



Vidyayāmruthamashnute

B. N. M. Institute of Technology

An Autonomous Institution under VTU.

27th Cross, 12th Main, Banashankari 2nd Stage, Bengaluru 560 070. INDIA

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Bhageerathi Bai Narayana Rao Maanay
Educational Institutions
1972-2022



International Conference on Advanced Materials and Fluid Mechanics



Hybrid Mode

23-24 November 2023

Organized & Hosted by

- **Department of Mechanical Engineering**
- **Department of Physics**
- **Department of Chemistry**
- **Department of Mathematics**

About BNMIT



B N M Institute of Technology was established in the year 2001. It has achieved academic laurels and is one of the top preferred institutes in technical education in Karnataka. BNMIT has been granted Autonomous Status since June 2021 by UGC and VTU. BNMIT, a lush green campus is located at Banashankari, Bengaluru, a quiet and well-known locality with easy access to all essential facilities. BNMIT offers Engineering courses in Electronics and Communication Engineering, Electrical and Electronics Engineering, Computer Science and Engineering, Information Science and Engineering, Mechanical Engineering, and Artificial Intelligence and Machine Learning (AIML). The institute also offers post graduate programs in VLSI Design and Embedded systems, Computer Science & Engineering, and Master's in Business Administration. The institute is accredited by NAAC with 'A' Grade and all the eligible UG programmes are accredited by NBA, New Delhi. Department of Science & Technology has funded Rs. 2.87 Crores towards New Gen Innovation and Entrepreneurship Development Centre (IEDC). BNMIT has some more feathers on its cap; it's ranked (150-300) by NIRF INNOVATION-2023, Diamond Rating by QSI-Gauge, 26th Rank by TIME Survey, 34th Rank by Outlook and 40th Rank by Data Quest.

About the Conference

The International Conference on Advanced Materials and Fluid Mechanics is the premier forum for the presentation of technological advances and research results in the fields of material science and Computational Fluid Mechanics. It provides an international platform where researchers, industry professionals, academicians, and students across the globe can present and exchange innovative research ideas and build networks for further research collaboration. The ICAMFM-2023 will cover a range of topics, including Material Science, Nanotechnology, Biomaterials, Composite Materials, Surface Engineering, Rheology, Fluid Mechanics and many more. This conference will focus on the invited talks on the latest areas, the presentation and discussion of the most recent innovations, trends, and concerns, the practical challenges encountered, and their relevance in Advanced Materials and Fluid Mechanics.

About the Departments

Department of Mechanical Engineering

With a dynamic job scenario, both locally and globally, the scope of Mechanical Engineering is rapidly expanding. Mechanical Engineering graduates are finding increasing career opportunities that require expertise in interdisciplinary domains such as Machine Learning, Systems Engineering, and Robotics. At BNMIT, we have implemented a strong pedagogy with a contemporary curriculum designed to encourage interdisciplinary learning. Our curriculum, designed in consultation with academic and industry experts, has a broader horizon compared to those offered by other autonomous institutes and universities. Some highlights of our curriculum include Python Programming, Artificial Intelligence, Data Science, and Robotics. Internships are made mandatory to ensure that students are well-prepared for immediate employment. Additionally, the department organizes regular industrial visits, Skill Development Programs, Student Workshops, and Invited Lectures to empower students with the necessary skill sets for a successful career in Mechanical Engineering. The Department has been recognized as a Research Centre under VTU, Belagavi. The department is actively engaged in research areas of Material Science & Computational aspects of Fluid Mechanics with application in Applied Mathematics, Medicine & Aeronautical Engineering.

Department of Physics

The Department has enthusiastic and academically experienced teaching and technical staff. The Department has been recognized as a Research Centre under VTU, Belagavi. The Faculties are actively involved in research activities in the areas of Molecular Spectroscopy, Material Science, Nanotechnology, Computational Physics and Biophysics. The Department aims in equipping the future engineers with various aspects of Physics. The Engineering Physics Lab is well furnished with the latest equipment and all the necessary facilities.

Department of Chemistry

The Department has highly qualified, dedicated and enthusiastic faculty. It aims to impart high quality education by inspiring students to come out to compete globally in order to develop scientific outlook, with analytical mind giving due importance to Basic Science and its Application in Engineering Science. To encourage students to learn about making a significant contribution to their careers and to think about resolving humanity's environmental challenges. The Department is provided with well-equipped lab and individual attention is given to the students. The Department has been recognized as a Research Centre under VTU, Belagavi. The Department is actively engaged in research areas of Pharmaceuticals, Corrosion, Material Chemistry, Medicinal Chemistry, Nanotechnology & Water Treatment.

Department of Mathematics

The Department is equipped with experienced and academically oriented faculty. The Department has been recognized as a Research Centre under VTU, Belagavi. The Department is actively engaged in research areas of Fluid Mechanics and Graph Theory. The Department has also successfully conducted International Conferences and Symposia on mathematical topics such as Fluid Dynamics and its applications, Mathematical Modelling and Non-linear equations and hosted 52nd congress of the Indian Society of Theoretical and Applied Mechanics (An International Meet) in collaboration with IIT, Kharagpur.

Important dates:

- **Abstract Submission : 31st October 2023**
- **Acceptance Notification: 2nd November 2023**
- **Full length paper submission and Author registration: 10th November 2023**

Chief Patron

Sri. Narayan Rao R. Maanay,

Chairman, Governing Body,
BNM Institute of Technology, Bengaluru, India.

Chief Mentor

Dr. S. Sadagopan,

Former Director, IIIT Bangalore,
Advisor, BNMIT

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Call for Papers

High quality, state-of-the-art, original research papers are invited from researchers, industry professionals, academicians and students. The abstract should include title, author names and affiliations along with the corresponding authors email and restricted to 200 words. Template for abstract submission may be downloaded from the conference website and send by the email to icamfm2023@bnmit.in participants need to register for the conference using the link provided in the website : <https://icamfm.bnmit.in/>

Track – A : Advanced Materials

1. Composite Materials
2. Ceramics and Glass
3. Surface Engineering
4. Nano Technology
5. Sensors
6. Biomaterials
7. Rheology
8. Advanced Aerospace Materials
9. Functional Biomaterials
10. Smart Materials and its Applications
11. Sustainable Materials
12. Materials for Display and Security Applications
13. Batteries and Energy Materials
14. Self-healing Materials
15. Alloys and Composites
16. Corrosion Science
17. Advanced Material Processing
18. Materials for Energy Storage and Conversion
19. Electric and Semiconductor Material
20. Fuel Cells
21. Packing Materials
22. Polymers

Registration Fee Details:

Faculty: Rs.3000

Students (UG/PG): Rs.1500

Industry representatives: Rs. 4000

Foreign Delegates: USD 200

Contact Details:

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Track – B : Fluid Mechanics

1. Magneto Hydrodynamics
2. Boundary Layer Flows
3. Computational Fluid Dynamics
4. Aero Dynamics
5. Flow through Porous Media
6. Mathematical Modelling of Fluids
7. Convective Heat transfer
8. Newtonian and Non-Newtonian Fluids
9. Incompressible and Compressible Flows
10. Biomechanics
11. Nano Fluids
12. Entropy Generation
13. Smart Fluids
14. Electrodynamics

Note: The conference scope is not limited to the above topics

Journal Publications: Selected abstracts will be invited to submit their full length papers for publications in the "Journal of Physics: Conference Series" under IOP publishers which is indexed in Scopus.

Note: Publication Charges: Rs.8000

Registration fee has to be paid online via NEFT/RTGS only

Bank Name: Canara Bank

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A/C Number: 1147101032831

MICR Code: 560015006

IFSC Code: CNRB0001147

Branch: Sevakshethra, BSK II Stage

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