SPONSORSHIP CERTIFICATE

Mr./Ms./Dr. ……., an employee of our institute/ organization is sponsored to attend the summer school on **Experimental & Computational Methods in Fluid Dynamics** from July 07-19, 2008 at MNNIT Allahabad .

Signature of Sponsoring Authority
Office Seal

Name:
Designation:

PAYMENT DETAILS

DD No.: …….. dated: ……
Amount: ……..
Drawn at: …….

ADDRESS FOR COMMUNICATION

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Course Coordinator
Motilal Nehru National Institute of Technology
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OR
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Co-Coordinator, MNNIT Allahabad.
Mobile: +919336060762.
e-mail: arpaul@mnnit.ac.in

OR
Prof. A.K. Mishra
Course Director, Summer Schools
SNFCE, MNNIT- Allahabad- 211004.

About MNNIT

Founded as Motilal Nehru Regional Engineering College by Pt. Jawahar Lal Nehru in 1961 as providers of high quality technical manpower especially to Indian industry and to be pace-setting institution for development of technical education in the region. It has constantly grown and crossed many milestones during its journey of more than four decades towards academic excellence. Now, it has been reincarnated as Motilal Nehru National Institute of Technology, a Deemed University in 2002 with a view to set higher standards of academic performance, become a lead institution with international recognition in technical education. It offers nine undergraduate courses and 22 postgraduate courses in engineering and technology, besides MMS and MCA and doctoral programmes in wide areas of specialization. The institute possesses several modern facilities and offers a congenial environment for research and development activities in almost all the major fields of engineering. MNNIT campus is situated at about 8 km from main railway station on Allahabad-Lucknow highway.

About Department of Applied Mechanics

The Department of Applied Mechanics offers four M.Tech. programmes including M.Tech. in Fluids Engineering as well as Ph.D. programme in the field of Fluids Engineering, Solid Mechanics and Materials Science.

About ALLAHABAD

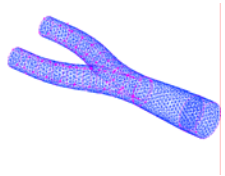
The *Kumbh nagr*i Prayag, known as Allahabad is situated at the confluence of the sacred rivers the Ganga, the Yamuna and legendary Saraswati. The present name was given to the city by the Mughal Emperor Akbar in 1583. This city enjoys a glory of its own in the religious, cultural, education and political history. Its grandeur has attracted throughout the ages, not only the common people, but also great monarchs, religious leaders, philosophers and scholars. Allahabad has number of places of cultural and historical importance like Sangam, Bhardwaj Asharam, Fort, Khushroo Bagh, Alfred park, Anand Bhawan, Museum etc. It is on Delhi–Howrah rail link and NH-2. Allahabad is main junction of North Central Railway having direct links to Delhi, Howrah and Mumbai.

AICTE/ MHRD Sponsored

Staff Development Programme

On

Experimental & Computational Methods in Fluid Dynamics



July 07 – 19, 2008

Patron:
Prof. Arun Baran Samaddar
Director

Chairman:
Prof. Rakesh Mathur
Head, Department of Applied Mechanics

Course Coordinator:
Dr. Anuj Jain
Professor, Department of Applied Mechanics

Organised by

Department of Applied Mechanics
Motilal Nehru National Institute of Technology
Allahabad (U.P.)- 211004, India

BACKGROUND

Rapid advancement in the instrumentation and computational technologies over the past decades has contributed largely to the development of experimental and computational techniques for better flow analysis. The present course is aimed to introduce the recent developments in the fields of Experimental and Computational Fluid Dynamics to meet the industrial needs and the rapid growth of national economy.

The participants will be benefited after attending state-of-the-art lecturers and hands-on experience covering both the experimental and computational aspects of fluid dynamics. The course will enable the participants to understand fundamentals and enrich their knowledge about the recent developments and future trends in this field. This will help them to improve their teaching and research capabilities in these areas.

COURSE CONTENTS

Experimental Methods in Fluid Dynamics

- Design of Experiments in Fluid Dynamics.
- Liquid Flow Measurement Techniques.
- Gas Flow Measurement Techniques.
- Boundary Layer Measurement.
- Control of Flow Separation.
- Experiments in Turbulent Flow.
- Recent Developments in Flow Measurement.
- Flow Visualization Techniques.
- Experiments in Turbomachines
- Fluid Power Control.
- Experiments in Micro-Hydel Power Plants.
- Fluid-Structure Interaction.
- Naval Hydrodynamics.
- Design and Experiments of Thermo-fluid Systems.

Computational Methods in Fluid Dynamics

- Introduction to CFD.
- Applied Numerical Methods.
- Fundamental of Fluid Flow Modeling.
- The Finite Volume Methods.
- Automatic Grid Generation.
- Panel Methods for Compressible Flows.
- Turbulence Modeling.

The course contents will be covered through power-point presentations, interactive sessions, group discussions, brain storming sessions, *etc.* Laboratory classes shall be conducted to provide hands-on experience on CFD software and on experimental techniques.

RESOURCE PERSONS

Faculty from MNNIT- Allahabad, guest resource persons from other premier institutions/ research organizations like IISc, IITs, NITs, NAL and form manufacturing & process industries will deliver lectures.

COURSE MATERIAL

Lecture notes and reference material will be provided either in printed form/ CD-ROM.

IMPORTANT DATES

- Receipt of application by: **23rd June, 2008.**
- Intimation about selection by: **30th June, 2008.**
  (On Institute web site: www.mnnit.ac.in)
- Confirmation by the participants: **2nd July, 2008.**
  (by e-mail to course coordinator)

ELIGIBILITY

The candidate should have B.E./ B.Tech. in any branch of engineering. Preference will be given to the candidates having higher qualifications.

COURSE FEE

No course fee will be charged from the faculty members of AICTE recognized Engineering Colleges/ Institutions. However, they have to send a Demand Draft of Rs.200/- for registration which is **fully refundable** unless they fail to attend the course.

Professionals from industry are welcome to participate with payment of Rs. 7000/- for the course.

All payments should be made through **demand draft** payable at Allahabad and drawn in favour of **Director, M.N.N.I.T., Allahabad**.

TA/ DA AND ACCOMMODATION

Eligible teacher candidates would be provided TA limited to 3rd AC by shortest route for attending the programme as per AICTE norms. Suitable arrangement will be made to accommodate these participants at MNNIT Campus free of cost. TA/DA, boarding and lodging will have to be borne by the industry participants.

APPLICATION FORM

AICTE/ MHRD Sponsored SDP
on
Experimental & Computational Methods in Fluid Dynamics

July 07 – 19, 2008

Name: ……

Destination: ……

Department: ……..

Institute/
Organization: ……

……

Experience (in Years): .....

Address: ....…….....

……..……..……

Tel. No.: …….

Mobile No.: ….…….

e-mail: .....……...

Educational Background (B.E./ B.Tech. onwards):

Degree	Branch	Institute	Marks	Year
……..	……..	……	…….	..….
……..	……..	……	…….	..….
……..	……..	……	…….	..….

Areas of Research Interests:

Kindly register me for SDP on **Experimental & Computational Methods in Fluid Dynamics** to be held at MNNIT- Allahabad during July 7-19, 2008.

Place: ……
Date: ……. **Signature of Applicant**

Interested candidates can pre-register by sending the filled application form by e-mail in advance to course coordinator, if they anticipate delay in sending the form through proper channel.