

Send the completed registration form/DD to:

Dr. S.B. Mishra

Mechanical Engineering Department,
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Dr. A. K Upadhyay,

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IMPORTANT DATES:

DEADLINE FOR REGISTRATION:

September 10, 2014

REGISTRATION FEE*

For Students: **Rs. 2000/-**

For Faculty: **Rs. 3000/-**

For Industry person: **Rs. 5000/-**

* Registration fee includes the course materials, lunch and refreshments.

ACCOMMODATION

Accommodation for participants may be provided in the institute guest house/hostels depending on availability, on payment basis.

ORGANIZING COMMITTEE

PATRON:

Prof. P. Chakrabarti,
Director, MNNIT Allahabad.

CHAIR PERSON:

Head, Mechanical Engineering Department,
Head, Applied Mechanics Department,
MNNIT Allahabad

CONVENER:

Dr. K. K. Shukla,
Professor, AMD and Dean (Academic Affairs)
MNNIT Allahabad

COORDINATORS:

Dr. S. B. Mishra, MED, MNNIT Allahabad
Dr. Ramesh Pandey, AMD, MNNIT Allahabad
Dr. A. K. Upadhyay, AMD, MNNIT Allahabad

ADVISORY BOARD

Prof. Anuj Jain, Head, AMD
Dr. Sadhana Sachan, Head, Chemical Engg.
Prof. A. K. Sachan, Head, CED
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Prof. R. K. Srivastava, MED, MNNIT Allahabad
Prof. Rakesh Narain, MED, MNNIT Allahabad
Prof. A. D. Bhatt, MED, MNNIT Allahabad
Prof. H. S. Goyal, MED, MNNIT Allahabad
Prof. K. N. Pandey, MED, MNNIT Allahabad

RESOURCE PERSONS:

Experts from IITs, NITs and other reputed Institutes

SELF FINANCED SHORT TERM COURSE ON STRUCTURAL COMPOSITE MATERIALS (SCM-2014)

September 17 - 21, 2014

CHAIR PERSON

HEAD, MED
HEAD, AMD

CONVENER

PROF. K. K. SHUKLA

COORDINATORS

DR. S. B. MISHRA
DR. RAMESH PANDEY
DR. A. K. UPADHYAY



Organized by

Mechanical Engineering Department
&
Applied Mechanics Department
Motilal Nehru National Institute of Technology Allahabad
Allahabad - 211004
INDIA

MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY ALLAHABAD

Motilal Nehru National Institute of Technology Allahabad was established in 1961. The institute has been recognized as an institute of national importance, by the Government of India. Further, the institute acts as a center for Quality Improvement Programme (QIP) for M.Tech and PhD. At present, the institute offers nine B.Tech, nineteen M.Tech, MCA, MBA, MSc. and M.S.W programmes.

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 is having qualified and experienced faculty in almost all streams of Mechanical and Production Engineering.

APPLIED MECHANICS DEPARTMENT

Applied Mechanics Department is established in 1965. The department offers several fundamental undergraduate courses and four postgraduate programmes in applied mechanics, fluids engineering, material science and engineering and biomedical engineering. The department is well known for its excellence in leading research and eminent teaching capabilities.

COURSE OBJECTIVE

Composites are one of the widely used materials with better strength to weight / stiffness ratio. The analysis and design procedures of composite structures are considerably more complex due to their anisotropic nature. To achieve safe and reliable structural system, the composites designer/analyst needs to have a sound knowledge and firm grasp of the underlying principles of the structural response of composite materials. This course aims to provide the basic knowledge and understanding of the mechanics of composite materials utilised in the advanced engineering structures in order to permit their efficient use in design applications.

This course is designed for Industry Personnel, Faculty, Research Scholars and M. Tech./ B. Tech. students working in the field of Mechanical Engineering, Civil Engineering,

Chemical Engineering, Materials Science, and Composites. The main focus of this course is to strengthen the subject knowledge theoretically and practically, by providing in-depth insights on the fundamentals of the subject, extension to advanced topics and by indicating the key elements that should be emphasized while teaching and research. This course is aimed at those who are interested in the application of composite materials for the development of efficient lightweight structural designs.

COURSE CONTENTS

- Introduction to Composite materials
- Challenges in modeling and processing of Composite Materials
- Engineering Elastic constants: Micro/macro mechanics of lamina / composites
- Lamination theory for prediction of stiffness, strength and failure
- Axial, bending, shear and torsional loading
- Modes of failure in composite laminates
- FE analysis of composite materials
- Buckling of laminated composite construction
- Damage modeling of composite structural elements
- Introduction to Polymer nanocomposites
- Applications and Synthesis of Nano particles / Carbon nano tubes (CNTs) / fibres for nanocomposites
- Simulation of polymers nanocomposites
- Composite fabrication and testing
- ANSYS and Materials Studio Software - Applications and Tutorials

REGISTRATION PROCEDURE

Payment can be made in the form of demand draft drawn in the favor of "SCM-2014", payable at Allahabad. The registration will be confirmed on receipt of the DD with filled form by post. The registered participants will be intimated through email.

Alternatively the registration fee can be deposited online through net banking to Vijaya Bank, Branch MNNIT Allahabad, Uttar Pradesh; Account no. 718400301000127, Name of Beneficiary: SCM-2014; IFSC : VIJB0007184, and the transaction detail shall be send along with the filled form.

SELF SPONSORED SHORT TERM COURSE ON STRUCTURAL COMPOSITE MATERIALS (SCM-2014)

SEPTEMBER 17 – 21, 2014
REGISTRATION FORM

Name:.....

Gender (Male/Female):.....

Designation:.....

Organisation:.....

Address:.....

.....Pin.....

Telephone:.....

Mobile:.....

Email:.....

ACCOMMODATION: Required/Not required

DD Number:.....dated..... for
Rs. drawn on in favor
of "SCM-2014" payable at Allahabad is enclosed.

OR

Online Transaction detail:.....

.....

Signature of the Participant with date