



AICTE Sponsored Five - Day Online FDP

on

“Fundamentals and Applications of Computational Fluid Dynamics in Fluid-Thermal Systems”



Invited Speakers:

13 - 17 March 2021



Prof. Gautam Biswas
(IIT Kanpur, India)



Prof. Suman Chakraborty
(IIT Kharagpur, India)



Prof. Wilson Chiu
(University of Connecticut, USA)



Prof. Sandip Mazumder
(The Ohio State University, USA)



Prof. Tanmay Basak
(IIT Madras, India)



Prof. Prabal Talukdar
(IIT Delhi, India)



Dr. Siddhartha Das
(University of Maryland, USA)



Prof. Amaresh Dalal
(IIT Guwahati, India)



Dr. Arup Kumar Das
(IIT Roorkee, India)



Dr. Ganesh Natarajan
(IIT Palakkad, India)

Organized by: Department of Mechanical Engineering

National Institute of Technology Silchar, Assam – 788010 (India)



About NIT Silchar

National Institute of Technology Silchar is one of the 31 NITs of India and was established in 1967 as Regional Engineering College (REC) Silchar Assam. In 2002, it was upgraded to the status of NIT and was declared as Institute of National Importance under National Institute of Technology Act, 2007. The institute is well known for its notable work in the technical field. NIT Silchar has achieved 46th rank in Engineering in NIRF 2020 (9th among all NITs).

About AICTE

All India Council for Technical Education (AICTE) was set up in November 1945 as a national-level Apex Advisory Body to conduct a survey on the facilities available for technical education and to promote development in the country in a coordinated and integrated manner.

About FDP

The FDP would offer the platform for faculty members to discuss the fundamental understanding of Computational Fluid Dynamics and its practical applications for real fluid-thermal systems.

Topics to be Covered

- Introduction to CFD and its Applications
- Understanding of Transport Equations used in CFD
- Classifications of PDEs
- Introduction to Finite Difference Method, Finite Volume Method and Finite Element Method
- Solution of Navier-Stokes Equation using FVM-SIMPLE Algorithm
- Solutions of Navier-Stokes Equation in Complex Geometry
- Formulations of Multiphase Flows
- Introduction to Lattice Boltzmann Method
- Different Schemes of CFD for Boiling Phenomena
- Hands on Training for Solving Problems in Fluid-Thermal System

Registration Details

- **Participants:** Teachers from AICTE Approved Engineering Institutions
- **Maximum number of Participants:** 100
- **Registration Fees:** Nil
- **Online Registration form:**

<https://forms.gle/7q6K4vtFYZqQQZ9iR6>

- **Last date for Registration:** 11th March 2021

Certification

e-Certificates shall be issued jointly with AICTE

Organizing Committee

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Prof. S. Bandyopadhyay, Director, NIT Silchar

Advisory Committee:

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Prof. A. K. Barbhuiya, Dean (Acad), NIT Silchar
Prof. M. Ali Ahmed, Dean (R&C), NIT Silchar
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Dr. S. Bhowmik, HoD, ME, NIT Silchar

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Dr. S. Nath, Dr. S.D. Barma, Dr. A.B. Deoghare,
Dr. S. Dey, Dr. P. D. Roy, Dr. S.R. Maity,
Dr. Biplab Das, Dr. Y. Singh, Dr. Bipul Das,
Dr. C.K. Sahoo, Dr. A. Paul, Dr. R.N. Gupta,
Dr. S. Sharma, Dr. A. Bisoi, Dr. S. Negi, Dr. S. Kar

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