Chief Patrons

Dr. Nand Kishore Garg
Founder and Chief Advisor, MATES
Chancellor, MAU, H.P.

Shri Vineet Kumar Gupta
Chairman, MATES, Delhi

Shri S.P. Aggarwal
Executive Chairman, MATES, Delhi

Patrons

Prof. (Dr.) M. L. Goyal
Vice Chairman (Academics), MATES, Delhi

Prof. (Dr.) Neelam Sharma
Director, MAIT, Delhi

Workshop Chief Advisor

Prof. (Dr.) S. S. Deswal
Dean (Academics), MAIT, Delhi

Invited Speakers

Dr. Kishor Khankari
President and founder of AnSight LLC, United States

Mr. R. Christopher Mathis
President, MC2-Mathis Consulting Company, United States

Dr. Ahmad A. Medhat A. Fahim
Professor of Mechanical Engineering@HBRC-Eg.Gov, Egypt

Advisory Committee

Prof. (Dr.) Rajveer Mittal, HoD, EEE
Prof. (Dr.) M. L. Sharma, HoD, IT
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Prof. (Dr.) Sunil Kumar, HoD, ECE
Prof. (Dr.) Chandra Prakash, HoD, App. Science
Dr. Amit Gupta, HoD, MBA

Technical Team

Dr. Vikas Acharya, Asst. Prof., MAE Deptt.
Dr. Vipin K. Sharma, Asst. Prof., MAE Deptt.
Dr. Siddharth, Asst. Prof., MAE Deptt
Mr. Ramakant Rana, Asst. Prof., MAE Deptt

One Week E-Workshop

On

Computational Fluid Dynamics (CFD) and its Applications

(19-23 October 2020)

Organized by
Department of Mechanical & Automation Engineering
&
Department of Mechanical Engineering

Maharaja Agrasen Institute of Technology
Agrasen Chowk, Sector-22, Rohini, New Delhi.

In association with
American Society for Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) India Chapter

Organizing Secretary
Prof. Ved Nath Mathur
Head, MAE Deptt.

Convener
Dr. Vaibhav Jain
Head, ME Deptt.

Coordinators

Mr. Deshdeep Gambhir
Assistant Professor, MAE Deptt

Mr. Naveen Solanki
Assistant Professor, MAE Deptt

Main Focus of the Workshop

Computational Fluid Dynamics deals with the numerical simulation and analysis of fluid flows encountered by engineer of various disciplines like mechanical, automobile, aeronautical, civil, environmental and so on. CFD is a very robust technique that finds wide applications in various industry sectors. There is an immense need for engineers, who understand and can apply the techniques of CFD to solve a variety of design, analysis and optimization problems. This course is a peek into this highly demanding field and will be a door to the numerous opportunities for engineers.

CFD has become widely used and universally accepted procedure in many academic and industrial sectors. This workshop offers excellent guidance on how to use CFD software. The increasing importance of CFD software development, application, and analysis, in the Indian industry and research organizations, along with the lack of trained manpower in this area, has greatly increased the significance of this course.

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Virtual Venue
Maharaja Agrasen Institute of Technology, Delhi

About the Institute

Maharaja Agrasen Institute of Technology an ISO 9001:2015 certified Institute, was established in 1999 by Maharaja Agrasen Technical Education Society promoted by a group of well known Industrialists, Businessman, Professionals and Philanthropists with an aim to promote quality education in the field of Technology and Management. Since then, MAIT has grown from strength to strength to emerge as one of the top technical institutes among the private Institutes with three NBA accredited programs (CSE, ECE and MAE).

The institute began its first batch of 180 B.Tech. students in 1999 and at present, MAIT offers Bachelor's Degree in 5 disciplines of Engineering - Computer Science and Engineering (240 students intake), Electronics and Communication Engineering, Electrical and Electronics Engineering, Information Technology, Mechanical and Automation Engineering (180 students intake each), Mechanical Engineering (60 students intake) and Postgraduate degree in Master of Business Administration (180 students intake). The Institute is approved by All India Council for Technical Education and affiliated to Guru Gobind Singh Indraprastha University, Delhi. To build lasting relations with Industries, MAIT invites industries to join hands in fulfilling the social responsibility of imparting industry relevant technical education and training. Its alumni have also distinguished themselves through their achievements in and have been contributing significantly to industry, academics, research, business, government and social domains. The institute continues to work closely with the alumni to enhance its activities through interactions in academic and research programs.

About ASHRAE

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) is an American professional association seeking to advance heating, ventilation, air conditioning and refrigeration (HVAC&R) systems design and construction. ASHRAE has more than 57,000 members in more than 132 countries worldwide. Its members are composed of building services engineers, architects, mechanical contractors, building owners, equipment manufacturers' employees, and others concerned with the design and construction of HVAC&R systems in buildings. The society funds research projects, offers continuing education programs, and develops and publishes technical standards to improve building services engineering, energy efficiency, indoor air quality, and sustainable development.

Scope of Workshop

CFD is a methodology for computer simulation of fluid mechanics and heat transfer problems. The simulation results in prediction of the flow fields in the domain of interest are very useful in the design and optimization of processes and equipment. This workshop will be appropriate for the persons whose area of interest are Heat transfer, Fluid mechanics, Simulation and Analysis software and other thermal subjects and for the people who carrying out research in CFD.

The objective of the workshop is to bring Students, Academicians, Industry Experts and Research Scholars of matching interests on a common platform to network and have scientific discussions on the latest developments in the fields of CFD. Such interactions will facilitate better understanding about technological developments all across the globe amongst the peers. This workshop will certainly ignite the minds of researchers for understanding more interdisciplinary collaborative research for upgradation of technology.

Registration Details

Online registration should be made in advance with the given link.

Registration Fees: Nil

Registration Link: https://bit.ly/3nC4blG

Workshop Platform: Microsoft Team

Certificate of participation will be sent at the registered email ID

Schedule & Speakers

Speaker: Dr. Kishor Khankari

Dr. Kishor Khankari, Ph.D. is President at AnSight LLC in Ann Arbor, MI. He provides engineering solutions and insights through Physics based simulations and CFD analysis. Kishor has several years of experience in providing optimized HVAC solutions to a wide variety of applications involving external wind engineering, plume dispersion, smoke exhaust, displacement ventilation, natural ventilation, radiant heating and cooling, and indoor air quality and thermal comfort optimization for office spaces, patient rooms, operating rooms, cleanrooms, justice facilities, data centers, and warehouses.

Topic: Applications of CFD for Built Environment
Date: 19 October 2020
Time: 6.00-7.00 p.m. (IST)

Speaker: Mr. R. Christopher Mathis

As president of Mathis Consulting Company, Chris and his team provide a variety of professional building science and strategic planning consulting services to both public and private sector clients. He has spent the past 38 years focusing on how buildings and building products perform – from energy efficiency to long-term durability and sustainability. He is the author of numerous research papers on various topics of building performance – from proper evaluation of insulation performance to fenestration systems performance, sustainability metrics and green building challenges.

Topic: Building Science Lessons from the Honey Bee
Date: 20 October 2020
Time: 6.00-7.00 p.m. (IST)

Speaker: Dr. Ahmad A. Medhat A. Fahim

Prof. Ahmed A. Medhat A. Fahim is a full time Professor of Mechanical Engineering since 2012 & Official Consultant at Architect & Housing Institute [AHI] at Housing & Building National Research Centre, [HBRC], Head of MEP Technical Reviewers Committee at HBRC. He has a consulting firm named LUUKKI, Egypt. LUUKKI has more than 25 years' experience in Middle-East working for Continuous Educations, Engineered HVAC designs, CFD predictions validated by field tests for of smoke management applications & fire strategies, also, HVAC, climate control systems.

Topic: CFD Modelling as an Assessment Tool for Performance-Based-Design
Date: 21-23, October 2020
Time: 6.00-8.30 p.m. (IST)