



PVPSIT

DEPARTMENT OF MECHANICAL ENGINEERING



A Half- Yearly

News Letter

January 2023

01



Guest Lectures / Workshops
Organized

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03

Industrial visits



04

Students Cornor

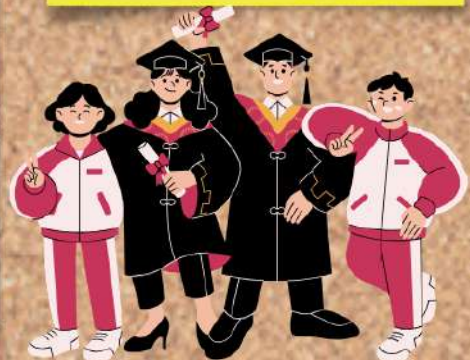


02

Faculty Achievements

Publications in
Journals and
Conferences

Workshops Attended



PVPSIT

Department of Mechanical Engineering

NEWS LETTER

January, 2023

About the Department

The Department of Mechanical Engineering has been in existence ever since the college started in year 1998. Department is affiliated to JNTU since 1998. B. Tech. Program is accredited by NBA-AICTE in May 2007 for 3 years and provisionally accredited for 2 years in June 2012 and is certified by ISO 9001:2015 certification. It is provisionally accredited for 3 years under OBE Tier-II in the year 2016 and Once again for 3 years under OBE Tier -I in 2019. The Programme was accredited by NBA thrice in the years 2007, 2012, 2016 under Tier-II subsequently accredited under Tier-I in 2019.

The Department is proud to have a vibrant student fraternity who pursue Undergraduate and Post-graduate courses. The annual intake of students is 60 in the undergraduate course and 6 in Post graduate course. Total area of the Department is 5084 sq.mts. The Department has facilities in terms of faculty, infrastructure and equipment. The Department has a team of diversely qualified faculty including 5 Professors, 5 Associate Professors and 24 Assistant Professors, who aims at delivering quality lectures that blends with their rich research experience. The total worth of the equipment available in the Department is Rs. 2, 78, 43, 795.00.

Numerous research papers have been published in National and International Journals and Conferences. The Department arranges guest lectures by eminent professors from India and abroad, scientists from research organisations and experts from industry to bridge the gap between academics and industry. Faculty members are encouraged to improve their academic qualification and to gain experience by attending FDPs, workshops, conferences etc. They are also encouraged to present research papers at workshops and conferences, and to participate in co-curricular and extracurricular activities.

The Department promotes active industry-institute collaboration by organizing workshops and by taking part in sponsored research projects and consultancy services. Visits to the industries for faculty and students are frequently arranged to enhance the practical exposure with the real corporate world. Department also organizes programmes like Alumni interaction sessions with current students and make them familiar with specific market requirements and demands. Two Industry supported Labs were established in associated with APSSDC-DASSAULTS Lab and European Centre for Mechatronics, Germany.

College Vision

To provide rich ambience for Academic and Professional Excellence, Research, Employability skills, Entrepreneurship and Social responsibility.

College Mission

To empower the students with Technical knowledge, Awareness of up-to-date technical trends, Inclination for research in the areas of human needs, Capacity building for Employment / Entrepreneurship, Application of technology for societal needs.

Department Vision

To enhance the capabilities of students and mould them into innovative, employable, entrepreneurial, socially responsible graduates successful in advanced fields of research.

Department Mission

To impart quality education, ethical values, social responsibility, employability, research and entrepreneurial skills.

Programme Outcomes (POs)

PO - 1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO - 2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO - 3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO - 4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions

PO - 5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO - 6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice

PO-7: **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO -8: **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO - 9: **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO - 10: **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions

PO - 11: **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO - 12: **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Programme Specific Outcomes (PSOs)

PSO-1: Apply Engineering Principles for design, manufacturing and maintenance of mechanical systems

PSO-2: Execute multi-disciplinary projects and exhibit managerial, leadership and entrepreneurial skills.

Programme Educational Objectives (PEOs)

PEO-I: Progress in wide range of mechanical engineering fields with solid foundation in physical and engineering sciences.

PEO-II: Contribute as members of multi-disciplinary engineering teams, solve mechanical engineering and allied field problems resulting in significant societal development.

PEO-III: Achieve goals by pursuing higher studies / research, become entrepreneurs.

PEO-IV: Become responsible citizens by undertaking active role in their community.

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1. Workshops/Seminars/Guest Lectures/Training Programs/Symposiums organized:

The department of Mechanical Engineering organized ---

- i. A Two week workshop on **“Design, Simulation and Manufacturing (CATIA, SIMULA & DELMIA) tools using Dassault 3D experience platform”** in Association with APSSDC by Mr. N. Srikanth, Trainer, APSSDC, Mr. Y. Lokesh, Trainer, APSSDC for faculty from 04.07.2022 to 16.07.2022 in the Dassault Lab.



- ii. A Guest Lecture on **“Steel Selection for Automotive Application”** by Dr. G. Venkata Sarath Kumar, Material Scientist, Ashok Leyland, Chennai, Tamilnadu for III-B. Tech. ME students and faculty on 03.09.2022 from 10:00 AM in the Ground floor Seminar hall.



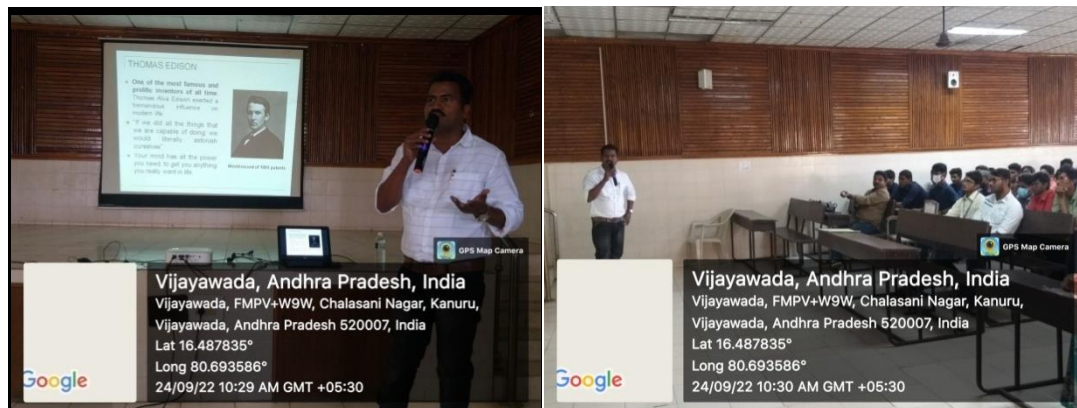
- iii. AICTE recognized One week online FDP on **“Enhancing Research Capabilities for Academic Career Progression”** in association with NITTTR Chandigarh at Knowledge Centre room number 459 by Dr. Harsh Vardhan Samalia, Associate Professor and Course Coordinator, EDIC Dept. NITTTR Chandigarh, Dr. Ankit Mahindroo, Assistant Professor, Thapar University, Patiala, Ms. Nayyer Khan, Assistant Consultant, Corporate Marketing Research, Tata Consultancy Services (TCS), Dr. Hergovind Singh, Assistant Professor, Department of Management Studies, MANIT, Bhopal, Dr. Hemant Kumar Vinayak, Associate Professor, Rural Development Dept. NITTTR, Chandigarh, Dr. K G Srinivasa, Professor (DSAI), Dr. SPM – IIIT, Naya Raipur, Chhattisgarh, Mr. Ashutosh Kumar Jha, Assistant Consultant, Corporate Marketing Research, Tata Consultancy Services (TCS), Dr.

Gaurav Goyal, Assistant Professor, Thapar University, Patiala, Dr. Niraj Bala, Professor and Head of Department, EDIC Dept. NITTTR, Chandigarh from 05.09.2022 to 09.09.2022.

- iv. A Seminar on “**Mechanical Engineering Industry at a glance**” by Sri. Paladugu Durga Prasad, Dy General Manager, Vigilance Department, Bharat Electronic Ltd., Machilipatnam for III & IV-B. Tech. ME students and faculty on 15.09.2022 from 10:00 AM in the Ground floor Seminar hall.

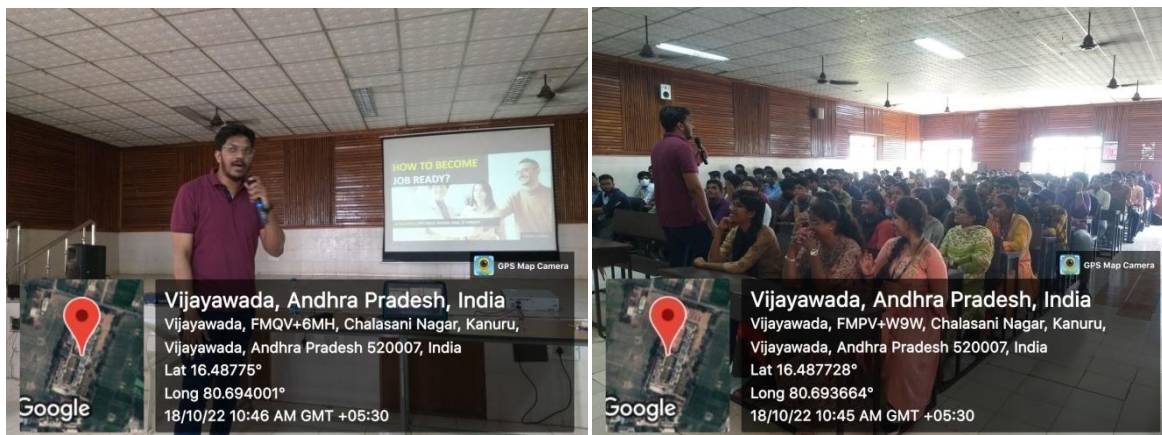


- v. A Two week Training Programme in association with BYTE Technologies on “**C & Data Structures**” by BYTES Trainers for III-B. Tech. ME students and faculty from 19.09.2022 to 25.09.2022 and 17.10.2022 to 23.10.2022 in the Auditorium.
- vi. A Guest Lecture on “**Create your own future**” by Sri. V. Rajkumar, Scientist F, Defence Research and Development Laboratory (DRDL), Hyderabad, Telangana for II-B. Tech. ME and ECE students and faculty on 24.09.2022 from 10:00 AM in the Ground floor Seminar hall.

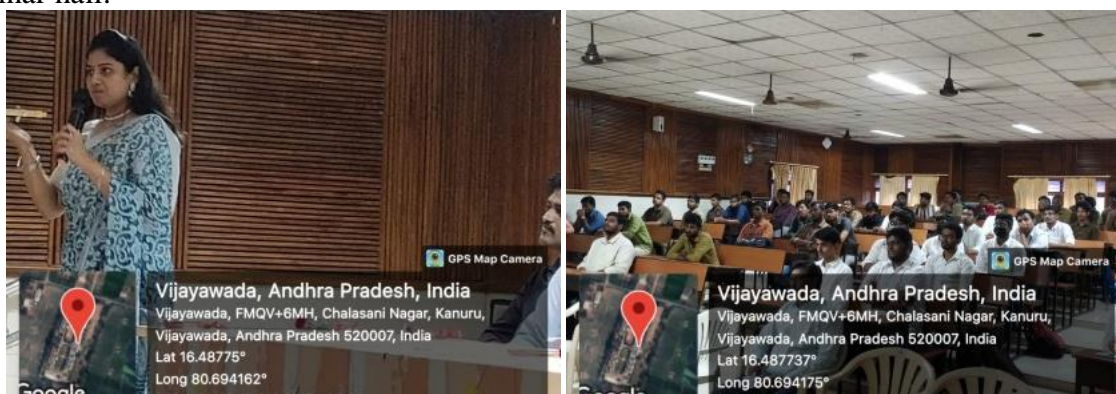


- vii. A Seminar of Entrepreneurship Orientation programme on “**Succeeding in the Business of HVACR and Winning Customers**” by Ms Kshama Jain, Managing Director, KEHEMS Technologies, Indore, Madhya Pradesh for IV-B. Tech. ME students on 14.10.2022 from 11:00 AM in the Knowledge centre room number 459.

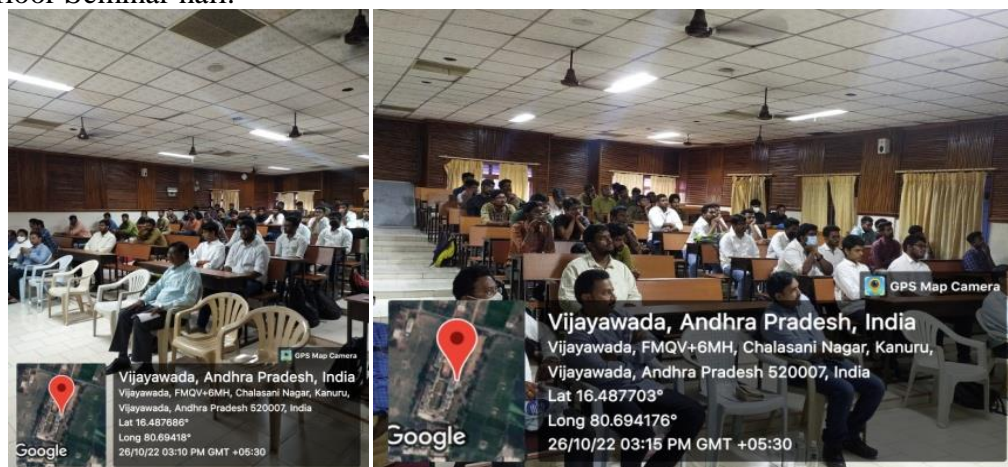
- viii. A Seminar on “**Career Guidance**” by Mr. Sai Devan. K, MBA, IIT Bombay, Soft Skills Trainer & Career Development Specialist, Manager, ICICI Bank, Hyderabad, for II -B. Tech. ME students on 18.10.2022 from 10:30 AM to 12:30 PM in the Second floor Seminar hall.



- ix. A Seminar on “**Opportunities in the field of HVAC&R**” by Mrs. Saandeepani Vajje, Director, Earthonomic Engineers Pvt. Ltd., President, ISHRAE Vijayawada Chapter. for IV -B. Tech. ME students on 26.10.2022 from 01:30 PM to 02:30 PM in the Ground floor Seminar hall.



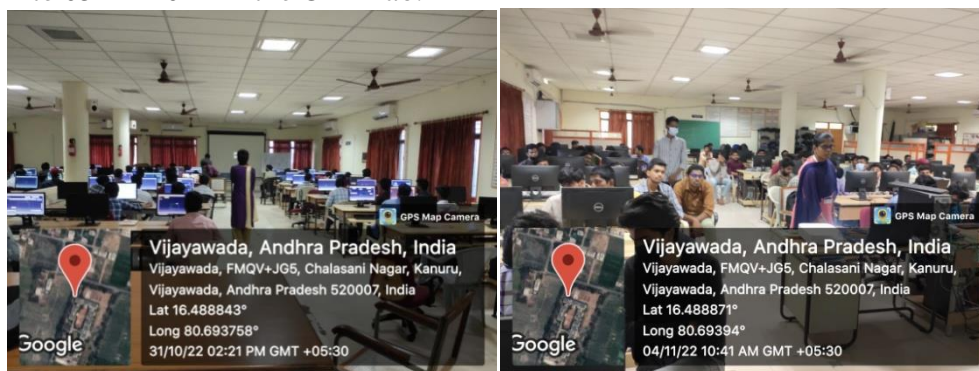
- x. A Guest Lecture on “**Safety Measures in HVAC Systems**” by Mr. K. V. Trinadha Prasad, Training Chair, ISHRAE Vijayawada Chapter, Director, KELVI COOL Agencies, Vijayawada for IV -B. Tech. ME students on 26.10.2022 from 02:30 PM to 03:30 PM in the Ground floor Seminar hall.



- xi. A Workshop on “**Assembling and Disassembling of VCR System**” by Mr. Edison P., Director, Vijaya Refrigeration & Air conditioning Engineers, Secretary, ISHRAE Vijayawada Chapter., Mr. Dinesh Babu. P, Director, D3 HVAC Designs, Student Activity Chair, ISHRAE Vijayawada Chapter, Mr. Sk. Karimulla, Director, New Star Comfort Solutions, Youth Chair, ISHRAE Vijayawada Chapter, Mr. Sk. Moulali, Director, Comfort cool systems, Treasurer, ISHRAE Vijayawada Chapter, Mr. U. Siva Satyanarayana, Director, Sheetal Enterprises, ISHRAE Vijayawada Chapter for IV-B. Tech. ME students on 26.10.2022 from 03:30 PM to 05:30 PM in the Ground floor Seminar hall.



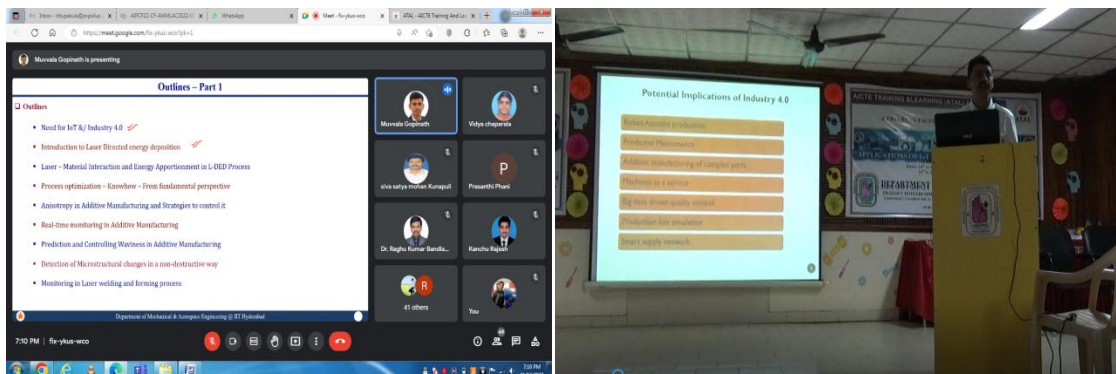
- xii. A one week Training programme on “**CATIA**” by Ms. Karra Prasanna Lakshmi, Trainer, APSSDC, Mr. Dongalasani Rambabu, Trainer, APSSDC for II-B. Tech. ME students from 31-10-2022 to 05-11-2022 in the CAD lab.



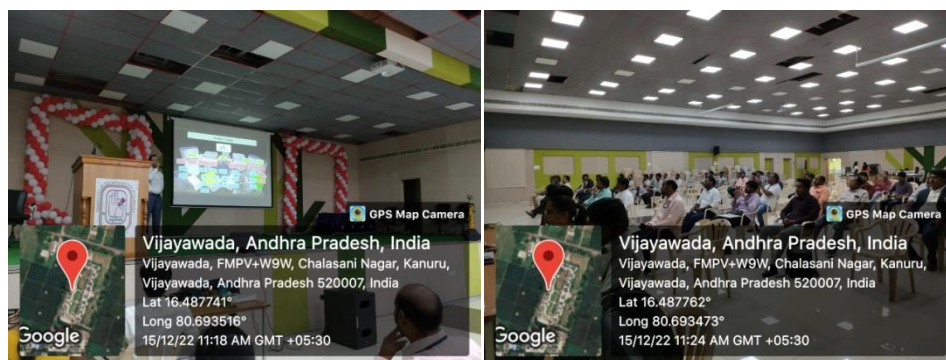
- xiii. A seminar of Entrepreneurship Orientation programme on “**Motivation to Entrepreneurship**” by Mr. T. Chaitanya, Managing Director, Akshaya Samvrudhi Technologies India Pvt. Ltd., Vijayawada and Hyderabad, for III-B. Tech. ME students on 07.11.2022 from 11:00 AM in the Second floor seminar hall.

- xiv. A two week ATAL sponsored FDP on “**Applications of IoT in Mechanical Engineering**” Speakers for online FDP from 14.11.2022 to 19.11.2022 were Dr. M. Gopinath, Assistant Professor, IIT Hyderabad, Dr. Debasish Mishra, Researcher, University of Connecticut, USA, Dr. Sanjeev Rajput, Assistant Professor, NIT Raipur, Dr. Rahul Jain, Assistant Professor, IIT Bhilai, Prof. Yuvraj K Madhukar, Assistant Professor, IIT Indore, Dr. Pranab Kumar Kundu, Assistant Professor, MNIT Allahabad and Speakers for offline FDP from 21.11.2022 to 25.11.2022 were Dr Anil Kumar, Scientist, VSSC, Trivandrum, Sri. Rama Krishna Dasari, CEO and founder, Efftronics Systems Pvt. Ltd., Mangalagiri, Guntur, Dr. V. Jagadish, Associate Professor, PVPSIT, Vijayawada, Dr. K. Rama Krishna, Professor & Dean (Quality), KL University, A.P, Mr. K. Siva Sankar, Co-founder, VIRIDUS Social

Impact Solutions and for Hands on practice sessions the resource persons were Dr.Habibulla Mohammad, Sr. Asst. Professor, Dept. of ECE, PVPSIT, Mrs. D. Hareesha, Asst. Professor, Dept. of ECE, PVPSIT, Mrs. B. V. Subbayamma, Asst. Professor, Dept. of ECE, PVPSIT and Mrs. Sri Lakshmi Chandana, Asst. Professor, Dept. of ECE, PVPSIT.



- xv. A one day Workshop In association with ISHRAE Vijayawada Chapter on **“Inverter Technology”** by Mr. Manohar Gummala, Deputy Manager, Project Sales, MITSUBISHI Electric India Pvt. Ltd., Vijayawada for technical experts from various industries, faculty and non teaching staff of Mechanical Engineering, PVPSIT on 15.12.2022 in the college Auditorium.



2. Papers presented in Seminars/Conferences/Symposiums by the faculty:

- i. Ch.Vidya has attended and presented a paper entitled “ Comprehensive review on mechanism accountable for dispersion stability of ultra-fine particle suspensions in heat transfer applications at the 2nd International Conference on Emerging Trends in Mechanical & Industrial Automation (ICETMIA)-2K22at Narasaraopeta Engineering College from 29th -30th July, 2022.
- ii. Ch.Vidya has presented a paper titled Thermal Degradation study of cotton waste pulp based cellulose nanocrystals at the International Conference on Materials Innovation and Sustainable Manufacturing (ICMISM-2022) at Vishnu Institute of Technology-Bhimavaram from 16th -17th Dec, 2022.

3. Workshops/Seminars/STTP/Conferences/Faculty Development Programmes /Awareness programmes attended by the faculty:

a) Seminars/Webinars:

- i. Jasti Surendra has participated in One day National Seminar on “Green Chemistry Applications in Process Development” organized by department of Chemistry, KL University on 11/11/2022.

b) Workshops:

- i. T.Rama Krishna has attended an online workshop on Artificial Intelligence and high performance computing conducted by National Institute of Technology, Mizoram and Indian Institute of Technology, Kharagpur from 25th -29th July, 2022.
- ii. T.Rama Krishna has attended an online Awareness workshop on “Energy Conservation Building code &Eco - Niwas Samhitha conducted by Andhra Pradesh State Energy Conservation Mission (APSECM) on 4th August, 2022.
- iii. Dr.K.Ravi Prakash Babu has participated in the workshop “Designing and Modeling of IoT, AI & ML Systems organized by AICTE, ATAL Academy, Arm Education and STMicroelectronics from 01st -05th August, 2022.
- iv. Ch.Lakshmikanth has participated in the Three Day International Virtual Workshop on "Research Methodology & Manuscript Writing" Jointly Organized by Lavender Literary Club, India, Cape Comorin Trust, India, Malaysian Industrial Relations & Human Resource Association (MIRHA), Malaysia from 09th - 11th September,2022.
- v. Dr.K.Srividya, Dr.P.Phani Prashanthi, U.Koteswara Rao, Dr.Sd.Abdul Kalam,Dr.K.Ravi Prakash Babu, Dr.P.Anusha, Dr.T.Rama Krishna, Dr.KIV.Vandana, Dr.Ch. Kishore Reddy,E.Kavitha, G.Bala Krishna,M.Rajya Lakshmi, K.Venkat Rao, Ch.Laxmi Kanth P.Gopala Krishnaiah, T.Srinag, P.Mastan Rao, N.Raghuram, Ch.Vidya, M.Radha Devi, T.J.Prasanna Kumar, has actively participated and successfully completed the requirements for the Workshop on Dassault 3D Experience Platform organized by APSSDC in association with Dassaults Systemes from 4th -16th September,2022.
- vi. Dr.T.Rama Krishna has participated in ACRESERVE organized by ISHRAE at PVPSIT on 15th Dec,2022.

c) STTP/STCs:

- i. Dr.B.Raghu Kumar, Dr.KIV.Vandana, V.Sravani has successfully participated in IP Awareness/Training Program under National Intellectual Property Awareness Mission organized by Intellectual Property Office, India on 12th October,2022.

- ii. Dr.KIV.Vandana , M. Rajyalakshmi has successfully participated the five days Online Short Term Course on “Renewable Energy: Pathways and Technologies” organized by Department of Mechanical Engineering, NIT Uttarakhand from 31/10/2022 to 04/11/2022.
- iii. Dr. P. Anusha and Dr. M. Naga Swapnasri, N.Raghuram have participated in the DST Sponsored National Level training programme on " Advanced Materials & Manufacturing Methods for Automobile Applications" organized by Dept. of Mechanical Engineering, GITAM School of Technology, GITAM (Deemed to be University), Visakhapatnam during 23/11/2022 to 29/11/2022.

d) Faculty Development Programmes:

- i. E.Kavitha has participated in the FDP on “Industrial Automation and Robotics” sponsored by Electronics & ICT Academy, NIT Warangal, from 01st –13th August 2022 at JSS Academy of Technical Education, Bengaluru.
- ii. KIV.Vandana successfully completed the NPTEL – AICTE FDP course on Innovation by Design during July-August-2022.
- iii. Ch.Vidya has successfully completed the NPTEL – AICTE FDP course on "Design Technology & Innovation” during July - Sep 2022.
- iv. Lakshmikanth Ch has successfully completed the NPTEL – AICTE FDP course on "Deep Learning during July - Oct 2022.
- v. Dr.T.Rama Krishna has successfully completed the NPTEL – AICTE FDP course on "Fundamentals of convective Heat Transfer” during July - Oct 2022.
- vi. Dr. K. Srividya has participated in a two weeks (40 hours) online Faculty Development Programme on “MATLAB Programming”, jointly organized by the Electronics and ICT Academies at MNIT Jaipur, NIT Patna and PDPM IITDM Jabalpur under the “Scheme of financial assistance for setting up of Electronics and ICT Academies” of the Ministry of Electronics and Information Technology (MeitY), from 22/08/2022 to 02/09/2022.
- vii. Dr. K. Srividya, E. Kavitha, M. Rajya Lakshmi, Dr.KIV.Vandana, P. Mastan Rao, M. Radhadevi and Sravani Vemuri, T.J.Prasanna Kumar, T.Rama Krishna have participated in the AICTE Recognized Faculty Development Programme on “Enhancing Research Capabilities for Academic Career Progression" Conducted by Entrepreneurship Development and Industrial Coordination Department at PVPSIT in collaboration with NITTTR Chandigarh from 05/09/2022 to 09/09/2022.
- viii. Dr. K. Srividya has participated in the Professional Development Programme on “Guidance and Counseling" conducted by NITTTR Chennai through online mode from 14/11/2022 to 18/11/2022.
- ix. M. Radhadevi and Sravani Vemuri, T.J.Prasanna Kumar, Ch.Mohan Sumanth have participated & completed successfully AICTE Training And Learning (ATAL) Academy Blended/Hybrid FDP on "Applications of IoT in Mechanical Engineering" from 2022-11-14 - 2022-11-19 to 2022-11-21 - 2022-11-25 at PVPSIT.

- x. Dr.Phani Prahanthi, Dr.Ch.Kishore Reddy, Dr.Sd.Abdu Kalam, Dr.KIV.Vandana, E. Kavitha M. Rajya Lakshmi, K.Venkat Rao, MVH.Satish Kumar, P.Gopal Krishnaiah, Ch.Vidya, G.Bala Krishna have participated in Two Week FDP on "Applications of IoT in Mechanical Engineering" from 2022-11-14 - to 2022-11-25 at PVPSIT.
- xi. Dr.KIV.Vandana , E.Kavitha, Ch.Vidya has participated in Two Week FDP on “ IoT in Mechanical Engineering” at PVPSIT from 14th -25th Nov,2022.
- xii. Dr.T.Rama Krishna has participated in one week FDP on “Hybrid Electric Vehicles” organized by GMR Institute of Technology, Rajam & VRSEC,Vijayawada from 21st – 25th Nov,2022.

e) Guest Lectures: NIL

f) Awareness programmes/Interaction meet/Quizzes, etc:

- i. J.Surendra has participated in the regional meet, Institutions Innovation Council at Sreenidhi Institute of Technology, Hyderabad on 12th August, 2022.
- ii. Dr.B.Raghu Kumar, Dr.KIV.Vandana, V.Sravani has successfully participated in IP Awareness/Training Program under National Intellectual Property Awareness Mission organized by Intellectual Property Office, India on 12th October,2022.

g) Conferences: NIL

4. Publications by the faculty (National/International Journals/ Conferences):

a) Scopus indexed journals:

- i. Balakrishna Gogulamudi, Raghu Kumar Bandlamudi, Balakrishna Bhanavathu, Venkata Sarath Kumar Guttula, A Prediction Model for Additive Manufacturing of AlSi10Mg Alloy, Transactions of the Indian Institute of Metals, July 2022<https://doi.org/10.1007/s12666-022-02676-5>
- ii. M. Radhadevi, G. Vijay Kumar, P. Gopalakrishnaiah, Process optimization of Titanium alloy machining with Wire Electro Discharge Machining using Taguchi's Grey Relational Analysis, INCAS BULLETIN, Volume 14, Issue 3/ 2022, pp. 75 – 84 (P) ISSN 2066-8201, Sep-2022, DOI: 10.13111/2066-8201.2022.14.3.7.
- iii. Kocharla, Ravi Prakash Babu, Bandlamudi, Raghu Kumar, Aruri, D. et al., Finite element modeling aspects in the fracture assessment of a low pressure steam turbine blade., Int J Interact Des Manuf (2022)., <https://doi.org/10.1007/s12008-022-01045-2>, October-2022.
- iv. Jayaraman Mathiyarasu , Jasti Surendra , Ganapavarapu Veera Raghava Sarma, Rajendran Rajaram , Sengottaiyan Shanmugan , Sankararao Mutyala, Graphene/Polyaniline nanocomposite as efficient electrocatalyst for oxygen reduction reaction for fuel cells, Inorganic Chemistry Communications, Volume 146, December 2022, Article: 110192, ISSN: 1387-7003, DOI: <https://doi.org/10.1016/j.inoche.2022.110192>, Scopus Indexed

- v. K. Srividya, P. Anusha, E. Kavitha, M. Naga Swapna Sri, V. Sravani, Analytical and Experimental study on FVA of Isotropic and Orthotropic Laminates with FEM Validations, INCAS BULLETIN, Volume 14, Issue 4/ 2022, pp. 145 – 156, (P) ISSN 2066-8201, (E) ISSN 2247-4528, Scopus Indexed.

b) SCI/SCIE/ESCI indexed journals:

- i. Raviteja Surakasi , Balakrishna Gogulamudi , Alla Naveen Krishna ,Raja Ambethkar M, Pravin P. Patil , Pradeep Jayappa, Optimization of the Process of Metal NanoCalcium Oxide Based Biodiesel Production through Simulation Using Super Pro Designer, Hindawi, Journal of Engineering, Volume 2022, Article ID 3473356, 6 pages, July-2022, <https://doi.org/10.1155/2022/3473356>, ESCI/Scopus Indexed.
- ii. Tarun Kumar Kottedda, D. Eshwar, G. Balakrishna, Sandeep Varma Kuchampudi, B. Durga Prasad, Sasivaradhan Sadasivam, Experimental Investigation on Metal Matrix Nanocomposite: Aluminium Alloy 6061 and 7075 with SiC and Fly Ash, Hindawi, Journal of Nanomaterials, Volume 2022, Article ID 8368934, 14 pages, September-2022, <https://doi.org/10.1155/2022/8368934>, SCI Indexed.
- iii. Mallampati Somaiah Chowdary, Gujjala Raghavendra, M. S. R. Niranjan Kumar, Shakuntala Ojha, Manne Anupama Ammulu, P. Phani Prasanthi, Evaluation of mechanical and tribological properties of nano clay reinforced Kevlar/Sisal polyester composites, Polymer Composites. 2022; Pg: 1–9, September-2022, DOI: 10.1002/pc.27067, SCI Indexed.
- iv. L. Karthick , R. Rathinam , Sd. Abdul Kalam , Ganesh Babu Loganathan , R. S. Sabeenian, S. K. Joshi, L. Ramesh, H. Mohammed Ali, Wubishet Degife Mammo, Influence of Nano-/Microfiller Addition on Mechanical and Morphological Performance of Kenaf/Glass Fibre-Reinforced Hybrid Composites, Hindawi, Journal of Nanomaterials, Volume 2022, Article ID 9778224, 10 pages, September-2022, SCI Indexed, <https://doi.org/10.1155/2022/9778224>.
- v. P. Ravi Kumar, T. Nancharaiah , D. Sameer Kumar, Sd. Abdul Kalam, G. Balakrishna, Flapwise vibration of functionally graded rotating tapered beam with tipmass, Sigma J Eng Nat Sci, Vol. 40, No. 3, pp. 640–648, September, 2022, ESCI Indexed.
- vi. Phani Prasanthi , Sivaji Babu Kondapalli, Niranjan Kumar Sita Rama Morampudi, Venkata Venu Madhav Vallabhaneni , Kuldeep Kumar Saxena, Kahtan Adnan Mohammed, Emanoil Linul , Chander Prakash , Dharam Buddhi, Elastic Properties of Jute Fiber Reinforced Polymer Composites with Different Hierarchical Structures, Materials 2022, 15, 7032. Pg: 1-20, October-2022, <https://doi.org/10.3390/ma15197032>, SCI Indexed.
- vii. V. V. Venu Madhav, Ch. Sri Chaitanya, P. Phani Prasanthi, A. V. S. S. K. S. Gupta, V. V. Spandana, Kuldeep K. Saxena, Chander Prakash, Design and analysis of angle-ply

arrangement on fracture properties of FRP composite structure under thermo-mechanical loading conditions subjected to central circle cut-out, International Journal on Interactive Design and Manufacturing (IJIDeM), <https://doi.org/10.1007/s12008-022-00984-0>, September-2022, ESCI/Scopus Indexed.

- viii. Kothuri Chenchu Kishor Kumar, Bandalamudi Raghu Kumar, Nalluri Mohan Rao, Tribological Parameters Optimization of AZ31-SiC Composite Using Whale Optimization Algorithm, Journal of Materials Engineering and Performance, Print ISSN: 1059-9495, November-2022, doi: <https://doi.org/10.1007/s11665-022-07570-1>, SCIE Indexed.
- ix. Phani Prasanthi P, Vallabhaneni Venkata Venu Madhav, Chadalavada Sri Chaitanya, Vallabhaneni Veda Spandana, Kuldeep K Saxena, Sahil Garg, Migbar A Zeleke, Prediction of impact behaviour for natural fiber-reinforced composites using the finite element method, Green Composites for Structural Applications, “Composites and Advanced Materials-2022”, Volume 31: 1–12; ISSN: 2634-9833, December-2022, SCIE Indexed.
- x. Bhiksha Gugulothu P. Anusha , M. Naga Swapna Sri , S. Vijaya kumar , R. Periyasamy, Suresh Seetharaman, Optimization of Stir-Squeeze Casting Parameters to Analyze the Mechanical Properties of Al7475/B4C/Al2O3/TiB2 Hybrid Composites by the Taguchi Method, Hindawi, Advances in Materials Science and Engineering, ISSN / eISSN: 1687-8434, Volume 2022, Article ID 3180442, 9 pages, September-2022, <https://doi.org/10.1155/2022/3180442>, SCIE Indexed.
- xi. S. Prabhu, M. Naga Swapna Sri, P. Anusha, G. Saravanan, K. Kannan, Selvaraj Manickam, Improvement of Mechanical Behavior of FSW Dissimilar Aluminum Alloys by Post weld Heat Treatments, Hindawi Advances in Materials Science and Engineering, ISSN / eISSN: 1687-8434, Volume 2022, Article ID 3608984, 8 pages, September-2022, <https://doi.org/10.1155/2022/3608984>, SCIE Indexed.
- xii. P. Phani Prasanthi, M.S.R.Niranjan Kumar, M.Somaiah Chowdary, V. V. Venu Madhav, Kuldeep K Saxena, Kahtan A. Mohammed, Muhammad Ijaz Khan, Gaurav Kumar, Sayed M Eldin, Mechanical Properties of Carbon Fiber Reinforced with Carbon Nanotubes and Graphene Filled Epoxy Composites: Experimental and Numerical Investigations, Materials Research Express, IOP Publishing Ltd, December-2022, SCI Indexed.
i. ISSN / eISSN:2053-1591
- xiii. P. Anusha, M. Naga Swapna Sri, V.V. Venu Madhav, Ch. Sri Chaitanya, V.V. Spandana, Kuldeep K. Saxena, Dalael Saad Abdul-Zahra, Emanoil Linul, Chander Prakash, Dharam Budhi, Raul Campilho, Dynamics of MHD Convection of Walters B Viscoelastic Fluid through an Accelerating Permeable Surface Using the Soret–Dufour Mechanism, Appl. Sci. 2022, Volume-12, Issue-19, ISSN: 2076-3417; Sep-2022, SCI Indexed

c) IEEE/Springer journals: NIL

d) UGC/other journals:

- i. M. Rajyalakshmi, M Venkateswara Rao, Application of Artificial Neural Networks and Genetic Algorithm for Optimizing Process Parameters in Pocket Milling of AA7075”, Journal of Scientific & Industrial Research, Vol. 81, September 2022, pp. 911-921, ISSN: 0022-4456, DOI: 10.56042/jsir.v81i09.55874
- ii. M. P. Krishna Sai, K. Navya Sri, K. I. Vishnu Vandana, Review on Ceramic Materials for Cutting Tool Applications, International Journal of Research Publication and Reviews, Vol 3, no 9, pp 677-682, September 2022, ISSN 2582-7421
- iii. Vidya Chaparala, G. Ravi Kiran Sastry, P. Phani Prasanthi, Contributing mechanisms for dispersion stability of nano fluids in the perspective of heat transfer application – A comprehensive review, Gradiva Review Journal, ISSN NO: 0363-8057, Volume-8, Issue 9, 2022, Pg: 436-441.

e) Conference Proceedings:

- i. M.N.V.S.A. Sivaram Kotha, T.J. Prasanna Kumar, U. Gobikrishnan, TA. Selvan, S. Rajesh, S. Madhankumar, Electrical discharge Machining process variable assessment on Al 7075 mixed composite materials utilizing multi-criteria optimization method, Materials Today: Proceedings, 2022, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2022.07.339>, (<https://www.sciencedirect.com/science/article/pii/S2214785322049719>), Scopus Indexed
- ii. T Rama Krishna , T J Prasanna Kumar , B Teja, Influence of Core-FacePlates and Cell geometry on the strength of Sandwich Honeycomb Structure, International Conference on “Emerging Trends in Mechanical Engineering and Industrial Automation” Organized by Dept of Mechanical Engg., Narsaraopet Engineering College, Narsaraopet, in Association with Institute of Engineers India from 29 to 30 July 2022, Proceedings of ICETMEIA-2K22, Page:45- 50, ISBN: 978-93-91420-07-9

Others

- i. Vidya Chaparala, G. Ravi Kiran Sastry P. Phani Prasanthi, Comprehensive Review on Mechanism Accountable for Dispersion Stability of UltraFine Particle Suspensions in Heat Transfer Applications, International Conference on “Emerging Trends in Mechanical Engineering and Industrial Automation” Organized by Dept of Mechanical Engg., Narsaraopet Engineering College, Narsaraopet, in Association with Institute of Engineers India from 29 to 30 July 2022, Proceedings of ICETMEIA-2K22, Page:91- 95, ISBN: 978-93-91420-07-9
- ii. **Ch. Lakshmikanth** , K. Venkatarao, A. Venkata Jayasri , S. Nagakumar, Experimental observation of Mechanical and microstructure properties of Corn /Coconut Hybrid composites with Alkali Treatment, International Conference on “Emerging Trends in Mechanical Engineering and Industrial Automation” Organized by Dept of Mechanical

Engg., Narsaraopet Engineering College, Narsaraopet, in Association with Institute of Engineers India from 29 to 30 July 2022, Proceedings of ICETMEIA-2K22, Page:189-193, ISBN: 978-93-91420-07-9.

- iii. Gopalakrishnaiah Peteti, Venkaiah Mandula and Bharathi Penumall, Multi Optimization of Process Parameters using Grey Relational Analysis, International Conference on “Emerging Trends in Mechanical Engineering and Industrial Automation” Organized by Dept of Mechanical Engg., Narsaraopet Engineering College, Narsaraopet, in Association with Institute of Engineers India from 29 to 30 July 2022, Proceedings of ICETMEIA-2K22, Page:114- 116, ISBN: 978-93-91420-07-9
- iv. K. Venkatarao, A. Venkata Jayasri, Ch. Lakshmikanth, S. Nagakumar, Investigation of Mechanical, Thermal properties and SEM analysis of Jute/Coconut Hybrid composites with Alkali Treatment, International Conference on “Emerging Trends in Mechanical Engineering and Industrial Automation” Organized by Dept of Mechanical Engg., Narsaraopet Engineering College, Narsaraopet, in Association with Institute of Engineers India from 29 to 30 July 2022, Proceedings of ICETMEIA-2K22, Page:257- 260, ISBN: 978-93-91420-07-9
- v. Gopala krishnaiah Peteti, Ch lakshmikanth, K Anupama Francy, Experimental and Numerical investigations on Plain turning of AA 8011 alloy using Grey Relational Analysis, International Conference on Materials Innovation and Sustainable Manufacturing (ICMISM- 2022), 16th & 17th December 2022, organized by the Department of Mechanical Engineering, Vishnu Institute of Technology-Bhimavaram
- vi. Ch.Vidya, Thermal Degradation study of cotton waste pulp based cellulose nanocrystals, International Conference on Materials Innovation and Sustainable Manufacturing (ICMISM- 2022), 16th & 17th December 2022, organized by the Department of Mechanical Engineering, Vishnu Institute of Technology- Bhimavaram.

f) Book chapters:

- i. Ch Vidya, G Ravi Kiran Sastry, P Phani Prasanthi, Ch Lakshmikanth, Thermodynamic Analysis of cross flow heat exchanger with organic blends as substitute to ionic coolants, Springer nature, Lecture Notes in Mechanical Engineering (LNME), Recent Advances in Applied Mathematics and Applications to the Dynamics of Fluid Flows, ISBN: 978-981-19-1928-2, Pages:285-296, October-2022, DOI: 10.1007/978-981-19-1929-9_25

g) Books: NIL

5. Faculty Achievements (Patents, Higher Qualification awarded, guest lectures given, awards and rewards, acted as a Resource person etc.):

a. Patents:

- i. Dr.M.Naga Swapna Sri, Dr.P.Anusha, Published a patent titled “Combination Of Mould Pattern Riser In Sand Casting”, with the application number: 202241071886, Journal Number – 52/2022, dated: 30/12/2022, at Intellectual Property Rights, Government of India.

- ii. Dr.M.Naga Swapna Sri, Dr.P.Anusha, Published a patent titled “3-Axis Actuator”, with the application number: 202241072914, Journal Number-52/2022 dated: 30/12/2022, at Intellectual Property Rights, Government of India.
- iii. Dr.M.Naga Swapna Sri, Dr.P.Anusha, Published a patent titled “Sheet Metal Joining Machine”, application number: 202241074866, Journal Number-52/2022 dated: 30/12/2022, at Intellectual Property Rights, Government of India.
- iv. Dr.M.Naga Swapna Sri, Dr.P.Anush, Design Accepted and Published titled” An Electronic Painting Kit, application number: 370666-001, Journal No is 51/2022 and Journal Date is 23/12/2022, at Intellectual Property Rights, Government of India.
- v. Dr.M.Naga Swapna Sri, Dr.P.Anush, Design Accepted and Published titled” Kids Dining Table application number: 370674 -001, Journal No is 51/2022 and Journal Date is 23/12/2022, at Intellectual Property Rights, Government of India.
- vi. Dr.M.Naga Swapna Sri, Dr.P.Anush, Design Accepted and Published titled” Spine Exercise Device” application number:370675-001, Journal No is 51/2022 and Journal Date is 23/12/2022, at Intellectual Property Rights, Government of India.
- vii. Dr.M.Naga Swapna Sri, Dr.P.Anush, Design Accepted and Published titled” Chest Compression Device” application number:370677-001, Journal No is 51/2022 and Journal Date is 23/12/2022, at Intellectual Property Rights, Government of India.
- viii. Dr.M.Naga Swapna Sri, Dr.P.Anush, Design Accepted and Published titled” Mobile Charger With Holder” application number:370681-001, Journal No is 51/2022 and Journal Date is 23/12/2022, at Intellectual Property Rights, Government of India.
- ix. Dr.M.Naga Swapna Sri, Dr.P.Anush, Design Accepted and Published titled” Alphanumeric Toy” application number:370683-001, Journal No is 51/2022 and Journal Date is 23/12/2022, at Intellectual Property Rights, Government of India.
- x. Dr.M.Naga Swapna Sri, Dr.P.Anush, Design Accepted and Published titled” Bangle For Women Safety” application number:370686-001, Journal No is 51/2022 and Journal Date is 23/12/2022, at Intellectual Property Rights, Government of India.
- xi. Dr.M.Naga Swapna Sri, Dr.P.Anush, Design Accepted and Published titled” Dining Table” application number: 370690-001, Journal No is 51/2022 and Journal Date is 23/12/2022, at Intellectual Property Rights, Government of India.
- xii. Dr.M.Naga Swapna Sri, Dr.P.Anush, Design Accepted and Published titled” Pen Stand” application number:370692-001, Journal No is 51/2022 and Journal Date is 23/12/2022, at Intellectual Property Rights, Government of India.
- xiii. P.V.P.Siddhartha Institute Of Technology, E.Kavitha, V.Sravani, Dr.P.Anusha, Dr.P.Phani Prasanthi, Design Accepted and Published titled: Portable Ventilator, Journal No is 50/2022 and Journal Date is 16/12/2022 at Intellectual Property Rights, Government of India.
- xiv. M. Nikhitha, T.Akshita, Kunapareddy Sai Dikshit, Mohammad Sameer, V. Sai Harsha Vardhan. Dr.Phani Prasanthi, Design Accepted and Published, titled” Fiber Equipped Air Purifier Journal No is 01/2023 and Journal Date is 06/01/2023 at Intellectual Property Rights, Government of India.
- xv. Vidya Ch . Dr. G. Ravi Kiran Sastry. Dr. Phani Prasanthi, “Design Accepted and Published, titled” CPU FAN “,Journal No is 01/2023 and Journal Date is 30/10/2023 at Intellectual Property Rights, Government of India.

- xvi. Dr.M.Naga Swapna Sri, Dr.P.Anusha, filed a design patent with number 370664-001, titled: Multimedia Bag on 9/12/2022 at Intellectual Property Rights, Government of India.
- xvii. Dr.M.Naga Swapna Sri, Dr.P.Anusha, filed a design patent with number 370665-001, titled: Seating Device on 9/12/2022 at Intellectual Property Rights, Government of India.
- xviii. Dr.M.Naga Swapna Sri, Dr.P.Anusha, filed a design patent with number 370667-001, titled: Exercise Machine for Paralysis Patients on 9/12/2022 at Intellectual Property Rights, Government of India.
- xix. Dr.M.Naga Swapna Sri, Dr.P.Anusha, filed a design patent with number 370668-001, titled: Table with Built-in Projector on 9/12/2022 at Intellectual Property Rights, Government of India.
- xx. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370669-001, titled: Obstacle Detector Setup for TV on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxi. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370670-001, titled: Table for Vegetable Cutting on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxii. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370671-001, titled: Table Shoe Rack on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxiii. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370672-001, titled: Table Mobile Charger Holder on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxiv. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370673-001, titled: Duster with Marker on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxv. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370676-001, titled: Duster on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxvi. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370678-001, titled: Exercise Machine for Paralysis Patients, on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxvii. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370679-001, titled: Muscle Activation Device, on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxviii. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370680-001, titled: Tablemate Insert for Chair, on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxix. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370682-001-001, titled: Breathe Analyser, on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxx. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370684-001-001, titled: Baby Bath Tub, on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxxi. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370685-001-001, titled: Artificial Intelligence Based School Stick, on 9/12/2022 at Intellectual Property Rights, Government of India.

- xxxii. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370687-001-001, titled: Broom stand, on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxxiii. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370688-001-001, titled: Multi-Purpose Storage device, on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxxiv. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370689-001-001, titled: Desk Décor Kit, on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxxv. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370691-001-001, titled: GPS Enabled Ear Ring for Woman Safety t, on 9/12/2022 at Intellectual Property Rights, Government of India.
- xxxvi. Dr.P.Anusha Dr.M.Naga Swapna Sri, filed a design patent with number 370693-001-001, titled: Electronic Alphabetic Device for Kids, on 9/12/2022 at Intellectual Property Rights, Government of India.

b. Ph.Ds awarded:

- i. Ms K.I.Vishnu Vandana was awarded Ph.D. degree for her thesis titled “Experimental Investigations on Microwave sintered Alumina - Graphene composite Tool Inserts for Machining of Hardened Steels” on 29th July 2022 from Andhra University, Vishakhapatnam.
- ii. Ms. M. Rajyalakshmi was awarded Ph.D.degree for her thesis titled “Optimization of Process Parameters in Pocket Milling on Austenitic Stainless Steel and Aluminium Alloys” on 28th November 2022 from Nagarjuna University, Guntur.

c. Guest lectures delivered:

- i. Dr. B.Raghu Kumar acted as a Resource person in the One week Faculty Development Program on “ Innovations in Mechanical Engineering” at VVIT, Nambur from 26.12.222 to 30.12.222

d. Reviewers of journals:

- i. Ch. Vidya reviewed a paper titled, “Experimental study and CFD Simulation of drag reduction and heat transfer enhancement in a vertical pipe using water/PIB/nano-Sio2 poly nano-fluids,” submitted to 'Journal of the Brazilian Society of Mechanical Sciences and Engineering (BMSE)'.
 - ii. Dr.P Phani Prasanthi reviewed a paper titled, “Hydrodynamic performance and acoustic response of ship propeller,” submitted to 'Transaction on Maritime science'.
 - iii. Dr.P Phani Prasanthi reviewed a paper titled, “Solution for elasatic module of three phase composite with random distribution of coated ellipse inclusions,” submitted to 'Functional composites and structures'.

- iv. Dr.P Phani Prasanthi reviewed a paper titled, “analysis of Spectroscopic Morphological characterization and interaction of Dye molecules for the surface modification TiB₂ nano particles,” submitted to 'Journals of nanomaterials'.
- v. Dr. Sd. Abdul kalam Sayyad reviewed a paper titled, “Frame work and technical analysis of pressure vessel,” submitted to 'Journals of Aerospace engineering and technology'.

6. Faculty Participation (as a Judge, Guest, or BOS member, & Chairing a session, etc.):

- i. Ch.Vidya has contributed as a Jury member for State Level Koushal –Quiz /Poster Competition being conducted by APCOST & Bharatiya Vijnana Mandali(VIBHA) on 9th December,2022.

7. MOOCs courses completed by the faculty:

- i. Dr.K.I.V.Vandana has successfully completed and certified in NPTEL course with title “Innovation by Design” offered by IITB during the period July - August 2022.
- ii. Dr.T.Rama Krishna has successfully completed and certified in NPTEL course with title “Fundamentals of Convective Heat Transfer” offered by IITG during the period July - October 2022.
- iii. Dr.M.Rajya Lakshmi has successfully completed and certified in NPTEL course with title “Fundamentals of Convective Heat Transfer” offered by IITH during the period July - October 2022.
- iv. Mr.Ch.Lakshmi Kanth has successfully completed and certified in NPTEL course with title “Deep Learning” offered by IITM during the period July - October 2022.
- v. Mr.Ch.Lakshmi Kanth has successfully completed and certified in NPTEL course with title “Introduction to Machine Learning ” offered by IIT KGP during the period July - September 2022.
- vi. Ms.Ch.Vidya has successfully completed and certified in NPTEL course with title “Design Technology & Innovation” offered by IITB during the period July - September 2022.
- vii. Mr.M.Somaiah Choudary has successfully completed and certified in COURSERA course with title “Data Analysis with Python” offered by IBM in December 2022.

8. Industrial Visits:

- i. III B.tech I semester (section-2) of Mechanical Engineering students Visited CIPET Surampalli on 27/09/2022.
- ii. III B.tech I semester (section-1) of Mechanical Engineering students Visited CIPET Surampalli on 27/09/2022.
- iii. Students of Mechanical Engineering (II,III and IV of ISHRAE chapter) Visited Mohan Spintex , Mallavalli on 11/11/2022.
- iv. II B.tech I semester (section-1) of Mechanical Engineering students Visited Kristna Engg works, Enikepadu on 08/12/2022.
- v. II B.tech I semester (section-2) of Mechanical Engineering students Visited Kristna Engg works, Enikepadu on 12/12/2022.

9. Students' achievements:

a) Co-curricular Activities:

- i. Y.Dhereswara Reddy, Y.Teja Devi Vara Prasad, David Adithya, Narendra Kumar, S.Surya Vishnu Mukesh, P.Yoga Nanda, P.Dinesh of II B.Tech has participated in the event Blast Zone conducted during Exousia 2K22 at Vasi Reddy Venkatadri Institute of Technology on 22nd September, 2022.
- ii. P.Dinesh, David Adithya, SSV.Mukesh, P.Sreenivas, P.Mounish Bala Subrahmanyam of II B.Tech has participated in the event Blind Folded Circuits conducted during Exousia 2K22 at Vasi Reddy Venkatadri Institute of Technology on 22nd September, 2022.
- iii. SSV.Mukesh, P.Sreenivas, P.Mounish Bala Subrahmanyam of II B.Tech has participated in the event Logo Heights conducted during Exousia 2K22 at Vasi Reddy Venkatadri Institute of Technology on 22nd September, 2022.
- iv. P.Dinesh of II B.Tech has participated in RANVITA event conducted at V. R. Siddhartha Engineering College on 23rd September, 2022.
- v. P.Dinesh, Sk.Saidulu, Y.Teja Devi Vara Prasad, U.Babu Narendra Kumar, P.Yoga Nanda of II B.Tech has participated in the NEONITE-2K22 event conducted at V. R. Siddhartha Engineering College from 28th -29th September, 2022.
- vi. P.Dinesh of II B.Tech has participated in winter notch -2k22 organized by ACM student chapter at V. R. Siddhartha Engineering College on 26th Nov, 2022.
- vii. P.Dinesh, Sk.Kalesha of II B.Tech has participated in Quizzard under the event INFINITO-2K22 conducted at V. R. Siddhartha Engineering College on 2nd Dec, 2022.
- viii. P.Dinesh of II B.Tech has participated in Blind Coding under the event INFINITO-2K22 conducted at V. R. Siddhartha Engineering College on 2nd Dec, 2022.

b) Extra-curricular Activities: NIL

c) Coursera/NPTEL Details of the students: NIL

d) Internships:

- i. 135 students of III B.Tech (Mechanical Engineering) underwent internship and the industries are:
- ii. HINDUSTHAN SHIPYARD, VERZEO, SRINIVASA INDUSTRIES, JYOTIRMAYE TEXTILES PVT LTD, POWER MECH, SOUTH CENTRAL RAILWAY, ARMOR, POWER MECH, BHARATH HEAVY ELECTRICALS LTD, MAHASHAKTI POLYMERS, S R HONDA, SV MOTORS, JASPER INDUSTRIES, INTERNSHALA, MITHRA AUTO AGENCIES, VISHNU CARRIERS, ITC LIMITED, RAMCO CEMENTS, LINEYSHA AND THEVAN SOFTWARE, SAI SWARNA HYUNDAI, ABHIJEET FERRO TECH LTD, FRONTLINES EDUTECH PRIVATE LTD.

- iii. 118 students of IV-B.Tech (Mechanical Engineering) underwent internship and the industries are:

SRI GOKUL TVS, INTERNSHALA, SCR (WWO), HINDUSTAN SHIPYARD, GOODWILL AGENCIES, APSSDC, PANTECH E LEARNING, OMNIWYSE TECHNOLOGIES, AIR CONTROL SYSTEMS, RAPS PVT LTD, SAHNI AUTO PVT LTD, PRAKASA SPECTRO CAST LTD, NIT AP, LASYA AUTOMOTIVES.

d) Student Publications:

- i. Jaya Madhuri Mandava, Nalluri Aishwarya, Saggurthi Ramadevi, Muppalla Praveen Chowdary, Vemulapalli Chinmai and P. Phani Prasanthi, "Acoustic Analysis Of Composite Materials Using Finite Element Method", Published in Lecture Notes in Mechanical Engineering, ISSN:2195-4356, Scopus/SCI Conference Proceeding, Dec-2022. (Online)
- ii. Nikitha M, Akshitha T, Phani Prasanthi, "Analysis Of Carbon-Epoxy And Glass-Epoxy reinforced Composite Under Low Impact velocity Using Finite Element Method", Published in Lecture Notes in Mechanical Engineering, ISSN:2195-4356, Scopus/SCI Conference Proceeding, Dec-2022. (Online)

10. Higher Education:

The following students got admission for doing Higher studies (MS/ME/M.Tech...)

- i. Chakka Venkata Sumanth Sairam Vivek (18501A0320) of 2018-2022 Batch joined M.Tech in Mechanical Engineering in 'Defence Institute of Advanced Technology' at Pune.
- ii. Banavathu Sai Kiran Naik (18501A0309) of 2018-2022 Batch joined M.Tech in machine Design in 'A U College of Engineering' at Visakhapatnam.
- iii. Kavati Noel Pasanth (18501A0343) of 2018-2022 Batch joined Masters in mechanical engineering in 'Lamar University' at U.S.
- iv. Kondapalli Sai Krishna (18501A0347) of 2018-2022 Batch joined Masters in mechanical engineering in 'Lamar University' at U.S.
- v. Bandaru Harsha Vardhan (18501A0310) of 2018-2022 Batch joined M.Tech in machine Design in 'P V P Siddhartha Institute of Technology' at Vijayawada.
- vi. Bokkinala Rajeev Kumar (18501A0318) of 2018-2022 Batch joined M.Tech in machine Design in 'P V P Siddhartha Institute of Technology' at Vijayawada.

b) The following students got qualified in state/National/ International level competitive examinations (IELTS/GRE/PGECET...)

- i. Five students (18501A0307, 18501A0327, 18501A0355, 18501A0378, 14501A0383) qualified for the GRE examination.
- ii. Five students (18501A0307, 18501A0322, 18501A0325, 18501A0345, 14501A0384) qualified for the IELTS examination.
- iii. Three students (18501A0332, 18501A0366, 19505A0320) qualified for the Duolingo examination.

- iv. One student (17501A0374) qualified for the TOFEL examination.

11. Other Information:

a) Students and Staff membership of professional bodies:-

Student Memberships

ISTE- 93, IE -64, ISHRAE- 71

Faculty Memberships:

ISTE-29, IE -03, IAENG-06, IRED -10, SFA-01, IIM -01, PMAI- 01, MRSI -01, CMSI -01

b) Cultural / Literacy activities:-

- i. 'ECO-FRIENDLY GANESH IDOL CONTEST' was conducted by the department Techno-Cultural committee on 30.08.2022 for Faculty and Students of Mechanical Engineering Department. A total of 14 members have participated in the event.
- ii. The Techno-Cultural committee conducted Cultural-week end on 26-11-2022. A total of 92 students have participated in various events viz., SINGING, DANCING, SKIT, PANCHE-KATTU and CHEERA-KATTU.

c) Equipment Procured:-NIL

d) Alumni Interaction:

- i. Mr Prasanth, CAE Analyst working in Mercedes Benz research and development India Pvt Ltd has interacted with III B.Tech II Sem students with a topic of “ core with software skills” on 31-10-2022.
- ii. Mr. G Srihari, Technical officer - C SDSC SHAR ISRO has interacted with II B.Tech I Sem students with a topic of “Opportunities in ISRO” on 08.11.2022.

12. Students Corner:

i) A DAY WITHOUT PHONE

After college I reached home,

One day I tested myself without phone,

Wonder I had so much fun

I played chess with my sister

I won the match with my dad

I helped mom in making the dish, my sister and I set write the things,

We shared the topics at supper time,

We all spent a quality time...

Now I realize how good it is to follow every day the same....

Article by
M.Virinchi
20501A0351

ii) **Gowtham Buddha My Inspiration**

That's wonderful! Gautama Buddha, the founder of Buddhism, is a deeply inspiring figure for millions around the world. His teachings on mindfulness, compassion, and the path to enlightenment have influenced countless people throughout history. Here are a few key aspects of Buddha's life and teachings that inspired me:

1. The Middle Way: Buddha taught the importance of balance and moderation in life, advocating the "Middle Way." He advised against both extreme indulgence and extreme asceticism, promoting a balanced approach to life that leads to peace and wisdom.

2. Mindfulness and Meditation: One of the most well-known aspects of Buddha's teachings is the emphasis on mindfulness and meditation. Buddha believed that through meditation, individuals could reach a deeper understanding of themselves and the world around them, leading to inner peace and enlightenment.

3. The Four Noble Truths: Buddha's path to enlightenment is based on these four core truths:
Suffering (Dukkha): Life involves suffering, which is an inevitable part of existence.
The Cause of Suffering (Samudaya): Suffering is caused by desire, attachment, and ignorance.
The End of Suffering (Nirodha): By eliminating desire, attachment, and ignorance, one can end suffering.
The Path to the End of Suffering (Magga): The Noble Eightfold Path is the way to end suffering, which includes right understanding, right action, right speech, right livelihood, right effort, right mindfulness, and right concentration.

4. Compassion and Loving-Kindness: Buddha emphasized the importance of compassion (karuna) and loving-kindness (metta) toward all beings. This not only leads to a harmonious life but also helps in overcoming personal suffering.

5. Impermanence (Anicca): Buddha taught that everything is impermanent and constantly changing. By understanding the transient nature of life, we can free ourselves from attachment and the suffering that comes from clinging to things that inevitably change.

6. Self-Awareness and Inner Peace: Buddha's journey toward enlightenment began with introspection and self-awareness. Through his teachings, he encouraged others to seek inner peace by understanding their thoughts, emotions, and behaviors.

Buddha's life and teachings continue to inspire individuals to seek wisdom, cultivate compassion, and strive for inner peace

Article by
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iii) THE ELEPHANT AND THE ROPE

One day, a man was walking past an elephant camp and noticed that the elephants were held only by a small rope tied to one leg. They weren't chained or caged, yet they made no attempt to break free.

Curious, he asked the trainer why the elephants didn't try to escape. The trainer replied, "When they are young, we tie them with the same rope. At that age, it's strong enough to hold them. As they grow, they believe they can't break free, so they never even try."

The man was amazed. The massive elephants stayed stuck simply because they believed they couldn't escape.

Moral:

Like the elephants, many of us are held back by old beliefs or self-doubt. Remember, you are capable of more than you think. Break free from limiting thoughts, and you'll achieve great things!

Story by
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iv) SUCCESS

Every successful person has painful story. Every painful story has a successful ending. Accept the pain and get ready for success. Success begins with efforts and hard work .To be successful in life one needs to set a goal and work towards it with determination .Success gives your life value and you can proudly show your worth.

Success gives you the courage to achieve all the things in your life .For being successful in life one should not fear about failure.

Success is directly proportional to the amount of hard work and time you have invested in achieving that goal .To succeed in life you need two things: Ignorance and Confidence

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