



*B. N. M. Institute of Technology*

An Autonomous Institution under VTU.

27<sup>th</sup> Cross, 12<sup>th</sup> Main, Banashankari 2<sup>nd</sup> Stage, Bengaluru 560 070. INDIA

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# International Conference on Applied Sciences and Advanced Materials



**Hybrid Mode**

**28-29 November 2025**

**Publication Partner**

**Cureus**

Part of **SPRINGER NATURE**

Selected papers will be  
Published in **Cureus**  
**Journal of Engg.,**  
**(SpringerNature)**

**Organized by**

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

## About BNMIT



Since 2001, B.N.M. Institute of Technology has emerged as a well-established institution in Karnataka, inspired by the philanthropic and visionary ideas of our Founder and Managing Trustee, Shri N. Raghunath Rao Maanay, and Founder Secretary, Prof. Sunanda P. Jadhav, and further strengthened under the leadership of Shri Narayan Rao Maanay, Secretary, BNM Educational Institutions.

BNMIT is an Autonomous institution since 2021 and is most sought-after. It is located in the heart of Bangalore city set in a lush landscaped green campus. BNMIT offers UG programs in Artificial Intelligence & Machine Learning, Computer Science, Electronics & Communication, Electrical & Electronics, Information Science and Mechanical Engineering apart from M.Tech and MBA programs. Being autonomous, the Board of Studies is enriched with industry experts as members, ensuring that the curriculum is aligned with current and future requirements—an approach highly appreciated by all concerned industries. The institute's state-of-the-art infrastructure includes Wi-Fi network, digital classrooms, highly sophisticated laboratories with latest equipment, Industry supported Centers of Excellence, Skill labs, fully furnished and equipped conference/seminar halls and a large auditorium.

BNMIT has adapted a unique outcome-based education system by employing project-based teaching-learning techniques with more emphasis on skill development. Centres of Excellence and specialized labs like Engineering Exploration Lab and Experiential Learning Lab help carry-out projects effectively. Implementation of LMS with Microsoft TEAMS ensures exceptional online education. QS-IGauge has certified BNMIT with E-Lead certification for excellence in E-Learning and Academic Digitization.

The Career and Professional development cell create global professionals through structured training programs, enabling 95% of eligible students to be placed across over 150 companies with attractive salary packages.

BNMIT is NAAC accredited with "A" grade and all eligible programs are NBA accredited. Most of the surveys conducted by agencies like TIMES, OUTLOOK, Dataquest and India Today have ranked BNMIT one amongst top Institutions in the country.

### About the Conference

The International Conference on Applied Sciences and Advanced Materials (ICASAM 2025) aims to bring together researchers, academicians, and industry experts to explore cutting-edge advancements in applied sciences and material technologies. Organized by the Departments of Mechanical Engineering and Basic Sciences, the conference will serve as a platform for knowledge exchange, fostering interdisciplinary collaborations. Key topics include advanced materials, nanotechnology, sustainable innovations, and emerging trends in applied sciences. ICASAM 2025 will feature keynote sessions, technical presentations, and interactive discussions, providing valuable insights for global scientific and industrial communities. Join us on 28 & 29 November 2025, to be part of this transformative event.

## About the Departments

### Department of Physics

The Physics Department has enthusiastic and academically experienced teaching and technical staff. The Department has three doctorate holders and the other faculty member has registered for his Ph.D. program. The Department has been recognized as a Research Centre under VTU, Belgavi. The faculty members are actively involved in research activities in Molecular Spectroscopy, Material Science, Nanotechnology, Computational Physics and Biophysics. The Department aims to equip future engineers with various aspects of Physics. The Applied Physics Laboratory is well-furnished with the latest equipment and all the necessary facilities. The Department also has a Research Laboratory to enable the faculty members to pursue experimental research work in the fields of Molecular Spectroscopy, Material Science and Nanotechnology.

### Department of Chemistry

The Department of Chemistry is led by a team of highly qualified, dedicated, and passionate faculty members committed to delivering excellence in Academics and research. With a strong foundation in fundamental and applied chemistry, the Department fosters scientific inquiry, critical thinking, and problem-solving skills, preparing students to compete globally. It encourages innovation and inspires students to contribute to advancements in science while addressing real-world environmental and industrial challenges. The Department is actively involved in guiding various projects to the Engineering students. The Department has a well-equipped lab and a recognized research Centre under VTU, Belagavi. The Department ensures hands-on learning and personalized mentorship. The Department is actively engaged in research areas of Pharmaceutics, Corrosion, Material Chemistry, Nano Materials, water treatment and Medicinal Chemistry. The Department has demonstrated its research excellence through publications in national and international journals, as well as by authoring books and securing patents.

### Department of Mathematics

The Department is equipped with well-experienced, academically oriented faculty. The Department has ful-fledged Research Centre recognized by Visvesvaraya Technology University, Belgaum. 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 relevant to Engineering, and hosted 52 congress of the Indian Society of Theoretical and Applied Mechanics (An International Meet) in collaboration with IIT, Kharagpur.

### Department of Mechanical Engineering

The Department of Mechanical Engineering was established in 2011 with an intake of 60 students. It boasts well-equipped state-of-the-art laboratories and a team of dedicated faculty with rich academic and industrial experience. The faculty hold Master's and Doctorate degrees in Machine Design, Thermal, and Manufacturing Engineering. The Department is also recognized as an R&D Centre by VTU, Belagavi. Our curriculum is enriched with interdisciplinary subjects from AIML and Computer Science to meet modern industry demands. The Toyota Centre of Excellence provides hands-on training in engine and transmission systems, bridging theory and practice. The 3D Printing Centre of Excellence offers practical exposure to additive manufacturing technologies, fostering innovation and skill development.

### Important dates:

- **Abstract Submission : 15<sup>th</sup> November 2025**
- **Acceptance Notification: 16<sup>th</sup> November 2025**
- **Full length paper submission and Author registration: 20<sup>th</sup> November 2025**

 **Chief Patron**

**Sri. Narayan Rao R. Maanay,**  
Chairman, Governing Body,  
BNM Institute of Technology, Bengaluru, India.

 **Chief Mentor**

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Former Director, IIIT Bangalore,  
Advisor, BNMIT

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**Dr. L. Ravi Kumar**, Vice-Principal, BMSCE, Bengaluru

**Dr. Sanjeev Kumar**, Principal, Sri Siddhartha School of Engineering, Tumakuru

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**Dr. B. S. Prathibha**, Prof. & HoD, Chemistry Dept., BNMIT  
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**Dr. B. S. Anil Kumar**, Prof. & HoD, Mechanical Engineering Dept., BNMIT

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**Dr. Mahendra Kumara C**, Associate Professor, Mechanical Engineering Dept., BNMIT  
**Dr. Harish A**, Associate Professor, Mechanical Engineering Dept., BNMIT  
**Sri. Vishnu P**, Assistant Professor, Mechanical Engineering Dept., BNMIT  
**Smt. Shwethashree B**, Assistant Professor, Mechanical Engineering Dept., BNMIT  
**Sri. Bapugowda C M**, Assistant Professor, Mechanical Engineering Dept., BNMIT  
**Sri. Vishwanath B R**, Assistant Professor, Mechanical Engineering Dept., BNMIT  
**Sri. S Sudindra**, Assistant Professor, Mechanical Engineering Dept., BNMIT  
**Smt. K J Madhushree**, Assistant Professor, Civil Engineering Dept., BNMIT  
**Sri. Manu A S**, Assistant Professor, Civil Engineering Dept., BNMIT

## Call for Papers

**H**igh quality, state-of-the-art, and original research papers are invited from researchers, industry professionals, academicians and students. The abstract (not exceeding 200 words) should include the title, author names with affiliations, and the corresponding author's email address. Abstracts should be submitted to [icasam2025@bnmit.in](mailto:icasam2025@bnmit.in) on or before 15<sup>th</sup> November 2025. The abstract template can be downloaded from the conference website. Participants are required to register for the conference using the link available at: <https://icasam2025.bnmit.in>

### Conference theme

1. Nanomaterials
2. Polymers and composites
3. Smart materials and their applications
4. Multifunctional coatings and thin films
5. Phase-change and shape-memory materials
6. Magnetic and optoelectronic materials
7. 3D and hybrid materials
8. Energy harvesting and storage (batteries, supercapacitors, solar cells)
9. Photocatalysis and electrocatalysis
10. Hydrogen and fuel cells
11. Drug delivery systems and tissue engineering scaffolds
12. Sensors
13. Bioactive polymers and hydrogels
14. Materials in regenerative medicine
15. Materials modeling and simulation
16. Machine learning and AI in materials discovery
17. Advanced manufacturing and 3D/4D printing
18. Metamaterials and photonic crystals
19. Space and aerospace materials
20. Wearable and flexible electronics
21. Nano and smart fluids
22. Electric and Semiconducting materials
23. Advanced material processing and Manufacturing
24. Magnetohydrodynamics
25. Computational Fluid Dynamics
26. Mathematical Modelling of Fluids
27. Corrosion science
28. Ceramics and Glasses
29. Surface engineering
30. Materials for display and security applications
31. Photophysical properties of materials
32. Convective heat transfer
33. Graph theory
34. Sustainable and Green Technologies.

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

**Journal Publications:** High quality selected paper will be published in Cureus Journal of Engineering (Springer Nature). The publication charges will range from USD 0 to 150.

### Registration Fee Details:

Faculty: Rs.2000

Students (UG/PG): Rs.1000

Industry representatives: Rs. 4000

Foreign Delegates: USD 200

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

Bank Name : Canara Bank

A/C Name : BNMIT Maths

A/C Number : 1147101032831

MICR Code : 560015006

IFSC Code : CNRB0001147

Branch : Sevakshethra, BSK II Stage

## Resource Persons



### Prof. E. S. Dwarakadasa

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### Prof. R. Shabadi

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### Mr. Kashinath Patnasetty

ACE Design Ltd.  
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### Dr. T. Ram Prabhu

Assistant Director  
DRDO



### Dr. S.T. Aruna

Chief Scientist  
Surface Engineering Division  
CSIR-National Aerospace  
Laboratories Bengaluru



### Dr. M. R. Sanjay

Principal Research Scientist  
King Mongkuts University of  
Technology North Bangkok  
Thailand



### Dr. C. S. Ramesh

Dean of Research & Innovation  
Sapthagiri NPS University  
Bengaluru



### Dr. Sarbari Bhattacharya

Professor  
Department of Physics  
Bangalore University



### Dr. Neha Paddillaya

Ph.D. in Bioengineering  
Postdoctoral Researcher  
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### **Contact Details:**

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