REGISTRATION FORM

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DD/NEFT/RTGS No.....

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Date : … … … … … … … … … .

Accommodation for few persons will be provide on first come first serve (on payment basis)

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A Short Term Course On "Clean Steel Technology"

9th -13th December, 2019

Sponsored by TEQIP-III

Organized by:- Department of Metallurgical and Materials Engineering Malaviya National Institute of Technology Jaipur

JLN Marg, Jaipur - 302017

ABOUT M.N.I.T, JAIPUR

The college was established in 1963 with the name as Malaviya Regional Engineering College, Jaipur as a joint venture of the Government of India and the Government of Rajasthan Subsequently; on June 26, 2002 the college has been given the status of National Institute of Technology and on15August 2007, Proclaimed Institute of National Importance through Act of Parliament. The Institute is fully funded by Ministry of Human Resource Development (MHRD), Government of India.

ABOUT THE DEPARTMENT

Department of Metallurgical and Materials Engineering is one of the oldest department established in 1965. The department offers B.Tech, M.Tech and Ph.D programmes in all frontiers areas globally. The basic motto of department is to provide quality education through its highly qualified and experienced faculty members. The faculty is ontinuously 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 international

Theme of Course (Clean Steels)

Clean steels are generally those steels that have low levels of the solute elements sulfur, phosphorus, nitrogen, oxygen and hydrogen; controlled levels of the residual elements copper, lead, zinc, nickel, chromium, bismuth, tin, antimony and magnesium; and, a low level of non metallic or oxide inclusions. The requirements vary with the steel grade and its end use. Clean steels used for one application may be often not acceptable for a different use. Steels with low levels of solutes are sometimes termed as 'high purity steels' while steels with low percentage of tramp elements are often called 'low residual steels'. Other than iron and carbon different alloying elements are also added in varying proportion for achieving various properties according to the application. These alloying elements greatly influence the properties of steel and so amount of each elemental addition is carefully controlled during manufacturing.

About the course

The Course includes expert lectures on the following topics followed by laboratory visits.

I. Concept of Clean Steel - Non Metallic Inclusions, Dissolved Gases, Tramps, Segregation Intensity- Solidification Morphology- Effect of the same on properties & performance, with suitable examples

II. Ladle Metallurgy for Clean Steel Making - Unit processes and Unit Operations - calculation and control of stirring intensity, selection of slag, choice of refractory, temperature etc. to ensure a low content of oxide and sulphide inclusions, Inclusion Engineering- Concept & apt examples

III. Mechanisms and control of segregation (micro / macro) in continuous casting of steel.

IV. Testing and Characterization of Steels

Audience Domain

Research scholars, Post Graduate students, faculty members of institutes and industrial persons. This short-term course will be really helpful to the teaching fraternity, scientists, Industry people and students

Registration Fees

Research scholars & students: 2000/-INR
(Other than MNIT Jaipur)

Teaching fraternity: 3000/-INR

Industrial Professionals: 5000/-INR

Registration fee includes Tea, Lunch and Registration Kit.

Payment mode: NEFT/IMPS or DD

A/c Name: The Registrar MNIT, Jaipur (TEQIP-Phase III), A/c No. 36875887782, IFSC Code: SBIN0015921

Demand Draft (DD) payable at Jaipur in name of: The Registrar MNIT, Jaipur (TEQIP-Phase III)

Resource Persons

Experts from IITs, NITs, and Industries will be delivering the lectures

Contact Person

Dr. Vijay N Nadakuduru

Convener

Contact no. +91-9549650129

Email id: Vijay.meta@mnit.ac.in