ABOUT THE WORKSHOP

Scientific computation and visualization are essential in the mathematical modeling and analysis of complex fluid flow problems encountered in a variety of engineering applications. The workshop aims to provide participants with a thorough understanding and hands-on experience in scientific computation, numerical simulation, visualization, and presentation of fluid flow problems using open-source software tools. It will also introduce computational approaches for solving and analyzing fluid flow problems, along with techniques for effectively interpreting and presenting numerical results. The workshop will further promote self-sufficiency by encouraging the use of accessible computational tools for sustainable, reproducible, and independent research practices.

OBJECTIVES OF THE WORKSHOP

The specific objectives of the workshop are:

- To introduce the fundamentals of scientific computation and open-source tools for solving and analysing fluid flow problems.
- To discuss the applicability of computational and numerical techniques in various fluid mechanics, engineering, and research problems.
- To provide hands-on training in scientific visualization and presentation of computational results using open-source software tools.

CERTIFICATION

Participation certificates will be provided to participants having a minimum of 80% attendance during the sessions.

TARGET AUDIENCES

PG/Ph.D. student, faculty members and industry participants from India or abroad working in the field of Fluid Dynamics may join and benefit from the workshop.

CONTACT DETAILS

Dr. Geetanjali Chattopadhyay
Contact No: +91 9549652968
e-mail: geetanjali.maths@mnit.ac.in

Dr. Om P. Suthar
Contact No: +918870730702
e-mail: ompsuthar.maths@mnit.ac.in

Dr. Kushal Sharma
Contact No: +919549650346
e-mail: kushal.maths@mnit.ac.in

A
Five-Day Workshop
on

Scientific Computation, Visualization and Presentation for Fluid Flow Problems Using Open-Source Tools

30th Nov. to 4th Dec. 2026

Organized by

Department of Mathematics
Malaviya National Institute of Technology Jaipur

Convener
Dr. Geetanjali Chattopadhyay

Coordinators
Dr. Kushal Sharma
Dr. Om P. Suthar

ABOUT MNIT JAIPUR

Malaviya National Institute of Technology Jaipur is one of the premier NITs, designated with the status of "Institute of National Importance" through an act of parliament. The institute is fully funded by the Ministry of Education (Shiksha Mantralaya), Government of India. The institute was established in 1963, and its campus spreads over 325 acres of lush green area in the central location of Jaipur city. The institute offers undergraduate and postgraduate courses (B.Tech., M.Tech. /MBA / M.Sc. & Ph.D.) to about 4500 students, in leading fields of technology, architecture, & sciences. Through the engineering, management internationally renowned faculty, laboratories with state of art equipment and excellent infrastructure, the institute is actively engaged in research, consultancy and developmental activities, besides imparting regular teaching. MNIT Jaipur is ranked at 42nd position in NIRF 2025 Ranking.

DEPARTMENT OF MATHEMATICS

The Department of Mathematics was established in 1963. The Department was one of the two Departments, which were established along with the establishment of the college in Jaipur. The faculty members of the Department are teaching mathematics to about 1500 undergraduate and postgraduate students yearly. The Department offers B.Tech. in Mathematics and Computing, M.Sc. in Mathematics and also offers Ph.D. in varied areas like Analysis, Special Functions, Integral Transform, Fractional Calculus, Operation Research, Topology, Computational Statistical methods and Fluid Dynamics. The Department has produced more than 80 Ph.D. graduates so far in various areas of Mathematics.

ORGANIZING COMMITTEE

PATRON
Prof. N. P. Padhy
Director, MNIT Jaipur

Co-PATRON
Dr. Ritu Agarwal
Head, Department of Mathematics, MNIT Jaipur

CONVENER
Dr. Geetanjali Chattopadhyay

COORDINATORS
Dr. Om P. Suthar
Dr. Kushal Sharma

RESOURCE PERSONS

The resource persons are from reputed institutes from India and abroad:

Prof. Christian Ruyer-Quil
Université Savoie Mont Blanc, Chambery, France

Dr. Sachidananda Behera
Indian Institute of Technology Hyderabad

Dr. Manish Kumar
Malaviya National Institute of Technology Jaipur

Accommodation:

Limited accommodation will be provided on a first-come, first-served basis and subject to availability. Accommodation charges are not included in the workshop registration fee and are payable separately.

REGISTRATION DETAILS

Registration fee including GST:
PG/ Ph.D. Students: **INR 3000/-**
Faculty Members**: INR 4500/-**
Industry Participants: **INR 5000/-**
International Participants**: USD 100**

Mode of Payment:

The registration fee (non-refundable) must be paid through online payment as per the following details:
Institution Account Name**: Registrar (Sponsored Research) MNIT, Jaipur**
Account Number**: 676801700388**
IFSC Code**: ICIC0006768**
Bank Name: **ICICI Bank LTD.**
Branch Name**: MREC branch, MALVIYA NATIONAL INSTITUTE OF TECHNOLOGY, JAIPUR - 302017**
Interested participants can register on or before **10th of November, 2026** through Google form available at the following link : **https://forms.gle/YZPLmPaT4TKXukWr9**

IMPORTANT DATES

Last date for registration:
10th of November, 2026

Workshop Dates:
30th of November to 04th of December, 2026

