

## **ABOUT THE WORKSHOP**

Natural fibers are a promising alternative to synthetic fibers as a reinforcing material for composites due to their lower density, biodegradability, abundant availability, strong damping qualities, reduced abrasive damage to equipment, and high health safety. There is a growing need for high-performance composites, which drives manufacturers to adopt innovative technologies to suit consumer needs. This workshop focuses on the advanced manufacturing and soft computing techniques used in the natural fiber reinforced polymer (NFRP) composites industry.

## **CONTENTS OF THE WORKSHOP**

- Selection of natural fibers using multi-criteria decision-making techniques
- Advanced manufacturing techniques for NFRP composites
- Finite element analysis of composites
- Hands-on practice of fabrication and processing of NFRP composites.
- Hybrid composites
- Testing of composites
- Optimization techniques for composite designs
- Advanced composites including sandwich, functionally graded and curved fiber composites

## **REGISTRATION & FEE PARTICULARS**

Please transfer the Fee amount to the following bank account (details given below). Attach the payment receipt along with the google form for registration.

Name: CONFERENCE, NIT ROURKELA  
SBI Account No: 36734418111  
Bank: State Bank of India  
Branch: NIT Campus Rourkela  
IFS Code: SBIN0002109

No registration fee for students and faculty of NIT Rourkela.

Google Form Link: [bit.ly/nfrp\\_nitrkl](https://bit.ly/nfrp_nitrkl)

Employees from the Industry and R & D Organizations	Rs. 3000/-
Faculty from Academic Institutions	Rs. 2000/-
Research scholars and students (Offline)	Rs. 1000/-
Research scholars and students (Online)	Rs. 500/-

## **IMPORTANT DATES**

- Last date for submitting the online or offline form for registration: 21<sup>st</sup> April 2023
- Event Date: 24<sup>th</sup> to 28<sup>th</sup> April 2023

## **ACCOMMODATION**

Accommodation can be arranged for outside participants at NIT guesthouses and hostel on a payment basis (Twin sharing) based on availability.

## **WHO SHOULD ATTEND?**

The participation in this workshop is open to faculty and students of recognized technical institutes, researchers from the research laboratory, engineers from industries and any other interested personnel. The successful participants will be given a participation certificate.

## **ORGANIZING COMMITTEE**

### **Patron**

Prof. K. Umamaheshwar Rao  
Hon. Director, NIT Rourkela

### **Chairman**

Prof. Susanta Kumar Sahoo  
HOD, Mechanical Engg. NIT-Rourkela

### **Coordinators**

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### **Laboratory Volunteers**

Anurag Jasti, Ph.D. Scholar  
Naveen Kumar Akkasali, Ph.D. Scholar  
Sidhartha Sahu, M.Tech. Scholar

## REGISTRATION FORM

Name: .....

Designation: (Student/Faculty/Industry)

.....

Organization: .....

Specialization: .....

Address:.....

.....

Mobile: .....

Email: .....

Accommodation Required (Yes/No): .....

Registration Fee Details:

Amount: Rs .....

Payment Date: .....

Transaction Number: .....

Place:

Date: Signature of Applicant

The registration fee can be paid by account transfer or in the form of crossed Demand Draft drawn in favour of, CONFERENCE NIT ROURKELA Payable at SBI NIT campus Rourkela.

## ABOUT NIT ROURKELA

National Institute of Technology Rourkela is an Institute of National importance for technical education established by the Government of India. The institute is an internationally acclaimed institution of higher learning that serves as a source of knowledge and expertise for the society and is a preferred destination for undergraduate, postgraduate, and research students. Rourkela is well connected to all the major cities of India by railway network. Rourkela railway station is approximately 6 km from NIT Campus.



## ABOUT DEPARTMENT OF MECHANICAL ENGINEERING

The Mechanical Engineering Department of NIT Rourkela is known for research in a variety of fields include mechanical vibration, composites, robotics, heat transfer, CAD/CAM, precision engineering, metal forming, manufacturing, CFD, industrial refrigeration, and cryogenics. The department at present has over one hundred research scholars pursuing research in diverse fields. Many research and development projects being pursued by the faculty are sponsored by government agencies and private industries. The major sponsors among these projects are ISRO, SERB, BRNS, DST, CSIR and DRDO

## Five Days Workshop on Advances in Natural Fiber Reinforced Polymer Composites (ANFRPC-2023) (24<sup>th</sup>-28<sup>th</sup> April 2023)

(Hybrid Mode)



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