News Letter – JANUARY 2023

January 5th - 8th, 2023: Prof. Devaraj K., Assistant Professor, Department of Mechanical Engineering was deputed to attend the tenth Annual International Conference on Transformations in Engineering Education(ICTIEE) 2023 organised by IUCEE conducted at Vidyavardhaka College of Engineering, Mysuru.

January 6th, 2022: The Mechanical Engineering Association (MEA) organized a Guest lecture by Dr. Amruth Bhargav, Alumnus of BMSCE-2013 on "Fundamental Concepts of Lithium-Ion Batteries" for III Semester students.

January 9th-14th, 2022: The following faculty were part of organizing committee of One-week FDP on Advanced Materials & Manufacturing Techniques -2023 (AMMT-2023) organized by B. M. S. Evening College of Engineering and Department of Industrial Engineering and Management, BMSCE in association with ISTE-BMSCE chapter & Visvesvaraya Technological University, Belagavi.

Convener: Dr. Rudra Naik

Members of Internal - advisory committee:
Dr. G. Giridhara, Dr. M. Ramachandra, Dr. S. Srinivas, Dr. B. N. Sarada, Dr. Vardhaman S. Mudakappanavar, Dr. J. Sharana Basavaraja, Prof. R. Umesh Naik (BMSECE- ME)

Co-Convener: Dr. M. Ravikumar (BMSECE-ME)
Organising Committee: Prof. Shivakumar M. M. (BMSECE-ME), Prof. Santhosh S. (BMSECE-ME)

Dr. Prabhu Swamy N. R., Sri. G. Karthik, Dr. Ram Rohit, Dr. H. R. Prakash, and Dr. R. Suresh Kumar, Assistant Professors, Department of Mechanical Engineering attended one-week FDP on Advanced Materials & Manufacturing Techniques -2023 (AMMT-2023) from 9th to 14th, 2023.

January 20th, 2023: A Technical Development Program by Mr. Maruthi G.V.was organized for Technical Staff from Medini School of Design, Vijaya Nagar, Bengaluru.

January 20th, 2023: A team of engineers led by Mr. Vishwas B. Patil, CAE Application Engineer at Molex India, and Alumnus-BMSCE visited the Department of Mechanical Engineering to get an overview of research facilities and activities at the Department. They were appraised about the departmental activities by Dr. G. Giridhara and Dr. H. K. Rangavittal. The team visited BSN Center for Structural Integrity Studies and R&D laboratories to explore possibility of availing the facilities. The team showed keen interest in collaborating with the department for mechanical property characterization of polymer materials for various engineering applications.

January 23rd, 2023: Dr. B. Sudarshan, Assistant Professor, Department of Mechanical Engineering received research grant of Rs.20 Lakhs from Vision Group for Science & Technology, Government of Karnataka, for the year 2021-22 under the scheme Karnataka Fund for Infrastructure Strengthening in Science & Technology (K-FIST L2) for the Project "Establishing the Infrastructure and Aerodynamic Investigation on an Airfoil with Novel Tubercles and Serrations Geometry for Wind Turbine Applications".

January 27th & 28th, 2023: Dr. L. Ravikumar, Professor, Department of Mechanical Engineering visited a college as an NBA expert member.

News Letter – FEBRUARY 2023

February 1st, 2023: A patent titled Cascaded Air Foil Thrust Bearing was granted through Patent No. : 420041 (Application No. : 3663/CHE/2015, Date of Filing: 17/07/2015) to the research work by Dr. R. N. Ravikumar, Dr. K. J. Rathanraj and team.

February, 15th-17th, 2023: Dr. B. Sudarshan, Assistant Professor, Department of Mechanical Engineering presented an invited talk titled 'Studies on the shock wave effects on biopolymers and nano tubes using the modified Reddy shock tunnel'and a technical paper titled 'Hypersonic flow study in a pneumatically operated academic shock tunnel'at 7th National Symposium on Shock Waves (NSSW-2023) organised by Society of Shock Wave Research (IISc) at Physical Research Laboratory, Ahmedabad

February 16th, 2023: The Controller of Examination conducted an orientation programme about the examination process for faculty members who have joined BMSCE from 01.01.2017 till date. Dr. Venkatesh T Lamani, Dr. Suhas B. G., Dr. Sangamesh C Godi, and Dr. Chidanand K. M., faculty from the department attended the orientation.

February 17th, 2023: Dr. G. Giridhara, Professor & Head, Department of Mechanical Engineering visited a College in Maharashtra as an expert for Accreditation by NBA, New Delhi.

February 20th, 2023: An orientation programme was conducted for M. Tech. Students admitted during the academic year 2022-23. Principal, Vice-Principals, Dean-Academics, Controller of Examination, Dean-Placement and Institute-level PG Coordinator addressed the students and briefed the students about the regulations of the programme, Infrastructure and facilities available to students, Evaluation process, scholarships and other opportunities available to students on the campus.

February 23rd, 2023: Dr. Anil Chandra A.R., Assistant Professor, Department of Mechanical Engineering was invited as a resource person to conduct a workshop on "Fatigue Testing" at HKBK College of Engineering, Bengaluru.

February 24th, 2023: Ph. D. Awarded: Department of Mechanical Engineering congratulates Dr. Manjunath K. (USN: 1BM18PME09), Research Scholar under the guidance of Dr. G. Giridhara, Professor & Head, Department of Mechanical Engineering for being awarded Doctor of Philosophy degree during 22nd Annual Convocation held on 24.02.2023 at Visvesvaraya Technological University, Belagavi.

Title of Thesis: Erosion, Corrosion and oxidation studies on CNT reinforced CR3CR2-NICR coatings using HVOF Technique.

February 26th, 2023: Dr. G. Giridhara, Professor & Head, was appointed as a Technical Advisor to National Design and Research Forum (NDRF) for expertise in the multidisciplinary area of Structural Dynamics, Structural Health monitoring and Rotor Dynamics as applied to aerospace, automotive, power, renewables, oil & gas and other programs of NDRF.

February 27th, 2023: An Induction Program for Lateral Entry students admitted during the academic year 2022-23 was conducted in Auditorium-1, Platinum Jubilee block. Principal, Vice-Principals, Dean-Academics, Controller of Examination, and Dean-Placement addressed the students and briefed the students about the regulations of the programme, facilities available to students, Evaluation process, and other requirements.

February 27th- 3rd March, 2023: One-Week Training Program for Non-Teaching Staff on "Computer Proficiency and Skill Development" was organized by Department of Electrical & Electronics Engineering, Department of Electronics & Instrumentation Engineering, in association with EEE Association and ISA-BMSCE Student Section. The following Technical Staff attended the training program. Sri. Hariprasad and Sri. A. N. Damodhara, Staff from the department attended the training.

Journal/ Publications:

February 6th, 2023: Dr. G. Saravanakumar, Associate Professor, Sri. Suresh Erannagari, Assistant Professor, Department of Mechanical Engineering along with T. Hemanth Raju, Manjunatha, T. Jagadeesha

and Amithkumar Gajakosh published a technical paper on 'Thermal Conductivity of Hot‑Rolled Al7075/TiB2/Graphite Hybrid MMCs' in J. Inst. Eng. India Ser. D, The Institution of Engineers (India) 2023.
https://doi.org/10.1007/s40033-023-00448-z

February 20th, 2023: Dr. Raghu Yogaraju, Assistant Professor, Department of Mechanical Engineering published a book chapter along with Pradeep Kumar G. S. (Christ University, India), Sachit T. S. (Symbiosis Institute of Technology, Symbiosis International University, India), Mruthunjaya M. (JSS Academy of Technical Education, India), Harish Kumar M. (Christ University, India) and Sasidhar Jangam (Christ University, India) titled 'Mechanical and Tribological Properties of Polymer Composites Developed by FDM' in Development, Properties, and Industrial Applications of 3D Printed Polymer Composites, 2023.
DOI: 10.4018/978-1-6684-6009-2.ch004

News Letter – MARCH 2023

March 4th, 2023: Dr. L. Ravikumar, Professor, Department of Mechanical Engineering visited AICTE for the Expert Visit Committee meeting.

March 6th, 2023: An interaction was arranged with faculty and students from Dr. Arun Prakash, Group Lead and Senior Scientist, Micromechanical Materials Modeling (MiMM), Technische Universitat Bergakademie Freiberg, Saxony, Germany, regarding opportunities for students pursuing higher studies in Germany.

March 6th – 9th, 2023: Dr. B. Sudarshan, Assistant Professor, Department of Mechanical Engineering attended One-week symposium on 'Applications of Shock waves in Science, Engineering and Medicine' organized by the Department of Aerospace Engineering and CDSIMER at Dayananad Sagar University, Bengaluru.

March 10th, 2023: Dr. B. Sudarshan, Assistant Professor, Department of Mechanical Engineering attended One-day workshop on 'Natural Refrigerants: Applications and Policies' organised by IISc jointly with IITM, ISHRAE, SADHANA, INDEE+ and NTNU (Norway).

March 13th & 14th, 2023: Dr. G. Giridhara, Professor & Head, Department of Mechanical Engineering was nominated as a selection committee member by Hon'ble Vice Chancellor for appointments of Central University of Rajasthan, Krishnagar.

March 16th & 17th 2023: Dr. Ram Rohit V, Assistant Professor, Department of Mechanical Engineering participated and presented papers entitled 'Impact of covid-19 on online education: Indian Perspective' and 'Success of Qatar Airways: A Case Study' at the 4th Int. Conf. on 'Innovation, Technology and Sustainability: Shaping the future of Business and Society' organised by L. N. Welingkar Institute of Management Development and Research (WeSchool), Bengaluru.

March 20th, 2023: Dr. S. M. Suresh, Professor, Department of Mechanical Engineering visited the GEMS Polytechnic College, Aurangabad to offer the guidance/ expertise for their institution to uplift to the new heights.

March 21st, 2023: Dr. Madhav Murthy, Assistant Professor, Department of Mechanical Engineering attended the technical closure meeting as a member from Academia for Independent DRDO Committee for Evaluation of S & T Project titled 'Development of Structural Health Monitoring (SHM) technology for an experimental flying wing UAV' (SHMT) at Aeronautical Development Establishment (ADE), Bengaluru.

March 23rd, 2023: Dr. B. Sudarshan, Assistant Professor, Department of Mechanical Engineering was selected as a Life Member of Aeronautical Society of India.

March 24th & 25th, 2023: Dr. L. Ravikumar, Professor, Department of Mechanical Engineering visited a college as an NBA expert member for Accreditation by NBA, New Delhi.

March 24th & 25th, 2023: Dr. G. Giridhara, Professor & Head, Department of Mechanical Engineering visited a College in Telangana as an NBA expert member for Accreditation by NBA, New Delhi.

March 29th & 30th, 2023: Dr. S. M. Suresh, Professor, Department of Mechanical Engineering visited a Technical Institute in the southern region as a Peer Committee Member, NAAC.

March 31st, 2023: A felicitation function was arranged for Sri. Sreekanth N.V. (relieved on 14.09.2022) and Dr. Madhav Murthy (relieved on 31.03.2023), faculty of the Mechanical Engineering for having served BMSCE for more than 10 years and left college for better prospects.

Journal/ Publications:

March 31st, 2023: Dr. Suhas Badakere Gopalakrishna, Assistant Professor, Dr. Chidanand Kishor Mangrulkar, Assistant Professor, Department of Mechanical Engineering published a technical paper along with Kiran Kumar Kapse Umashankar and Sathyabhama Alangar. (2023). 'Numerical investigation on subcooled boiling heat transfer coefficient of water ethanol mixture by CISCAM technique' in Journal of Mechanical Science and Technology KSME, Springer publication 37 (4) 2055~2067. http://doi.org/10.1007/s12206-023-0341-9

News Letter – APRIL 2023

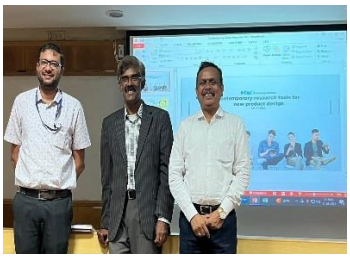
April 6th, 2023: A team of expert members from National Design Research Forum of Institution of Engineers visited the Mechanical Engineering department on 06-04-2023. The team comprised of Dr. Seetharamu, Former Director, Central Power Research Institute, Prof. V. Vasudeo Rao, IIT-KGP, and Dr. Raghuvotham Rao from DRDO. The visit aimed at overviewing the overall academic activities of the department. The committee members proposed the possible collaboration in the field of design, thermal and manufacturing aspects.

April 11th, 2023: A Guest lecture by Mr. Ramachandran S, Principal Consultant, Infosys Knowledge Institute was organized by Mechanical Engineering Association (MEA) at at Mechanical Engineering Seminar Hall (MESH) Topic: 'Contemporary Research Tools for New Product Design'.

Sri. Ramachandran S, a Mechanical Engineering graduate with executive MBA from IIM-B associated as senior consultant with Infosys Knowledge Institute talked about methods to identify innovative tools for new product design. The talk aimed at educating students related to the tools and techniques required for the launch of new

product design. The speaker guided focusses on ease of manufacturing, cheaper and better products with changing geo-political aspect in recent times.

The speaker also conducted short activity in identifying key parameters in day-today products such as vacuum machine and microwave oven. The total of 102 students of V semester attended the talk. The total of 74 students of VI sem section A and B attended the talk.



April 12th, 2023: A Guest lecture by Dr. P. Thareja**,** Former Principal Program Coordinator (TQEM) & Head Metallurgical Engg. Punjab College of Engineering, Chandigarh**,** Former director / Principal, RIEIT, Ropar, on the topic 'Evolution of manufacturing and manufuture' was organized by Mechanical Engineering Association (MEA).

Dr. P. Thareja, a Chartered Engineer and a certified Environment Auditor with LEAN six sigma black belt (QT&T Singapore), educated students on the conventional and modern tools for the future manufacturing process. The quality assurance norms related to ISO 9001 and 14001 were discussed from career aspects. The speaker also illustrated the scope of additive manufacturing such as 3-D printing in various sectors such as electronics, defence, and space technology. The talk was organized for VI semester section C and D students of Mechanical Engineering. The total of 61 students attended the talk.

April 12th & 13th, 2023: Department of Physical Education and Sports Science organized 'BMS MILANOTSAVA-2023' Inter-Collegiate Competition for BMSET Institutions. The following staff participated in the above event.

1. Mr. Santhosh Somashekar Assistant Professor, BMSECE
2. Mr. Shivanna G –Mechanic
3. Mr. Lokesh R – Assistant Instructor
4. Mr. A. N. Damodara – Assistant Instructor
5. Mr. Subramanyam V – Instructor
6. Mr. Basavaraju – Assistant Instructor
7. Mr. Sabeel Ur Rahaman – Assistant Instructor
8. Mr. Keshava N – Instructor

Intramural staff tournament April 2023 Cricket winners
Mr. A. N. Damodhara, Mr. Sabeel Ur Rahman, Mr. V. Subramanyam

MILONATSAVA BMSET sister Institution Staff tournament Cricket winners

Mr. A. N. Damodhara, Mr. Sabeel Ur Rahaman, Mr. Shivanna G

April 20th, 2023: Sri. G. Dilip Maruthi, Assistant Professor attended LTIMindtree program, faculty enrichment program at Global Village Tech Park, Mysore Road Office.

April 22nd, 2023: Dr. Raghu Yogaraju, Assistant Professor, Department of Mechanical Engineering visited Triveni Turbines for vibration testing of a Two stage steam turbine supposed to be delivered to CW Hydro, Canada, along with Sri. Ramakrishna, retired scientist NAL.

April 27th, 2023: Dr. G. Giridhara, Professor & Head, Department of Mechanical Engineering attended a mock NBA visit at G. Pulla Reddy Engineering College, Kurnool.

April 27th, 2023: ERP Software training for UG & PG Faculty was organized at 2.30 p.m. in EVI Lab.

April 27th, 2023: Dr. Sangamesh C. Godi, Assistant Professor, Department of Mechanical Engineering was invited as an external expert for the research proposal defense of a research scholar from the Department of Mechanical Engineering, Amrita School of Engineering, Bengaluru.

April 28th & 29th, 2023: Dr. L. Ravikumar, Professor, Department of Mechanical Engineering visited the colleges as a NBA expert member.

April 29th, 2023: Dr. R. Suresh Kumar, Assistant Professor, Department of Mechanical Engineering was invited for conducting Academic Audit in LBS Institute of Technology for Women, Thiruvananthapuram, Kerala.

April 29th, 2023: A felicitation function was arranged to Sri. Praveen T Hunashikatti, faculty of the Mechanical Engineering for having served BMSCE for more than 9 years and left the college for better prospects.

April 20th, 2023: Dr. Sudarshan B., Assistant Professor, Department of Mechanical Engineering was selected as a life member in Indian Society of Heat and Mass Transfer (ISHMT). ISHMT is actively working in India related to heat and mass transfer applications.

May 11th -13th, 2023: Dr. R. Suresh Kumar, Assistant Professor, Department of Mechanical Engineering visited Jeppiaar Institute of Technology, Sriperumbudur, Chennai to conduct Academic Audit.

May 19th & 20th, 2023: Dr. G. Giridhara, Professor & Head, Department of Mechanical Engineering, visited a College in Tamilnadu for Accreditation by NBA, New Delhi, as an NBA expert member.

May 22nd – 26th, 2023: Dr. Sachin Kumar B., Assistant Professor, Department of Mechanical Engineering, participated in one-week faculty development Program on " Polymer Composites for Engineering Applications (PCEA-2023)" (blended-mode) conducted by the Department of Chemistry, BMSCE.

May 23rd, 2023: Dr. Anil Chandra A. R., Assistant Professor, Department of Mechanical Engineering, delivered a talk titled: "Characterizing mechanical properties of polymer composites for Engineering applications" in the One-week Faculty Development Program on "Polymer Composites for Engineering Applications" (PCEA – 2023) from 22nd-26th May 2023 conducted by the Department of Chemistry, BMSCE.

May 25th, 2023: National Board of Accreditation has extended accreditation status of M. Tech. (Machine Design) Program for a period of one year from 01.07.2023 to 30.06.2024.

May 25th & 26th, 2023: Dr. Shivashankar R Srivatsa and Dr. Raghu Yogaraju, Assistant Professors, Department of Mechanical Engineering, attended a 2-day Orientation and hands-on training on Simulation tools / Abaqus conducted by Dassault Systemes at Pune.

May 26th & 27th, 2023: Dr. L. Ravikumar, Professor, Department of Mechanical Engineering visited a college for Accreditation by NBA, New Delhi, as an NBA expert member.

May 26th & 27th, 2023: Students from BMS College of Engineering in collaboration with BMS College of Architecture took part in the Solar Decathlon National level competition. They designed Net zero energy Buildings and were selected for finals among the 149 colleges. Division-wise final round was conducted on May 26th and final event was conducted on May 27th at Infosys Campus, Mysuru. Dr. Suhas B. G., Assistant Professor, Department of Mechanical Engineering is the Faculty lead coordinator of the team. Following are the list of students who participated in the event.

May 28th - 1st June 2023: Dr. Sudarshan B., Assistant Professor, Department of Mechanical Engineering presented a technical paper titled 'A study on Multi-wall Carbon Nanotubes for Aviation Vehicle Structure Suitability in flight regimes' at the 25th American Institute of Aeronautics and Astronautics (AIAA) International Space Planes and Hypersonic Systems and Technologies Conference, Bengaluru.

Journals / Publications:

May 15th, 2023: Dr. Sudarshan B, Assistant Professor, Department of Mechanical Engineering along with H.A. Pranav, and A.V. Sanjay published a technical paper titled 'Hypersonic flow study in a pneumatically operated academic shock tunnel' in Review of Scientific Instruments published by American Institute of Physics (AIP).
DOI: https://doi.org/10.1063/5.0142147
DOI: 10.1063/5.0142147

Newsletter – JUNE 2023

June 2nd, 2023: Financial Approval of the following projects (Rs.2 lakhs each) was sanctioned by the Management under Faculty Research Promotion Scheme (FRPS) for a period of 2 years.

Principal Investigator	Title of the Project
Sri. Devaraj K	Experimental and Numerical Investigation of the performance of an indirect evaporative cooling (IEC) system working on maisotsenko cycle technology for air-conditioning and cooling applications
Dr. Venkatesh T Lamani	Design and Analysis of Thermal Behaviors within a Scraped Surface Heat Exchanger
Sri. Ramesh M Chalkapure	Performance evaluation and validation of thermoacoustic refrigerator

June 6th, 2023: Dr. Santhosh Doreswamy, Assistant Professor, Department of Mechanical Engineering participated in the workshop on 'Sensing, Automation and IoT' conducted by Department of CSE (IOT and Cyber Security with Blockchain Technology) and Department of Computer Science & Engineering, B. M. S. College of Engineering.

June 9th, 2023: Dr. B. Sudarshan, Dr. R N Ravikumar, Dr, G Saravan Kumar and Dr. Ravi L had a discussion with Dr. Shyam Vasudev Rao, founder of Renalyx Pvt. Ltd., Basavangudi, about designing an indigenous home dialysis machine involving optimization of mechanical components and flow CFD analysis.

June 10th & 11th, 2023: Dr. R. Suresh Kumar, Assistant Professor, Department of Mechanical Engineering visited Guru Nanak Institute of Technology, Kolkata, for Academic Audit.

June 15th, 2023: Dr. Rudra Naik, Professor, Department of Mechanical Engineering, was invited as an expert committee member for Departmental Promotion Committee Review meeting to consider Scientists/ Engineers from Grade SE (L-12) to Grade SF (L-13) in ISRO - U. R. Rao Satellite Centre, Airport Road, Bengaluru.

June 16th, 2023: Dr. G. Giridhara, Professor & Head, Department of Mechanical Engineering, and Dr. Bheemsha Arya, Professor, Department of Mechanical Engineering & Vice Principal (Admin), BMSCE, were invited as expert committee member for Departmental Promotion Committee meeting to consider Scientists/ Engineers from Grade SE (L-12) to Grade SF (L-13) in ISRO - U. R. Rao Satellite Centre, Airport Road, Bengaluru.

June 19th - 24th, 2023: Dr. Shivashankar R Srivatsa, Dr. Raghu Yogaraju, Assistant Professors, and Sri. Praveen N., Assistant Instructor, Department of Mechanical Engineering, participated in five days FDP on 'Fundamentals of low frequency NVH and Automotive Applications' organized by Dassault Systemes La Fondation at their training centre in Pune.

June 30th & July 1st, 2023: Dr. G. Giridhara, Professor & Head, Department of Mechanical Engineering visited a College in Andhra Pradesh as an expert member for Accreditation by NBA, New Delhi.

June 30th, 2023: Farewell function was organized by the college for outgoing UG and PG students of 2023 batch.

Newsletter – JULY 2023

June 12th - 16th, 2023: Dr. Venkatesh T Lamani, Assistant Professor, Department of Mechanical Engineering participated in the Five-Day Workshop on ANSYS Multiphysics Event at National Institute of Technology, Puducherry, Karaikal, India.

July 3rd, 2023: Dr. B. Sachin Kumar, Assistant Professor, Department of Mechanical Engineering participated in the FDP on Vehicle Computer at BOSCH, Adugodi.

July 7th & 8th, 2023: Dr. G. Giridhara, Professor & Head, Department of Mechanical Engineering visited a college for inspection as an expert member of VTU -LIC committee.

July 11th and 12th, 2023: KSCST 46th series of Student Project Programme (SPP): 2022-23. The following project is selected for State Level Exhibition held at Alva's Institute of Engineering and Technology, Moodubidire.

Project Title: Designing and Fabrication of tail sitter drones to use them for surveillance and mapping with long-range coverage. Advancement of tail sitter and use it for Industry usage.
Name of the Students: Mr. Ishan Jain, Mr. Ahmed Zeedan, Mr. Sanket Singla, Mr. Sushant Singh Pagaria
Guide: Dr. B. Sudarshan

News Letter – AUGUST 2023

July 10th-13th, 2023: Bullz Racing SAE - the automotive club of BMSCE participated in the National Level Formula Student competition - SAEINDIA SUPRA 2023, held at the Buddh International Circuit, Greater Noida. Students from different universities were required to design and fabricate open wheeled - single-seater formula style race cars and compete in various design, manufacturing and race events. 25 members from Team Bullz Racing BMSCE from departments of Mechanical, Aerospace, Electronics and Communication and Industrial Engineering participated in the competition. The team secured the runner-up award under the Computer Aided Engineering (CAE) category at the competition, winning a prize money of ₹20,000/- apart from its commendable performance in the other presentations and race events.

The team secured the following results out of 58 teams that took part:

- Runner Up in Computer Aided Engineering stream with a cash prize worth ₹20,000 sponsored by M/s Altair Engineering.
- Overall rank - 9th out of 58
- Engineering Design Presentation - 5th
- Cost Evaluation - 9th
- Business Plan Presentation - 7th

List of Student Participants:

Sl. No.	USN	Student Name	Branch	Year
1	1BM19ME184	Yuvaraj Badiger	ME	4
2	1BM19ME160	Adithya Sagar N		
3	1BM19ME005	Rashid Ahmed		
4	1BM19ME121	Suhas R		
5	1BM19ME154	Tanmay M Shegade		
6	1BM19ME164	Thejas N Kanakuppe		
7	1BM19ME165	Tilak Gouda S		
8	1BM19ME182	Yashaswi Khot		
9	1BM19IM033	Sampada S	IEM	
10	1BM21ME413	Dharshini Kumaran	ME	3
11	1BM20ME181	Hardhik Gurajala		
12	1BM20ME065	Harshith Kumar		
13	1BM20ME043	K R Anupam Gowda		
14	1BM20ME052	M Yasovardhan		
15	1BM20ME055	Prajjwal Kumar		
16	1BM20ME 091	Vignesh Karthic G K		
17	1BM20EC194	Bhardwaj Bhat	ECE	
18	1BM20EC031	Deekshitha Reddy P		
19	1BM21AS038	Nithish S Reddy	AS	2
20	1BM21ME084	Aaradhya Malik	ME	
21	1BM21ME031	Darshan S D		
22	1BM21ME001	P M Varun Krishnan		
23	1BM21ME019	Arya V		
24	1BM19ME004	Abhinav Kumar		
25	1BM21ME070	Samanth Rajan N		

July 12th, 2023: VTU Local Inquiry Committee (LIC) visited the Department to inspect and grant temporary/ permanent affiliation of UG /PG Programmes and Research Centres for the Academic year 2023-24.

July 13th -15th, 2023: Dr. Venkatesh T. Lamani, Assistant Professor, Department of Mechanical Engineering, chaired a session for Thermal Track at 21st International Conference on Advances in Mechanical Engineering (ISME-2023) jointly organized by PES University and IIT-Madras at PES University, Bengaluru.

July 13th – 15th, 2023: Dr. Anil Chandra A.R., Assistant Professor, Department of Mechanical Engineering presented a research paper titled: 'Emissivity Study of Hierarchical GFRP-CNT Composites' in 21st ISME International Conference on Advances in Mechanical Engineering (ISME-2023) at PES University, Bengaluru.

July 13th – 15th, 2023: Akshaykumar. S. Jambagi (M.Tech Student- USN: 1BM20MTH01) and Venkatesh T Lamani, Assistant Professor, Department of Mechanical Engineering presented a paper titled 'CFD Airflow Analysis of a Generic Airblast Atomiser' in 21st International Conference on Advances in Mechanical Engineering (ISME-2023) jointly organized by PES University and IIT-Madras at PES University, Bengaluru.

July 14th, 2023: Dr. Venkatesh T Lamani et.al., Assistant Professor, Department of Mechanical Engineering along with UG students presented papers titled 'Hydrodynamic Characteristics of High-Pressure Homogenizer Using Computational Fluid Dynamics' in International Conference on Recent Advances in Fluid Mechanics and Nanoelectronics (ICRAFMN– 2023) Organized by Manipal Institute of Technology, Bengaluru, and NIT, Uttarakhand.

July 14th, 2023: Dr. Venkatesh T Lamani et.al., Assistant Professor, Department of Mechanical Engineering along with UG students presented a paper titled in "Hydrodynamic Characteristics of Cavitation Reactor for Various

RPM Using Computational Fluid Dynamics" in International Conference on "Recent Advances in Fluid Mechanics and Nano electronics" (ICRAFMN – 2023) Organized by Manipal Institute of Technology Bengaluru and NIT, Uttarakhand.

July 16th-21st, 2023: Dr. Sudarshan B, Assistant Professor, Department of Mechanical Engineering presented his research work findings through two conference papers at 34th International Symposium on Shock Waves (ISSW34), Daegu, Korea. His travel and other expenses were supported by Science and Engineering Research Board (SERB), Govt of India, and BMS College of Engineering respectively.

Paper title	Authors
Surface Morphological Study of Multi-walled Carbon Nanotubes subjected to Shock Wave Impact	Sudarshan B, Shreejeet P Tarale, Anil Chandra A R
Depolymerization study on Chitosan Biopolymer subjected to Shock Wave Impact	Deepak Y, Sudarshan B, Chintoo S Kumar

July 17th, 2023: A Memorandum of Understanding was signed between M/s VOLVO Group India Pvt. Ltd. and B. M. S. College of Engineering for the 'VOLVO-BMSCE CONNECT', a Collaborative Research Project Venture that aims to pool resources and expertise to cutting-edge-technology research. The online event was coordinated by Dr. Shivashankar R Srivatsa, Assistant Professor, and Dr. G. Giridhar, Professor & Head, Department of Mechanical Engineering with Dr. S. Muralidhara, Principal, as signatory**.**

July 21st & 22nd, 2023: Dr. L. Ravikumar, Professor, Department of Mechanical Engineering visited a college as an expert member for accreditation by NBA.

July 22nd, 2023: Mr. A. N. Damodhara, Instructor, Department of Mechanical Engineering participated in 2nd state-level staff badminton tournament organised by Patel Group of Institutions. Kadubisanahalli, Bengaluru and won First prize.

July 25th, 2023: As part of BMSCE-VOLVO-CONNECT, the collaborative research venture between BMSCE and Volvo, Kick-off meeting of stakeholders of the first Research Project initiated by Department of Mechanical Engineering was held on Tuesday, 25.07.2023 at 10.00 A.M. in Mechanical Engineering Seminar Hall. From the BMSCE Team, Dr. Shivashankar R. Srivatsa (SPOC), Dr. J. Sharanabasavaraja, Dr. Raghu Yogaraju, Dr. G. Giridhara. Dr. H. K. Rangavittal and Dr. V. Arun Kumar attended the meeting to finalize on the timeplan for the research project. From the VOLVO team, Mr. Dheepan Raja (SPOC), Mr. Antriksh Shinde, Mr. Surya Sreenivas Raju, Technical Members and Mr. Arjun Nayar from Purchase Department were present.

July 25th, 2023: Dr. Venkatesh T Lamani, Assistant Professor, Department of Mechanical Engineering attended BOE meeting as an External member at Department of Mechanical Engineering, BMS Institute of Technology and Management, Bengaluru.

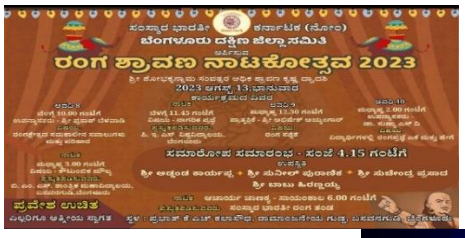
July 31st, 2023: Patent Granted: Intellectual Property India, The Patent Office of Government of India vide Application No. 202141014385, Patent No. 441669, (DOF– 30.03.2021) has granted Patent for an invention titled "A flexible Coupling Apparatus". Department of Mechanical Engineering Congratulates the patentees Dr. L. Ravikumar, Dr. G. Saravanakumar, Dr. Raghu Yogaraju, Sri. G. P. Ravishankar, Sri. Gurushankara Karle Chandregowda and Dr. V. Arunkumar.

Newsletter – AUGUST 2023

August 5th, 2023: Dr. L. Ravikumar, Professor, Department of Mechanical Engineering visited SNS College of Engineering, Coimbatore for the Academic audit.

August 5th, 2023: Dr. S. M. Suresh, Professor, Department of Mechanical Engineering attended the fourth Board of Governors Meeting at Ramaiah Institute of Management Studies (RIMS), Bengaluru.

August 13th, 2023: Dr. H. R. Prakash, Prof. Rajesh P, Dr. Venkatesh T Lamani, Dr. Raghu Yogaraju, Assistant Professors, Department of Mechanical Engineering along with Dr. Madhav Murthy, Assistant Professor, Wellingkar Institute of Management Development & Research, performed a play (Drama) entitled 'Aantharmuki' in Ranga Shravana Natakothsava-2023 at K H Kalasoudha, Basavanagudi. Organized by Samskara Bharathi, Karnataka(R) Bengaluru South.



August 18th & 19th, 2023: Dr. G. Giridhara, Professor and Head, Department of Mechanical Engineering visited a College in Odisha as an expert member for Accreditation by NBA, New Delhi.

August 18th, 2023: Department of Mechanical Engineering congratulates Dr. G. Karthik, Assistant Professor, Department of Mechanical Engineering BMSCE, for being awarded Doctor of Philosophy degree (Ph.D) by Indian Institute of Technology, Bombay for the thesis titled 'Joint Loading in Walking with Wearable Robotic Devices: Insights from Musculoskeletal Simulations for Design and Control'.

August 18th, 2023: Dr. Ravikumar M, Assistant Professor, Department of Mechanical Engineering attended one-day workshop on Gas Turbine Technology – Opportunities and Challenges organized by Dept. of Aerospace Engineering, B.M.S. College of Engineering.

MOU: August 21st, 2023:
An Academia Industrial collaboration has been initiated through an MOU between B.M.S College of Engineering and M/s Innovmon Technologies Pvt.Ltd., in the eVehicles domain, renewable energy systems and mechanical engineering with focus on materials testing, wind tunnel experiments, engineering design using state of the art engineering software. Dr. Nagashri, HOD, Dr. Umavathi, Assistant Professor, Department of EEE, and Dr. Ravikumar R. N., Associate Professor, Department of Mechanical Engineering, are the collaborators of the project..

August 26th, 2023: Final Ph. D. Viva-voce of Ms. Roopa D. (1BM19PME01) was held under the guidance of Dr. Vardhaman S Mudukappanavar, Associate Professor, Dept. of Mech Engg., under Visvesvaraya Technological University.
Title of the Thesis: Cutting performance and wear characteristics of PVD and CVD coated tools in Machining of hard materials.

August 28th, 2023: Dr. K. Veerabhadrappa, Assistant Professor, Department of Mechanical Engineering, visited M/s Mysore Electricals Industries Ltd., a leading manufacturer of Switch gears and electrical wiring panels to explore collaboration to provide internship for students of B.E. in Mechanical Engineering, Electrical & Electronics Engineering and Industrial Engineering and management.

August 30th, 2023: Dr. R. N. Ravikumar, Associate Professor, Department of Mechanical Engineering was invited as an expert member for interview panel for selection of Faculty by the department of Automobile Engineering, Dayananda Sagar College of Engineering, Bengaluru.

Journal / Publications:
August 4th, 2023: Dr. B. Sachin Kumar, Assistant Professor, Department of Mechanical Engineering published a technical paper titled 'Understanding the interplay of solution and process parameters on the physico-chemical properties of ZnO nanofibers synthesized by sol-gel electrospinning' along with Niranjan N Prabhu, B V Rajendra, S Anandhan, Krishna Murthy, R B Jagadeesh Chandra, Gibin George, and B Shivamurthy, in Mater. Res. Express 10 (2023) 085001. https://doi.org/10.1088/2053-1591/acead4

August 23rd, 2023: Dr. Anil Chandra A. R. Dr. Santhosh D, Assistant Professors, Dr. J. Sharana Basavaraja, Professor, Department of Mechanical Engineering along with S Bharath Bhushan (1BM19MMD03), N V Sreekanth, Shylaja Srihari and C M Manjunatha presented the paper titled 'Fatigue Crack Growth Rate Behavior of a Additively Manufactured Nickle Based Superalloy' at the 3rd International Conference on Structural Integrity (ICONS) at Mahabalipuram.

Newsletter – SEPTEMBER 2023

August 24th, 2023: Sri. Rajesh P, Assistant Professor, Department of Mechanical Engineering, attended and presented online a paper titled 'Optimize the finger seal pad design for reducing the leakage between high-pressure and low-pressure region' at the MYTRIBO Symposium 2023 (MITC2023) organized by University Putra, Malaysia.

September 1st, 2023: Dr. G. Giridhara, Professor & Head, Department of Mechanical Engineering attended Board of Studies Meeting in Mechanical Engineering, BNM Institute of Technology, Bengaluru, as an External Expert Member.

September 4th, 2023: A Guest Lecture on 'Maintenance of static equipment in petroleum Refineries' by Dr. R. Verma, S-OJT Trainer, was organized by Department of Mechanical Engineering under MEA. The talk was on "New dimensions and career opportunities in Oil and Gas Industry for Mechanical Engineers in India and abroad. The talk covered the process of offshore oil extraction, refinement and transportation. It emphasized key aspects related to stationary equipment such as heat exchangers, oil filters, pumps, along with piping design and allied activities related to oil and gas, Net Carbon Zero concept and the role of maintenance engineer in the entire cycle. A total of 96 students of IV semester Mechanical Engineering and Chemical Engineering were attended the talk.

September 5th, 2023: A team of faculty from Department of Mechanical Engineering comprising Dr. Shivashankar R Srivatsa, Dr. Raghu Yogaraju, Dr. Anil Chandra A.R, Sri Rajesh P, Dr. Sangamesh C Godi, Dr. Sachin Kumar B, Assistant Professors, Dr. Sharana Basavaraja, Professor, Department of Mechanical Engineering, and Dr. Y. S. Rammohan, Professor, Department of Aerospace Engineering, visited M/s Honeywell Technology Centre India to discuss opportunities of research collaboration in the field of aerospace technologies.

September 6th & 7th, 2023: Dr. G. Giridhara, Prof. & Head, Department of Mechanical Engineering attended and presented the following two papers in International Conference on Processing & Fabrication of Advanced Materials - PFAM29 at Indian Institute of Technology, Tirupathi.

News Letter – OCTOBER 2023

1) Slurry Erosive Wear Behavior of TiO2-Inconel718 Composite coatings Plasma Sprayed on Mild Steel Substrate authored by Dr. R. Suresh Kumar and Dr. G. Giridhara
2) Effect of Plasma sprayed TiO2-15wt% Inconel 718 composite coatings on salt spray corrosion of on SS304 steel authored by Dr. R Suresh Kumar, Dr. G. Giridhara, Sri. E. Suresh

Dr. Karthick G., Assistant Professor, was felicitated for obtaining Ph.D. degree from IIT, Bombay during the academic year.

September 9th, 2023: Dr. Rudra Naik, Professor, Department of Mechanical Engineering and Principal, BMS Evening College of Engineering participated in 'Automation Summit 2023', a flagship event of ISHRAE, Bengaluru at Hotel La Marvella, Bengaluru.

September 13th- 27th, 2023: The Induction Program was conducted for First year B.E. students (batch of 2023).

September 23rd, 2023: Final Year B. E. Projects were evaluated to identify the Best Projects for the AY 2022-23 by a panel comprising Dr. L. Ravikumar, Dr. M. Ramachandra, Dr. S. Srinivas, Professors, Department of Mechanical Engineering, BMSCE, and Dr M. R. Kamesh, Associate Professor, Department of Mechanical Engineering, Dayananda Sagar College of Engineering, Bengaluru. The following three projects have been graded.

Place	Project title	Students	Guide
I	Developing Solutions to Differential Equations Related to Mechanical Engineering Domain using Physics-Informed Neural Networks (PINNs)	Sumedh D Karanth Vishnu Prathap JRVP Ninad Murali Ashwin Gupta	Dr. Sangamesh C Godi
II	Flow Visualisation using Photo Luminescent Technique for the Flow over an Airfoil with Tubercles	Udaya Karthik BS J Sanat Kumar Pratik Agarwal	Dr. B Sudarshan
III	Controlling Mechanical Motion using Micro controller	C B Karthik C Thanuj Sai Vedantha, Anusha C N	Dr. Santhosh D.

September 25th – 29th, 2023: Dr. Venkatesh T Lamani and Dr. Raghu Yogaraju, Assistant Professors, Department of Mechanical Engineering, attended through online mode a Five-day workshop on 'Universal Human Values-I' organized by UGC-AICTE.

Newsletter – OCTOBER 2023

September 21st, 2023: MOU with CSIR- NAL

A Memorandum of Understanding was made and entered into between BMSCE and Council of Scientific and Industrial Research represented by National Aerospace Laboratories, Kodihalli, Bengaluru, for the Skill Development Academic Connect- One Week One Lab campaign-CSIR-National Aerospace Laboratories. Dr. S.

M. Suresh, Professor, Dr. Ram Rohit V and Dr. H. R. Prakash Assistant Professors, Department of Mechanical Engineering coordinated the proceedings.

This MOU was signed for the following purposes.

- Creating Opportunities for BMSCE faculty and Research Scholars to collaborate with Engineers, Scientists and Researchers at CSIR-NAL.
- Offering opportunities for interested Scientists from CSIR-NAL to pursue research for a doctoral degree at BMSCE.
- Providing Internship and Research Opportunities to B.E. / M. Tech Students for BMSCE Students at CSIR-NAL.
- Organizing joint workshops and conferences on current topics.
- Undertaking joint projects of mutual interest.
- Facilitating online delivery of lectures, seminars and workshops.

October 5th, 2023: Antarmukhi, a poignant play, was enacted by the following faculty of Department of Mechanical Engineering during the event B. M. S Kala Sourabha.

Dr. Raghu Yogaraju, Dr. H. R. Prakash, Dr. Venkatesh T Lamani, Sri. Rajesh P, and Dr. Madhav Murthy, WeSchool.

October 6th & 7th, 2023: Dr. L. Ravikumar, Professor, Department of Mechanical Engineering visited colleges as expert member for accreditation by NBA.

October 7th, 2023: Fluid Power Society of India in association with the Department of Mechanical Engineering conducted Fluid Power R & D Confluence (FPRD-2023) in Auditorium 1, Platinum Jubilee Block, BMSCE.

Theme: 1. Product Indigenization/ Development
2. Disruptive Technology

Chief Guest: Dr. G. Satheesh Reddy, President, Aeronautical Society of India (AESI), Former Scientific Advisor to Raksha Mantri and Secretary DD R&D and Chairman DRDO.
Keynote Speaker: Mr. V Sekar, Chief General Manager R & D, BEML.
About 87 papers were submitted and presented by the industrial researchers in the R&D confluence. Awards were presented in the evening for the winners of quiz competition and best project winners. It was a network day of fluid power professional and students of BMSCE. Companies like Wipro fluid power, L&T Fluid power, Eaten – Pune, Walvoil India Ltd, Hycom Ltd, Janatics Ltd, FESTO, Sai Fluid power, and many more have participated in the conference. Dr. G. Saravanakumar, Associate Professor, Department of Mechanical Engineering coordinated the event.

October 10th, 2023: Dr. Venkatesh T Lamani, Assistant Professor, Department of Mechanical Engineering attended One-week Short Term Training Programme on "IC Engine Testing and Simulation" held from 10th to 14th October

organised by Department of Mechanical Engineering, Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur, India.

October 11th, 2023: Bureau of Indian Standards (BIS) and Department of Mechanical Engineering, BMSCE jointly conducted One-day seminar on "Quality Connect Campaign" program for the purpose of engaging the consumers in direct connect mode. Through this programme, the BIS aims to empower the consumer on the benefits of BIS schemes and utilize its features through student participation. The training campaign is undertaken through network of youth volunteers (Engineering Students). It was proposed to train students from BMSCE and other Engineering Institutions through this connect campaign. Dr. G. Giridhara was nominated as a Mentor/ Co-ordinator for the said Quality Connect Programme. A total of 60 students from BMSCE attended the talk. Dr. Chidanand K M, faculty, coordinated the event through MEA

October 13th, 2023: Delegates from Dassault Systemes, India, Mr. Huzefa Salim - Director for Academia & User Empowerment and Mr. Praveen Bhagoji, Project Manager, La Fondatio, Dassault Systemes, visited the Product Innovation Lab, Department of Mechanical Engineering, to review the progress and implementation of research projects and laboratories funded by Dassault Systemes. Dr. Anil Chandra A R, Prof. Devaraj K, Dr. Bharathi V., Faculty from Mechanical Engineering Department alongwith faculty from Department of Civil Engineering attended the interaction.

October 18th, 2023: Dr. Anil Chandra A.R., Assistant Professor, Department of Mechanical Engineering was nominated as Joint-Secretary for the Indian Society for Advancement of Materials and Process Engineering (ISAMPE), Bangalore Chapter.

October 18th, 2023: A technical delegation from M/s Trane Technologies Ltd. visited Department of Mechanical Engineering, BMSCE. Shri. Atul Singhal, Engineering Leader from Trane Technologies interacted with the faculty members of Mechanical Engineering department to explore possible research collaboration in the field of decarbonization methods related to sustainable engineering.

October 18th & 19th, 2023: Dr. Venkatesh T Lamani, Assistant Professor, Department of Mechanical Engineering attended the EMS 14001 Workshop at BMSCE by Bureau Veritas organized by IQAC.

October 20th, 2023: A Guest Lecture was organized by the Department of Mechanical Engineering through MEA on "Vacuum Technology for Process Applications" by Prof. V. Vasudeva Rao, Retd. Professor, IIT Kharagpur. The talk aimed at educating students about the importance of negative pressure in various applications and practical difficulties. He also discussed the various job opportunities in the upcoming areas involving the use of negative pressure-based applications. 165 students from Mechanical Engineering department attended the talk.

Newsletter – NOVEMBER 2023

September 2023: Prof. Ramesh M Chalkapure, Assistant Professor, Department of Mechanical Engineering, completed AICTE-NITTT training, Modules 1 to 7, conducted by NITTTR-Chennai.

October 25th, 2023: Mr. Amith Kaniyattu Roy, Student of B. E. (Mechanical Engineering), under the guidance of Dr. B. Sudarshan, Assistant Professor, Department of Mechanical Engineering, presented a paper titled 'CFD analysis of drone propeller with tubercle at leading edge' in the 15th International Symposium on Experimental and Computational Aerodynamics of Internal Flows (ISAF-15) at IIT-Madras, Chennai.

November 3rd, 2023: Signing of Non-Disclosure Agreement (NDA)
A non-disclosure Agreement was executed between B. M. S. College of Engineering and M/s Fernandez Innovative Solutions pertaining to BMSCE-VOLVO CONNECT Collaborative Research Project of the Department of Mechanical Engineering, BMSCE for the purpose of supply of testing machines for the project, on 3rd November 2023, at 2:30 pm in the chambers of the Principal, BMSCE. Dr. S. Muralidhara, Principal, BMSCE and Executive Authority of the Collaborative Project, Mr. Abhishek B. M. Fernandes, Proprietor, M/s Fernandes Innovative Solutions and the team members of the project Dr. G. Giridhara, Professor & HOD, Mechanical Engineering, Dr. V. Arun Kumar, Dr. Shivashankar R. Srivatsa and Dr. Raghu Yogaraju were present during the occasion.

November 3rd, 2023: A Non-Disclosure Agreement was executed between B. M. S. College of Engineering and M/s. Honeywell Technology Solutions Lab Pvt. Ltd. for the intended collaborative activities between Department of Mechanical Engineering and HTS.

November 6th-8th, 2023: A 3-days training on 'Particle Image Velocimetry (PIV) Flow Visualization Technique and Its Applications' was conducted at the department of Mechanical Engineering from November 6-8, 2023 for V and VII semester UG students from Mechanical, Chemical, Civil, and Aerospace departments.

Mr. Surya Narayanan P., Scientist from NAL, Mr. Rahul and Mr. Manoj, Research Fellows from IISc, and Dr. Sudarshan B, inhouse faculty of the department were the resource persons. Hands on training and related

theoretical discussions on PIV technique was conducted. 25 students participated in the training coordinated by Dr. B. Sudarshan, Assistant Professor, Department of Mechanical Engineering.

November 10th, 2023: UHV online monthly lecture series-1 was organized for first semester students. The lecture was delivered by Prof. K. Chidananda Gowda, Former Vice Chancellor, Kuvempu University on the topic: Human Values and Technological Values: Harmonious Integration". This program was conducted as a part of student Induction Program.

November 17th, 2023: Dr. Venkatesh T. Lamani, Assistant Professor, Department of Mechanical Engineering completed the course assessment for the Internal Auditor Training course on Environmental Management System (Based on ISO 14001: 2015) certified by Bureau Veritas**.**

November 17th & 18th, 2023: Dr. L. Ravikumar, Professor, Dr. G. Saravanakumar, Associate Professor & Dr. Raghu Yogaraju, Assistant Professor, Department of Mechanical Engineering along with students from Department of Mechanical Engineering, participated in the International Conference on Vibrations Science and Technology, INVEST-2023 held at IISc, Bengaluru.

November 21st, 2023: The following students from Department of Mechanical Engineering have secured MiM Scholarship (Mercedes in Mech Scholarship Program). We congratulate the students for the same.

Name	USN	Current Semester	Year of Passout
Aaradhya Malik	1BM21ME001	5th Sem	2025
Dhanajna Karayi Sajeeva	1BM21ME032	5th Sem	2025
Nidhi Prakash Joshi	1BM21ME065	5th Sem	2025

November 28th, 2023: Dr. Shivashankar R. Srivatsa and Dr. B. Sachin Kumar, Assistant Professors, Department of Mechanical Engineering, attended a One-day CoreEL Edu Summit-AI in Engineering on the theme 'Powering Artificial Intelligence System Simulation' organized by CoreEL Technologies and MathWorks (India).

Journal / Publications:

October 24th -27th, 2023: Dr. Sudarshan B, Assistant Professor, Department of Mechanical Engineering along with students Amit Kaniyattu Roy, Manish M S, Meenakshi B. Aili, Mohammed Fahad presented a paper titled 'Numerical Simulation On Rotating Drone Impeller With Serrations At Leading And Trailing Edges' in the 15th International Symposium on Experimental and Computational Aerodynamics of Internal Flows (ISAF-15) at IIT Madras.

November 2nd - 3rd, 2023: Mr. Rajesh P., Assistant Professor, Department of Mechanical Engineering, presented a paper titled "Sustainable Designs: The key to unlocking learning potential" in 2nd Lincoln International HE Practices Conference held at the S. P. Mandali's Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru Campus.

November 2nd - 3rd, 2023: Rajesh P, Assistant Professor Department of Mechanical Engineering along with Likith, Skandan, Madhav Murthy presented paper on "Exploring Sustainable Initiatives in Higher Education Institutions: A Case Study of Bengaluru" in
2nd Lincoln International HE Practices Conference held at the S.P. Mandali's Prin. L.N. Welingkar Institute of Management Development and Research, Bengaluru Campus.

Dr. B. N. Sarada, Professor, Department of Mechanical Engineering, along with Dr. Vardhaman S, Mudakappanavar, Associate Professor, Department of Mechanical Engineering and Sanjo Thomas published a paper titled "Synthesis and Testing of Transparent Wood" in Goya Journal, ISSN NO 0017 – 2715, 3, Volume 16, Issue 10, 2023, DOI:12.163022. Gj.2023. v16.10.14

Newsletter – DECEMBER 2023

December 10th, 2023: Dr. G. Giridhara, Prof. & Head, Department of Mechanical Engineering completed the consultancy work of Rs.1,35,000/- for design and drawings of stop log gates and trash racks to KC Valley projects Phase 2 (lift 7 & lift 8) for Muduwadi and Yadururu sites of lift irrigation projects, Kolar.

December 11th-16th, 2023: Dr. Shivashankar R Srivatsa, Dr. Sangamesh C. Godi, and Dr. Chidanand K. M., Assistant Professors, Department of Mechanical Engineering participated and attended One-week AICTE Training and Learning Academy (ATAL) Faculty Development Program on 'Advances in Modelling, Simulation and Testing of EV Technology' conducted by Department of Mechanical Engineering, R. V. College of Engineering, Bengaluru.

December 14th- 17th, 2023: Dr. Venkatesh T Lamani, Assistant Professor, Department of Mechanical Engineering attended 27th National and 5th International ISHMT-ASTEF Heat and Mass Transfer Conference and presented a paper titled "Effect of Pressure Drop on Multi-phase Flow of High-Pressure Homogenizer-CFD Study" held at IIT, Patna.

December 14th-15th, 2023: **Phase-shift 2023**

The following events were conducted in the Department of Mechanical Engineering as part of the Technical fest Phase Shift-2023.

1. Unmanned, Unmatched – Seminar:
Resource Person :Dr. S. Guruprasad,
Former Director General DRDO,
Distinguished Scientist, New Delhi
Former Director R&DE (Engineers), DRDO, Pune.
No. of participants : 97
Focused on autonomous systems like swarm technology for UAVs, the event aimed to enlighten students on their pivotal role in defense. The seminar included discussions on applications and implications of showcased technologies, fostering an engaging atmosphere for learning.
Event Coordinators : Nihad Ahmed, Veerendrakumar Salimath (5th Sem)

2. Autonomous Mobility Solution

Resource person: Mr. Vivek,
Business Development Manager-Acoustics,
Hexagon MSC Software Ltd., Bangalore
No. of participants: 116
A seminar on transformative leap in the field of transportation, promising to redefine the way we

move and interact with our surroundings. The innovative systems leverage cutting-edge technologies, such as artificial intelligence, machine learning, and advanced sensors, to enable vehicles to navigate and operate without human intervention. The seminar included discussions on applications and implications of showcased technologies like AI&ML and electronics sensors, fostering an atmosphere for interdisciplinary learning.

Event Coordinators: Adarsh Raj, Aaradhya Malik (5th sem)

3. Futuristic Diagnostic Tool In Mechanical Engineering

Resource person: Dr. Girish Doddamani
CEO at Enviro Sense Tech , Bengaluru
No of participants: 32

This seminar highlighted the convergence of innovation and diagnostics, offering a visionary perspective into cutting-edge tools and focused on the complexity of modern mechanical engineering systems and the escalating demand for cutting-edge diagnostic solutions.

Event Co-ordinators: Dhanajna K. S., Akshay K. (5th sem)

Dr. Ravi L, Sri. Santhosh Somashekar, Sri. Shiva Kumar M M, Assistant Professors, Department of Mechanical Engineering coordinated the events of Phase Shift - 2023.

December 16th & 17th, 2023: Dr. R. Suresh Kumar, Assistant Professor, Department of Mechanical Engineering conducted Two-day workshop on 'Outcome-based education and accreditation' at JIS College of Engineering, Kalyani, Nadia.

December 19th, 2023: A Guest lecture on the topic 'Basics of Heating Ventilation and Air Conditioning & Refrigeration Insulation' was organised by department of Mechanical Engineering, BMSCE for III Semester students at Mechanical Engineering Seminar Hall. Sri. Ramanathan Annamalai, Manager – Business Development, ALP Aeroflex Company was the resource person.

The program aimed at educating students about the latest development in the field of HVAC. He also briefed the students about the career opportunities in HVAC along with some pre-requisites essential for the budding technocrats to enter this field of engineering. His talk also focused on maintenance issues at remote site and ways to overcome for boosting the profitability of the firm. A total of 86 students from BMSCE attended the talk. Dr. Sudarshan B., Assistant Professor, Dept. of Mechanical Engineering coordinated the event.

December 21st, 2023: Dr. G. Giridhara, Professor & Head, Department of Mechanical Engineering was invited by VTU as an Expert Committee Member to inspect an Engineering college in Bangalore.

December 22nd, 2023: A guest lecture on 'Role of Computer Aided Design in product design and Manufacturing' by Sri. T. R. Amarnath Babu, Trainer from Vijay CAD/CAMM solutionz ,was organized by the department of Mechanical Engineering, BMSCE for V-A Semester students. The program aimed at educating students about the latest development and job opportunities in CAD/CAM domain. Dr. Chidanand K M., Assistant Professor, Dept. of Mechanical Engineering coordinated the event. A total of 46 students from V Semester section-A attended the talk.

December 30th, 2023: Mechanical Engineering Association (MEA) in association with Department of Mechanical Engineering organized one day seminar on "Machine Learning for Enhanced Engineering" in Mechanical Engineering Seminar Hall for V and VII Semester Students as a part of skill enhancement. Sri. Vivek and Sri. Debashish from Hexagon MSc Software were the resource persons.

The speakers illustrated the analytical, numerical and AIML methodology and tools for any engineering problems. The significance of training data and sample size were explained with real life examples in process engineering application. Sri. Debashish showcased few case studies on flow induced noise with sample data points on

ODYSSEE A-EYE and solver. A total of 60 students from BMSCE attended the talk. Dr. B. Sachin kumar, Assistant Professor, Dept. of Mechanical Engineering coordinated the activity.

Journal / Publications:

November 1st, 2023: Dr. B. N. Sarada, Professor, Department of Mechanical Engineering along with G. Padmavathi, S. P. Shanmuganatan, H. Ramesha, B. V. Padmini, & P. Sampathkumara published a journal on 'Fatigue Behaviour of HVOF‐Sprayed WC–Co–VC and Cr3C2–NiCr–VC Coatings on AISI 4340 Steel' in J. Inst. Eng. India Ser. D
https://doi.org/10.1007/s40033-023-00592-6

December 7th, 2023: Dr. R. N. Ravikumar, Dr. Vardhaman S. Mudakappanavar; Associate Professors, Dr. Tataram K. Chavan, Assistant Professor, Department of Mechanical Engineering along with Dr. K. J. Rathanraj, Professor, Department of Industrial Engineering Management published a technical paper titled 'Experimental studies on performance of air foil thrust bearing load carrying capabilities considering different foil materials' International Conference on Advances in Materials, Ceramics and Engineering Sciences (AMCES-2020), AIP Conf. Proc. 2399, 030023-1–030023-12; https://doi.org/10.1063/5.0132220

December 13th, 2023: Dr. Anil Chandra, A.R., Assistant Professor, Department of Mechanical Engineering along with L. Lokesh Kumar, B. S. Raviteja, S. V. Ashish, A. Arun, and C. M. Manjunatha, Structural Integrity Division, CSIR-NAL (National Aerospace Laboratories) published a technical paper on 'Simulation Studies of Low-Velocity Impact Damage in FRPS' in, R. Tiwari et al. (eds.), Vibration Engineering and Technology of Machinery, Volume I, Mechanisms and Machine Science 137.
https://doi.org/10.1007/978-981-99-4721-8_15

December 14th-17th,2023: Dr. B. Sudarshan, Assistant Professor, Department of Mechanical Engineering along with UG Students-Mr. Udayaa Karthik B S, Sanat J Kumar, and Pratik Agarwal presented a conference poster in 27th National and 5th International ISHMT-ASTFE Heat and Mass Transfer Conference on 'Flow Visualization study on a NACA0020 airfoil with sinusoidal tubercles using photo luminescence particles' at IIT Patna, Patna-801106, Bihar, India.

November 15th, 2023: Dr. Anil Chandra A.R., Assistant Professor, Department of Mechanical Engineering along with Jayaram R. Pothnis, Akshay K. Hajagolkar, Raj Das, Suhasini Gururaja published a paper titled "Open-hole fatigue testing of UD-GFRP composite laminates containing aligned CNTs using infrared thermography" in Composite Structures, Elsevier, Volume 324, 15 November 2023, 117557
https://doi.org/10.1016/j.compstruct.2023.117557

November 30th, 2023: Dr. Suhas B.G, Dr. Anil Chandra A. R,, Dr. Shivashankar R Srivatsa, Assistant Professors, Department of Mechanical Engineering and Dr. Prema V, Associate Professor, Department of Electronics and Electrical Engineering, BMSCE published a paper titled "Design of a low velocity wind turbine blades for power generation: part I-aerodynamic performance" in Sadhana, Indian Academy of Sciences, Springer Publication (2023),48:276 (Web of Science)
https://doi.org/10.1007/s12046-023-02339-1