

## REPORT ON COLLEGE ACTIVITIES – JANUARY 2025

### January 2, 2025

- Dr. Sanjeevkumar Hatture, Professor and Head, ISE department worked as Session Chair for IEEE International Conference.



### January 4, 2025

- Alumni Meet on 4.1.2025.



- Dr. Navya Rani, Associate Dean(R&D) and Dr. Mahesh Shastri, Assistant Professor, ECE published a research article in SCIE Journal.

Dr. Navya Rani, Associate Dean(R&D) and Dr. Mahesh Shastri, Assistant Professor, ECE have published a research paper in a reputed SCIE journal, titled, "Sulfur coated RGO Composite Synthesized via a Rapid Heating Method for Li-S Battery Application"

Journal Name: Physica Scripta, IOP Science  
Mahesh Shastri, Navya Rani M, Murthy M, Majunath..  
Impact factor:2.6, Quartile: Q2, H- Index: 97

<https://iopscience.iop.org/article/10.1088/14024896/ada3a4>

### January 9, 2025

- Mr. Manjunath KN, Assistant Professor, AIML has completed Online Courses.

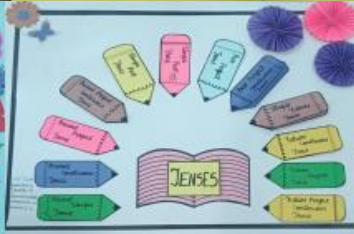
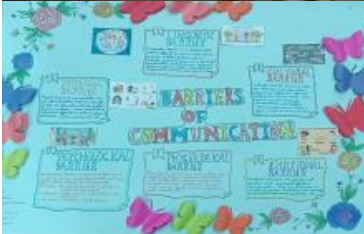


- Open House Activities by First Semester B.E. Students (2024-2025) on 9.01.2025.

Experiential Learning as encapsulated in the Learning by doing method was used in various First Semester B.E. (2024-2025) courses namely the Innovation and Design Thinking, Creative Learning, Mechanics, Introduction to Civil engineering, Waste Management, Scientific Foundation for health, Communicative English and Constitution of India, so as to enhance learning outcomes and better prepare students for practical challenges.

An Open House of activities by First semester B.E. students was held on 9th Jan. 2025. Several Models such as Automatic Street Lamp, Wisdom Apartment, Types of Supports, Accident prevention, Carbon purification for industries, recycling plastics to make road tar, waste water treatment, waste Management and recycling, other prototypes, puzzles, poster presentations were the highlights of the open house. In the House of creative learning Salt and Sugru rocket experiment was illustrated.





### • Sankranthi Celebrations on 11.01.2025.



### January 11, 2025

### • Final Year Project Exhibition Prakalpa 2025 on 11.01.2025.







### January 12, 2025

- NCC Unit organized Marathon on 12.1.2025



- Mr. Sananth Kumar, NSS officer attended 5 days NSS Officers Training Program at Bangalore University.



### January 15, 2025

- Dr. Pallavi Singh, Assistant Professor, ECE, published a research article in SCIE Journal. Dr. Pallavi Singh, ECE dept. faculty, has published a research paper in a reputed SCIE journal, titled, "A Review on Computational Low-Light Image Enhancement Models: Challenges, Benchmarks, and Perspectives". Journal Name: Archives of Computational Methods in Engineering - Springer, Impact factor: 9.7, Quartile: Q1, H-Index: 92

### January 17, 2025

- ECE Faculty completed Atal FDPs



- Dr. Syed N H, Professor & Head, CSE(Data Science) invited as a resource person for ATAL FDP.



- NCET received 3 star rating for IIC activities during the year 2023-24. NCET has received a prestigious 3-star rating out of 4 for IIC 6.0 for the activities during the year 2023-24.



- Dr. Lohit J J, Professor & Head, CSE(AIML) has been invited as session chair for a conference at BNMIT.





### ISE Student presented a research paper in IEEE conference held at IIT, Kharagpur.

Ms. Asharani M. S (1NC21IS008) of 7th Semester ISE Student participated and Presented a paper in 21st IEEE INDICON 2024 at IIT, Kharagpur.



### January 18, 2025

### Dr. Shilpashree S, Department of CSE completed Atal FDP.



### ECE students published a research article in IEEE International Conference.

The research paper "Automatic Door Opening System Using RFID and Arduino System" of our 3rd year ECE students' batch of Shashidhar, Sinchana HV, Narendra R N, Priyanka CM under the guidance of Dr. Vivek Singh and Dr. Ajay Kumar Dwivedi has been accepted at IEEE International Conference on Intelligent control, Computing and Communications-2025, GL Bajaj Group of Institutions, Mathura U.P. (India). Indexing: IEEE Xplore (Scopus) **Conference Link: [https://www.glbajajgroup.org/IC3\\_2025](https://www.glbajajgroup.org/IC3_2025)**

### The research article by 7th Semester CSE-DS student's

The research article by 7th Semester CSE(DS) students titled "Enhance fake news news detection using GPT-2" under the guidance of prof. Lakshmaiah and Dr Praveen has been accepted at the ERCICAM-2025 NITTE-MIT Nitte, Bangalore

- Darshan K
- Kiran Kumar C H
- Subhash C S
- Vishwas M,

The article will be published in springer in their prestigious "lecture notes in electrical engineering series ( <https://Springer.Com/series/7818>

### ISE Students published a research article in Conference.

The research by 7th Semester ISE Students Mr. Manoj, Mr. Jayanth N, Mr. K. Akash Reddy, Mr. Nithin M, Mr. Kushwanth M.V, titled "Modularity-Driven Influence: An Enhanced LPA Framework for Community Detection and Maximization in Social Networks" under the guidance of Mrs. Ankita Shukla has been accepted at the 4th International Conference on

Sentiment Analysis and Deep Learning ICSADL 2025, Far Western University Bhimdatta, Indexing: IEEE Xplore (Scopus Indexd)

### January 19, 2025

### DS Students published a research paper.

7th Semester CSE-DS student's team consisting of :

- Sumanth
- Puneeth
- Manu
- Narendrababu

have published a research paper entitled "Behavioral and Hybrid Anomaly Detection for Enhanced E-commerce Fraud Detection System" (Guide: Dr Praveen Kumar), MLIP-2025, Conference Date: 21&22 of Feb-2025. Paper Publication: All the accepted and registered conference papers will be published in the Conference Proceedings with ISBN and it will be indexed by Scopus and Crossref.

### Mr. Subhakar, Assistant Professor, Data Science Department published a conference paper.

Prof. Subhakar presented a paper entitled " Skin Lesion segmentation on ISIC melanoma images by employing Artificial Gorilla Troops Optimizer" ICSMDI-2025.



### Dr. Praveenkumar S C, Data Science department was invited as Resource Person for FDP.

Dr. Praveenkumar S C, Associate Professor, Department of Data Science, was invited as a resource person for the National Level FDP on Imminent Innovations for Interdisciplinary Application using AI.

**ABOUT THE INSTITUTE**  
Institute established in 2008 under Shri...  
**ABOUT FDP**  
The need for Artificial Intelligence (AI) in the field of engineering is growing rapidly. With advancements in AI technology, intelligent systems that can automate processes, optimize operations, and enhance control efficiency. There is a growing demand for trained experts in the area of AI, ML, DL, and related fields.

**RESOURCE PERSONS**  
Dr. Praveen Kumar S C, Associate Professor, Department of Data Science, Konguvedu College of Engineering and Technology, Trichy, Tamil Nadu, India.

**INSTITUTE VISION**  
International Standing in Technical Education and Research, contributing towards Improvement and Empowerment of Society, Country and in turn, Mankind.

**INSTITUTE MISSION**  
To develop technically sound and globally accepted professionals.  
To enhance capability of updating with cutting edge technologies and innovation research.  
To make aware of social commitments and regular official visits as an integral strength for sufficient expansion.  
To build career oriented courses and interactive teaching-learning process.

**REGISTRATION LINK**  
<https://www.fdpseries.com/series/7818>

**DR. PRAVEEN KUMAR S C**  
Associate Professor, Department of Data Science, Konguvedu College of Engineering and Technology, Trichy, Tamil Nadu, India.

### January 20, 2025

### Mrs. Geetha D L, Assistant Professor, Mathematics department published a research article.

Mrs. Geetha D L, Assistant Professor, Mathematics department published a research article in Elsevier journal.

International Journal of Non-Linear Mechanics  
Available online 16 January 2025, 105015  
in Press, Journal not peer-reviewed

### Modal and non-modal linear stability analysis of plane channel flow through a Darcy-Brinkman porous medium with symmetric and asymmetric slippery walls

D.L. Shivamurthy Kumar<sup>1</sup>, D.L. Geetha<sup>1,2</sup>, M.S. Biswasvaraj<sup>1</sup>

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https://doi.org/10.1016/j.nonlinme.2025.105015

Highlights

- Investigates modal and non-modal stability of plane channel flow through porous media with slip boundaries.
- Symmetric slip enhances stability; asymmetric slip shows complex dynamics influenced by viscosity ratios.
- Non-modal analysis reveals significant transient energy growth under asymmetric slip conditions.
- Highlights critical Reynolds number variations, velocity profiles, and eigenvalue spectra across boundary types.

### • Data Science Department organized one week FDP.

**Department of CSE-Data Science**  
Cordially invites you all to the  
One Week Faculty Development Programme (FDP)  
On  
**Research Trends and Innovation in Information Technology**

Chief Guest: **Dr. Shivamurthy G** (IIT Madras)  
Guest of Honour: **Dr. S. G. Gopalakrishna** (IIT Madras), **Dr. B. V. Ravishankar** (NITW, Warangal)

20<sup>th</sup> January 2025 @ 1:00pm  
Seminar Hall, Admin Block, NCET

**Dr. Bheemappa Halavur**  
Assistant Professor, Department of CSE, IIT Sri City, Chittoor

**Department of CSE-Data Science**  
organises  
One Week Faculty Development Programme on  
Research Trends & Innovation in Information Technology

Session 3:  
"Exploring Recent Trends and Research directions in NoC Architecture."

21<sup>st</sup> January 2025 @ 2:30pm to 4:00pm  
Seminar Hall, Admin Block, NCET

**Department of CSE-Data Science**  
organises  
One Week Faculty Development Programme on  
Research Trends & Innovation in Information Technology

**Dr. Mohammed Javed** (IIT Allahabad),  
Associate Professor  
Department of Information Technology, IIT Allahabad

Session 2:  
"Introduction to Data Science with Applications."

21<sup>st</sup> January 2025 @ 1:00pm to 2:30pm  
Seminar Hall, Admin Block, NCET

**Department of CSE-Data Science**  
organises  
One Week Faculty Development Programme on  
Research Trends & Innovation in Information Technology

**Mr Gangadhar Imadi**  
Tech Lead, VTracks Technology, Bengaluru.

Session 4:  
"Emerging Trends in Generative AI: Innovations, Applications and Future Directions"

22<sup>nd</sup> January 2025 @ 1:00pm to 2:30pm  
Seminar Hall, Admin Block, NCET

**Department of CSE-Data Science**  
organises  
One Week Faculty Development Programme on  
Research Trends & Innovation in Information Technology

**Dr. Mohamed Rafi**  
Professor & Chairman  
Department of Studies in CSE,  
University DST College of Engineering, Davangere

Session 5:  
"Recent Research Challenges in Cyber Security"

22<sup>nd</sup> January 2025 @ 2:30pm to 4:00pm  
Seminar Hall, Admin Block, NCET

**Department of CSE-Data Science**  
organises  
One Week Faculty Development Programme on  
Research Trends & Innovation in Information Technology

**Mr Jeevan Kulkarni**  
Cloud Consultant, Eli Lilly, Bengaluru

Session 6:  
"Applications of AI in Enterprise Technology"

23<sup>rd</sup> January 2025 @ 1:00pm to 2:30pm  
Seminar Hall, Admin Block, NCET

**Department of CSE (Data Science)**  
organises  
One Week Faculty Development Programme on  
Research Trends & Innovation in Information Technology

**Mr Santhosh V**  
UI/UX Architect, L&T Tech Solutions, Bengaluru.

Session 7:  
"User Experience- Evolution, Journey and Future"

23<sup>rd</sup> January 2025 @ 2:30pm to 4:00pm  
Seminar Hall, Admin Block, NCET

**Department of CSE (Data Science)**  
organises  
One Week Faculty Development Programme on  
Research Trends & Innovation in Information Technology

**Dr Ganesh Kumar P**  
Associate Professor, Anna University, Coimbatore.

Session 8:  
"Evolution of Deep Learning"

24<sup>th</sup> January 2025 @ 1:00pm to 2:30pm  
Seminar Hall, Admin Block, NCET

**Department of CSE (Data Science)**  
organises  
One Week Faculty Development Programme on  
Research Trends & Innovation in Information Technology

Session 9:  
"The Role of Blockchain Technology in IoT Security"

**Dr Suresh B**  
Professor, Dept. of CSE, NITW, Warangal

24<sup>th</sup> January 2025 @ 2:30pm to 4:00pm  
Seminar Hall, Admin Block, NCET

**Department of CSE-Data Science**  
organises  
One Week Faculty Development Programme on  
Research Trends & Innovation in Information Technology

**Mr Anish Ravishankar**  
Senior Data Scientist, KAPLAN, Bengaluru.

Session 10: "Gen AI with RAG"

25<sup>th</sup> January 2025 @ 10:30am to 12:00pm  
Seminar Hall, Admin Block, NCET

### • ECE Student published a research paper in IEEE International Conference.

Mr. Sreenivas S, Final Year students ECE Department have published a paper of in IEEE 2nd International Conference on Microwave, Antenna, and Communication (MAC 2024), jointly organized by DRDO, IIT Roorkee, THDC IHET, NIT Uttarakhand, and MNNIT Allahabad, held during 04-06 October, 2024 at Dehradun, India, IEEE Xplore. Conference Place: Dehradun, India, Conference Type: IEEE Xplore (Scopus Indexed), Guide Name: Dr. Ajay Kumar Dwivedi, Associate Professor, ECE Dept.

#### Innovative Graphene-Enhanced Terahertz Antennas for Next-Generation Communication Systems

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United College of Engineering and Research (Allahabad, Prayagraj),  
sudash.11110@gmail.com

**Abstract**—This paper explores the development of advanced electromagnetic antennas operating in the terahertz and millimeter-wave spectra, essential for modern communication, radar, environmental monitoring, and medical applications. To address increasing demands for higher data rates and miniaturization, the focus is on antennas operating in the terahertz (THz) range. Graphene, known for its superior electromagnetic properties and ability to support surface plasmon polaritons (SPPs), is highlighted as a key material. A microstrip antenna design incorporating a graphene layer on an SiO<sub>2</sub> substrate is presented, demonstrating enhanced performance with tunable electrical properties and a resonance at 0.32 THz. This study underscores graphene's potential in advancing THz antenna technology.

**Keywords**—Graphene, THz Communication, SPP

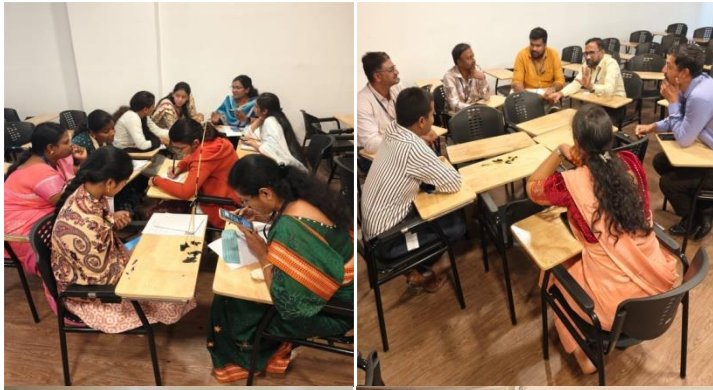
**1. INTRODUCTION**

properties are tunable via electrical, magnetic, or chemical means. Notably, graphene's plasmonic response and predominant in the THz and infrared bands, making it an ideal candidate for THz transceivers and optoelectronic systems [4]. While SPPs can also be supported by composite materials in the THz range, graphene stands out as the sole primary material offering this kind of plasmonic activity, thus presenting new possibilities for manipulating and directing waves in this spectrum [5]. Utilizing graphene's unique capabilities, researchers have developed innovative, compact, and adjustable resonant, leaky-wave, and reflect array antennas. These graphene-based antennas are not only more efficient than their metallic equivalents but also leverage graphene's adjustable electrical properties to achieve a lower resonance frequency. This work introduces a microstrip antenna design that incorporates a









### January 23, 2025

- Dr. Syed N H, Professor and Head, Data Science department was invited as a Resource person for FDP.



- AICTE sanctioned AICTE-IDEA Lab to NCET with a grant of Rs. 1.20 Crores.

College Project proposal, submitted to AICTE under the AICTE-IDEA Lab Scheme for the academic year 2024-25, has been Selected for funding with a generous grant worth of Rs. 1.2 Crore. The proposal was developed under the esteemed leadership of Chief-Mentor Dr. B. V. Ravishankar, Principal. Coordinator: Dr. Nagesh K. N., Vice Principal & Head, ECE Co-Cordinator: Dr. Rohith S., Associate Professor, ECE.

### January 25, 2025

- Dr. Sanjeevakumar Hatture, Professor & Head, ISE has been nominated as Academic Council Member of WIT, Solapur.

Dr. Sanjeevkumar Hatture, Professor & Head, Department of Information Science and Engineering has been nominated as the Member of the Academic Council of Walchand Institute of Technology, Solapur, Maharashtra.

- Mrs. Jyothi S K, Assistant Professor, ECE, Completed Pre-PhD Comprehensive Viva Voce.

Mrs. Jyothi SK, Assistant Professor, Dept of ECE NCET has successfully completed her Ph.D. Pre-Comprehensive Viva Voce today with her research titled "Designing and Investigation of In Vitro Diagnostics of Diabetes"

The viva was conducted in presence of External Panel-RAC and faculties with valuable insights and assessments from the Research Advisory Committee panel comprising Dr. Ramachandra A.C, Professor Dept. of ECE, NMIT, Bengaluru and Dr. Rajesh N, Professor, Dept. of ECE, NMIT, Bengaluru.



- MBA Department Organized Parichay-Freshers Welcome Function.







### Department of MBA organized Road Safety Awareness Program.

Department of MBA organised National Road Safety Awareness Program in association with Ministry of Youth Affairs & Sports, GOI, Nehru Youth Kendra, Bengaluru in coordination with Vijayapura Police.



### January 26, 2025

### Republic Day Celebrations at NCET.



### January 28, 2025

### Dr. Syed N H, Professor and Head, Data Science has been recognized as Reviewer for IEEE International Conference.



### Research Paper by Data Science students got selected for IEEE Conference Proceedings.

A Research Paper by 5th sem CSE(DS) students, Misba, Gaurav and Heena, got accepted in ICEARS-25, all the accepted paper will be published in IEEE explore.

### Dr Bhargav R, Associate Professor, CSE department invited as Resource Person for FDP.



### Faculty Members completed Atal FDPs.







1. Tayana Mobility Technologies: Rs. 15050/- @ month - 3 students
2. Trikara Software Solutions Ltd: Rs. 12000/- @ month - 7 Students
3. Cellcomm Solutions Ltd: Rs. 5,000/- @ month - 1 Student

Sl.No	Name of the Candidate	USN	Date of Commencement/Duration	Industry/ Organization
1.	Mr. Aryan Venna	INC2115007	09-09-2024 to 09-03-2025	Tayana Mobility Technologies Private Limited, Bengaluru
2.	Ms. Priya Darshini S	INC2115043	09-09-2024 to 09-03-2025	QoGates Technologies, Bengaluru
3.	Mr. Vinod C.M	INC2115060	09-09-2024 to 09-03-2025	Cellcomm Solutions Limited, Bengaluru-562149
4.	Mr. Niranjan B.G	INC2115036	01-10-2024 to 11-12-2024	Trikara Technologies Private Limited, Bengaluru
5.	Ms. Madhu Shree H.K	INC2115032	07-10-2024 to 07-01-2025	Cellcomm Solutions Limited, Bengaluru-562149
6.	Mr. Kantal Pradeep	INC2115014	09-10-2024 to 09-04-2025	Trikara Technologies Private Limited, Bengaluru
7.	Mr. Abhinav Raj	INC2115001	09-10-2024 to 09-04-2025	Trikara Technologies Private Limited, Bengaluru
8.	Mr. Anil Kumar	INC2115006	09-10-2024 to 09-04-2025	Trikara Technologies Private Limited, Bengaluru
9.	Mr. Anil Kumar	INC2115009	09-10-2024 to 09-04-2025	Trikara Technologies Private Limited, Bengaluru
10.	Mr. Anil Pradeep	INC2115010	09-10-2024 to 09-04-2025	Trikara Technologies Private Limited, Bengaluru
11.	Mr. Rahul Kumar	INC2115048	09-10-2024 to 09-04-2025	Trikara Technologies Private Limited, Bengaluru
12.	Mr. Shree Nithya	INC2115046	01-08-2024 to 11-03-2025	Eerbit
13.	Mr. Vishal H.M	INC2115063	01-01-2025 to 11-03-2025	SONES Commerce

January 29, 2025

### Interaction with Students from MIT, Cambridge, USA by Creative Learning Centre.

NCET hosted the students from the prestigious Massachusetts Institute of Technology (MIT), USA at NCET! As part of MIT's flagship initiative, MISTI (MIT International Science and Technology Initiatives), specifically the Global Teaching Labs (GTL) program, these students are traveling the world to teach STEM to school children. At NCET, they interacted with our MBA students and staff, sharing experiences and perspectives. Thanks to Mr. Akshay Mashelkar, Head-CCLE for facilitating this collaboration.



### Internship opportunity for Students

Following EC Students got internship with a Stipend:

- 1) 3 students are selected under Project work at ISRO TELEMETRY Tracking and Command Network [ISTRAC], BENGALURU for 6 months
- 2) 13 students at BHARAT ELECTRONICS LIMITED [BEL], BENGALURU for 3 months.
- 3) 8 students at Microwave Tube Research and Development Centre(MTRDC) (DRDO) for 6 months.
- 4) 2 Students got opportunity as intership in National Arenotics Limited (NAL)
- 5) 2 students exclusively got Internship Opportunity with stipend of 8000 per month in A3T technologies.
- 6) 1 student from 3rd Semester got an internship Opportunity for 3 months in OS CODE with stipend of 8000 per month.
- 7) 1 student from 7th Semester got an internship Opportunity for 4 months at IIT Goa under ADVANCED DRONE CENTER.

### ISE Students Internship with Stipend 2024-25

### Department of CSE received a consultancy project of Rs.2.40 lakhs.

Department of CSE in association with Tech-Hub received PO/WO of consultancy project work on "Content development and delivery of programming course and study on effective teaching of programming course" from G.K Cloud Solutions Pvt Ltd. Cost of project: Rs. 2,40,000 Duration of project : 3 months Principal Investigator : Dr Mallikarjun Kodabagi, Professor and HoD-CSE, Dean Academics-SoC Co-Principal Investigators: Dr. Bhargava, Associate Professor and TechHub program Manager and Ms. Gayatri H. P. TechHub trainer.



• **Department of CSE completed a consultancy work of Rs. 3.60 lakhs.**

Department of CSE in association with Tech-Hub completed consultancy project work on "content development and delivery of Metaverse course" from GLOBAL KNOWLEDGE PVT LTD.

Cost of project: Rs. 3,60,000

Duration of project : 3 months

Principal Investigator : Dr Mallikarjun Kodabagi, Professor and HoD-CSE, Dean Academics-SoC

Co-Principal Investigators: Dr. Bhargava, Associate Professor and TechHub program Manager and Ms. Gayatri H. P. TechHub trainer.

• **Dr. Yogeesh H C, Associate Director(IQAC) completed AICTE-QIP PG Certificate Course in Cyber Security from IIIT, Dharwad.**



### January 30, 2025

• **CSE Research Scholar Completed Pre-PhD Comprehensive Viva Voce.**

Mr. Gurusiddappa Hugar, Asst. Professor, Department of CSE, KLEIT, Hubballi, successfully completed his Ph.D. Pre-Comprehensive Viva Voce at the Research Center of Computer Science and Engineering, Nagarjuna College of Engineering and Technology, Bengaluru.

His research, titled "Design Methodology for Generating a Kannada Text Description from Real-Time Deaf Sign Language Action Using Deep Learning Techniques" was thoroughly evaluated in the presence of an External Panel - RAC and esteemed faculty members.

The Research Advisory Committee (RAC) panel comprised: Dr. Mithun B. N., Professor and Head, Dept. of Cyber Security, APS College of Engineering, Dr. Mallikarjun M. Kodabagi, Dean, School of Computing and Dr. Rajakumar, Professor and Research Center Head, CSE.

The panel provided valuable insights, constructive assessments, and recommendations, which will be duly incorporated to further enhance the research work.



### January 31, 2025

• **Mr. Manjuanth KN, Assistant Professor, AIML has participated in Faculty Development Programme at BNMIT. Bengaluru**

