



2-Day Workshop on

Partial Differential Equations: Analysis and its Applications to Engineering Problems in Industry (Hybrid Mode) sponsored by TIIC

29-30 November 2024

Patron

Prof. S.N. Singh
Director, ABV-IIITM Gwalior

CONVENER/COORDINATOR

Dr. Anuwedita Singh
Dr. Pragya Shukla

Objective of the workshop

This workshop is an activity under the TIDE 2.0 scheme funded by MEITY, Government of India, focuses on the theory and numerical methods for solving partial differential equations (PDEs) found in scientific and engineering applications like wave propagation, heat transfer, and fluid dynamics. Given the complexity and nonlinear nature of many PDEs, analytical solutions are often impractical, so numerical methods such as finite difference, finite volume, and discontinuous Galerkin methods are emphasized for their convergence properties. The workshop also explores advanced techniques for wave propagation, hyperbolic conservation laws, and convection-diffusion problems, with applications in solid mechanics and crack propagation. The workshop highlights how innovations in these computational methods can drive entrepreneurial opportunities and faster innovative solutions in engineering.

Resource Persons

- Prof. G.D. Veerappa Gowda (TIFR CAM Bangalore)
- Dr. Aekta Aggarwal (IIM Indore)
- Dr. Indranil Chaudhary (IIT Kanpur)
- Prof. Evgeny Rudoy (Lavrentyev Institute Russia)
- Dr. Maneesh Singh (Imperial College London)
- Dr. Pankaj Gautam (IIT Roorkee)
- Dr. Purnendu Mishra (ABV-IIITM Gwalior)
- Dr. Anuwedita Singh
- Dr. Pragya Shukla

Who can participate

The program is open to PG students, Research Scholars, Postdocs, faculty members from all Institutes, Startups, entrepreneurs, professional, and industry personnel working in the concerned/allied disciplines.

About the Institution

ABV-IIITM Gwalior, a Deemed University, is an apex IT and Management Institute, established by the MHRD, Government of India. ABV-IIITM Gwalior is the foremost institution providing Technical and Managerial Education in the areas of Information Technology and Management, in India. The only institution of kind in India, ABV-IIITM Gwalior is at the vanguard of imparting superior quality higher education and pertinent skills.

About the Department

The Department of Applied Sciences was established in July 2022; however, it is renamed as Department of Engineering Sciences in June 2023. The Engineering Sciences faculties have been teaching and doing research in this institute since 2006 with a clear motive to equip the engineering students with fundamental and engineering concepts of Physics and Mathematics.

Registration

<https://forms.gle/v9BRLHXErFcQADhD7>
(Registration Link)

Last Date of Registration: 15th Nov 2024
Registration Fees for offline participants: Rs. 2360/-
(=2000+18%GST) (Accommodation (shared basis),
Lunch and Breakfast)
Registration Fees for online Participants: Rs.1180/- (=1000+18%GST)

Bank Account Details:
Account Name: ABV-IIITM FDP ACCOUNT
Address: Bank of India, IIITM Campus, Gwalior
Account No.: 945210110009380
IFSC: BKID0009462
MICR: 474013010

"Please register early as seating is limited."

Organizing Committee

- Prof. Joydip Dhar
- Prof. Anurag Srivastava
- Prof. Pankaj Srivastava
- Dr. Ajay Kumar
- Dr. Manoj Kumar Dash (TIIC)
- Dr. Jeevaraj S.
- Dr. Kapil Kant
- Dr. Purnendu Mishra
- Dr. Anuraj Singh

Contact Details

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