## WHO MAY PARTICIPATE

- Faculty Members from Engineering Colleges & Universities
- Research Scholars pursuing Ph.D.
- Post Graduate Engineering Students
- Engineers/Executives from different industries
- Scientists from various R&D sectors

## REGISTRATION PROCESS

Interested candidates should fill in their details at the following website latest by 20th July 2022.

Link: https://www.frpclabnitrkl.com/1day-training

## REGISTRATION FEE

- There is NO registration fee for this event. However, the maximum number of participants is restricted to 10 only.
- Confirmation to the shortlisted candidates will be sent through e-mail by 25th July 2022.

## IMPORTANT DATES

- **Last date for submitting the online form for registration:** 20th July 2022
- **Confirmation regarding registration:** 25th July 2022
- **Event Date:** 13th August 2022

**Convenor:**

Dr. Rajesh Kumar Prusty

**Organized by**

FRP Composites Lab

Metallurgical & Materials Engineering

https://www.frpclabnitrkl.com/

FRP COMPOSITES LABORATORY

National Institute of Technology ROURKELA

**National Institute of Technology Rourkela, Odisha, India, 769008**

**Phone: +91-661-2462598,**

**Sponsored by**

**Science and Engineering Research Board (SERB), India**

**For Registration and Further details:**

**Dr. Rajesh Kumar Prusty,**

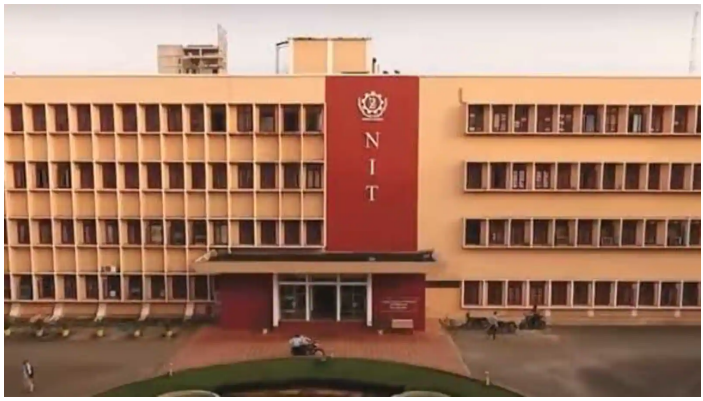
**Assistant Professor, Department of Metallurgical & Materials Engineering**

**Phone: 9861133420**

**Email: prustyr@nitrkl.ac.in**

**A SERB sponsored**

# One Day Research Facility Training Program on "Hands-on experience in fabrication and characterization of FRP composites"




**on**

**13th August 2022**

**at**

**FRP Composites Laboratory**

**Department of Metallurgical and Materials Engineering**

**NIT ROURKELA**

## ABOUT NIT ROURKELA

**NITR is a centrally funded institute of higher learning for engineering, science and technology located in the steel city of Rourkela, Odisha, India. As per the Times Higher Education World University Rankings of 2022, NIT Rourkela has a position between 801-1000 in the world and 271-280 in Asia. NIT Rourkela is presently ranked the 3rd best NIT and 20th nationwide (including IITs) by the NIRF.**

## ABOUT METALLURGICAL & MATERIALS ENGINEERING DEPARTMENT

**The Metallurgical and Materials Engineering Department of NIT Rourkela has earned expertise and reputation for conventional fields like study of blast furnace, fracture mechanics, advanced materials like polymer composite, nanomaterials, thin film etc. To support these it possesses high-end equipment like UTM, XRD, SEM, DSC, FTIR, Surface profilometer etc. The major emphasis of the Department right at this moment spread over from characterization of slag to nano-materials.**

## DEMONSTRATIONS TO BE DONE

- **Visual inspection, appearance or identification of different types of fibers.**
- **Fabrication of laminated FRP composites using hand layup technique.**
- **Quality check of the fabricated composites by density and void content measurement.**
- **Flexural/Tensile/interlaminar shear characterization of FRP composites.**
- **determination of the glass transition temperature of the composites.**
- **Visco-elastic behaviour of FRP composites .**
- **Interlaminar fracture behaviour of FRP composites.**

**Exposure to Processing/ characterization/weathering instruments**

- **Universal testing machine (UTM) with environmental chamber**
- **Differential Scanning Calorimetry (DSC)**
- **Dynamic Mechanical Thermal Analyzer (DMTA)**
- **Fourier transformed infra-red spectroscopy (FTIR)**
- **EPD Setup for fiber surface modification**
- **CNT alignment technique in Polymer composites**

## SCHEDULE

**9:30 AM - Inauguration**

**10 - 12:30 PM - Session 1**

**12:30 - 2 PM - Lunch Break**

**2 - 4:30 PM - Session 2**

**5 PM: Valedictory session**

## TECHNICAL SUPERVISOR

**Mr. Rajesh Patnaik**

## LABORATORY VOLUNTEERS

- **Abhinav Omprakash Fulmali, Ph.D. Scholar**
- **Srinivasu Dasari, Ph.D. Scholar**
- **BNVS Ganesh Gupta K, Ph.D. Scholar**
- **Shubham, Ph.D. Scholar**
- **Satyaroop Patnaik, Project Scholar**
- **Archit Kumar, M.Tech Scholar**
- **Maheep Kumar Upadhyay, M.Tech Scholar**