



## B.M.S. COLLEGE OF ENGINEERING, BENGALURU

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### REPORT ON COLLEGE ACTIVITIES – DECEMBER 2024

#### December 1<sup>st</sup>, 2024

✚ Dr.Suma M N, Professor and Dr.Karthikeya G S, Assistant Professor in the department of Electronics and Communication Engineering along with Mr. Pavan S Murthy & Ms.Kshama U Marathe, students in the department have been granted Patent for an invention titled, 'A Multiport Wideband Antenna And a Method Thereof ' for a term of 20 years.

✚ Dr. L. Ravikumar, Professor, Department of Mechanical Engineering was awarded Education Champion (Exemplary Leadership in Education) from Cognitive.



✚ Dr. Murugendrappa M.V., Associate Professor, Department of Physics and Ms. Jyothi A Goudar, Research Scholar published a research paper titled, 'Cobalt-Based Materials in Supercapacitors and Batteries: A Review' in the Journal, 'Advanced energy and sustainability research' page No.

2400271 published on December 1<sup>st</sup> 2024 with impact factor 6.2.

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#### December 2<sup>nd</sup>, 2024

✚ Department of CSE (Data Science) organized one-day workshop on 'Full Stack Web Development'. Sri. Shrihari, Cloud Application Developer at Continental, Bengaluru was the resource person. By building a WhatsApp application clone and working on REST APIs, students developed hands-on expertise in full-stack development.



✚ Dr.Maligi Anantha Sunil, Assistant Professor, Department of Electronics and Communication Engineering presented a poster titled, 'Fabrication of Bi2S3 Sensitized Solar Cell by Silar Method' at International Winter School 2024 on Frontiers in Materials Science organised at JNCASR, Bengaluru during Dec.2<sup>nd</sup>-6<sup>th</sup>,



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2024.



December 3<sup>rd</sup>, 2024

- Dr. B Kanmani, Professor, Department of ETE was invited to deliver a special address during the inauguration of Outcome Based Education workshop series, by Dr Govi Chezhaan, Hon'ble Minister for Higher Education, Government of Tamil Nadu; presided by Dr.K Gopal, I.A.S., Additional Chief Secretary, Higher Education Department, Government of Tamil Nadu; with Special Address by Sri.M. P. Vijaykumar I.A.S., Vice-Chairman, TANSCHÉ organized by the Tamil Nadu State Council for Higher Education (TANSCHÉ), at Centenary Building, University of Madras, Chennai.



- Dr. B Kanmani, Professor, Department of ETE conducted one day workshop for faculty on 'Outcome Based Education', organized by the Tamil Nadu State Council for Higher Education (TANSCHÉ), at Lady Willingdon College Campus, Kamarajar Salai, Chennai on 3<sup>rd</sup> & 4<sup>th</sup> Dec.2024.



- Research paper titled, 'Computational investigation of naturally occurring anticancer agents in regulating Hedgehog pathway proteins' was published by Dr. Saisha Vinjamuri, Professor, Ms.Renu Pai, Research Scholar, Dr. Divijendranatha Reddy, Professor, Dr.Rajyalakshmi M., former Professor, Department of Biotechnology in the web of science indexed, Q1 journal PLOS ONE,



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December 3<sup>rd</sup>, 2024 issue  
(10.1371/journal.pone.0311307).

- A major milestone was achieved by signing a license agreement for the Technology Transfer of '*Synthesis and Biodegradation of Polydimethylsiloxane for application as media in AFFM*'. The technology developed by Dr.Y.K.Suneetha (PI), Professor and Mrs.Shabnam Siddiqui (Co-PI), Assistant Professor, Department of Chemical Engineering was transferred to M/s. Stoicheiodis Scientia. The research was successfully conducted through a collaboration between CMTI and BMSCE. This TOT showcases the commercial potential of the technology and its practical applications in AFFM.



- Department of Electronics and Telecommunication Engineering organized a meeting with experts from NOKIA to update the status of the project work carried out by the students as part of industry institute collaboration.

December 4<sup>th</sup>, 2024

- Dr. Murugendrappa M.V., Associate Professor, Department of Physics published a research paper titled, 'Impact of Compatibilizer on the Electrical and Thermal Characteristics of Areca Fibre-Filled Polypropylene Composites' in the Journal, 'Fibers and Polymers'(2024) Pg No. 2400271, December 4<sup>th</sup> 2024 with impact factor 2.8. Online ISSN:2699-9412, Print ISSN:2699-9412  
<https://doi.org/10.1007/s12221-024-00791-2>

December 5<sup>th</sup>, 2024

- PHASE SHIFT 2024, Annual Technical Symposium of the college with the theme: Resurgence-Transforming Tomorrow Sustainably was organised during Dec. 5<sup>th</sup> & 6<sup>th</sup>, 2024. Sri.Gopalan Oppiliappan, Head, AI Centre of Excellence, Intel India was the Chief Guest for the Inaugural Function. Dr.Rajlakshmi Borthakur, Founder & CEO, TerraBlue XT and Ms.Jyothi Ganapathi, Director, HR, MNC, Bengaluru were the Guests of Honor for the function. The Principal and other dignitaries graced the occasion. Various technical events were organised by the departments.





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As part of Phase shift 2024, Department of CSE (Data Science) in collaboration with DSync organized Casino Code-Off 2.0 and TradeSync events. Casino Code-Off 2.0 redefined traditional coding competitions by merging programming expertise with strategic gameplay. TradeSync included an initial talk by Sri.Dinesh Pai, Zerodha followed by multiple rounds of competition which enriched participants' skills in trading concepts, coding and critical thinking.



collaboration with Digoat Technologies Pvt. Ltd., organised a workshop and quiz session on STM32 kits. The event proved to be a perfect blend of learning and competition, attracting enthusiastic participants from various institutions.



Department of EEE conducted the event - Bob the Circuit Builder as a part of Phase Shift 2024.



### MAZE RUNNER



Department of Electronics and Instrumentation Engineering in

The Gradient Club of department of Machine Learning(AI&ML) brought back the excitement with Maze Maniac Resurrected during Phase Shift 2024.



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This solo Minecraft-based event was a perfect mix of fun and challenge, featuring everything from tricky mazes and parkour runs to intense PvE battles and clever puzzles. With a special emphasis on mazes, participants had to rely on their own skills, patience and quick thinking to navigate through the twists and turns. The atmosphere was buzzing with energy as players immersed themselves in the game making it an unforgettable experience.



✚ Retro Design 2.0 was an engaging technical event organized by the Department of Machine Learning during PhaseShift 2024. The event featured a futuristic 2050 storyline, where participants raced to solve reverse engineering puzzles focused on sustainability. Teams of two competed in challenges involving decryption, mystery box logic and steganography, unlocking advanced green technologies hidden in alien ruins. This immersive experience combined technical problem-solving with environmental awareness,

emphasizing teamwork and critical thinking.

✚ The Green Protocol was an engaging event blending cryptography, sustainability and problem-solving organised by department of Machine Learning(AIML). The event featured teams of two working alongside the interactive chatbot EcoRanger to uncover the secrets behind Project Zeta—a covert operation threatening global sustainability. Participants tackled encryption, decryption and steganography challenges, decoding hidden texts and solving complex ciphers. The puzzles not only tested technical skills but also highlighted the importance of sustainable practices. The event left participants with a deeper awareness of sustainability and the role of technology in addressing global challenges, emphasizing collaboration, innovation and responsibility towards the planet's future.





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✚ 'MedRevolution' was a visionary idea-pitching event organized by the department of Machine Learning(AIML). This unique platform aimed to inspire and empower young innovators to design and present sustainable medical devices and solutions that address pressing challenges in the healthcare industry. Mr. Mohammad Zaid Khan, founder and CEO of Zedital Media Pvt. Ltd., a marketing agency specializing in digital marketing and advertising strategies and Mr..Akshay Ramesh, Co-founder and CEO of DocTrue Technologies Private Limited were the judges for the event.



✚ Singularity: The astronomical society of the college organised the event 'THE ECLIPSE OF ETERNITY'.



✚ Sri.Kiran Holla, Alumnus 1990, Computer Science visited the college, interacted with faculty members and contributed to the endowment scholarship for students under merit-cum-means basis. Sri.Aviram Sharma, Trustee, Dr.Bheemsha, Principal, Wg.Cdr.R.A.Raghavan(R), Director, BMSET and other dignitaries graced the occasion.



✚ Dr. Chandra Shekara G, Assistant Professor, Department of Mathematics presented a paper titled, 'Linear and Non – Linear Stability Analysis of the Mixed Convective Flow of Jeffrey Fluid through the Porous Medium using the LTNE Model' in the 6<sup>th</sup> International Conference on Applications of Fluid Dynamics (ICAFD) – 2024 organised by the Department of Mathematics, School of Advanced Sciences, Kalasalingam Academy of Research and Education, Krishnankoil, Virudhunagar, Tamil Nādu, in collaboration with the University of the West Indies, St. Augustine Campus, Trinidad & Tobago, West Indies and the





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University of Dodoma, Dodoma, Tanzania during December 5<sup>th</sup> – 7<sup>th</sup>, 2024

#### December 6<sup>th</sup>, 2024

Department of Medical Electronics Engineering organised 'Beat the Circuitry', an electrifying event designed to challenge participants' creativity and technical skills in electronics. The event featured a theoretical session covering Arduino, C programming, and basic electronics, followed by a quiz and a hands-on circuit-building challenge. Sri.S. Balaji Raghavendra, founder and CEO of Piroya Technologies Private Limited and an associate with BMSCE through the BIG Foundation, served as the resource person and judge. With his expertise in electronics and innovation, he provided participants with invaluable insights and guidance during the event.

Department of Medical Electronics Engineering organised a workshop, 'The Gen AI Coding for Healthcare' during Phase Shift 2024 which aimed at equipping students with foundational knowledge and practical skills in generative AI. The workshop featured a hands-on approach to AI coding and a series of expert-led sessions that explored real-world applications. Sri.Subhajit Banerjee Purnapatra from Forus Health Pvt. Ltd., shared his

expertise on the impact of generative AI in enhancing diagnostic tools and streamlining healthcare processes. Special guests from, Dr. Ram K. Nair, CEO, Jeeva Raksha Trust and Dr. Akash R. Jadhav, Executive Assistant to CEO, Jeeva Raksha Trust discussed the role of AI in improving emergency response systems and healthcare accessibility.



SINGULARITY, the astronomical society of the college organised a workshop, 'Stellar Serpent' during Phase Shift 2024.



Encode Mania, an engaging event hosted by department of CSE (Data Science) and DSync as part of PhaseShift 2024 tested



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and enhanced participants' knowledge about Data Structures, Algorithms and problem-solving techniques.



Prof. Simon Hogg, from the Dept. of Engineering, Durham University, UK summarized the overall renewable energy generation scenario in United Kingdom (UK). Around 250 participants from across the departments attended the talk.



- Department of Mechanical Engineering along with MEA (Mechanical Engineering Association) organised a lecture on 'Career opportunities in Engineering and how universities help students build careers in these fields' by Prof. Simon Hogg, Professor in the Department of Engineering, Durham University.



- Guest Lecture organized by department of Mechanical Engineering for UG students of the college on 'Power generation with Horizontal Axis wind turbine (HAWT)' during Phase Shift 2024 aimed at educating students about the significance of renewable power generation with Horizontal Axis wind turbine (HAWT). The speaker,

- The Departments proudly showcased their innovative spirit at Phase Shift 2024 with vibrant stalls highlighting student-led projects. The exhibits displayed in the stalls included alternative and sustainable building materials, interactive displays that ranged from predictive analytics models to game engines etc.







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The stalls exhibited by the departments of Electronics & Communication Engineering and Mechanical Engineering were adjudged as Best and department of Civil Engineering was awarded first Runner up in the 'Best Stall Project Contest'. Department of Biotechnology ranked first under Sustainable Development Goals category and Department of Electronics & Telecommunication Engineering was adjudged as having Maximum Industry Connect.

Dr.lalitha S M., Operations Excellence Lead, HPE was the Chief Guest for the

Valedictory Function of Phase Shift 2024. The dignitaries appreciated the efforts of Phase Shift team in making the event a grand success. Winners were felicitated in the Valedictory Function.



Dr.Prema V, Associate Professor, Department of EEE delivered two sessions on 'Wide Band Gap Devices for Advanced Electric Drives for EV Applications with Hands-on Training' during the ATAL FDP on 'Cutting Edge Developments in Electric & Hydrogen Cell Vehicles for Educators' at The Oxford College of Engineering, Bengaluru.



Smt.Soniya Agrawal, Assistant Professor, Department of EEE conducted two sessions on 'Wide Band Gap Devices for



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Advanced Electric Drives for EV Applications with Hands-on Training' during the ATAL FDP on 'Cutting Edge Developments in Electric & Hydrogen Cell Vehicles for Educators' at The Oxford College of Engineering, Bangalore.



assessment on travel-demand modelling of working-class students through a case study in Bengaluru city' at 7<sup>th</sup> International Conference on Modelling and Simulation in Civil Engineering organized by TKM College of Engineering, Kollam, Kerala through online mode.

- ✚ Mr.Shreyas C.S., student and Dr.D N Sujatha, Professor in the department of Computer Applications published an article titled, 'Predicting Heart Disease Using Machine Learning: A Comparative Analysis of Classification Models'in Medicon Engineering Themes Vol. 7 Issue 6, December 2024, pp. 39-49.

- ✚ Dr.D. N. Sujatha, Professor in the Department of Computer Applications was invited to attend the inauguration of the 3<sup>rd</sup> International Conference on Data, Decision and Systems organised at PES University.



December 7<sup>th</sup>, 2024

- ✚ Ms.Sudhiksha B and Ms.Sanchitha S Poojary , students of third semester MCA participated in the 'Dice and Throw' event conducted as a part of the 'Magnevita' program organized by Christ University, Bengaluru and secured second place.



- ✚ Dr. Nalina M M, Assistant Professor, Department of Civil Engineering presented a paper titled, 'Predictive



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- Dr. Prema V, Associate Professor, Department of EEE delivered a session on 'Power Electronics in EV Applications' during IEEE\_PES Industry Academia Conclave organised at Acharya Institute of Technology, Bengaluru.



Department of Physics presented (online) a paper titled, 'Balancing Power and Energy: Analysis of Electrical and Electrochemical Techniques' in 4<sup>th</sup> International World Energy Conference organised by Kaysei, Turkiye.

- More than hundred Alumni from batch of 2000 to 2024 participated in various sports such as cricket, badminton singles, doubles, Table tennis singles and doubles, Chess organised at the college.



#### December 8<sup>th</sup>, 2024

- 34 classmates of 1979 batch of students in Electronics and Electrical departments had a refreshing meet up and gathering at the college. The team contributed to the endowment scholarship for students under Merit, Means and Disability category.



#### December 9<sup>th</sup>, 2024

- Ms. Jyothi A Goudar, Research Scholar under the guidance of Dr.M.V.Murugendrappa, Professor,

- Dr. Ugrasen G, Sri.Suresh Erannagari, Dr.Raghu Yogaraju, Dr.Ravi L, Assistant Professors, Department of Mechanical Engineering participated in AICTE Training and Learning (ATAL) FDP on Sustainable Manufacturing Practices and Environmental Impact Optimization Techniques organised at





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✚ Dr. J. Sharana Basavaraja, Professor, Department of Mechanical Engineering attended Departmental Promotion Committee meeting as an external expert convened at U. R. Rao Satellite Centre, Bengaluru.

✚ Dr. Priya V, Assistant Professor, Department of Civil Engineering presented a research paper titled, 'Re-use of carbon dust(waste/byproduct) generated from selected industries as toner component-profitable solution of waste to wealth' in International Conference - Environment 2024 organised at IIT, Guwahati during Dec.9<sup>th</sup> -12<sup>th</sup>, 2024.

#### December 11<sup>th</sup>, 2024

✚ Dr. Anil Chandra A.R., Assistant Professor, Department of Mechanical Engineering participated as a delegate & gave a talk titled, 'Mechanical Response Of 3D Printed Reinforced Nylon for Use In Performance-Specific Applications' in the 30<sup>th</sup> International Conference on Processing of Advanced Materials and Fabrication of Products (PAMFP-2024) organised at IIT, Hyderabad during Dec.11<sup>th</sup> -13<sup>th</sup>, 2024.

✚ Dr. Manjunatha S.O, Assistant Professor, Department of Physics co-authored and

published a research paper titled, 'Oxygen Vacancy Defect Engineering on ZnFe<sub>2</sub>O<sub>4</sub>/wt.%CoCr<sub>2</sub>O<sub>4</sub> Heterojunction Toward the Degradation of Tetracycline Hydrochloride', in Journal of Electronic Materials (2024) (In Press) with impact factor 2.2, SJR: Q2, ISSN 0361-5235 (print) 1543-186X (Electronic)  
[DOI: https://doi.org/10.1007/s11664-024-11639-z](https://doi.org/10.1007/s11664-024-11639-z)

#### December 12<sup>th</sup>, 2024

✚ Dr. Sreenivasa Murthy A, Assistant Professor, Department of Civil Engineering delivered guest lecture on the course titled, 'Analysis and Design of (G+1) Residential Building by limit State Method' at SSIT, Tumkur.



✚ Department of Electrical & Electronics and EEE Association in collaboration with Reliamotives Labs organized two days hands-on workshop on 'Electric Motor Design using MotorXP and



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MATLAB – From Basics to Advanced’ in the college during Dec. 12<sup>th</sup> - 13<sup>th</sup>, 2024. More than 40 industry personnel attended the workshop.

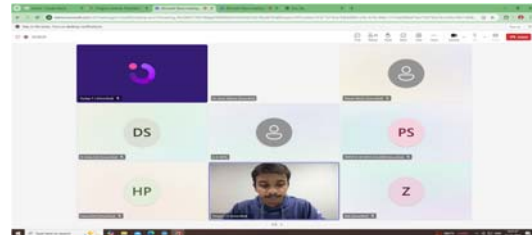


- Dr. B Mallikarjuna, Assistant Professor, Department of Mathematics was invited to give a lecture on ‘Discrete Fourier Transforms and Fast Fourier Transforms’ at department of mathematics, Dayananda Sagar Academy of Technology & Management, Bengaluru.



- Mr.Sumanth V, Mr.Shreyas C.S., Mr.Prajwal R Bhat, students in the department of Computer Application, Smt.Pushpa T.S., Assistant Professor in the department of Computer Application

and Mr. Nandan Kumar from Dayanand Sagar Business Academy co-authored and presented (online) research paper titled, ‘Text Recognition and 3D Rendering using Optical Character Recognition and Augmented Reality’ in 6<sup>th</sup> International Conference on Soft Computing and its Engineering Applications (icSoftComp2024), organized by Charotar University of Science and Technology, Chnaga, Bangkok, Thailand during December 10-12, 2024.



- The Placement Club of the department of Computer Applications organized student interaction meeting for the third semester students in the department. The students who had attended placement interviews shared their experiences with their peers. The session focused on fostering personal and professional growth of all participants.





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December 13<sup>th</sup>, 2024

- Dr. B.L Suresha, Head, Department of Physics was invited as Chief Guest for SPARK – Arena of Talents, Exhibition organised at BMS college of Women, Bengaluru.



- Ph.D viva voce of Sir. Rajesh P, Assistant Professor, Department of Mechanical Engineering under the guidance of Dr.J.Sharana Basavaraja, Professor, Department of Mechanical Engineering was conducted.

Title: Development of Finger Seal for Gas Turbine Applications.



- Dr. Sangamesh C Godi, Assistant Professor, Department of Mechanical Engineering chaired a session in the fifth International Conference on Emerging Research in Civil, Aeronautical, and Mechanical Engineering (ERCAM-2024) organised at Nitte Meenakshi Institute of Technology, Bengaluru during Dec. 12<sup>th</sup> – 13<sup>th</sup>, 2024.



- Dr. Pratibha S., Assistant Professor, Department of Physics attended IPR career summit 2024 in online mode organised by Turnip innovations, Kolkata and Nalsar University, Hyderabad during Dec.11-13, 2024.

- Dr.Chetan A Nayak, Professor & HoD, Chemical Engineering and Dr.Shivakumar R, Associate Professor & placement officer of Chemical Engineering Department visited Utthunga Technologies, Bengaluru to discuss the industry institute collaboration regarding internship for pre-final year students and recruitment





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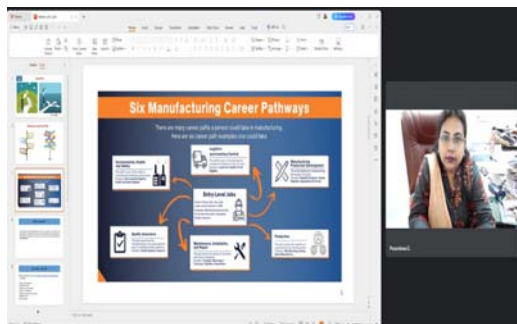
of final year students as graduate trainees at their organisation.



modelling and its importance in Engineering' at Cambridge Institute of Technology, Bengaluru.



✚ Dr.Poornima G, Associate Professor, Department of Electronics and Communication Engineering was invited as a Mentor for the Mentorship Rural Program to the underprivileged students (from low income backgrounds) organised by Freedom Employability Academy, Kalyanpur, Prayagraj North, Uttar Pradesh. Mentoring was conducted through online mode.



✚ Dr.G.Chandra Shekar, Assistant Professor, Department of Mathematics delivered a lecture on 'Mathematical

December 14<sup>th</sup>, 2024

✚ Department of Biotechnology organised hands-on training for seventh semester students in the department on Genome informatics as a part of course, Genome informatics by Prof B.V. Gurudatta and Mr.Tim George, Research Scholar, NIMHAS, Bengaluru.



✚ Dr. Sreelakshmi Diddi, Associate Professor and Dr.Hari Prasad Uppara, Assistant Professor in the Department of Chemical Engineering attended one week Faculty Development Program on 'Python for Chemical Engineers'



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organized by GVP College of Engineering (Autonomous), Visakhapatnam, Andhra Pradesh.

- Dr. Umavathi M, Assistant Professor, Department of EEE chaired a session in 2<sup>nd</sup> International Conference on Intelligent and Sustainable Power and Energy Systems (ICISPES 2024) organised at Dayananda Sagar College of Engineering, Bengaluru.



- Dr.K.Vijayalakshmi, Professor in the department of Medical Electronics Engineering was a resource person in Workshop on Wheels, organized by the IEEE SPS Bangalore Chapter in collaboration with VVIET, Mysore. This was an unique event that combined learning, networking and recreational activities during the journey from Bengaluru to Mysore.



- Dr. Kaliprasad C.S., Assistant Professor, Department of Physics participated in Six days online Faculty Development Program on 'Advanced Computational and Experimental Research in Physics' organised by Mohamed Sathak A J College of Engineering, Chennai during Dec. 9<sup>th</sup> - 14<sup>th</sup>, 2024 .

- Dr. Vandana M, Assistant Professor, Department of Physics co-authored and published a research paper titled, 'Recent Developments in Thermally Stable Transparent Thin Films for Heater Applications: A Systematic Review' in international Journal, ISSN: 2079-4991, Nanomaterials 2024, 14(24), 2011; Impact Factor: 4.4 (2023) <https://doi.org/10.3390/nano14242011>

December 15<sup>th</sup>, 2024

- Smt.Soniya Agrawal, Assistant Professor, Department of EEE published a paper titled, 'A Fault-Tolerant Common-Ground based Five-Level inverter for Photovoltaic Applications' in an ESCI index Journal, *IEEE Journal of Emerging and Selected Topics in Industrial Electronics*.

December 16<sup>th</sup>, 2024

- The Department of CSE (IOT & CS) conducted a workshop on 'Prototyping using Raspberry Pi'. This transformative one day program was designed to equip



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students with the latest in Embedded Designs, featuring hands-on training and insights from one of the industry leaders, Sri.G Ravi Prakash, Bytemate Private Limited. Smt Tejashwini A G, Assistant Professor in the department coordinated the event.



✚ Department of Electronics and Instrumentation Engineering organized Industrial visit to Schneider Electric India-BGRT Bengaluru for fifth semester students in the department. Sri.Kumar D., Assistant Professor in the department accompanied the students in the industry visit. Students were introduced to the company's products, services and

operations in the field of energy and automation.



✚ Dr. Harish K N, Assistant Professor, Department of Chemistry co-authored and published a research paper titled, 'Effect of developed NiFe<sub>2</sub>O<sub>4</sub> NPs for electrochemical sensing action on ascorbic acid detection and photocatalytic applications', Ionics (Springer Nature Link) (2024). 16<sup>th</sup> December 2024. Q3 Journal. Impact factor: 2.6, ISSN: 0947-7047. DOI: <https://link.springer.com/article/10.1007/s11581-024-05994-4>





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✚ Orientation Program for first semester Post-Graduate students was organised in the college during Dec.16-17,2024.

✚ Mr. Gopinath, student in the department of Mechanical Engineering through AeroBMSCE, participated in the National Aeromodelling competition organised at IIT, Bombay Techfest during Dec.16-24,2024.

#### December 17<sup>th</sup>, 2024

✚ The department of Chemical Engineering organised a pre-placement talk by the industry expert, Sri. Sreejith, Fluidyn Consultancy Pvt. Ltd., for the benefit of final year students in the department. Dr.C T Puttaswamy, Professor in the Department coordinated the event.



✚ The department of Computer Science & Engineering (IoT & C S) organised a Workshop, 'Digital Footprints: Tracing cyber crime through forensics'. Sri.Samarth Bhaskar Bhat, Director of Reverse Engineering at Infosec Pvt. Ltd.,

was the resource person. This comprehensive workshop was divided into three sessions, each focusing on a distinct aspect of cybersecurity. The workshop aimed to familiarize participants with tools like Netdiscover, Nmap, Nessus, OpenVAS, and sandboxes for vulnerability assessment and exploitation. Smt. Manjula M, Assistant Professor in the department coordinated the workshop.



✚ The department of EEE organised an industrial visit to EMMVEE Photovoltaic Power Pvt. Ltd, Bengaluru for fifth semester students in the department.



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Dr. Umavathi M, Dr. Prakash, and Dr.Chethan Raj, Assistant Professors in the department coordinated the event and accompanied the students in the industry visit.



undergraduate students from the department of Electronics & Communication Engineering and one student from Civil Engineering participated in 29<sup>th</sup> International Advanced Computing and Communications Conference (ADCOM 2024) organised at IIIT Bengaluru, during Dec. 18<sup>th</sup> - 20<sup>th</sup>, 2024.



- Two days student Technical fest "NIRMAAN ISCE 2024" was organised by the Department of Civil Engineering during Dec.17-18,2024. Students from various colleges across the state participated in the event & competitions.



#### December 18<sup>th</sup>, 2024

- Smt.Pushpa T.S., Assistant Professor, department of Computer Applications along with third semester students in the department and around thirty

- The department of Computer Applications conducted Orientation Program for first semester students of the department during Dec. 18<sup>th</sup> - 19<sup>th</sup>, 2024. The program aimed to acquaint the new students with the institution's rules, facilities and curriculum. It also offered



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valuable guidance on making the most of their MCA journey, understanding academic expectations and preparing for a successful academic experience. The event was coordinated by Sri.Lakshminarayana P., Assistant Professor in the department.



✚ Dr. G. Saravana kumar, Professor, Dr. Anil Chandra A.R, Assistant Professor in the Department of Mechanical Engineering attended the short course on 'AICTE-QIP PG Certificate Programme' at IISc, Bengaluru during Dec. 18<sup>th</sup> to 20<sup>th</sup>, 2024.

December 19<sup>th</sup>, 2024

✚ Dr. Gururaja H S, Assistant Professor, Department of Computer Science & Business Systems was invited as Resource person on 19<sup>th</sup> & 20<sup>th</sup>, December for three days Student Development Program on 'Robotics Process Automation' organised by the Department of CSE(AI&ML), Nagarjuna College of Engineering & Technology, Devanahalli.

✚ The department of EEE organised an Industrial visit to Integrated Electric Company Ltd.







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✚ The Placement Club of the department of Computer Applications organized an activity for third semester students in the department to enhance their communication skills. Students were divided into teams of three each and were assigned a specific topic to create a mind map for organizing their thoughts and ideas effectively. Additionally, a resume-building session was conducted to emphasize the importance of showcasing key skills, qualifications, work experience and accomplishments, helping students stand out to potential employers.



✚ Dr.Meghana J, Assistant Professor, Department of Mathematics presented the paper titled, 'Three- Component Ferroconvections in a couple Stress Fluid with Cross Diffusion' in the 69<sup>th</sup> Congress of Indian Society of Theoretical and Applied Mechanics (ISTAM) organised by the centre for Mathematical Needs, Department of Mathematics, CHRIST (Deemed to be University) Bengaluru, in collaboration with ISTAM during Dec. 19-21 2024.

December 20<sup>th</sup>, 2024

✚ Patent publication by Dr. R Ashok Kumar, Professor and Head, department of Computer Science & Business Systems and students on the topic, 'A system and Method to detect plant disease with real time Data Analysis' in The Patent Office Journal No 51/2024 dated 20.12.2024.

✚ Dr.Mangala Keshava, Professor, Department of Civil Engineering delivered a talk on 'RMC Waste-A Misplaced Resource' at RASTA, Centre for Road Technology, Bengaluru organised by Ultra Tech RMC Engineers.

✚ The NBA Expert team visited the Institution during Dec.20-22, 2024 to evaluate the M.Tech (Machine Design) Programme.



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The ACM India Chapter Summit 2024, held on 20<sup>th</sup> and 21<sup>st</sup> December, 2024 at the college (Anchor Venue) and R.V. College of Engineering was a great success and a major milestone for the BMSCE ACM Student Chapter. Centered on the theme, 'Sustainable Computing', the event emphasized technology's role in energy efficiency and resource optimization. With over 350 participants from all over India and keynote sessions from eight distinguished speakers, the summit strengthened the bond within the ACM India community.



December 21<sup>st</sup>, 2024

Annual Alumni Day-2024 was organised in the college. Over 600 alumni participated in the open house at the department level meet-up and the evening formal event.

The alumni interacted with the current students providing valuable advice on higher education, career choices, internships and job opportunities to second, third and final year students in the department. Few departments arranged panel discussions, workshop by the esteemed alumni for the benefit of current students.





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The 11<sup>th</sup> Alumni Homecoming culminated with a colourful program in the evening. During the event, 63 merit scholarships and 13 merit-cum-means scholarships were awarded to the deserving students.



The winners of the Alumni Sports Day competitions were felicitated. Additionally, senior alumni from the batch of 1983-84, totaling 87 members, were also felicitated. Sri. Nagaraj G., Alumnus-Mechanical Engineering, 1965, Kannada Rajyotsava Awardee 2023(Social services), Retd. Additional Director, Directorate of Industries & Commerce, GOK was the Chief Guest for the function. Esteemed alumni, Col. Shankar from the batch of 1965 and Sri.Vijay Kumar, an alumnus from Mechanical Engineering, 1982 batch and also the BMSCE Alumni Association committee member graced the occasion.







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- Department of Physical Education & Sports and the department of Electronics and Telecommunication Engineering in collaboration with Heartfulness Institute organized Meditation and Yoga sessions for the students on the occasion of World Meditation Day. Around 600 students participated in the event.



Additionally, a session was conducted by Mr.Nishanth and Ms.Vaishnavi, both third semester MCA students, where they introduced the concept of robotics and showcased various models. The goal of this session was to spark interest in students about robotics and to familiarize them with the facilities available on campus, particularly the Robotics Lab.



- As part of the Cultural Club, Department of Computer Applications, a session was conducted by Ms.Sudhiksha, third-semester MCA student, featuring a fun and interactive activity designed to enhance communication among first-semester MCA students. In this activity, seven students were invited to the stage to perform a series of steps as instructed by a person. They had to effectively communicate these steps to their teammates, who were positioned in front of them, until the instructions reached the end. Four teams participated in the game and the final outcome demonstrated the effectiveness of their communication. The session was memorable.



December 23<sup>rd</sup>, 2024

- Dr. Manjunatha S.O, Assistant Professor, Department of Physics co-authored & published a research paper titled, 'Synthesis and magnetic characterization of Cd-doped CoCr<sub>2</sub>O<sub>4</sub> ceramics for low-temperature applications', Ceramics



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International (2024) (In Press) with impact factor 5.2, SJR: Q1, ISSN 0272-8842 (print) 1873-3956 (Electronic)

DOI:

<https://doi.org/10.1016/j.ceramint.2024.12.390>

#### December 24<sup>th</sup>, 2024

- Mr. Anuj Srinivas, student of 4<sup>th</sup> semester, Department of Machine Learning participated in Semi Finals of MANTRA-Battle of the Bands competition in MOOD INDIGO organised at Indian Institute of Technology, Bombay (IIT-B) and played electric & bass guitar for the performance.



- The Biotechnology student association of the college organized an enriching session titled, 'Career Launchpad: Proven Strategies for Professional Success'. The distinguished alumna, Mrs. Shwetha Acharya shared her expertise on networking, career

planning and leveraging opportunities for professional growth.



- Dr. B. Mallikarjuna, Assistant Professor, Department of Mathematics was invited as Guest for National Mathematics Day celebrations by the Department of mathematics, Akshaya Institute of Technology, Tumkur. He delivered a talk on 'Essential Mathematics for Engineers'.



#### December 26<sup>th</sup>, 2024

- The Gradient Club of department of Machine Learning (AI&ML) hosted an insightful and hands-on workshop on AI Agents, led by Sri. Sharad Jain, founder of AutoScreen and former Meta employee.



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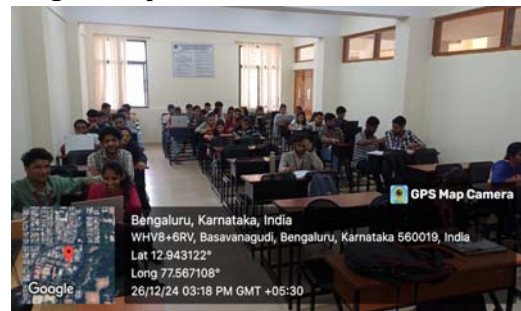
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The event drew AI enthusiasts and students eager to explore advanced AI technologies and applications. Sri.Sharad opened the session with an in-depth discussion on Large Language Models (LLMs), explaining their architecture, real-world challenges and transformative impact on AI solutions. He then introduced Retrieval-Augmented Generation (RAG), highlighting how combining LLMs with retrieval systems enhances contextual accuracy and knowledge access. A hands-on project formed the core of the event, allowing participants to build their own AI agent under Sri.Sharad's expert guidance. The interactive session provided invaluable practical experience, bridging theory with application. The workshop concluded with a dynamic Q&A, leaving attendees inspired and eager for more learning opportunities.



The Placement Club of the department of Computer Applications organized Technical and Communication sessions for third-semester MCA students. The first session was a coding activity designed to enhance coding skills and

improve the ability to code within a time frame. The second session was a 'Pick and Speech' activity, where students drew chits with technical topics and spoke for about two minutes on the assigned topic.



Dr. Hari Prasad Uppara, Assistant Professor, Dr. Shiva Kumar R, Associate Professor, Department of Chemical Engineering along with the final year UG students in the department co-authored and published an article titled, 'A ternary MOF-based Ce-Ni-Cu oxide for energy storage applications: structural, optical, and impedance studies' in Journal of Materials Science: Materials in Electronics, 36, 55 (2025). (WOS indexed, Q2). <https://doi.org/10.1007/s10854-024-14114-x>





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✚ Dr.G. Giridhara, Professor & Head, Department of Mechanical Engineering was invited as a resource person for the National Seminar on 'Role of Education System in the development of Democratic society' as a distinguished member of the Governing Body of the Satyadev Group of Colleges, Ghazipur, Uttar Pradesh.

December 27<sup>th</sup>, 2024

✚ Dr.Poornima G, Associate Professor, Department of Electronics and Communication Engineering was invited as a Mentor for the Mentorship Rural Program to the underprivileged students (from low income backgrounds) organised by Freedom Employability Academy, Kalyanpur, Prayagraj North, Uttar Pradesh. Mentoring was conducted through online mode.

December 28<sup>th</sup>, 2024

✚ Department of Electronics and Communication Engineering in collaboration with IEEE COMSOC Student Chapter organised demonstration on 'Real-time Satellite Tracking for Weather Images' for the undergraduate students of the department. Sri. H N Suresh Kumar Retd., Deputy Director of ISRO who had been awarded as an outstanding scientist from ISRO and Sri. Vikas Kashyap, Senior

Cloud Engineer at TCS were the resource persons. Students were exposed to hands-on practical aspects of both LEO and GEO satellites using YAGI UDA antenna. Dr. Arathi R Shankar, Professor, in the department coordinated the event.



✚ Dr. Rajeshwari Hegde, Professor, Department of ETE & Dean(Student Affairs) received Havyaka Shikshaka Rathna Award during Vishwa Havyaka Sammelana organised at Palace Grounds, Bengaluru.





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#### December 30<sup>th</sup>, 2024

✚ Dr. S. M. Suresh, Professor, Department of Mechanical Engineering was invited to provide guidance regarding NAAC Accreditation for the group of Institutes, LBS Centre for Science & Technology, Govt. of Kerala, Trivandrum during Dec.30-31,2024.

✚ Ms. Anitha, Research scholar under the guidance of Dr.Latha Kumari, Associate Professor, Department of Physics presented the research work titled, 'Structural, thermal and Optical Characterisation of CoSb<sub>2</sub>O<sub>6</sub> nano materials synthesized by solvothermal method' in the international conference on materials and applied science for society (MASS-2024) organized by Anand Niketan college of Science, arts and Commerce, Anandwan, Warora, Maharashtra, India in joint auspices of Condensed Matter Research Society.



✚ Ms. Meghashree Vinod Shetter, Research Scholar under the guidance of Dr.Latha Kumari, Associate Professor in the department of Physics presented

research work titled, 'Study of effected of calcination temperature on the structural and optical properties of ZnFe<sub>2</sub>O<sub>4</sub> nanomaterials synthesize by hydrothermal method' in the international conference on materials and applied science for society (MASS-2024) organized by Anand Niketan college of Science, arts and Commerce, Anandwan, Warora, Maharashtra, India in joint auspices of Condensed Matter Research Society during Dec.30-31,2024.

#### December 31<sup>st</sup>, 2024

✚ Dr. Veena M.B, Professor, Department of Electronics and Communication Engineering and Mr. Shivakumar V, Research Scholar from CPRI published a research paper titled, 'Cybersecurity and IEC 62351 for SCADA Systems of Power Grid' in SSRG International Journal of Electrical and Electronics Engineering on 31 December 2024, Volume 11, Issue 12, 36-52,ISSN:2348-8379.

<https://doi.org/10.14445/23488379/IJEEE-V11I12P104> (Scopus Indexed).

✚ Dr. M. Ravikumar, Assistant Professor, Department of Mechanical Engineering co-authored and published a research article in SCI(E) indexed Journal (Archives of Metallurgy and Materials - PAS Journals) on Comparative Study on Micro and Nano Sized SiC Particulates Reinforced Al7075 Composites using Stir



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Casting Process Arch. Metall. Mater. 69  
(2024), 4, 1395-1400 DOI:  
<https://doi.org/10.24425/amm.2024.151405>

- ✚ Dr.S.Srinivas, Professor, Department of Mechanical Engineering who retired from the service at the college on 31<sup>st</sup> Dec.2024 on attaining the age of superannuation was felicitated.



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