

Materials and Manufacturing (M&M) Panel  
Aeronautics Research and Development Board  
sponsored

## One-Day Workshop

on

## Sustainable Manufacturing

March 19<sup>th</sup>, 2019

### Coordinators

Dr. Ravi Kant

Prof. Harpreet Singh



### Organized by

Department of Mechanical Engineering  
INDIAN INSTITUTE OF TECHNOLOGY ROPAR  
RUPNAGAR-140001 (PUNJAB)

Website: [www.iitrpr.ac.in](http://www.iitrpr.ac.in)

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### APPLICATION FORM

Name: \_\_\_\_\_

Father's Name: \_\_\_\_\_

Area of Research: \_\_\_\_\_

Institution: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

E-mail: \_\_\_\_\_

Tel No: \_\_\_\_\_

Fax No.: \_\_\_\_\_

Payment details:

DD No: \_\_\_\_\_ Dated: \_\_\_\_\_

For **Rs.** \_\_\_\_\_ in favour of **Registrar, IIT Ropar**  
payable at **Rupnagar**.

Accommodation required: Yes /No

Place \_\_\_\_\_ Signature of Applicant

Date \_\_\_\_\_

Seal \_\_\_\_\_ Signature of  
Head of Institution

Xerox copies may be used for multiple use

### IMPORTANT DATES

Last date for acceptance of application form:  
**15<sup>th</sup> March, 2019**

Information to selected candidates by:  
**16<sup>th</sup> March, 2019**

*(The selected candidates shall be informed by e-mail)*

### PROSPECTIVE PARTICIPANTS

The workshop is open for participants from academic institutes, industries and R&D organizations including faculties, researchers, students, practicing engineers, industrialists and start-up professionals.

### REGISTRATION FEE

There is **no registration fee for the participants**.

### BOARDING AND LODGING

Boarding and lodging shall be arranged for the participants in the institute hostels on a prior request. The request for accommodation must be submitted along with the application form to avoid inconvenience at the later stage.

### TENTATIVE SCHEDULE

9:00-9:30	Registration
9:30-10:00	Inauguration Session
10:00-10:30	Presentation by M&M Panel, ARDB
10:30-11:00	Tea Break
11:00-11:45	Keynote Address
11:45-12:45	Technical Session
12:45-13:45	Lunch Break
13:45-16:00	Technical Session and Conclude
16:30-17:30	Lab Visit and Demonstration(s)

## **ABOUT THE INSTITUTE**

Indian Institute of Technology Ropar (IIT Ropar) is one of the best institutes in India for higher education in Engineering, Technology and Basic Science. It was established in 2008 by the Ministry of Human Resource Development (MHRD), Government of India, to expand the reach and enhance the quality of technical education in the country. IIT Ropar is committed to providing state-of-the-art technical education in a variety of fields and also for facilitating transmission of knowledge in keeping with latest developments in pedagogy. At present, the institute has eleven departments and centers, and offers B.Tech., M.Tech., M.Sc., M.S. and Ph.D. degrees in various engineering and science disciplines. The institute is located over a large area of 525 acres and is developing infrastructure at a very fast rate. The institute is situated at a naturally attractive place near the bank of Sutlej River and surrounded by the Sivalik range of hills. This place is well connected with various parts of the country through road, rail and air. The nearest airport is at Chandigarh which is just 45 kms from the institute. The laboratories, data-center, workshop, and library of the institute are all well equipped with modern facilities suitable for learning and research. The institute got five-star GRIHA rating, one of the highest national ratings for Green Buildings, for its state-of-the-art design to save the natural resources like water, energy, fossil fuels, etc. The institute is appreciated worldwide for its quality contribution in both research and academics which reflects in the ranking of the institute given by various national and international agencies. The institute research focus is to solve the regional problems as well as to satisfy the country needs. The institute has collaborations with many institutions of international repute across the globe.

## **ABOUT THE PROGRAMME**

The requirement of industries in 21<sup>st</sup> century is producing products with minimal harm to the environment, competitive price, customized features and quick response to the change in demand. Sustainable manufacturing is the creation of manufactured products through economic and environment friendly processes that minimize harmful impact on the environment, conserve energy and natural resources and enhances community and product safety. Sustainable manufacturing cannot be attained without adopting sustainable design. It is important for an industry to adopt sustainable design and manufacturing to grow and sustain in the competitive environment. The sustainability in design and manufacturing not only reduces the cost and waste but also helps to reach new customer or demand. Considering the importance of this area, many academic institutes are introducing specialization and dedicated courses in the sustainable design and manufacturing. A lot of researchers across the globe are working towards sustainable manufacturing.

This workshop will focus on the different aspects of Sustainable Manufacturing. The importance of sustainability concepts will be discussed. These topics have great academic, industrial and R&D values in the current times. It is anticipated that the workshop will help the participants to understand the basics of sustainable manufacturing and its three pillars viz. environment, economy and society. The participants will get familiar with the importance of the sustainable manufacturing. The course will explore the current research trend in this interesting field which will

encourage the participants to do research in this very active area. This course will also explore various aspects of the sustainable manufacturing which will help the participants to improve their teaching skills in the subject. The potential benefit of attending this workshop are realized through acquiring knowledge on the values that sustainable manufacturing brings to the manufacturing, design and consultancy industries.

The objectives of the workshop are as below:

- Introduce the participants, the basics of sustainability manufacturing and its importance in 21<sup>st</sup> century and industry 4.0.
- Discuss the process and techniques, to implement sustainable manufacturing in industries.
- Present recent development in sustainable manufacturing.

## **OUTCOME OF THE PROGRAMME**

It is anticipated that the course will be useful for the participants to make them conversant with the basics of the subject on one hand, whereas encourage some of them to start their R & D careers on the other. Participant will get chance to interact with renown experts in sustainable manufacturing which will help the participants to recognize the demand of manufacturing sector. It will guide them to upgrade as per the future requirement and to prepare the team for future industries.

## **CONTACT DETAILS**

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