

## REGISTRATION FORM

### Personal Details:

1. Name (Mr./Ms./Mrs./Dr.):
2. Designation:
3. Highest Qualification:
4. Specialization:
5. Organization:
6. Department:
7. Date of Birth:
8. Address for Communication:

Pin: Ph. No.:  
Fax No.: Email:

### Payment Details: DD/NEFT/Direct Deposit

UTR No. or Demand Draft No.: Date:  
Drawn on:  
Amount in ₹:

- DD should be drawn in favour of “**STC-MMPS-2014, MNNIT Allahabad**” payable at Allahabad or paid by NEFT transfer or direct deposit in Vijaya Bank account of “**STC-MMPS-2014**” (A/C No. **718400301000114/IFSC Code VIJB0007184**).

.....  
Signature of Applicant Signature of  
Director/Dean/HOD with seal

### Note:

- Incomplete registration form or registration form without demand draft shall be rejected.
- A separate registration form shall be used for every applicant.
- Registration fee is non-refundable.
- No TA/DA will be provided for attending the course.
- Organizers have all rights to cancel course under unavoidable circumstances, which will be communicated to all applicants by email.
- To avoid postal delay, it is advised to send scanned copy of duly signed registration form by email.

### Organizing Committee

Patron : **Prof. P. Chakrabarti**  
Director, MNNIT Allahabad  
Chairman : Head, Mechanical Engineering Department  
Convener : **Prof. Vinod Yadava**, MED, MNNIT Allahabad  
Coordinators : **Dr. Audhesh Narayan**, MED, MNNIT Allahabad  
: **Dr. V. R. Komma**, MED, MNNIT Allahabad  
Treasurer : **Dr. Audhesh Narayan**, MED, MNNIT Allahabad

### Advisory Committee

Prof. R. K. Srivastava, Head, MED, MNNIT Allahabad  
Prof. N. Roy, MED, MNNIT Allahabad  
Prof. M.D. Singh, MED, MNNIT Allahabad  
Prof. Anuj Jain, Head AMD, MNNIT Allahabad  
Prof. Haranath Kar, Head ECED, MNNIT Allahabad

### Registration Fee

Industry Personnel	₹ 5000
Faculty from Academic Institution	₹ 2500
Research Scholar/P.G. Students/Project Staff	₹ 2000

Registration fee includes Lunch, Dinner, Refreshments, Accommodation in hostel and Course Kit.

### Registration Procedure

Hard copy of filled and signed registration form duly forwarded by Director/Dean of the Institute/HOD should be sent to the coordinators on or before ~~June 07, 2014~~ **June 15, 2014** along with Demand Draft in favour of “**STC-MMPS-2014, MNNIT Allahabad**” or the registration fee may be paid by NEFT transfer or direct deposit in Vijaya Bank account of “**STC-MMPS-2014**” (A/C No. **718400301000114/IFSC Code VIJB0007184**). Scanned advance copy may be emailed to coordinators.

### Important Dates

Last date of receipt of application	: June 15, 2014
Acceptance	: June 15, 2014
Intimation of selection by email	: June 15, 2014

### Address for Correspondence

**1. Dr. Audhesh Narayan OR Dr. V. R. Komma**  
Mechanical Engineering Department,  
Motilal Nehru National Institute of Technology Allahabad,  
Allahabad- 211004, INDIA  
Mob. +91-9794259712, Email: anarayan@mnnit.ac.in  
OR  
Mob. +91-9412979763, Email: kvrao@mnnit.ac.in

## One Week Self Financed Short Term Course

on

# Micromanufacturing: Materials, Processes and Systems (MMPS-2014)

June 17-21, 2014

Convener : **Prof. Vinod Yadava**  
Coordinators : **Dr. Audhesh Narayan**  
: **Dr. V. R. Komma**



Organized

by

**Mechanical Engineering Department**  
**Motilal Nehru National Institute of Technology**  
**Allahabad, Allahabad- 211004, India**

## About Allahabad City

The city of Allahabad is among the largest cities of Uttar Pradesh where three holy rivers namely Ganga, Yamuna and mythological Saraswati meet. The secret confluence is called Sangam. The famous Kumbh is organized at Allahabad every twelve years where hundreds of million people gather for holy dip. The city is a birth place of Pt. Jawahar Lal Nehru, the first Prime Minister of India. Allahabad is built on a very ancient Aryans Site, formerly known as Prayag. This historically famous city was a centre of the Indian Independence movement. Allahabad is known for Academics, Politics, and Religions. The city has many institutes like MNNIT, IIT and University of Allahabad. It has many tourist places like Sangam, Anand Bhawan, Company Bag, Narayan Ashram, etc. Allahabad is well connected with the major cities of India via Road, Rail and Air.

## About the Institute

Motilal Nehru National Institute of Technology (MNNIT) Allahabad is an institute of total commitment to the quality and excellence in academic pursuits. It was established as Motilal Nehru Regional Engineering College (MNREC) Allahabad in 1961 as a joint enterprise of Government of India and Government of Uttar Pradesh, and was an associated college of University of Allahabad, which is the third oldest university in India. With over 45 years of experience and achievement in the field of technical education, having traversed a long way, on June 26, 2002 MNREC was transformed into National Institute of Technology and Deemed University fully funded by Government of India. With the enactment of National Institute of Technology Act-2007, the Institute has been granted the status of Institution of National Importance w. e. f. August 15, 2007.

Institute offers B. Tech., M. Tech., Ph.D., MCA, M.Sc. and MBA degrees in various disciplines of Engineering, Technology, Science, Humanity, and Management. The Institute has been recognized by Government of India as one of the Centre for the Quality Improvement Programmes for M. Tech. and Ph.D.

The Institute has been selected as Lead Institution under World Bank funded Government of India Project on Technical Education Quality Improvement Programme (TEQIP) (2002-2007). Currently Institute is funded generously under TEQIP-II by Government of India under World Bank project.

## About Mechanical Engineering Department

Mechanical Engineering Department (MED) is one of the oldest and the largest department of MNNIT Allahabad. The department offers B. Tech., M. Tech. and Ph.D. programmes with wide choices of specialization, electives and research areas. The department offers two B. Tech. programmes, one in Mechanical Engineering and other in Production & Industrial Engineering. The department is also running five M. Tech. programmes in Mechanical Engineering with the specialization in Design Engineering, Production Engineering, Thermal Engineering, Computer Aided Design and Manufacturing and Product Design & Development. The department is having qualified and experienced faculty in almost all streams of Mechanical Engineering. Various areas of research are being pursued in the department like Advanced Manufacturing Processes, Mechatronics, CAD/CAM/CIM, Fracture Mechanics, Heat Transfer, Production and Operation Management, Supply Chain Management, Energy Management, Knowledge Management etc.

## About the Course

Miniaturization of final product has been identified as future technology. In recent years, the need of light weight and miniature products are becoming more valuable since they can provide more powerful functionality in limited space. In order to meet these requirements, the development of sub-micrometer order manufacturing technology has become considerably important. However, manufacturing of a small parts of dimension  $\mu\text{m}/\text{nm}$  is still a challenge to manufacturing engineers. Today, high tech micro/nano product industries are facing challenges of creating miniature features of complex shape in those materials having extraordinary properties. Micro products/components are extensively used in aerospace, electronics, telecommunication and biomedical industries.

Micromanufacturing deals with the material science, process technology and application of micro/nano manufacturing processes. Micromanufacturing processes includes the processes used for building miniature structures, devices and systems in one, two or three dimensions. Micromanufacturing involves both bottom-up and top-down approaches.

## Course Contents

Outline of the broad topics that will be covered during the course are as follows:

- Materials in Micromanufacturing
- Characterization of Nanocomposites
- Lasers in Micromanufacturing
- Biomedical Micromanufacturing
- Microforming Processes
- Conventional Micromachining Processes
- Unconventional Micromachining Processes
- $\mu$ -Joining and Welding Processes
- $\mu$  and n-Coating Processes
- Measurements in Micromanufacturing
- FEM/ANN/GA Applications in Micromanufacturing
- Mechatronics in Micromanufacturing
- KM/CFD in Micromanufacturing
- MEMS/NEMS/Microsystems

## Speakers

The speakers will be mainly from Motilal Nehru National Institute of Technology Allahabad. A few external speakers with expertise in related areas will also be a part of the team.

## Accommodation

1. Accommodation will be provided in institute hostel on twin/triple share basis.
2. Accommodation in the Institute Executive Development Centre (Guest House) may be made available on payment basis on prior request by participants subject to availability.