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IIT DHARWAD

INDIAN INSTITUTE OF  
TECHNOLOGY dhARWAD

# NEWSLETTER

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VOLUME 3 | ISSUE 1  
JANUARY 2025



FROM SCHOOL  
CLASSROOMS  
TO IIT DREAMS

MOTIVATING THE NEXT GENERATION



In the last quarter, our campus welcomed numerous school, PU college, and engineering degree students, offering them a firsthand experience of the state-of-the-art facilities and academic environment that define our institute. The students were left amazed and inspired by the resources and infrastructure, which foster innovation and excellence. The primary aim of these visits was to motivate students to pursue careers in STEM (Science, Technology, Engineering and Mathematics) fields and create awareness about the opportunities available at IITs, particularly IIT dhArwAD. Visitors, including students and faculty, also appreciated our efforts in achieving a Net Zero water, energy, and waste green campus, which showcases our commitment to sustainability.

During their visit, they explored the Indoor Common Facility, various specialized labs, and the Central Learning Theatre (CLT). They were also shown fascinating experiments in the physics, biology, and chemistry labs, which sparked their curiosity and deepened their interest in scientific exploration. The hands-on experiences left the students intrigued and excited about the possibilities within STEM fields. Students were in awe of our infrastructure.

Addressing the school students, PROF. Shivaprasad S.M., Dean Outreach, emphasized the importance of staying updated with emerging technologies and the pivotal role of Artificial Intelligence (AI) across all fields. His insights encouraged students to embrace the rapid advancements in technology as a foundation for their future careers.

PROf. Dileep A. D., Head, CSE Department inspired students to value time and work hard to secure better opportunities in life. He also spoke about the groundbreaking research happening at our institute, which encouraged students to consider a career in research. His words resonated with the audience, igniting a passion for discovery and innovation.

Adding to the inspiration, Prof. Vijeth J. Kotagi, CSE (Comp. Sci. & Engg.) Department, shed light on the value of hard work and perseverance. He spoke about the myriad of

opportunities available after securing admission into IITs, motivating students to set high aspirations and work diligently to achieve them.

Prof. Tamal Das, Assistant Professor, CSE Department, provided detailed career guidance, outlining the pathway to IITs and showcasing the cutting-edge facilities and academic support available. He also delved into the transformative research being conducted at IIT dhArwAD, sparking curiosity and ambition among the students.

Highlighting the current trends in AI research and its practical applications, Prof. Achyut Mani Tripathi, Assistant Professor, CSE Department, showcased how innovative projects are shaping the future. His talk illustrated the real-world impact of AI, further inspiring students to explore this dynamic field.

Addressing the students, Dr. Keerthi Kumar M, the Sports Officer, highlighted the state-of-the-art sports facilities available at our institute and emphasized the significant role of physical education in overall student development. He encouraged students to actively engage in sports and fitness activities, stressing how regular physical exercise not only enhances physical health but also contributes to improved mental focus, discipline, and teamwork.

Students from Civil Engineering backgrounds also had the opportunity to interact with Ph.D. scholars and faculty members of our CIE Department. During these interactions, Prof. Giridhar Rajesh Bande, Head, CIE (Civil & Infra Engg.) Department, highlighted the promising growth of Civil Engineering and its pivotal role in building a greener, smarter, and more resilient world. This exchange of ideas further motivated the students to explore the discipline's vast potential and its impact on society.

These engaging and insightful interactions left a profound impact on the students, motivating them to aim higher and consider pursuing education at prestigious institutes like IITs. Such initiatives underline our commitment to nurturing the next generation of innovators and leaders in STEM fields.



## Director's Major Engagements



PROF. Venkappayya R dEsAi, Director, IIT dhArwAD, addressed the launch of the Civil Engineering Association (CEA) and inaugurated the hands-on training program on "Staad.Pro and RCDC," organized by the Department of CIE, IIT dhArwAD. As the Chief Guest, he graced the 14th Graduation Day of Nitte Meenakshi Institute of Technology, Bengaluru, on 26.10.2024 and attended the National Wellbeing Conclave 2024 at IIT Hyderabad on 9.11.2024. On 21.11.2024, he inaugurated the State Bank of India ATM at IIT dhArwAD and participated as the Chief Guest at the 16th Foundation Day of the University of Horticultural Sciences, Bagalkot, on 22.11.2024. Additionally, Prof. dEsAi served as a panelist at Udyama 1.0, organized by the Directorate of Technical Education, Kerala and at IIT Bombay's Research Hub for Green Energy and Sustainability (GESH) on 18.12.2024. He also attended the inaugural function of the Scheme for Promotion of Academic and Research Collaboration (SPARC) one-week workshop on "Additive Manufacturing and Functional Materials Manufacturing for Energy and Biomedical Applications" on 25.11.2024 at IIT dhArwAD.



Prof. Amarnath Hegde, Dean [Infrastructure, Planning & Support], has earned recognition as one of the "Rising Stars in Geotechnical Engineering for 2023" by Frontiers, highlighting his work as one of the six early-career researchers worldwide. He delivered an invited theme lecture on "Geosynthetic-Based Barrier System for Mitigating Ground Vibrations" and chaired a technical session on "Soil Dynamics and Earthquake Engineering" at the Indian Geotechnical Conference-2024 on 19.12.2024 at MarATHwADa Institute of Technology, Aurangabad, Maharashtra. Additionally, he presented his research on "Barrier Systems to Protect Critical Transportation Infrastructure from Impact-Induced Ground Vibrations" and chaired a session on "Advanced Modelling in Transportation Infrastructure" at the 5th International Conference on Transportation Geotechnics 2024, held in Sydney, Australia, from 20th - 22nd Nov. 2024, organized by the University of Technology Sydney in collaboration with the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) and the Australian Geomechanics Society (AGS).



Prof. Achyut Mani Tripathi, Assistant Professor, Department of CSE, will have two research papers presented at the A\* Winter Conference on Applications of Computer Vision (WACV-2025), Tucson, Arizona, from 28.02.2025 to 03.03.2025. The first, "When Visual State Space Model Meets Backdoor Attack," co-authored with Sankalp Nagaonkar and Ashish Mishra, introduces the first imperceptible backdoor attack on the Visual State Space model (VMamba). The second, "Bandit Based Attention Mechanism in Vision Transformer," is co-authored with Raghuram Bharadwaj and Prabhuchandran K J. These works were supervised by a collaborative team from IIT dhArwAD, IIIT-Bengaluru, and Hewlett Packard Enterprise (HPE). Additionally, Prof. Tripathi's joint work with Prof. Om Jee Pandey (IIT BHU), "Semi-Supervised Knowledge Distillation Framework Towards Lightweight Large Language Model for Spoken Language Translation," has been accepted for publication at the A\* International Conference on Acoustics, Speech and Signal Processing (ICASSP-2025) to be held from 6th - 11th April, 2025, in Hyderabad.



Prof. Sai Ram Boggavarapu, Assistant Professor, Department of EECE, received the Best Paper Award at IEEE Power Electronics Drives and Energy Systems (PEDES) 2024 for his paper titled "Design of a Low Leakage Pulse Transformer for Gate Driving of Multiple SiC MOSFETs for Induction Heating Applications," co-authored with Mr. Arun K. Paul from Electronics Devices Worldwide Pvt. Ltd. Additionally, on 19.10.2024, Prof. Sai Ram delivered a talk on "Magnetic Design for Power Electronics and Finite Element Method" at a research colloquium on energy and power, organized by the IEEE Bombay Section in coordination with VJTI, Mumbai."



Prof. Pratyasa Bhui, Dean [Research & Development], delivered an invited talk at a seminar series organized and funded by the University of Southampton from 25th - 27th Sep. 2024 in Southampton, UK. The seminar was funded by the Royal Academy of Engineering (RAEng) fellowship. During the seminar, Prof. Bhui discussed research in the domain of renewable energy and explored potential research collaborations in the field of power and energy systems.

Prof. Vyom Sharma, Assistant Professor, Department of MMAE, delivered an expert talk on "Role of Advanced Manufacturing in Industry 4.0" during a one-week Faculty Development Program (FDP) held from 15 - 20.10.2024 at NIT Delhi.



Prof. Animesh Kumar Sahoo, was recently invited as a resource person in the AICTE sponsored 6 Days ATAL Online Faculty Development Program (FDP) held at the Department of Electrical and Electronics Engineering, Faculty of Engineering & Technology, Jain [deemed to be University], from 9th - 14th Dec. 2024. He delivered a talk on 'Grid Integrated Solar Energy Conversion System with Artificial Intelligence (AI)'.



Prof. Ridhima Tewari, Associate Professor, Department of Humanities, Economics, Arts and Rural Technologies, delivered an invited lecture "Feminism's Fourth Wave: Navigating the Complexities of Contemporary Feminist Thought", for the Department of English and the Department of Media and Mass Communication, Graphic Era Hill University, Haldwani, Uttarakhand on 07.10.2024.



Prof. Vandana Bharti, Department of CSE, chaired a technical session at the Third International Conference on Security, Privacy & Data Analytics (ISPDA 2024), organized by the Department of CSE, NIT Patna, from 13th - 15th Dec. 2024. Additionally, she served as one of the Technical Program Committee Chairs, contributing to the successful organization of the event. She has also been elevated to the prestigious grade of IEEE Senior Member, a recognition attained by only 10% of IEEE's global membership.



Prof. Ramesh Nayaka, Department of CIE, has been felicitated as a jury member at the ICI-Ultratech Awards Ceremony in Hubballi on November 14, 2024. Prof. Nayaka had evaluated and acknowledge some of the most outstanding and innovative concrete structures in the North KarnATaka region.



Prof. Abhijit Kshirsagar, Assistant Professor, Department of EECE (Electrical, Electronics, and Communication Engg), presented on the topic "Multilevel Converter Development: Simulation to Power Hardware Testing with OPAL-RT" at RT24 India | OPAL-RT's Regional Conference on Real-Time Power Systems, Power Electronics, Automotive & Aerospace applications. The event took place during 17th – 18th Dec. 2024.



Prof. Konjengbam Anand, Department of CSE, announced the launch of 'Eyongkart,' an e-commerce platform designed to support Internally Displaced Persons (IDPs) in Manipur. Speaking at the event held at Koubru Hall, Manipur Press Club, he highlighted that over 60,000 IDPs are currently in relief camps, striving to sustain their livelihoods through handloom, handicraft, and other products. Developed collaboratively by IIT dhArwAD, NIT Manipur, and Manipur Technical University, Eyongkart aims to address the marketing challenges faced by IDPs by providing an online platform to sell their goods. Prof. Anand appealed to the public to support this initiative, which also seeks to promote local products and empower displaced communities through sustainable economic opportunities.

## Funding Secured / Granted

### Sponsored Projects

Sl. No.	Principal Investigator [Dept]	Co Principal investigator [Dept]	Title of the Project	Sponsoring Agency	Sanction date	Value of Project [In lakh ₹]	Duration of the project (years)
1	Prof. Ruma Ghosh [EECE]	Dr. Rajeswararao M [CHY]	Design and Development of Carbon Nanomaterials modified Chemiresistive Sensors for SF6 and H2S	DAE-BRNS (Department of Atomic Energy – Board of Res. in Nuclear Sci.)	11.10.2024	39.82	3
2	Prof. Dhiraj V. Patil [MMAE]	-	3D two-Phase numerical modelling for sediment trans	SPARC (Scheme for Promotion of Acad. and Res. Collaboration)	05.12.2024	3.00	2

### Consultancy Projects

Sl. No.	Principal Investigator With Dept	Co Principal investigator With Dept	Title of the Project	Industry/ Company/ Institute	Sanction date/Agreement date	Duration of the project [months]	Cost of the Project [In Lakh ₹]
1	PROF. V. R. desAi [CIE]	PROF. Sanatkumar P. Rajamane [CIE]	Structural audit for FOBs of Eight railway Stations of Southwestern Railway (SWR)	Swarna Techno Constructions Pvt, Ltd.	28.10.2024	1	3.77
2	Prof. Ramesh Nayaka [CIE]	Prof. Amarnath Hegde [CIE]	Proof checking of Retaining Wall at CH 107 KM in Railway Doubling Line.	Surya Constructions Pvt, Ltd. Hyderabad	22.11.2024	2 Weeks	2.06
3	Prof. Rakesh Lingam [MMAE]	Prof. Satyapriya Gupta [MMAE]	Analysis of forming defects and characterization in precession stamping process	Aequs Private Limited	01.08.2024	12	11.80
4	Prof. Hemanth Kumar Chinthapalli [CIE]	-	Concrete Mix design of M20, M25 & M30 for EPC Package of waste energy facility at Hubballi, KarnATaka.	NTPC Vidyut Vyapar Nigam Limited	31.12.2024	2	2.70

Note: The above data pertains to the last quarter i.e, from October 2024 to December 2024.



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**Skill Development Program on Research and Publications: 5-Day Online Winter Course (16-20, December 2024)**

**OVERVIEW OF THE COURSE**  
Objective: The workshop on Skill Development in Research and Publications aims to provide a comprehensive understanding of essential skills for effective research and academic publishing. It covers key areas such as writing research grant proposals, research paper and review article writing, journal indexing, and ethical considerations. Interactive sessions with experts will focus on mastering grant proposals, crafting high-quality research papers, and utilizing AI tools in research. Additionally, it aims to develop time management skills and prepare participants for future roles as PhD guides.  
Scope: This workshop addresses the need to enhance research capabilities aligned with national priorities, fostering innovation and academic excellence. It focuses on critical aspects such as research ethics, plagiarism avoidance, understanding AI scores, and

**TOPICS TO BE COVERED**

- Writing Research Grant Proposals
- Comprehensive Guide on Plagiarism and AI Score in Research Publications
- Hands-on Session on Writing a Grant Proposal (Interactive)
- All about Writing Research Papers
- Journal Indexing and Quartiles, Altmetrics, Types of Research Papers
- Hands-on Session on Writing a Research Paper (Interactive)
- Writing Review Articles
- Qualitative, Quantitative, and Mixed Methods of Research
- Hands-on Session on Writing a Review Article (Interactive)
- Harnessing AI Tools for Research
- Publication and Licensing
- Hands-on Workshop on AI Tools for Research
- Time Management Skills for Researchers



A 5-day online Winter Course titled "Skill Development in Research and Publications," organized by the Department of EECE, was held during 16th - 20th Dec. 2024. The course covered essential skills for research and academic publishing, including writing grant proposals, research papers and review articles, along with insights into journal indexing and ethical considerations. Interactive sessions focused on AI tools, time management and preparing participants for roles as Ph.D. guides.

On 19.10.2024, Prof. Rakesh Lingam, Department of MMAE, organized an industrial visit to RSB Transmissions for BTech Mechanical Engineering students as part of their manufacturing processes course. IIT dhArWAD being located in the manufacturing hub of North Karnataka, this initiative aims to strengthen the relationship between academia and local industries, contributing to the "Make in India" initiative and the development of the manufacturing sector.

The Scheme for Promotion of Academic and Research Collaboration (SPARC) sponsored one-week workshop on Additive Manufacturing and Functional Materials for Energy and Biomedical Applications was held from 25th -29th Nov. 2024 at IIT dhArWAD, in collaboration with Virginia Commonwealth University (VCU), USA. Featuring insightful talks by Prof. Somashekara M A, Prof. Ravi Hadimani, Prof. Anbukarasi Rajendran, and Dr. Saiyad Ladakhan, the workshop engaged 70 participants in discussions, project-based tasks, and research activities. Awards were presented for exceptional contributions to product development and research.



The Aerospace Resources Panel of the Aeronautics Research & Development Board (AR&DB), Defence Research and Development Organisation (DRDO) and the Department of MMAE, IIT dhArWAD co-organized a seminar on Advances in Aerospace Applications on 23.10.2024 at IIT dhArWAD. The seminar focused on research gaps, funding opportunities and the technological outlook in aerospace systems. Esteemed speakers included Dr. V. Sudhakar, Aeronautical Development Agency, Bengaluru, Dr. Amit Saraiya, Defence Materials and Stores Research and Development Establishment, Kanpur, Dr. Vidyadeesh P, Gas Turbine Research Establishment, Bengaluru, PROF. G. Jagadeesh, Indian Institute of Science, Bengaluru and Dr. S.K. Pandey [Secretary, AR&DB].

The Department of Mechanical, Materials, and Aerospace Engineering successfully hosted the 4th MMAE Annual Research Symposium, "ShOdhaYAntriki-2024," on 30.11.2024. Distinguished speakers, including Dr. Ravi Guttal (CTO, Aequs Pvt. Ltd.), Shri Rajesh Lingam (Applications Senior Manager, Dassault Systems), Shri Rohit Pitale (Chief Product Officer, Unbox Robotics), Shri Gunjan Verma (Technical Account Manager, Ansys) and Shri Hemanth Satyanarayana (Founder & CEO, Imagine Software Labs), delivered insightful talks. The symposium also included panel discussions on topics such as Mechanical Engineering Curriculum from an Industry Perspective and Transitioning from Student to Industry-Ready Professional: A Practical Approach.



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The Coding Club of IIT dhArWAD organized several events over the last semester, aimed at enhancing programming, cybersecurity and game development skills. Highlights include Arcadia, an Intra-Institute Game Development Competition held from August to October 2024, and workshops such as Python for Beginners and Intro to Competitive Programming, tailored for first-year students in August 2024. The club also hosted the Code Compete Conquer Competitive Programming Contest on 01.09.2024 and Cyber Security Workshops in October 2024. The Sleepless Coding Saga, the annual Intra-Institute Hackathon, was conducted during 26th – 27th Oct. 2024, followed by Industry Lectures on Computer Systems in November, featuring experts from Qualcomm and ReInfoSec. In December, the club organized Capture The Geese, an Intra-Institute Capture The Flag competition, focused on security and system puzzles. Additionally, weekly discussions covered diverse topics such as eBPF, Game Development, Debuggers, Cloud Computing and Version Control using Git. For more details, visit <https://codingclub.iitdh.ac.in/events>



Under the guidance of Prof. Vijeth J Kotagi, CSE Department, a Ph.D. scholar – Shri Vinay M Talageri, conducted a training program on Arduino programming, aimed at empowering government school teachers to make effective use of the Atal Tinkering Labs. The program focused on equipping teachers with hands-on skills in Arduino, enabling them to inspire students in STEM fields through innovative projects and activities. Teachers from five government schools in the dhArWAD district actively participated, gaining insights into integrating technology into their classrooms. This initiative is expected to enhance STEM education and foster a culture of innovation among young learners.



Dr. K. N. Satyanarayana, Director, IIT Tirupati; Prof. P. S. Anil Kumar, Dean, Administration & Finance, IISc, Bengaluru; Dr. K. V. Reghuthaman, Registrar, IIT Goa; Prof. Venkappayya R dEsAi, Director; Prof. Narayan S Punekar, Dean [Academic Programs]; and Shri Sandeep Pareek, Officiating Registrar from IIT dhArWAD were part of a recently convened meeting at IIT dhArWAD, for the recruitment of the institute's Registrar.



Visit of Dr. R Balasubramaniam, Member [HR], Capacity Building Commission, Govt. of India (GoI) on 26th December 2024.



As part of the fifth phase of the Government's cultural and educational initiative, Ek Bharat Shreshtha Bharat Yuva Sangam, a delegation of 44 students from higher education institutions in and around Bihar visited IIT dhArWAD, KarnATaka, from 26.11.2024 to 01.12.2024. Coordinated by Central University of Bihar as the nodal institute for Bihar and IIT dhArWAD for KarnATaka, the program fostered cultural exchange, promoted tourism, showcased progress and enhanced mutual understanding between the states.



Shri Ashish Malik (PH23DP001) from the Department of Physics, was awarded the Royal Society of Chemistry (RSC) Sponsored Young Researcher Award for Best Oral Presentation at the 3rd International Conference on Functional Materials and Application Physics (FMAP - 2024), held at Sardar Vallbhabhai National Institute of Technology (SVNIT), Surat, Gujarat from 18th-19th Oct. 2024. He presented his research on "p-type MASnI as an HTL in regular planar structure to improve the CABB perovskite device performance" alongside other esteemed participants.



Shri Godson M D (CE23DP004), Kumari Annapurna Basayya Balulmath (CE23DP002), and Prof. Giridhar Rajesh Bande presented their research, "Influence of Ballast Fouling on Reinforced Ballasted Railway Track - A Numerical Investigation," at the 5th International Conference on Transportation Geotechnics 2024 in Sydney, Australia. Shri Godson M D, Department of CIE, presented the work via a digital poster at the event organized by the University of Technology Sydney with ISSMGE (International Soc. of Soil Mech & Geotechnical Engg.) and AGS (Australian Geomech Soc.)



Shri Utkarsh Gupta (CS22BT072), Department of CSE, presented his research paper titled "Resource Profiling for Virtualized Radio Access Networks" at the IEEE Advances in Networking and Telecommunications Systems (ANTS) 2024 Conference held at IIT Guwahati during 15th - 18th Dec. 2024. This paper highlights the significant advancements in resource profiling techniques for virtualized Radio Access Networks (vRANs), focusing on optimizing resource allocation and utilization in next-generation network environments.



Kumari Prachi Praseon (IS22BM029), Department of Mathematics, delivered an outstanding performance at the Inter-IIT Cultural Meet 7.0, hosted by IIT Patna from 26th to 29th December 2024. Competing against 46 participants from across IITs, she secured 4th place in Hindi Slam Poetry, 4th place in Hindi Poetry Writing, and 8th place in English Slam Poetry. Representing IIT dhArWAD for the second time, her remarkable achievements earned valuable points for the team, showcasing her creativity and dedication.



Shri Manjunath Gouda M Patil (CE23DP011), Prof. Ramesh Nayaka and Mr. Fatheali Shilar (CE23DP003) of Department of CIE, presented their technical paper and poster titled "Digital Transformation for Sustainable and Resilient Infrastructure: Current Progress and Future Potential" at the 2024 IEEE Conference on Engineering Informatics (ICEI 2024) hosted by IIT dhArWAD.

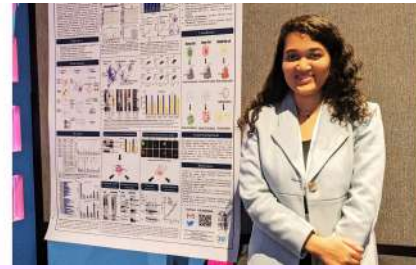


Kumari Anitha (CE23DP001), Kumari Annapurna Basayya Balulmath (CE23DP002), and Prof. Ramesh Nayaka of Department of CIE, presented their work, "Advancements in Digitalization and Automation in the Construction Industry towards Sustainable Infrastructure," at ICEI 2024 hosted by IIT dhArWAD.

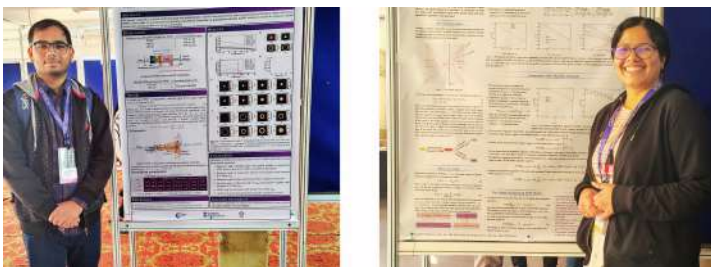




Kumari Annesha Chatterjee (BB19DP001) from the Biosciences and Bioengineering (BSBE) Department, attended and delivered an oral presentation at the prestigious Cell Symposia: Chemical Biology in Drugging the Undrugged conference, hosted by the University of California, San Francisco, USA during 2nd - 4th Dec. 2024.



Kumari Nikita Bhandari (BB20DP001), BSBE Department, presented her research at the Cell Symposia conference, hosted by the University of California, San Francisco. Her presentation, titled "Pan-cancer integrated bioinformatic analysis of RNA polymerase subunits reveal RNA Pol I member CD3EAP regulates cell growth by modulating autophagy," focused on advancements in Cancer Biology.



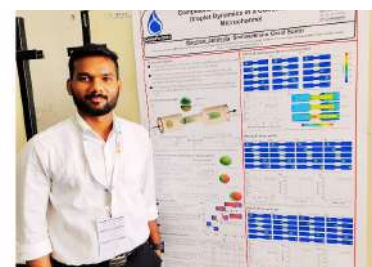
Ph.D. Scholars Shri Gopal Prasad Sahu (PH23DP002) [Supervisor: Prof. Kavita Devi] and Kumari Harsha Miriam Reji (PH18DP002) (Supervisor: Prof. R. Prabhu) from the Department of Physics have emerged as the winners of the Best Paper/Best Poster in the competition held at the 16th edition of the International Conference on Fiber Optics and Photonics, PHOTONICS – 2024 which was organized at the IIT Kharagpur, during 12th - 15th Dec. 2024.



Shri Jack Benjamin (EE22MS006), Department of EECE, working under the guidance of Prof. Pratyasa Bhui and Prof. Animesh Sahoo, Ph.D., presented his research titled "Enhanced Fault Current Utilization by Grid-Forming Inverter Using Non-Linear Transient Virtual Resistance During Symmetrical Faults" at the 23rd National Power Systems Conference (NPSC) 2024, held at IIT, Indore during 14th -16th Dec. 2024.



Kumari K Baishnobi Patro (HS23DP002), pursuing Ph.D. in Economics under the supervision of Prof Mohana Rao Balaga, received the best paper award in the 1st international conference on sustainable finance hosted by IIT Bhubaneswar, for the paper entitled "Beyond the Crises: Unravelling the Real Effects of Currency and Banking Crises". The paper explores the aftermath of Currency and Banking Crises as well as determines various significant macroeconomic factors that explain the consequences of currency and Banking Crises.



Shri Manohar Jammula (CH23DP001) from the Department of Chemical Engineering working under Prof. Somasekhara Goud Sontti, presented his work titled "Computational Investigation of Compound Droplet Dynamics in a Constricted Microchannel" at the Complex Fluids (CompFlu-2024) conference held from 16th to 18th December 2024, organized by Department of Chemical Engineering, IIT Hyderabad.



Shri Vivek Jaiswal (EE23MS007), from Department of EECE, presented a poster at the 68th Department of Atomic Energy Solid State Physics Symposium held at Bhabha Atomic Research Centre (BARC). The poster, titled "Novel TCAD Approach Precisely Simulating Charge Collection Efficiency of 4H-SiC Alpha-Particle Detectors," showcased a cutting-edge simulation technique to enhance the performance analysis of silicon carbide-based radiation detectors.



Kumari Lavanya Malakalappalli (CS23MS001), Department of CSE, presented her research paper titled "Integrating Explainable AI for Energy Efficient Open Radio Access Networks" at the prestigious Future Networks World Forum (FNWF) held in Dubai, UAE, from 15th to 17th October 2024. The paper highlights significant advancements in leveraging Explainable AI (XAI) to optimize energy efficiency in Open Radio Access Networks (O-RAN).



Shri Vinayak B Patil (HS24DP006), Junior Superintendent [And Ph.D. Scholar under Institute Staff category], presented his paper titled "Does transition to renewables upsurge energy security and sustainability? A review for KarnATaka" at the IX International Conference on Sustainable Energy and Environmental Challenges held at IIT Mandi from 13th to 15th December 2024. The paper evaluated KarnATaka's renewable energy profile, focusing on energy security and sustainability over the last decade.



Shri Ashit Kumar Subudhi (CS21DP002), Department of CSE, presented his research paper titled "Performance Evaluation of Scheduling Scheme in O-RAN 5G Network using NS3" at the prestigious Future Networks World Forum (FNWF) held in Dubai, UAE, from 15th to 17th October 2024. The paper highlights significant advancements in scheduling schemes for Open Radio Access Network (O-RAN) 5G systems, utilizing the NS3 simulator for performance evaluation.



Kumari Eluri Harshitha (ME21BT011), presented her research paper titled "Assessing Datasets for O-RAN RICs: Hoarding vs Choosing" at the prestigious IEEE Advances in Networking and Telecommunications Systems (ANTS) 2024 Conference held at IIT Guwahati from 15th to 18th December 2024. The paper was featured in the Workshop on Next-Generation Networking: Exploring the Convergence of Metaverse and 6G, highlighting significant advancements in dataset classification for Open Radio Access Network (O-RAN) systems.



Shri Velivela Mohith (CS22BT074), Department of CSE, presented his research titled "Enhancing Mobile Network Security through ORAN" at the IEEE Advances in Networking and Telecommunications Systems (ANTS) 2024 Conference held at IIT Guwahati from 15th to 18th December 2024. Featured in the Early Research Forum, his work focused on detecting and mitigating physical layer attacks in Open Radio Access Network (O-RAN) systems, contributing to mobile network security. He was also awarded a Conference Travel Grant for his contribution.



Shri Harsh Kumar Rai (ME22DP003), working with Prof. Dhiraj V. Patil and Prof. Hiranya Deka in the Department of MMAE, IIT dhArwAD, showcased his Ph.D. work through a poster presentation at Compflu-2024, a prestigious conference held in Hyderabad. His work primarily focuses on particle-laden drop formation and thinning dynamics.



Shri Avinash Kumar K M (ME20DP002), Department of MMAE, presented his research paper titled "Transfer-learning based multi-class area nut image classification under uncontrolled lighting on a conveyor system for automated sorting" at the prestigious IEEE Conference on Engineering Informatics (ICEI) 2024 hosted by IIT dhArwAD.



Kumari Yashaswini L (CS23BT060) represented IIT dhArwAD at the Inter-IIT Cultural Meet 7.0, held at IIT Patna from 26th to 29th December 2024, participating in Cook-off Culinary, Stage Play, and Cryptic Crossword events. In the Cook-off event, her team, comprising Kumari Yashaswini and Kumari Veeksha, showcased exceptional culinary skills and secured 7th place among 46 teams, earning top-10 ranking amidst tough competition from talented participants across IITs.



Shri Abhishek Saini (EE20DP006), Department of EECE, under the guidance of Prof. Pratyasa Bhui, represented IIT dhArwAD at RT24 India | OPAL-RT's Regional Conference held from December 17-18, 2024. He presented on "Cyber-Physical Security Testbed for Wide-Area Damping Control Systems," showcasing advancements in fortifying power systems against cyber threats.



## WELCOME TO IIT dhArwAD



From Left to Right: Prof. Tejas Prakash Gotkhindi, Associate Dean, Faculty Welfare [Recruitment], Prof. Dhiraj V Patil, Dean [Faculty Welfare], Prof. S M Shivaprasad, Dean [Outreach], Prof. Venkappayya R dEsAi, Director, welcomed Prof. Ashok Kumar Ummireddi, Dept. of Chemical Engineering, in presence of Prof. Suvamay Jana, Head, Dept. of Chemical Engineering, Prof. Ravi Chandra Dutta, Faculty In-Charge, Contract & Services Section and Prof. Rajeswara Rao M, Students Welfare [Gymkhana, Sports & Clubs].

Total Donations received till September 2024 are ₹ 45,67,501

### List of Donors to IIT dhArwAD [During October - December 2024]

Sl.No	Date	Donor's Name	Amount (₹)
1	29.10.2024	Shri Ashish Akash	1500.00
2	29.10.2024	Shri Siddarth Patra	2000.00
3	29.10.2024	Shri Vedant Shukla	2000.00
4	21.11.2024	Shri Ajul Dinesh	12422.00
5	22.11.2024	Kumari Haritha B	5001.00
6	22.11.2024	Kumari Rishita S Nambur	500.00
7	22.11.2024	Shri Nelaturi Nikhil	500.00
8	17.12.2024	Shri Souman Das	27000.00
9	04.12.2024	Shri Vilas	6600.00
10	07.01.2025	Prof. Konjengbam Anand	10000.00
11	07.01.2025	Prof. Konjengbam Anand	4000.00

# ಸಂಬಂಧ | ಸಂಬಂಧ | SAMBANDH

## SPICMACAY's Cultural Immersion at IIT dhArwAD: Celebrating India's Artistic Heritage

The Society for the Promotion of Indian Classical Music and Culture Amongst Youth (SPICMACAY) organized a 7-day Regional Convention program at IIT dhArwAD from 14th to 20th October 2024. The program, open residentially for pre-registered college students across KarnATaka from October 17th to 20th, provided an enriching experience celebrating India's artistic heritage.



The event featured Indian classical, folk Hindustani, and other music genres performed by reputed artists, including maestro Ustad Shafique Khan, Padma Shri awardees Vidwan R.N. Thyagarajan, Pt Venkatesh Kumar, Vidushi Leela Samson, and Shri Ramachandran Pulavar, who showcased his intriguing shadow puppetry (Tholapavakoothu). Ms. Sonia Shirsat, Pt Kaivalya Kumar Gurav, Shri Nirmalya Dey, and saxophone-jazz musician Mr. Lars Moller also delivered captivating performances. Yoga sessions led by Shri Nirmalya Dey and Vinayak Kulkarni nurtured participants' well-being.



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ಭಾ. ಪ್ರೌ. ಸಂ. ಧಾರವಾಡ  
IIT DHARWAD



## 2nd Edition of IEEE Conference on Engineering Informatics (ICEI 2024)

The 2nd edition of the IEEE Conference on Engineering Informatics (ICEI 2024) successfully took place from 26 to 28 Nov., 2024, across three institutions in HubbaLLi - dhArwAD — IIT dhArwAD, KLE Technology University, HubbaLLi and IIIT dhArwAD. On Nov. 26, IIT dhArwAD hosted the first day of the event, followed by KLE Tech. Uni. and IIIT dhArwAD on subsequent days. ICEI 2024 bridged the gap between academia and industry, showcasing cutting-edge research and innovations in the rapidly evolving field of Engineering Informatics. A total of 215 research papers were submitted to ICEI 2024, out of which 90 papers were accepted for presentation. Among them, 76 papers were published, and 22 papers were presented at IIT dhArwAD on the first day of the conference.



At IIT dhArwAD on Nov. 26, 2024, the keynote addresses were delivered by Dr. Renu M. Rameshan, Vehant Technologies, who discussed "Revolutionizing Physical Security with AI" and by Dr. C.P. Ravikumar, Adjunct Faculty, IIIT dhArwAD, who emphasized on "Applying Informatics in Engineering Education". The conference was sponsored by Aequs, DICS, and XQWave, supporting the event's mission to bridge the gap between academia and industry.



During the inauguration, Prof. Venkappayya R dEsAi, Director, IIT dhArwAD emphasized the growing relevance of data analytics and its transformative role in engineering applications. Welcoming the dignitaries, Prof. Dileep A.D., Head, Department of CSE, underscored the importance of collaboration between different institutions, stressing its significant impact on advancing research and fostering cross-disciplinary partnerships. Prof. Ambarish Kulkarni from Swinburne University, Australia reflected on the success of the conference in both India and Australia. He highlighted the emergence of Engineering Informatics as a rapidly advancing field, noting its key technologies and concepts that are driving innovation across various domains, including Artificial Intelligence, Robotics, and Digital Twins, which are all poised to have a transformational impact on industries worldwide.



### Conference Tracks

- Artificial Intelligence and Machine Learning (AI/ML)
- Robotics, Control, Automation, and Instrumentation
- Critical Infrastructure
- Industry 4.0
- 5G and 6G Technology
- Engineering Informatics Applications

Credits : Public Relations Team, IIT dhArwAD  
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