TRAINING PROGRAMMES FOR STEEL INDUSTRY

2012 – 2013 CALENDAR

ORGANIZED BY

Team of Experts from

DEPT. MME

(Proposed Centre for Ferrous Process Metallurgy)

1. CCAST       Dec. 21 – 22, 2012
2. FUNDSTEEL    January 21 – 25, 2013
3. WWSLAGS      April 22 – 24, 2013
NIT Trichy

The National Institute of Technology Tiruchirappalli (NITT) (formerly REC Trichy) is one of the leading institutions in the Nation, in the field of technical education. NITT is a Centrally Funded Technical Institution (under the Ministry of HRD, GoI), well known for teaching, research, consultancy and services to the community at large. Many consider NITT as the keystone within the network of NITs. NITT has sixteen academic departments, including nine engineering departments. NITT offers academic programmes at various levels – including B.Tech., M.Tech., M.S. and Ph.D. Dr. S. Sundarrajnan, an eminent scientist, with an outstanding career in the Defence Research and Development Organization, has been the Director of NIT Trichy since July 2011. He has launched many professional initiatives to work closely with the industry.

Dept. MME at NIT Trichy

The Department of Metallurgical and Materials Engineering (MME) is one of the best departments within NITT. Presently, the dept. has a dozen distinguished faculty, along with a Professor (Emeritus) on contract and five ad-hoc faculty. MME is well known for its commitment to teaching, initiatives and excellence in research, leadership role in consultancy and outreach activities. Students consider MME to be a very student – friendly department. In the realm of research and consultancy, MME often sets the benchmarks within NIT Trichy.

Brief Profile of some faculty of Dept. MME

Prof. V. SIVAN

Prof. Sivan is a well known teacher and is a product of the Indian Institute of Science, Bangalore. He has been with NIT Trichy for four decades. Well known for teaching and research activities in process metallurgy, corrosion and welding. His first year course on ‘Introduction to MME’ is very popular with students of B.Tech.. A highly decorated teacher, including awards from the Indian Institute of Metals. Has rendered exemplary service to NIT Trichy, as an administrator, in capacities such as Head of the Department, Dean and Director i/c. His students occupy positions of eminence, all over the world.

Prof. SANKARA RAMAN SANKARANARAYANAN

Prof. Raman has been with this department since 1998, and is the present Head of the Department (MME). He is a product of PSG College of Technology, Coimbatore and Drexel University, USA. He did his post-doctoral research at Carnegie Mellon University, USA; and had served brief stints in the steel industry. Enjoys his teaching activities. Also, interacts
happily with the industry. Has worked in areas such as slags, mould powders, process modeling and quality management. Had completed a project, for an integrated steel plant, on cost of quality aspects related to continuous casting of steels. Had worked with another plant, in the area of Phosphorous control in steels. He has also demonstrated his administrative abilities as an Associate Dean. He is very active in the Indian Institute of Metals.

Prof. S. NATARAJAN

Prof. Natarajan, Professor and former Head of the Department (MME), has been with NITT for three decades. A dedicated teacher and a lead researcher. He is active in areas such as corrosion, surface engineering and extractive metallurgy. Very closely working with industry, in recent years, with responsibilities for some of the very large research consultancy projects in NITT. Also a Vice-Chairman of the Indian Institute of Metals, Trichy Chapter.

Prof. S. P. Kumaresh Babu

Dr. Babu, Associate Professor in MME, has a rare combination of industrial experience and teaching experience. Had worked in leading steel foundries for a decade, before moving into the academia. Works in areas such as foundry, corrosion, surface engineering and composite materials. Works closely with Prof. Natarajan, in industrially funded projects.

INDICATIVE PUBLICATIONS FROM THE PROCESS METALLURGY GROUP:


iii. …, “Application of optical basicity to viscosity of high alumina blast furnace slags”, J. of Mining and Metallurgy, vol. 46 (1), Sec. B, 2010, pp. 41 – 49

INFORMATION ON THE INDUSTRY ORIENTED SHORT TERM TRAINING PROGRAMMES

Considering the expertise of the department, the huge expansion taking place in the Indian steel industry, the need for trained manpower in steel industry and considering inputs from the Ministry of Steel and inputs from MHRD, NITT intends to offer the following three short term training programmes, targeting the steel industry, during the next few months. It is recommended that engineers, of up to five years of experience, be nominated for these courses. Depending on the kind of nominations received, minor modifications may be made in the course contents / approach. (The training may also be useful for engineers having only diploma in metallurgy and few years of shop floor experience.) Experts from other organizations
may deliver some of the lectures. Total number of participants, per programme, may be restricted to thirty, in order to enhance interaction.

1. **CCAST**  **Dec. 21 and 22, 2012**

   Principal Coordinator: Prof. S. Raman Sankaranarayanan
   
   Co – Coordinator: Dr. S.P. Kumaresh Babu

   This two – day programme will focus on the **continuous casting process**, covering the basics, certain operational aspects and mould powders. The participant will obtain a basic understanding of the process; and gain the aptitude for tackling shop floor problems encountered during casting.

2. **FUNDSTEEL**  **January 21 – 25, 2013**

   Principal Coordinator: Prof. S. Raman Sankaranarayanan
   
   Co – Coordinators: Prof. V. Sivan; and Prof. S. Natarajan

   This five – day programme will focus on the **fundamentals of iron making and steel making processes**. The contents would form a condensed version of the semester long courses (often over 40 to 80 hours) offered in Universities on iron making and steel making. The participant will obtain a basic understanding of the processes; and gain the ability for using thermodynamic and kinetic concepts for tackling shop floor problems.

3. **WWSLAGS**  **April 22 – 24, 2013**

   Principal Coordinator: Prof. S. Raman Sankaranarayanan

   This three – day programme will focus on the **wonderful world of slags**. Fluxes and slags play a very crucial role in iron making, steel making, secondary treatments and in casting processes. However, the basics of slags are not sufficiently addressed in academic curricula. The plant metallurgist should have a comprehensive knowledge of the design, properties and performance of fluxes and slags. The course is designed to address this unique requirement. The participant will obtain a basic understanding of slags, some of the related phase diagrams and some of the testing procedures. The participant will gain the expertise to judiciously use fluxes and slags in various operations.
COURSE FEES AND REGISTRATION

Course fees should be remitted by demand draft (DD), in advance, in favour of Director NIT Trichy, payable at NIT Trichy. Name of the training programme should be clearly indicated on the reverse side of the draft. Instructions for e-remittance shall be provided, on request.

Registration may please be done in the official letterhead of the organization, clearly indicating the name of the training programme, number and names of nominated participants, along with payment details and accompanied by draft. Information on the academic background and job responsibility of the participant(s) will be useful to the organizers.

IN CASE, any discount (on fee) is being claimed, related information may please be provided in the same letter of registration.

Fee includes participation in the course, technical information handouts distributed during the course, lunch and refreshments. Accommodation is not included. Due to prevailing constraints, accommodation in NITT guesthouse is not feasible – with due apologies. Free transportation will be arranged between NITT and (couple of convenient pickup points in) Trichy. Distance between Trichy city and NITT can be covered in about forty five (45) minutes.

Courses will typically start by 930 am, on the first day. Courses will typically close by 530 pm, on the last day. Participants are advised to arrive in Trichy before 7 am of first day; and plan for departure after 8 pm of last day. (The five - day training programme may include a test (of one hour duration) for evaluating the competency of the participants, prior to valedictory session.)

1. CCAST Dec. 21 and 22, 2012

Fees: Rupees Fourteen Thousand (Rs.14,000/-) and applicable service tax (12.36%)

Last date for registration (including payment): Dec. 11, 2012

2. FUNDSTEEL January 21 – 25, 2013

Fees: Rupees Twenty eight Thousand (Rs.28,000/-) and applicable service tax (12.36%)

Last date for registration (including payment): January 1, 2013

3. WWSLAGS April 22 – 24, 2013

Fees: Rupees Twenty Thousand (Rs.20,000/-) and applicable service tax (12.36%)

Last date for registration (including payment): April 1, 2013
DISCOUNTS:

Nominating companies can avail of thirty percent (30%) discount by citing any one of the following criteria for discounts, if applicable. ONLY ONE type of discount may please be availed.

a. Companies having MoU with NIT Trichy
b. Companies which had / have sponsored research consultancy projects in NITT
c. Companies which have recruited at least three graduates of dept. MME, per year, over the last three years
d. Companies located within a four hundred Kilometre (400 Km) radius of NITT
e. Companies nominating more than four (4) candidates for any of the above training programmes

CONTACT INFORMATION:

Prof. S. Raman Sankaranarayanan

Dept. of Metallurgical and Materials Engineering (MME)

National Institute of Technology Tiruchirappalli (NITT)

Tiruchirappalli 620 015.

raman@nitt.edu, ramantech19811985@yahoo.com

Tel.: (0431) 250 3450 (MME Office) / 250 3451 (HoD)

FAX: (0431) 2500133 (Office of the Director)

Mobile: 98947 02353 (pers.); 94860 01107 (official)

THANK YOU.