

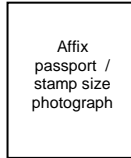
## Application Form

### One week STC on **Recent Advancements in Materials Processing and Characterization**

**June 10, 2019 to June 14, 2019**

(This form may be enlarged by Photocopying on A4 size paper)

1. Name: Ms./Mr./Dr.  
(In Block Letters)
2. Designation:
3. Age (years):
- 4a. Address:



State: Pin Code:

Email:

Phone (Off.)

Fax:

4b. Name of the Institute where employed:

4c. Name of the Department:

5. Highest academic qualification:

6. Specialization:

7. Teaching Experience in Years:

8. No. of FDP/STCs attended so far

At Roorkee ..... At other places ..... Total .....

9. Whether accommodation needed? (Yes / No)

Date:

Signature of applicant

**Note:** 1. This application form should reach the coordinator latest by **01.06.2019**. 2. Application without the approved letter will not be entertained. 3. Please note that 100% attendance is compulsory in the course.

### SPONSORSHIP CERTIFICATE

This is to certify that this institute is under the list of TEQIP III program. The applicant will be permitted to participate in the above Short Term Course (STC), in case he/she is selected for the same.

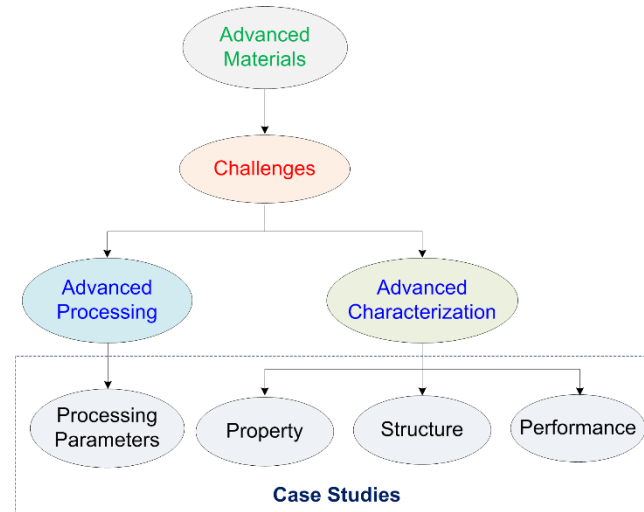
**Date:**

**Signature**

Sponsoring Authority (Principal /Director)

**SEAL**

## **THE COURSE**



### **ABOUT ROORKEE**

Roorkee is located at the foothills of Himalayas in the Uttarakhand State. The railway station is on the main line of Northern Railways having direct links to Delhi, Mumbai, Calcutta, Amritsar, Jodhpur and Ganganagar. The place is also within easy reach from Delhi by road (180 km) and is located on Delhi - Haridwar and Delhi - Dehradun bus routes. Roorkee is ideally located near several tourist places like Dehradun (70 km), Mussoorie (100 km), Haridwar (32 km) and Rishikesh (52 km).

### **COURSE COORDINATORS**

**Prof. Apurbba Kumar Sharma**

**Prof. Inderdeep Singh**

Department of Mechanical and Industrial Engineering  
Indian Institute of Technology Roorkee,  
Roorkee-247667, India.

Email: akshafme@iitr.ac.in (AKS)

inderfme@iitr.ac.in (IS)

Ph.: 01332-285421 (AKS) / 285614 (IS)



**TEQIP – III SPONSORED**

**One Week Short Term Course**

**on**

**Recent Advancements in Materials  
Processing and Characterization**

**June 10, 2019 to June 14, 2019**



**ORGANIZING DEPARTMENT**

Mechanical and Industrial Engineering  
Indian Institute of Technology Roorkee  
Roorkee – 247667, INDIA

## GENERAL INFORMATION

Indian Institute of Technology (IIT) Roorkee is organizing a one-week Short Term Course under TEQIP III on “**Recent Advancements in Materials Processing and Characterization**” during **June 10, 2019 to June 14, 2019**. The course is open to teachers from recognized engineering colleges where TEQIP III program is available. Only limited seats are available in this course. The application on the enclosed form duly signed by the sponsoring authority, should reach the coordinators latest by **June 01, 2019**. The candidate will be informed of his selection in advance.

## AIM OF THE COURSE

This course aims to bring together the faculty members from various institutions who are involved in teaching and research in the area of advanced materials processing and characterization. The primary aim of the course is to generate awareness, to transfer knowledge among the researchers and to promote various advanced processing techniques and characterization facilitates developed by the researchers at IIT Roorkee and at few other places. It will provide a great opportunity and platform to the participants to explore various technologies and to get a live demonstration. It will sensitize the faculty members and researchers about the state-of-the art of these technologies and their applications.

## COURSE OBJECTIVES

- To identify and understand the need for advanced materials and challenges involved in their processing and characterization.
- To enhance the understanding of the participant in the area of advancements in manufacturing technologies for processing of advanced materials.

- To acquaint the participants with various state-of-the-art characterization techniques and demonstration of some of the available facilities.
- To motivate the participant to start research in the area of advanced manufacturing processes and characterization.

## COURSE CONTENTS

- Materials and Manufacturing: An Overview
- Processing Challenges of Advanced Materials
- Novel Materials Processing Methods
- Primary Processing of Advanced Composites
- Secondary Processing of Advanced Composites
- Microwave Processing of Advanced Materials
- Additive Manufacturing Solutions
- Processing of Nano Composites
- Approaches in Micro-Nano Fabrication
- Advanced Joining Methods
- Processing of Green Composites
- Importance of Characterization and Structure-Property Correlations
- Mechanical Characterization
- Metallurgical Characterization
- Thermal Energy based Characterization

## RESOURCES

The expert from IIT Roorkee and other leading organization(s) who are working in the area of advanced manufacturing, advanced materials and material characterization will engage lecture sessions in the course. The participants will get opportunities to interact with the experts to discuss their research problems and to receive expert advices to continue research at their parent institutions. Moreover, Mahatma Gandhi Central Library, a state-of-the-art library in the country, and some other laboratories will be made accessible to the participant.

## PARTICIPATION

Indian Institute of Technology Roorkee welcomes participation of faculty members who are involved in teaching and research in the area of advanced manufacturing processes for advanced materials and their characterization. The faculty members who are working in TEQIP III institutions are mainly targeted in this course. Other researchers, industry person and students involved in the area may also apply for this course. No registration fee will be charged from the faculty members who belong to TEQIP III approved Institutes. Interested faculty members should send the completed application form through their TEQIP Coordinator to the course coordinator. The course will accommodate **only 25 candidates**.

## HOW TO APPLY

The participants can send the duly filled and signed application form to the course coordinators through email or speed post (please, see the contact details). The last date for submission of the application is **June 01, 2019**.

## TRAVEL AND ACCOMODATION

The selected participants will be provided free lodging and boarding in the institute guest houses or in the nearby hotels as per availability on twin sharing basis. There is no provision for family accommodation. However, one may make his/her own arrangement in the city hotels at his/her own expense.

IIT Roorkee will not reimburse TA-DA to the participants for attending the course. The participants can claim TA from their parent organization. As the number of seats are limited, participants are advised to plan their visit to IIT Roorkee only after getting confirmation from the Course Coordinators.