

Resource Persons

1. **Dr. H. B. Aravind**
Principal, Bapuji Institute of Engineering and Technology, Davanagere-577004, Karnataka, India
2. **Dr. K.M. Eswarappa,**
Professor and Head, Dept. of Physics, Davangere University, Davangere.
3. **Dr. Manjappa S**
Director R&D, Sahyadri College of Engineering & Management, Mangaluru.
4. **Dr. Mallikarjuna S Holli,**
Professor, Dept. of Biomedical Engineering, University of BDT College of Engineering, Davangere
5. **Dr. T Niranjana Prabhu**
Professor in Chemistry and Associate Dean – Office of Research & Innovation, M S Ramaiah University of Applied Sciences (MSRUAS), Bangalore.
6. **Dr. Manjunath Gudekote,**
Professor, Dept. of Mathematics, Manipal Institute of Technology, MAHE, Manipal.
7. **Dr. S B Mallikarjun**
Professor, Department of AI&ML, Bapuji Institute of Engineering and Technology, Davangere
8. **Sri. Krishnamurthy Upadhyay,**
Group Project Manager, Engineering Unit, Infosys, Mysore.
9. **Mr. Prajwal G B**
Technical Lead, Ecozaar, Autovert Technologies Pvt Ltd., Bangalore
10. **Dr. Lakshmikantha H,**
Environmental Officer, Regional Office, Karnataka State Pollution control Board, Mangalore.
11. **Sri Krishna Huilgol**
Senior Manager, and Product Manager Continental Automotives, Electronic City, Bengaluru

Note:

- **Registration is limited to 50 participants**
- **Accommodation will be provided upon prior request**

Address for Communication:

Dr. Suresh B

drbssmg2025@gmail.com; drbssmg@bietdvg.edu

Mobile No.: +91 9449242490

Dr Krishnakumar T K

Email Id: sairam@bietdvg.edu, Mobile No.: +91 9980300259

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Secretary, BEA, MLA South Constituency, Davanagere

Sri S. S. Mallikarjuna

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Principal, BIET

Prof. Y. Vrushabhendrappa

Director, BIET

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Dr. Suresh B

Associate Professor

Department of Civil Engineering

Co-coordinator

Dr. T. K. Krishnakumar

Assistant Professor

Department of Physics

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How to Apply for FDP

1. Visit the ATAL Academy Portal:
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5. Explore Workshops/FDPs: Navigate to the "VAANI – August – Energy Sustainability & Climate Change"
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Bapuji Educational Association (R.)



Bapuji Institute of Engineering & Technology,

Davanagere - 577004

An Autonomous Institute Affiliated to Visvesvaraya Technological University, Belagavi, Karnataka.



Three Days Faculty Development Program

on

“Sustainable Development and Future trends: Innovations in AI and Quantum Technology”

ಮೂರು ದಿನಗಳ ಅಧ್ಯಾಪಕರ ಜ್ಞಾನ ಅಭಿವೃದ್ಧಿ ಕಾರ್ಯಾಗಾರ

“ನಾವೀನ್ಯತೆಗಳ ಮೂಲಕ ಕೃತಕ ಬುದ್ಧಿಮತ್ತೆ ಮತ್ತು ಕ್ವಾಂಟಮ್ ಕಂಪ್ಯೂಟಿಂಗ್ ನಲ್ಲಿ ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಮತ್ತು ಭವಿಷ್ಯದ ಪ್ರವೃತ್ತಿಗಳು”

20th - 22nd August 2025

Organized by

Department of Civil Engineering

Department of Physics

Bapuji Institute of Engineering and Technology,

Davanagere – 577 004, Karnataka, INDIA

About the Institution

Bapuji Institute of Engineering and Technology (BIET), one of Karnataka's top ten self-financing engineering institutions, offers high-quality education to produce skilled engineers and technocrats. Spanning 63 acres, the campus provides state-of-the-art infrastructure for academic and extracurricular excellence. BIET offers 13 undergraduate and 5 postgraduate programs, along with 14 VTU-recognized research centers. Approved by AICTE, New Delhi, recognized under UGC sections 2f & 12(b), the institute emphasizes industry collaboration through skill training, industrial visits, expert lectures, and advanced learning methods like smart boards and NPTEL courses. The Industry-Institute Partnership Cell (IIPC) fosters collaboration, consultancy, and entrepreneurship. BIET has received research funding from AICTE, DST, DBT, and other agencies. Accredited by NBA and NAAC with an 'A' grade in 2017 and 2023, BIET continues to uphold academic excellence and industry relevance.

Vision of the Institute

To be a center of excellence recognized nationally and internationally, in distinctive areas of engineering education and research, based on a culture of innovation and invention.

Mission of the Institute

BIET contributes to the growth and development of its students by imparting a broad-based engineering education and empowering them to be successful in their chosen field by inculcating in them positive approach, leadership qualities and ethical values.

About the Department

The Department of Civil Engineering was established in the year 1979. Department offers UG program in Civil Engineering, PG programs in Environmental Engineering and Structural Engineering. The department has two research centers viz. Environmental Science & Technology Study Center and Civil Engineering research center accommodating research scholars from various Institutes and Industries. The department has well experienced and distinguished faculty with specialization in major areas of civil engineering. The department provides testing and consultancy services to various agencies. The department is proud to have distinguished alumni doing excellent professional work at the global level. Department was accredited by NBA in 2004, 2008, 2011, 2021 and also for 3 years from 2024 to 2027.

Vision of the Department

To train the students to become Civil Engineers with leadership qualities, having ability to take up professional assignments and research with a focus on innovative approaches to cater to the needs of the society.

Mission of the Department

- To provide quality education through up dated curriculum and conducive teaching learning environment for the students to excel in higher studies and competitive examinations and professional career.
- To impart soft skills, leadership qualities and professional ethics among the graduates to handle the projects independently with confidence.
- To deal with the contemporary issues and to cater to the socio-economic needs.
- To build industry institute interaction and to establish good rapport with alumni.

About Workshop

The workshop titled “Sustainable Development and Future trends: Innovations in AI and Quantum Technology” focuses on exploring the innovative, sustainable technology for the improvement of life skills of human beings by protecting the environment. It joins together experts, research scholars, policymakers and industry and stock holders to enhance the applications of advanced technology. It is evident that, the above technology provides vast opportunities and enhance the quality of our daily life and emphasizes importance of environmental sustainability. Sustainability plays very important, data provided by the various sources like environment monitoring, structural study of medicines and its behavior on human body, Waste management studies, Cyber Security and Cryptography, financial modelling, Study of material properties, agricultural fields, energy storage devices. Participants gain insights in the fields to need sustainability which can be appraised in an accurate manner application in the quantum technology and artificial intelligence. Communicating the new ideas to researches in regional language and in mother tongue is effective for reaching the common man to understand the importance. The workshop ultimately aims to build knowledge and strategies for application and developing environmentally responsible and sustainable environment that align with global climate goals and future visions. In this connection this conference provides an excellent platform for researchers to gain their knowledge in mother tongue (Kannada).

"ನಾವೀನ್ಯತೆಗಳ ಮೂಲಕ ಕೃತಕ ಬುದ್ಧಿಮತ್ತೆ ಮತ್ತು ಕ್ವಾಂಟಮ್ ಕಂಪ್ಯೂಟಿಂಗ್ ನಲ್ಲಿ ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಮತ್ತು ಭವಿಷ್ಯದ ಪ್ರವೃತ್ತಿಗಳು" ಎಂಬ ಶೀರ್ಷಿಕೆಯ ಕಾರ್ಯಾಗಾರವು ಪರಿಸರವನ್ನು ರಕ್ಷಿಸುವ ಮೂಲಕ ಮಾನವರ ಜೀವನ ಕೌಶಲ್ಯಗಳ ಸುಧಾರಣೆಗೆ ನವೀನ, ಸುಸ್ಥಿರ ತಂತ್ರಜ್ಞಾನವನ್ನು ಅನ್ವೇಷಿಸುವ, ನವೀನ ಗಮನಗಳನ್ನು ಅನ್ವೇಷಿಸುವುದರ ಮೇಲೆ ಕೇಂದ್ರೀಕರಿಸುತ್ತದೆ. ಸುಧಾರಿತ ತಂತ್ರಜ್ಞಾನದ ಅನ್ವಯಿಕೆಗಳನ್ನು ಹೆಚ್ಚಿಸಲು ಇದು ತಜ್ಞರು, ಸಂಶೋಧನಾ ವಿದ್ವಾಂಸರು, ನೀತಿ ನಿರೂಪಕರು ಮತ್ತು ಉದ್ಯಮ ಮತ್ತು ಷೇರುದಾರರನ್ನು ಒಟ್ಟುಗೂಡಿಸುತ್ತದೆ. ಮೇಲಿನ ತಂತ್ರಜ್ಞಾನವು ವಿಶಾಲವಾದ ಅಪಕಾಶಗಳನ್ನು ಒದಗಿಸುತ್ತದೆ ಮತ್ತು ನಮ್ಮ ದೈನಂದಿನ ಜೀವನದ ಗುಣಮಟ್ಟವನ್ನು ಹೆಚ್ಚಿಸುತ್ತದೆ ಮತ್ತು ಪರಿಸರ ಸುಸ್ಥಿರತೆಯ ಮಹತ್ವವನ್ನು ಒತ್ತಿಹೇಳುತ್ತದೆ ಎಂಬುದು ಸ್ಪಷ್ಟವಾಗಿದೆ. ಪರಿಸರ ಮೇಲ್ವಿಚಾರಣೆ, ಔಷಧಗಳ ರಚನಾತ್ಮಕ ಅಧ್ಯಯನ ಮತ್ತು ಮಾನವ ದೇಹದ ಮೇಲೆ ಅದರ ನಡವಳಿಕೆ, ತ್ಯಾಜ್ಯ ನಿರ್ವಹಣಾ ಅಧ್ಯಯನಗಳು, ಸೈಬರ್ ಭದ್ರತೆ ಮತ್ತು ಕ್ರಿಪ್ಟೋಗ್ರಫಿ, ಹಣಕಾಸು ಮಾಡೆಲಿಂಗ್, ವಸ್ತು ಗುಣಲಕ್ಷಣಗಳ ಅಧ್ಯಯನ, ಕೃಷಿ ಕ್ಷೇತ್ರಗಳು, ಇಂಧನ ಸಂಗ್ರಹ ಸಾಧನಗಳಂತಹ ವಿವಿಧ ಮೂಲಗಳಿಂದ ಒದಗಿಸಲಾದ ಡೇಟಾವು ಸುಸ್ಥಿರತೆಯ ಬಹಳ ಮುಖ್ಯವಾಗಿದೆ. ಕ್ವಾಂಟಮ್ ತಂತ್ರಜ್ಞಾನ ಮತ್ತು ಕೃತಕ ಬುದ್ಧಿಮತ್ತೆಯಲ್ಲಿ ನಿಖರವಾದ ರೀತಿಯಲ್ಲಿ ಅನ್ವಯಿಕದಲ್ಲಿ ಮೌಲ್ಯಮಾಪನ ಮಾಡಬಹುದಾದ ಸುಸ್ಥಿರತೆಯ ಅಗತ್ಯವಿರುವ ಕ್ಷೇತ್ರಗಳಲ್ಲಿ ಭಾಗವಹಿಸುವವರು ಒಳನೋಟಗಳನ್ನು ಪಡೆಯುತ್ತಾರೆ. ಪ್ರಾದೇಶಿಕ ಭಾಷೆಯಲ್ಲಿ ಮತ್ತು ಮಾತೃಭಾಷೆಯಲ್ಲಿ ಸಂಶೋಧನೆಗಳಿಗೆ ಹೊಸ ವಿಚಾರಗಳನ್ನು ತಿಳಿಸುವುದು ಸಾಮಾನ್ಯ ಮನುಷ್ಯನನ್ನು ತಲುಪುವ ಮೂಲಕ ಅದರ ಪ್ರಾಮುಖ್ಯತೆಯನ್ನು ಅರ್ಥಮಾಡಿಕೊಳ್ಳಲು ಪರಿಣಾಮಕಾರಿಯಾಗಿದೆ. ಕಾರ್ಯಾಗಾರವು ಅಂತಿಮವಾಗಿ ಅನ್ವಯಕ್ಕಾಗಿ ಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಗಳನ್ನು ನಿರ್ಮಿಸುವ ಮತ್ತು ಜಾಗತಿಕ ಹವಾಮಾನ ಗುರಿಗಳು ಮತ್ತು ಭವಿಷ್ಯದ ದೃಷ್ಟಿಕೋನಗಳೊಂದಿಗೆ ಹೊಂದಿಕೆಯಾಗುವ ಪರಿಸರ ಜವಾಬ್ದಾರಿಯುತ ಮತ್ತು ಸುಸ್ಥಿರ ಪರಿಸರವನ್ನು ಅಭಿವೃದ್ಧಿಪಡಿಸುವ ಗುರಿಯನ್ನು ಹೊಂದಿದೆ. ಈ ನಿಟ್ಟಿನಲ್ಲಿ ಈ ಸಮ್ಮೇಳನವು ಸಂಶೋಧಕರಿಗೆ ಮಾತೃಭಾಷೆಯಲ್ಲಿ (ಕನ್ನಡ) ಜ್ಞಾನವನ್ನು ಪಡೆಯಲು ಅತ್ಯುತ್ತಮ ವೇದಿಕೆಯನ್ನು ಒದಗಿಸುತ್ತದೆ.

Objectives of FDP

- To provide fundamental concepts of quantum technology and AI.
- To discuss potentials existing, technological bottlenecks, and the way forward.
- To expose the participants to state-of-the-art AI and quantum technology with its possible impact on society and sustainability.
- To develop the necessary skills to simulate the AI and quantum information for sustainable goals.
- The programme will also help to identify future research needs in the interdisciplinary research fields.
- The research scholars will also get wider exposure and interaction opportunities with industrial experts and eminent academicians in Sustainable Development and Future trends.
- ✓ ಕ್ವಾಂಟಮ್ ತಂತ್ರಜ್ಞಾನ ಮತ್ತು AI ನ ಮೂಲಭೂತ ಪರಿಕಲ್ಪನೆ.
- ✓ ಅಸ್ತಿತ್ವದಲ್ಲಿರುವ ಸಾಮರ್ಥ್ಯಗಳು, ತಾಂತ್ರಿಕ ಅಡಚಣೆಗಳು ಮತ್ತು ಮುಂದಿನ ದಾರಿಯ ಚರ್ಚೆ.
- ✓ ಸಮಾಜ ಮತ್ತು ಸುಸ್ಥಿರತೆಯ ಮೇಲೆ ಅದರ ಸಂಭಾವ್ಯ ಪರಿಣಾಮದೊಂದಿಗೆ ಆತ್ಮಾಧುನಿಕ AI ಮತ್ತು ಕ್ವಾಂಟಮ್ ತಂತ್ರಜ್ಞಾನದಲ್ಲಿ ಭಾಗವಹಿಸುವಿಕೆ.
- ✓ ಸುಸ್ಥಿರ ಗುರಿಗಳಿಗಾಗಿ AI ಮತ್ತು ಕ್ವಾಂಟಮ್ ಮಾಹಿತಿ ಮತ್ತು ಅಗತ್ಯವಾದ ಕೌಶಲ್ಯಗಳ ಅಭಿವೃದ್ಧಿ.
- ✓ ಅಂತರರಾಷ್ಟ್ರೀಯ ಸಂಶೋಧನಾ ಕ್ಷೇತ್ರಗಳಲ್ಲಿ ಭವಿಷ್ಯದ ಸಂಶೋಧನಾ ಅಗತ್ಯಗಳ ಗುರುತಿಸುವಿಕೆ.
- ✓ ಸಂಶೋಧನಾ ವಿದ್ವಾಂಸರು ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಮತ್ತು ಭವಿಷ್ಯದ ಪ್ರವೃತ್ತಿಗಳಲ್ಲಿ ಕೈಗಾರಿಕಾ ತಜ್ಞರು ಮತ್ತು ಪ್ರಖ್ಯಾತ ಶಿಕ್ಷಣ ತಜ್ಞರೊಂದಿಗೆ ವ್ಯಾಪಕವಾದ ಮಾನ್ಯತೆ ಮತ್ತು ಸಂವಹನವು.

Target Audience

Faculties from Engineering Colleges, Polytechnic Colleges, Gov't and Municipal Officers, Environmental consultants, Health department officials.