#### **About MNIT Jaipur**

Malaviya National Institute of Technology (MNIT), Jaipur is one of the premier NITs designated with the status of "Institute of National Importance" by MHRD located in a central part of Jaipur city and spread over 325 acres of lush green area. This institute was established in the year 1963 as a joint venture of the Government of India and Government of Rajasthan. The college was inspired by the great educationist and freedom fighter Pt. Madan Mohan Malaviya and thus named as Malaviya Regional Engineering College (MREC). The institute was upgraded to National Institute of Technology and was declared deemed university on June 26, 2002. Since then, the Institute started offering B. Tech. (Bachelor of Technology) degree instead of B.E. (Bachelor of Engineering) degree. MREC now known as MNIT, aims to set higher standards of academics to become a world class Institute.

## About Metallurgical & Materials EngineeringDepartment

Department of Metallurgical and Materials Engineering is one of the oldest departments established in 1965. The department offers B.Tech, M.Tech and Ph.D programmes in all frontiers areas of engineering. The basic motto of department is to provide quality technical education through its highly qualified and experienced faculty members. The faculty is continuously motivated to keep abreast with state-of-the-art technology.Alumni of this department hold important position in academia, R&D organizations and industries in India as well as atinternational level. Students of this department are certain to have bright career prospects across the globe due to recent ambitious growth plans of ferrous and nonferrous sectors, and great quest for high-tech materials worldwide. PATRON Prof. UdaykumarR. Yaragatti Director, MNIT Jaipur

# Coordinators

**Prof. A.K.Bhargava** 

Prof. U. Pandel

# **Organizing Secretaries**

Dr. Y.V.S.S. Prasad

Dr. R.K.Duchaniya

Members

Mr. Krishna Kumar

Dr. Vijay N.N.

Dr. Ajaya Kumar Pradhan

#### **Contact Person**

# Prof. A. K. Bhargava

Department of Metallurgical & Materials Engineering Malaviya National Institute of Technology J. L. N. Marg, Jaipur-302017 Phone: 0141-2713235 Mobile:9549654243 Email : akbhargava.meta@mnit.ac.in

# MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

**TEQIP** Sponsored

One Week Short Term Course on

Metallurgy for Non-metallurgists (December 11-15, 2017)



Organizedby

Department of Metallurgical & Materials Engineering Malaviya National Institute of Technology J. L. N. Marg, Jaipur-302017

#### **About Short Term Course**

This course will provide an explanation of the unique physical and mechanical characteristics of metals and how do these metals differ from nonmetals, and how metals are alloyed to achieve the desired properties. This course is aimed to cover basic understanding of phase diagrams, Steels and their heat treatments to achieve various combinations of mechanical, physical and chemical properties and their correlation with microstructure. This course is also focused on mechanical testing of materials for non-metallurgical, students and faculties and industrial stake holdersto enhance their basic skills and knowledge in thefield of metallurgical engineering. This STC provides the indepth practical knowledge of metallurgical phenomena.

#### CourseContent

- Basic principles of metal extraction
- Solidification of Metals
- Alloying and Phase diagrams
- Mechanical properties and their measurement.
- Strengthening of metals
- Important heat treatment processes of steels
- Case hardening of steels
- Some important steels: low carbon steels, stainless steels, tool steels
- Important cast irons
- Heat treatment of nonferrous alloys
- Corrosion and its prevention

#### ResourcePersons

Faculty members from Malaviya National Institute of Technology Jaipur and some experts from other organizations.

## **Registration Fee**

Students/Research scholars: Rs1500/-

Faculty from academia: Rs.2500/-

Professionals from Industries and R & D:Rs4000/-The fee should be submitted, along with the filled-in registration form through A/C payee Demand Draft drawn in favour of "**Registrar**, **MNIT Jaipur**".

Last date of Registration: December 04, 2017.

Brochure is available on institute web site http://mnit.ac.in.

### **General Information**

Accommodation and travelling expenses are to be borne by the participants/ sponsoring agency. Limited accommodation on actual charges may be available at MNIT Guest House II/ Hostels. A request for this need to be made in advance as per Institute norms. The participants will not be paid any TA/DA. Working lunch will be provided by the organizers.

## **Registration Form**

One Week Short Term Course On

## Metallurgy for Non-metallurgists

# (11<sup>th</sup> -15<sup>th</sup>December, 2017)

Name (In block letters) Designation
Organization
Academic Qualification
Specialization
Mailing Address
Telephone No. (with STD code)
E-mail
Accommodation required Yes/No
Details of registration fee-
DD No Date
Bank Name
Amount Rs
Date Signature of Applicant

Signature of Sponsoring Authority with seal