ABOUT ALLAHABAD

The city of Allahabad is among the largest cities of Uttar Pradesh. It is situated at the confluence of three rivers Ganga, Yamuna and the mythological Saraswati. The sacred meeting point is known as Sangam. The Allahabad city is also famous since long for its renowned academic institutes. This city is well connected via Air, Rail and Road routes with major cities of India.

ABOUT MNNIT ALLAHABAD

Motilal Nehru National Institute of Technology (MNNIT) Allahabad, Allahabad is an Institute with total commitment to quality and excellence in academic pursuits. It was established in the year 1961 as a joint enterprise of Government of India and Government of Uttar Pradesh as MNREC, and was an associated college of University of Allahabad. On June 26, 2002 MNREC was transformed into National Institute of Technology fully funded by Government of India. The Institute has been granted the status of institution of national importance w.e.f. 15th August 2007. The institute offers B.Tech., M.Tech., Ph.D., M.C.A., M.B.A., M.Sc., M.S.W. degrees in various disciplines of sciences, engineering, technology, management and humanities.

ABOUT CHEMICAL ENGINEERING DEPARTMENT

Chemical Engineering Department at MNNIT Allahabad was established as a new academic unit under the mentorship Mechanical Engineering Department in 2006. The department offers B. Tech., M. Tech. and Ph.D. programs in chemical engineering. The department is endued with young, vibrant and dynamic faculty well qualified to impart high quality teaching and research in conventional and frontier areas of Chemical Engineering. The department offers a environment that enables students to identify and pursue their personal and professional goals within an innovative educational and research program that is rigorous as well as flexible.

ORGANIZING COMMITTEE

Patron	Prof. Rajeev Tripathi		
	Director, MNNIT Allahabad		
Chairpersons	Prof. Anuj Jain, Head, ChED		
	Dr. Sadhana Sachan		
Chairs (Technical) Dr. M. Siraj Alam,			
	Dr. Sushil Kumar,		
	Dr. Akshoy Ranjan Paul		
Conveners	Dr. Ankur Gaur		
	Dr. Harindar Singh		

Dr. Harinder Singh Dr. Ashish N. Sawarkar Dr. Shabih-UI Hasan Dr. Suantak Kamsonlian

Advisory Chairs All Deans

All Heads of the Departments/Cell

CONTACTS:

Dr. M. Siraj Alam,

Chair (Technical), AMIMIP-2016 Asstt. Professor, Department of Chemical Engineering, MNNIT Allahabad, Allahabad, (U P) . 211004 Mob: 094512379090, E-mail: msalam@mnnit.ac.in

Dr. Sushil Kumar,

Chair (Technical), AMIMIP-2016 Asstt. Professor, Department of Chemical Engineering, MNNIT Allahabad, Allahabad, (U P) . 211004 Mob: 09455421398, E-mail: <u>sushilk@mnnit.ac.in</u>

Two-Day International Workshop

On

Application of Multiphysics and Inverse Modeling to Industrial Problems (AMIMIP-2016)

December 18-19, 2016

Organized by



Department of Chemical Engineering Motilal Nehru National Institute of Technology Allahabad Allahabad - 211004, INDIA

in association with

Huidyn

Fluidyn Technologies, France

ABOUT THE WORKSHOP

Computational fluid dynamics (CFD) has become one of the most explored areas of research due to its wide application in many industrial problems. A Two-day International Workshop on % pplication of Multiphysics and Inverse Modeling to Industrial Problems+ is proposed to impart knowledge on various aspects and applications of such tools to tackle industrial problems. The broad topics to be taken up in this workshop are as follows:

BROAD TOPICS

- 1. CFD for Industrial Operations: Two phase flow CFD
- 2. Multiphysics Simulations: Theory and Practice
- 3. Inverse Modelling of Hazardous Events
- 4. Industrial Applications of Multiphysics
- 5. Multiphysics for Future Energy Needs: MHD Applications in ITER
- 6. Fluidyn-MP: Multiphysics Software Structure and Usage
- 7. Case Study: Heat Exchanger
- 8. Case Study: Flow Induced Vibrations
- 9. Case Study: Leak and Explosion in a Plant

SPEAKERS

The workshop will be conducted by the experts in the area of CFD and Multiphysics from Fluidyn Technologies, France

ABOUT FLUIDYN TECHNOLOGIES, FRANCE

Transoft International was founded in 1987 in Paris, France by engineers coming from the nuclear and defence sectors with the aim of offering expert modelling services in the domains of fluid and structural dynamics. The FLUIDYN series of numerical tools was designed to respond to the numerical challenges in the field of fluid mechanics and the necessity to use tools and methods adapted to various applications. The company has its presence in USA, U.K., Singapore and India. Fluidyn/Transoft group of firms offers modelling software and consultancy services in CFD and related areas such as stress analysis, heat transfer, magneto-hydrodynamics, electro-chemistry or rarefied gas dynamics for optimizing industrial processes. One major modelling area is environmental impact and industrial hazards simulation.

REGISTRATION FEE

U.G. /P.G. /Ph.D. Students: Rs. 500/-Participants from Academic Institutions: Rs. 1000/-Participants from the Industries/Govt org: Rs. 2500/-

Registration fee includes: Program kit, lunch, and tea during the workshop.

MODE OF PAYMENT

Participants can make payment by depositing the registration fee through RTGS/NEFT in Account No. 718400301000219 (AMIMIP-2016) of Vijaya Bank MNNIT Allahabad (Branch Code: 007184; MICR Code: 211029004; IFSC Code: VIJB0007184). The payment can also be made through Demand Draft, in favour of **%AMIMIP-16+**, payable at Allahabad.

IMPORTANT DATES

Last date for receiving applications: **10th Dec. 2016** Confirmation of participation: **12th Dec. 2016**

TARGETED PARTICIPANTS

U.G./P.G./Ph.D. students of Chemical Engineering and Allied disciplines/Applied Mechanics/ Applied Physics and Mathematics interested to pursue research will be immensely benefited. Faculty members, Engineers and Scientists from industries and academic institution/organizations working in the area are also welcome to join this workshop.

VENUE

Workshop will be held at Chemical Engineering Department, MNNIT Allahabad. The registration for the workshop will start at 09:30 on 18th December 2016.

ACCOMMODATION

Accommodation in the Executive Development Centre/Hostels of the Institute may be provided on payment basis subject to availability at the time of request.

Two-Day International Workshop

On

Application of Multiphysics and Inverse Modeling to Industrial Problems

(AMIMIP-2016)

December 18-19, 2016

Department of Chemical Engineering MNNIT Allahabad

REGISTRATION FORM

NAME (BLOCK LETTERS):

Gender: M / F

DESIGNATION:

INSTITUTION / ORGANIZATION:

MAILING ADDRESS:

EMAIL:				
Highest Qualification :		Experience	:	_ Yrs
PAYMENT: D.D. No.: [Demand draft should be dr payable at Allahabad]	Dt awn in fa	avour of "	Rs AMIMIF	
URT No.:	Dt		Rs	

Signature of Applicant

Date:

Two-day International Workshop on

"Application of Multiphysics and Inverse Modelling to Industrial Problems"



fluidyn

on 18 – 19 December 2016

at Motilal Nehru National Institute of Technology, Allahabad

P R O G R A M M E

DAY-ONE: Sunday, 18 December 2016		
Presentation day on Industrial Process Modelling		
09.30 a.m. – 10.00 a.m.	REGISTRATION	
10.00 a.m. –	Introduction	
10.10 a.m.	Prof. Anuj Jain, Department of Applied Mechanics, MNNIT	
10.10 a.m. – 10.40 a.m.	Inaugural Address Dr. Suhas G. Markandeya, Scientific Secretary, BRNS and Head, P&CD, KMG, BARC (Retd)	
10.40 a.m. –	TEA	
11.00 a.m.		
11.00 p.m. –	CFD for Industrial Operations: Two phase flow CFD	
11.45 p.m.	Dr Ashutosh Kumar, Manager-MP Development, Fluidyn India	
11.45 p.m. –	Multiphysics Simulations: Theory and Practice	
12.30 p.m.	Prithvi Raju Mandapalli, Sr Research engineer, Fluidyn India	
12.30 p.m. –	LUNCH	
01.30 p.m.	Inverse Medelling of Hererdove Events (via video link)	
01.30 a.m. –	Dr Laurent Krumenacker, Project Leader, Eluidyn France	
02.15 a.m. –		
02.10 p.m.	TEA	
02.30 p.m. –	Industrial Applications of Multinbysics	
03 15 n m	Prithyi Baju Mandanalli Sr Research engineer Eluidyn India	
03 15 p m –	Multiphysics for Future Energy Needs: MHD Applications in ITER	
04.00 p.m.	Dr Ashutosh Kumar, Manager-MP Development, Fluidyn India	
04.00 p.m. –		
04.15 p.m.	Closure & Planning for next day Training and for one-to-one sessions	

DAY-TWO: Monday, 19 December 2016			
Training day for Multiphysics Modelling			
10.00 a.m. –	Fluidyn-MP: Multiphysics Software Structure and Usage		
11.00 p.m.	Mr. Subhash Shinde, Manager-Support, Fluidyn India		
11.00 a.m. –	ΤΕΑ		
11.15 a.m.			
11.15 a.m. –	Case Study: Heat Exchanger		
12.15 p.m.			
12.15 p.m. –	Case Study: Flow Induced Vibrations		
01.15 p.m.			
01.15 p.m	LUNCH		
02.15 p.m.			
02.15 p.m. –	Case Study: Leak and Explosion in a Plant		
03.15 p.m.			
03.15 p.m. –	ΤΕΔ		
03.30 p.m.			
03.30 p.m. –	One-to-one sessions for specific problems		
05.00 p.m.			