**Last date of registration: 25.01.2024**

Contact: +91-7008203434

Email ID: [meeventnitrkl@gmail.com](mailto:meeventnitrkl@gmail.com)

