

Greetings from CMTI

We are pleased to inform you that we are conducting a 02 days Non-Residential Training programme on **"Electron Microscopy Analysis", course code 0460**

### Highlights / Overview of the Program:

As rapid development of technology has led to rapidly decreasing feature size, analysis techniques, which are used to visualize & characterize are increasingly challenged. Very high resolution imaging by electron microscopes has enabled imaging and spatial dimension measurements in deep submicron or nano meter features accurately. The course aims to impart an understanding of the theoretical background as well as practical skills in many applications of electron microscopy. The lectures are followed by practical demonstration for better understanding and better access to learn the diversity of electron microscopy applications.

#### Topics covered:

- Sample preparation for Electron Microscopy Analysis.
- Electron Microscopy Principles and Fundamentals
- High resolution imaging and characterisation using SEM/SEM-EDAX
- Basics of Transmission Electron Microscopy (TEM)
- High Resolution Transmission Electron Microscopy (HR-TEM) and STEM

#### Target Participants:

The course is designed for research scholars, faculty from academic Institutions, engineers & scientists from Govt. R&D sectors and personnel from R&D and quality assurance engineers from industries.

#### Programme Schedule

It is 02 days Non Residential Training Programme scheduled during **05<sup>th</sup> – 06<sup>th</sup> December 2024**. The Programme will be held at Central Manufacturing Technology Institute, Bangalore

#### Participation Fees

**Rs. 7,800/- plus GST @ 18%\*\*\*, per participant. This includes Course Kit, working veg lunch, midsession tea.** Course Fee can be paid through **NEFT / RTGS / Demand Draft**. Demand Draft to be drawn in favor of "Central Manufacturing Technology Institute", payable at Bangalore and should reach CMTI one week before the actual date of commencement of the course.

#### Beneficiary for RTGS/NEFT

- a) Name : **Central Manufacturing Technology Institute**
- b) GST No: **29AAATC2085K1ZJ**
- c) Account No :**10521862015**
- d) Bank Name & Branch: **State Bank of India, Yeshwanthpur Branch**
- e) IFSC Code :**SBIN0003297**
- f) MICR Code : **560002055**

#### Additional Information:

1. A 10% rebate on course fee will be given to organizations nominating 3 or more participants for each programme, only if payment is made in advance, ten days before the commencement of the course.
2. Individuals/ Companies interested in participation are requested to fill in the enclosed Enrollment Form and submit at the earliest.
3. Participants are advised to proceed for the programme only after the nominations / Programme confirmed by us (by Fax / Letter / Phone / E-Mail).
4. Participants should report at CMTI on the day of commencement of the course. Participants are advised to reach Bangalore the previous day evening/ night.
5. Course will be conducted from 09:00 to 17:00 hrs. Participants may plan their return journey accordingly.
6. Participants will be given Certificate after the completion of the Training Programme
7. Enclosed are the tentative programme contents for ready reference
8. GST No. to be shared while sending your nomination / Registration (If a company is exempted from GST they have to provide GST Exemption certificate).
9. Please note that Course fee once paid will not be refunded. However, change in nomination will be permitted.

**Note: \*\*\* Taxes and other levies will be charged as per the prevailing rates at the time of Billing**

For further enquiries / registration / nominations, please contact:  
**Mr. Arun Kumar J G, Joint Director & Centre Head – AEAMT,**  
09449842686 / 78 Fax: (080) 2337 0428  
E-mail– training@cmti.res.in

**CENTRAL MANUFACTURING TECHNOLOGY INSTITUTE**  
Tumkur Road, Bangalore 560 022

**Training Programme**  
On  
**'Electron Microscopy Analysis'**

Tentative Programme Schedule

<b>Day &amp; Date</b>	<b>Particulars</b>
Day 1	Introduction to the course
	Electron Microscopy Fundamentals
	Electron Microscopy Fundamentals
	Sample preparation & Imaging Using SEM
	Different Imaging modes & Applications of SEM
	Demo on Sample Preparation
	Demo on SEM
	Fundamentals & Working principle of TEM
Day 2	Sample preparation for TEM
	Transmission Electron Microscopy
	Demo on Sample Preparation
	Demo on Transmission Electron Microscopy
	Concluding Session