



PVPSIT

Department of Mechanical Engineering

NEWS LETTER

January-June, 2022

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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. Once again it is provisionally accredited for 3 years under OBE in the year 2016 and got 4th time accreditation under OBE Tier-1 in 2019 for 3 academic years.

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 organizations 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.

Contents

- ◆ *Guest Lectures / Workshops Organized*
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- ◆ *Faculty Publications/ Conferences*
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- ◆ *Students Achievements*

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

The department of Mechanical Engineering organized ---

- i. A Guest Lecture on “**Computational Fluid Dynamics**” by Dr. Suresh Alapati, Assistant Professor, School of Mechanical and Mechatronics Engineering, Kyungsoong University, Busan, South Korea on 20.01.2022 for II -B. Tech. ME students and staff from 10:00 AM in the Ground floor Seminar hall.



- ii. Two day **International Conference** on RECENT ADVANCES IN MECHANICAL ENGINEERING (ICRAME-2022) on 04.03.2022 and 05.03.2022.

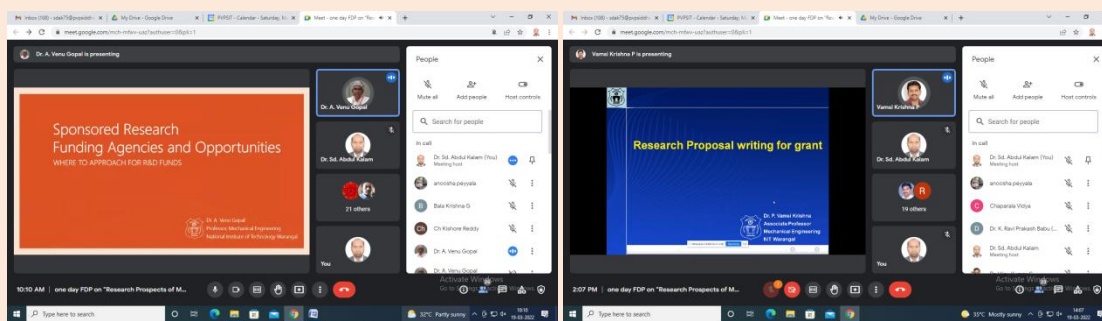


- iii. One day FDP on “**Research Prospects of Mechanical Engineering**” by Dr. G. Raghavendra, Assistant Professor, Department of Mechanical Engineering, NIT, Warangal. on 05.03.2022 for staff from 10:00 AM to 4:00 PM in the Ground floor Seminar hall.



- iv. One day FDP on “**Research Prospects of Mechanical Engineering-II**” by Dr. A. Venu Gopal, Professor, Department of Mechanical Engineering, NIT, Warangal and Dr P. Vamsi Krishna, Associate Professor, Department of Mechanical Engineering, NIT,

Warangal on 19.03.2022 for staff from 10:00 AM to 4:00 PM in the Google meet platform.



- v. A Guest Lecture on **“Personality Development”** by Sri. A. Radha Krishna Chowdary, Director, Kusalava International Ltd., Telaprolu, Vijayawada for II-B. Tech. ME and MBA students on 01.04.2022 from 11:00 AM in the Ground floor Seminar hall.



- vi. A Guest Lecture on **“Importance of high temperature materials for aero engine applications”** by Dr. K. Venkateswarlu, Senior Principal Scientist, CSIR-NAL, Bangalore for III-B. Tech. ME students and staff on 07.05.2022 from 11:00 AM in the Ground floor Seminar hall.



- vii. In association with MBA, APSCHE and CIMSME a Interactive session on **“Entrepreneurship, Innovation and Start-up centre Development”** by Dr. B. Geetha Reddy, AP CIMSME-State Chair Person, Andhra Pradesh for III-B. Tech. ME students on 18.05.2022 from 02:00 PM in the Ground floor Seminar hall.



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

- i. M.Radha Devi has participated and presented a paper in the Two Day “International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022) at PVPSIT from 04/03/2022 to 05/03/2022.
- ii. J Surendra has participated and presented a paper in the Two Day “International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022) at PVPSIT from 04/03/2022 to 05/03/2022.
- iii. T J Prasanna Kumar has participated and presented a paper in the Two Day “International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022) at PVPSIT from 04/03/2022 to 05/03/2022.
- iv. M.Rajyalakshmi has participated and presented a paper in the Two Day “International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022) at PVPSIT from 04/03/2022 to 05/03/2022.
- v. K I Vishnu Vandana has participated and presented a paper in the Two Day “International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022) at PVPSIT from 04/03/2022 to 05/03/2022.
- vi. Dr.P.Anusha has participated and presented a paper in the Two Day “International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022) at PVPSIT from 04/03/2022 to 05/03/2022.
- vii. Dr.K.Srividya has participated and presented a paper in the Two Day “International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022) at PVPSIT from 04/03/2022 to 05/03/2022.
- viii. P.Gopala Krishnaiah has participated and presented a paper in the Two Day “International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022) at PVPSIT from 04/03/2022 to 05/03/2022.
- ix. Dr.T.Rama Krishna has presented a paper at the International Conference on “Applied Mechanics, Machine Learning and Advanced Computation (AMMLAC-2022) held virtually at NIT Raipur from 16/03/2022 to 17/03/2022.

- x. Dr.P.Anusha has attended ICAME 2022 at SRM Institute of Science & Technology, Tamilnadu from 24/3/2022 to 26/3/2022.

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

a) Seminars/Webinars:

- i. Dr.T.Rama Krishna has participated in the National Webinar on Mathematical Modeling and Simulation of the Extreme Event” at KLEF on 21st March, 2022.

b) Workshops:

- i. M. Sommaiah Chowdary has attended the International Workshop on "Hybrid Composites for Railway Applications, Bangkok, Thailand on 18/02/2022.
- ii. U.Koteswara Rao, Dr. Tupakula Rama Krishna has attended a One-Day Online Workshop on "Professional Ethics and Values" organized by Academy of Maritime Education and Training, deemed to be University, Chennai on 18/02/2022.
- iii. Non-teaching staff of Mechanical Engineering participated one day workshop on “**Linux Installation using virtual box and image editing tools**” by Ms. Ch. Naga Malleswari, Developer, Cognizant Technologies Hyderabad, Ms. Ch. Niharika, Developer, Cognizant Technologies Hyderabad on 15/03/2022 at 09:30 AM in IT lab room no. 316.

c) STTP/STCs:

- i. K.Venkat Rao, P.Mastan Rao has participated in an AICTE Sponsored Short Term Course “Recent Advances in Modelling of inelastic Response and Integrity Assessment of Metals” at IIT Madras from 10/01/2022 to 17/01/2022 and 20/01/2022 to 13/01/2022.
- ii. Dr. Tupakula Rama Krishna has participated in two weeks training program for faculty members on AICTE Student Learning Assessment – STTP PARAKH in collaboration with Construction Industry Development Council (CIDC) from 7/2/2022 to 19/02/2022.
- iii. Dr.K.Srividya, Sommaiah Chowdary Mallampati has Participated in the Online Training Programme on "Developing Activities for OBE Attributes" Conducted by NITTTR, Chennai, from 07/02/2022 to 11/02/2022.
- iv. Dr. M. Naga Swapna Sri, Dr. P.Anusha, Dr.T.Rama Krishna, E. Kavitha, K.I.V. Vandana, M. Rajyalakshmi, T. J. Prasanna Kumar, M. Radhadevi, J. Surendra and V.Sravani have successfully participated in "IP Awareness/Training program" under National Intellectual Property Awareness Mission, organized by Intellectual Property Office, India on 23/02/2022.
- v. Dr. Tupakula Rama Krishna has participated in the One Day online Programme on “National Science Day Celebrations” at NIT-AP on 28th Feb, 2022.

- i. Dr. Tupakula Rama Krishna, V.Sravani has attended an online Awareness Programme on ECBC & ENS conducted by Andhra Pradesh State Energy Conservation Mission(APSECM) on 14th March,2022.

d) Faculty Development Programmes:

- ii. M.Radha Devi has participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Recycling of Plastics for Sustainable Growth" at Central Institute of Petrochemicals Engineering & Technology (CIPET): Institute of Plastics Technology (IPT) from 10/01/2022 to 14/01/2022.
- iii. Ch.Laxmi Kanth has participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Machinery Condition Monitoring" at Zakir Hussain College of Engineering & Technology from 10/01/2022 to 14/01/2022.
- iv. J.Surendra has received a certificate for exceptional contribution as a Primary Evaluator in Toycathon, 2021 by the Ministry of Education's Innovation Cell (Government of India).
- v. E.Kavitha, M. Radhadevi, V.Sravani, I.Manoj have successfully participated in Online FDP on "Industry 4.0 & Smart manufacturing "at NIT Warangal from 19/02/2022 to 26/02/2022.
- vi. Sravani Vemuri has participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Advanced FDP on "Polymer Matrix based Nanostructures for Targeted Drug Delivery Application" at Central Institute of Petrochemicals Engineering and Technology (CIPET) : CSTS Guwahati from 07/02/2022 to 11/02/2022.
- vii. U.Koteswara Rao has participated & completed successfully AICTE Training And Learning (ATAL) Online Elementary FDP on "Robotics and Artificial Intelligence" at LBREC,Mylavaram from 07/02/2022 to 11/02/2022.
- viii. U.Koteswara Rao ,Dr. Tupakula Rama Krishna , M.Rajyalakshmi, V.Sravani has participated in a One week Online FDP on "Artificial Intelligence /Machine Learning for Mechanical Engineering Problems" at Shri Vishnu Engineering College for Women, Bhimavaram from 21st -26th March,2022.
- ix. P.Gopalakrishnaiah successfully completed the course on "Enhancing Soft Skills and Personality" and received Faculty Development Program certificate from NPTEL-AICTE during Feb-April-2022.
- x. M.Radha Devi, V.Sravani has participated in the Faculty Development Programme on "Inventions, Innovations & Entrepreneurship arena in current Indian IPR Framework" at PVPSIT on 12th May,2022.
- xi. J.Surendra has participated and successfully completed the 5-Day Online FDP on "Inculcating Universal Human Values in Technical Education" organized by AICTE from 9th -13th May,2022.

- xii. M.Radha Devi has participated in the Professional Development Programme on “Academic & Research Writing Workshop” through online mode at NITTTR, Chennai from 30th May -03rd June, 2022.
- xiii. P.Gopalakrishnaiah has participated in the Professional Development Programme on “Advances in Heat Treatment & Material Processing” through online mode at NITTTR, Chennai from 20th -24th June, 2022.

e) Guest Lectures: NIL

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

g) Conferences:

- i. Dr.B.Raghu Kumar, Dr.G.Vijay Kumar, Dr.K.Srividya, Dr.Sd.Abdul Kalam, Dr.K.Ravi Prakash Babu M.V.H.Satish Kumar, U.Koteswara Rao, Dr.M.Naga Swapna Sri, Dr.P.Anusha Dr.T.Ramakrishna E.Kavitha, G.Bala Krishna, T.Srinag, P.Mastan Rao, KIV.Vandana, M.Rajya Lakshmi, , P.Gopala Krishnaiah, N.Raghuram, Ch.Laxmikanth, J.Surendra, Ch.Vidya, M. Radha devi, K.Sriram Vikas, T J Prasanna Kumar, K.Venkata Rao, Ch. Mohan Sumanth, M.Somaiah Chowdary have participated in the Two Day “International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022) at PVPSIT from 04/03/2022 to 05/03/2022.

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

a) Scopus indexed journals:

- i. D Eswara Prasada Rao, M David Raju, J Surendra, A Vasu Babu, P Eswaraiah, N Ravi Kumar Reddy, Ch Rajendiran, M Venkata Basaveswara Rao, “A Facile and Efficient Synthesis of bis(Imidazo[1,2-a]pyridin-3-yl)methane and Vinyl Derivatives”, Letters in Organic Chemistry, Volume 19, Issue 1, 2022, Pg: 53 – 58, ISSN (Online): 1875-6255 February-2022
- ii. Raviteja Surakasi, K. Ch. Sekhar, E. Kavitha, Mandeep Singh, Bharat Singh, “Evaluation of physico thermal properties of TiO₂–water mixture dispersed with MWCNTs”, Nanotechnology for Environmental Engineering, March-2022
- iii. Priyadarsini Morampudi, V.S.N. Venkata Ramana, K. SriramVikas, Rahul, Chitrada Prasad, “Effect of Nano ZrB₂ particles on physical, mechanical and corrosion properties of Al6061 metal-matrix nano composites through stir casting route”, Engineering Research Express, March-2022, <https://doi.org/10.1088/2631-8695/ac5f66>
- iv. Rajyalakshmi, M., M. Venkateswara Rao, “Multi-Response Optimisation of Process Parameters in Pocket Milling Using Artificial Neural Networks and Genetic Algorithms”, Journal of Information and Knowledge Management, World Scientific Publications, Singapore, ISSN / e-ISSN:0219-6492 / 1793-6926, April-2022, DOI: 10.1142/S0219649222500265
- v. CH. LAKSHMI SRINIVAS, P. UMAMAHESWAR RAO, T. SRINAG, M. C. SEKHAR, “ Grey Relational Analysis and Principal Component, Analysis based

optimization of process parameters in turning of EN-8 Steel, INCAS BULLETIN, Volume-14, Issue-2, ISSN No: 2247-4528, PP: 43-51, June-2022

- vi. Murahari Kolli, Ravi Prakash Babu K, Dasari Sai Naresh, A. Devaraju and K. Satyanarayana, "Investigation on material removal rate and taper angle in abrasive aqua jet machining of Al 7075/SiC/Gr composites using RSM approach", International Journal on Interactive Design and Manufacturing (IJIDeM), June-2022

b) SCI/SCIE/ESCI indexed journals:

- i. Mallampati Somaiah Chowdary, Gujjala Raghavendra, M. S. R. Niranjana Kumar, Shakuntala Ojha, Pasala Mohan Kiran, Manoj Panchal, "A comparison of the effect of Nano clay addition on microstructures and mechanical properties of epoxy and polyester reinforced glass/sisal hybrid polymer composites", Polymer Composites, Wiley Publications, April, 2022, Pg: 1-9, DOI: 10.1002/pc.26662
- ii. Phani Prasanthi P, T. Srinag, N.Raghu Ram, T. Rama Krishna, N.Chaitanya, "Energy-Absorbing Capacity Of Natural Hybrid Fiber -Epoxy Composites Under Impact Loading", Journal of the Brazilian Society of Mechanical Sciences and Engineering, Springer Publication, May 2022.
- iii. Shuguang Zhang, Kode Srividya, Ismail Kakaravada, Dimitrios A. Karras, Vishal Jagota, Inamul Hasan, Abdul Wahab Rahmani, "A Global Optimization Algorithm for Intelligent Electromechanical Control System with Improved Filling Function" Hindawi Scientific Programming, Volume 2022, Article ID 3361027, 10 pages, March-2022, <https://doi.org/10.1155/2022/3361027>
- iv. P. Phani Prasanthi, K. Sivaji Babu, M.S.R. Niranjana Kumar, N.Chaitanya, "Elastic Properties of CNT Mixed/CNT Coated Sisal FRP Composites Using Experimental And Fe Methods", New Materials, Compounds and Applications, Vol.6, No.1, 2022, pp.12-26, May 2022

c) IEEE/Springer journals: NIL

d) UGC/other journals:

- i. Dr. P. Anusha, Dr. M. Naga Swapna Sri, V. Sravani, "Experimental Reduction of Condenser Exit Temperature in VCR System with Condenser Jacket", YMER, ISSN: 0044-0477, VOLUME 21 : ISSUE 2 (Feb) – 2022, Pg:474-487
- ii. Sd. Abdul Kalam, Siva Sankara Babu Chinka, Seshaiyah.T, Degala Rajendra, "Properties of Magnesium Alloy AZ91D with TIC Reinforced Composite Material Based on Tensile and Wear Tests", International Journal of Mechanical Engineering, Kalahari Journals, Vol. 7 No. 2 February, 2022, ISSN: 0974-5823 Pages: 3532-3538
- iii. M.Naga Swapna Sri, P.Anusha, "Design and Fabrication of Automatic Bar Feeding and Cutting Mechanism" Recent Trends in Automation and Automobile Engineering, Volume-5, Issue-1, HBRP publication, Page:1-9, May-2022, DOI:<https://doi.org/10.5281/zenodo.6572713>

- iv. P.Anusha, M.Naga Swapna Sri, “Flow over Condenser Pipes with Fins: CFD Analysis”, *Advancement in Mechanical Engineering and Technology*, Volume-5 Issue-1, HBRP publication, Page:1-14, May-2022, DOI: <https://doi.org/10.5281/zenodo.6576207>
- v. Nanjangud Mohan, Sd. Abdul Kalam, R. Mahaveer kannan, Maulik Shah, Jitendra Singh Yadav, Vivek Sharma, Padmayya S Naik and S. Paramashivaiah, “Statistical Evaluation of Machining Parameters in Drilling of Glass Laminate Aluminum Reinforced Epoxy Composites using Machine Learning Model”, *Engineered Science Publisher*, June-2022, DOI: 10.30919/es8e716
- vi. M.V.H Satish Kumar, K.Venkatarao, Ch .Lakshmi Kanth, Ramakrishna Kolluru, “Interaction of Advanced MHD Boundary Layer with Heat and Mass Transfer Flow, *International Journal of Early Childhood Special Education (INT-JECSE)*, ISSN: 1308-5581, Vol 14, Issue 02 2022 PP:1412-1417 June-2022, DOI: 10.9756/INT-JECSE/V14I2.125
- vii. T J Prasanna Kumar, K Venkata Rao, Ch. Lakshmi Kanth, T Rama Krishna, “Solid propellant Burn Rate Enhancements with various Grain configurations”, *Journal of Emerging Technologies and Innovative Research (JETIR)*, (ISSN-2349-5162), June 2022, Volume 9, Issue 6, Pg: j756-j770
- viii. M. Radhadevi, K.Sai Sankaran , B.Lokesh, M. Vikas Dass, J. Akhil, “Design and Fabrication of Leaf Drill jig for Pen holder”, *International Journal of Research Publication and Reviews*, ISSN 2582-7421, Vol 3, no 6, pp 4767-4773, June 2022.
- ix. E. Kavitha, K. Sivaji Babu And M.R.S. Satyanarayana, “An Investigation On Thermal And Mechanical Characteristics Of Carbon T300 And S Glass Hybrid Fiber Reinforced Composites With Different Stacking Configurations”, *Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/ Journal of Tianjin University Science and Technology*, ISSN (Online): 0493-2137 E-Publication: Online Open Access Vol:55 Issue:04:2022, DOI:10.17605/OSF.IO/Q6J8H.
- x. Dr.P.Anusha, “Mobile Peltier Cooler”, *International Advanced Research Journal in Science, Engineering and Technology*, Volume-9, Issue-6, ISSN: 2393-8021, Pg: 950-955, June-2022.
- xi. Dr.M.Naga Swapna Sri, Dr.P.Anusha, E.Uthpal Ramana Panith, A.Teja Sai Abhiram, B.Sai Kiran Nai, A.Charan Teja, “ EMISSION CONTROL ANALYSIS ON SINGLE CYLINDER 4-STROKE DIESEL ENGINE”, *International Advanced Research Journal in Science, Engineering and Technology*, Volume-9, Issue-6, ISSN: 2393-8021, Pg: 943-950, June-2022.
- xii. K. Srividya, Ch. Mohan Sumanth, G.V.R.D. Eswar, Akula Surya, B. Siva Prasad, Ch. Vijaya Babu, “Automatic Bike Stand Slider”, *International Journal of Research in Engineering and Science (IJRES)*, ISSN: 2320-9364, Vol-9, Issue-6, Pg: 31-36, June-2022

e) Conference Proceedings:

- i. Kuriakose Joseph, SasidharJangam, K Ramesha, V Umesh, G Vijay Kumar, N Santosh, G Shankar, Abdul Razak, AsifAfzal, BA Praveena, “Design and Optimization of the Process Parameters for Fusion Deposition Modelling by Experimental and Finite Element

Approach”, 2nd International Conference on Advanced Research in Mechanical Engineering (2ndICARME-21); AIP conference Proceedings, <https://doi.org/10.1063/5.0076809>; January-2022

- ii. Dr. K Srividya, Dr. Sd. Abdul Kalam, Ch Mohan Sumanth, K SaiDikshit, Md Sameer, B Tarun Kumar, “Various test specimens on emissivity assessment apparatus: An experimental approach”, International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022), Proceedings Page 1-9, Conference Dates:’ 04/03/2022 and 05/03/2022, Organized by Department of Mechanical Engineering, PVPSIT, Vijayawada
- iii. Dr. P Anusha, Dr M Naga Swapna Sri, E Kavitha, “Computational Fluid Dynamics Analysis of flow over a flat plate for different fluids”, International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022), Proceedings Page 10-22, Conference Dates:’ 04/03/2022 and 05/03/2022, Organized by Department of Mechanical Engineering, PVPSIT, Vijayawada.
- iv. Dr. Ch. SrinivasaRao, Dr G Vijay Kumar, “A retrospect on Micro structural growth and mechanical characteristics of materials obtained by friction Stir processing”, International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022), Proceedings Page 52-60, Conference Dates:’ 04/03/2022 and 05/03/2022, Organized by Department of Mechanical Engineering, PVPSIT, Vijayawada.
- v. K I V Vandana, M P Krishna Sai, K Navya Sri, “Ceramic Materials Tools –A Review, International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022), Proceedings Page 61-69, Conference Dates:’ 04/03/2022 and 05/03/2022, Organized by Department of Mechanical Engineering, PVPSIT, Vijayawada.
- vi. M Rajya Lakshmi, Dr M VenkateswaraRao, “Application of artificial neural networks and genetic algorithm for optimization of process parameters in pocket milling of AA7075”, International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022), Proceedings Page 70-81, Conference Dates: 04/03/2022 and 05/03/2022, Organized by Department of Mechanical Engineering, PVPSIT, Vijayawada
- vii. K Satish, P GopalaKrishnaiah, G Jaswanth, “Miniature liquid cooled Heat sink”, International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022), Proceedings Page 82-89, Conference Dates: 04/03/2022 and 05/03/2022, Organized by Department of Mechanical Engineering, PVPSIT, Vijayawada.
- viii. B Kamala Priya, V Sravani, Dr. K Dilip Kumar, “Comparative analysis of eelliptical and square unit cell for the prediction of effective thermal conductivity”, International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022), Proceedings Page 90-98, Conference Dates: 04/03/2022 and 05/03/2022, Organized by Department of Mechanical Engineering, PVPSIT, Vijayawada
- ix. J Surendra, Dr Ravi Kadiyala, “Effect of Engine performance on nozzle variation for a Bio fuelled DI Diesel Engine”, International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022), Proceedings Page 99-107, Conference Dates:’ 04/03/2022 and 05/03/2022, Organized by Department of Mechanical Engineering, PVPSIT, Vijayawada.
- x. T J Prasanna Kumar, B Teja, A Rohith Kumar, B HarshaVardhan, A Anil Sai, “Experimental investigation of a wing wit serrations at its trailing edge using NACA

- 0012 airfoil”, International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022), Proceedings Page 108-119, Conference Dates:’ 04/03/2022 and 05/03/2022, Organized by Department of Mechanical Engineering, PVPSIT, Vijayawada.
- xi. M. Radha Devi, Dr. G Vijay Kumar, “A study on effect of stacking sequence in SLJ with laminated FRP composite”, International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022), Proceedings Page 120-130, Conference Dates:’ 04/03/2022 and 05/03/2022, Organized by Department of Mechanical Engineering, PVPSIT, Vijayawada
 - xii. Md. Abbas, K Dileep, K BalaSubrahmanyam, ChVidya, “Comprehensive review on thermo physical characteristics of nano based coolants”, International Conference on Recent Advances in Mechanical Engineering (ICRAME-2022), Proceedings Page 131-135, Conference Dates:’ 04/03/2022 and 05/03/2022, Organized by Department of Mechanical Engineering, PVPSIT, Vijayawada.
 - xiii. T J Prasanna Kumar, B Chaitanya Naresh, B Avinash Bhargav, M Hema Latha, B Sai Krishna, “Experimental Investigation on NACA 2415 Airfoil Designed and Fabricated with different Joining Techniques”, International Conference on Research Contributions in Mechanical Engineering (ICRCME-2022), Proceedings Page 34, Conference Dates:’ 25/02/2022 and 26/02/2022, Organized by Department of Mechanical Engineering, Seshadri Rao GEC, Gudlavalleru
 - xiv. Y. Bhagavan Pradeep, Y. Gowtham, Sd. Abdul Kalam, “Modal and Harmonic Analysis of Work Holding Device, International Conference on Research Contributions in Mechanical Engineering (ICRCME-2022), Proceedings Page -28, Conference Dates:’ 25/02/2022 and 26/02/2022, Organized by Department of Mechanical Engineering, Seshadri Rao GEC Gudlavalleru
 - xv. Sd Abdul Kalam, T Sessaiah, K Srividya, “Damage Behaviour and failure response of aircraft composite structure by soft body impact”, Materials Today Proceedings, Vol: 52, Issue-Part-3, Pg: 867-872, March-2022,
 - xvi. K. Sri Ram Vikas, Rahul , Ch. Kishore Reddy ,V.S.N. Venkata Ramana, Priyadarsini M, Ch. Prasad, “Effect of Grade 5 titanium interlayer on microstructure and pitting corrosion behaviour of AA1100/A36 explosion welds”, Materials Today: Proceedings, March-2022, <https://doi.org/10.1016/j.matpr.2022.03.330>
 - xvii. Priyadarsini Morampudi, V.S.N. Venkata Ramana Koonna Bhavani, Ch. Kishore Reddy, K. Sri Ram Vikas, “Wear and corrosion behavior of AA6061 metal matrix composites with ilmenite as reinforcement”, Materials Today: Proceedings, Vol-52, Part-3 Pg: 1515-1520, March-2022, <https://doi.org/10.1016/j.matpr.2021.11.228>
 - xviii. Bhavani Koonna, V.S.N. Venkata Ramana, Ch. Prasad , Rahul, K. Sri Ram Vikas, “Comparison of microstructure and corrosion behaviour of AA2014 electron beam and friction stir welds”, Materials Today: Proceedings, Vol-52, Part-3, Pg: 1615-1621, March-2022, <https://doi.org/10.1016/j.matpr.2021.11.272>
 - xix. P Anusha, M Naga Swapna Sri, E Kavitha, “Dynamics of MHD Convective Flow of Walters-B Viscoelastic Fluid Past an Accelerating Permeable Surface with Mechanism of Soret-Dufour”, 4th International Conference On Advances In Mechanical Engineering (ICAME 2022), organized by Department of Mechanical Engineering SRM Institute of Science and Technology, Changalpattu, Tamilnadu, from 24/03/2022 to 26/03/2022.

- xx. S. Naga Kumar, P. Sasidhar, M. Rajyalakshmi, K. I. V. Vandana, “INVESTIGATION OF PROCESS PARAMETERS IN ABRASIVE WATER JET MACHINING USING RESPONSE SURFACE METHODOLOGY”, International Conference on Mechanical Engineering and Emerging Technologies (MEET-2022), Dept of Mechanical Engineering, Bapatla Engineering College, on 22/04/2022 to 23/04/2022.

f) Book chapters:

- i. M Somaiah Chowdary , Raghavendra G, Ojha S, Kumar M.S.R.N, “Water Sorption and Solvent Sorption of Epoxy/Natural Fiber Composites”, Hand book of Epoxy/Fiber Composites. Springer, Singapore, https://doi.org/10.1007/978-981-15-8141-0_28-1, Online ISBN: 978-981-15-8141-0, March 2022.
- ii. Jami Sai Revanth, G. Pavan Kumar, P. Phani Prasanthi, K.Sai Phani Teja, A. Rama Satyanaryana & G. Ashok Kumar, “Failure Load of Jute–Coir Fiber Reinforced Epoxy Matrix Composites Using Micromechanics and Finite Element Method”, Innovations in Mechanical Engineering (Springer Nature Publications) Part of the Lecture Notes in Mechanical Engineering book series (LNME), Print ISBN: 978-981-16-7281-1, pp: 545–555, March-2022
- iii. Murahari Kolli, Dasari Sai Naresh and K.Ravi Prakash Babu, “Experimental studies on Mechanical characteristics of Bamboo Leaf Ash reinforcement with Aluminum 7075 alloy using Rotary Stir Casting Technique” Manufacturing and Processing of Advanced Materials, 2022, Ricardo Dias, Antonio A. Martins, Rui Lima and Teresa M. Mata (Eds), Bentham Science Publishers, chapter-20, pp. 3-19. June-2022
- iv.

g) Books: NIL

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

a. Patents:

- v. DR.P.RAVI PRAKASH BABU, A.ESWAR KUMAR. “Fruit Plucking Device”, Patent Application Number336197-001, Design Accepted and Published, Journal No is 05/2022 and Journal Date is 04/02/2022
- vi. Dr.P.PHANI PRASANTHI, Dr. GUJJALA RAGHAVENDRA,3. Dr. SHAKUNTALA OJHA, 4. BANDARU HARSHA VARDHAN, BAGASSE FIBER REINFORCED CAR COVER,Patent Application Numbe 361124-001, Application Accepted, Certificate of Design Generated.
- vii. Dr.P.PHANI PRASANTHI, Dr. GUJJALA RAGHAVENDRA, Dr. SHAKUNTALA OJHA, BABY CARRIER, application number: 361123-001, Design Accepted and Published, Journal No is 21/2022 and Journal Date is 27/05/2022
- viii. PRASAD V POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY, P.ANUSHA, Dr.M..NAGA SWAPNA SRI, BOYAPATI PURNA CHANDRA SEKHAR, RUMALLA HARANATH, SEETHEPALLI SREEHARSHA, I.MANOJ KUMAR, Dr. P.PHANI

- PRASANTHI, Application number:365318-001, WINDOW CURTAIN, Application Under Process
- ix. PRASAD V POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY, V.SRAVANI, E.KAVITHA, I.MANOJ KUMAR, Dr. P. PHANI PRASANTHI, PORTABLE WRITING PAD, Application number:365319-001, Application Under Process
 - x. Dr.M..NAGA SWAPNA SRI, Dr.P.ANUSHA, RUMALLA HARANATH, Dr.P.PHANI PRASANTHI, TABLE FAN GUARD, Application number:359279-001, Design Accepted and Published, Journal No is 21/2022 and Journal Date is 27/05/2022
 - xi. Dr.P.PHANI PRASANTHI, K.VENKATA RAO, LAKSHMI KANTH CHINTALAPATI, AVULA VENKATA JAYASRI, AMJURI BHARATHI LAKSHMI, KONERU VENKATA SAI PAVAN KALYAN, BANANA BUNCH HANGER, Application number: 358564-001, Design Accepted and Published, Journal No is 17/2022 and Journal Date is 29/04/2022.
 - xii. Mrs.Y.Padma and Mr. P.Ravi Prakash published a patent titled, “An Automatic Framework for Document Spam Detection using Enhanced Context Feature Matching” with the application number: 202041030675 A, Journal Number-31/2020 dated:31-7-2020, at Intellectual Property Rights, Government of India.

b. Ph.Ds awarded: NIL

- i. Ms. G. Lalitha Kumari was awarded Ph.D. degree for her thesis titled, “Analysis and Comparative Study of Hybrid Soft Computing System” on 8th June, 2020 from Acharya Nagarjuna University.

c. Guest lectures delivered: NIL

d. Reviewers of journals:

- i. Dr. B. Raghu Kumar, Professor & HOD, Department of Mechanical Engineering reviewer for Journal of Mechanics and Design.

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

7. MOOCs courses completed by the faculty:

Following faculty are completed COURSERA & INFOSYS Spring board courses.

- i. Dr.G.Vijay Kumar completed a course titled “Big Data Artificial Intelligence and Ethics” authorized by the University of California and offered through Coursera on 5/01/2022.

- ii. Mrs.K.I.V.Vandana completed a course titled “Basics of Python” Through INFOSYS Springboard platform on 29/04/2022.
- iii. Mrs.K.I.V.Vandana completed a course titled “Statistics for Today” Through INFOSYS Springboard platform on 9/07/2022.
- iv. Mrs.Rajya Lakshmi Mellacheruvu completed a course titled “Statistics for Today” Through INFOSYS Springboard platform on 28/06/2022.
- v. Mrs.Rajya Lakshmi Mellacheruvu completed a course titled “Basics of Python” Through INFOSYS Springboard platform on 30/06/2022.
- vi. Mrs.Sravani Vemuri completed a course titled “Building creative confidence” Through INFOSYS Springboard platform on 25/01/2022.
- vii. Mr. K.Venkata Rao completed a course titled “Data Analysis with Python” authorized by IBM and offered through Coursera on 26/02/2022.
- viii. Mrs.Sravani Vemuri completed a course titled “Speak Up” Through INFOSYS Springboard platform on 25/01/2022.
- ix. Mr. Lakshmikanth Chinthalapati completed a course titled “Data Science Math Skills” authorized by Pratt school of Engineering and offered through Coursera on 22/06/2022.
- x. Mrs.Vidya Chaparala completed a course titled “Active Listening Skills for Students” Through INFOSYS Springboard platform on 22/07/2022.
- xi. Mrs.E.Kavitha completed a course titled “Building creative confidence” Through INFOSYS Springboard platform on 25/01/2022.
- xii. Mrs.E.Kavitha completed a course titled “Introduction to Robotic Process Automation” Through INFOSYS Springboard platform on 25/01/2022.
- xiii. Mrs.E.Kavitha completed a course titled “Data Analysis with Python” authorized by IBM and offered through Coursera on 26/02/2022.
- xiv. Mr. Lakshmikanth Chinthalapati completed a course titled “Data Analysis with Python” authorized by IBM and offered through Coursera on 26/02/2022.
- xv. Mrs.Sravani Vemuri completed a course titled “Python 101: Develop Your First Python Program” authorized by Coursera Project Network and offered through Coursera on 18/02/2022.
- xvi. Mrs.K.I.V.Vandana completed a course titled “Python Basics” Through INFOSYS Springboard platform on August 2022.
- xvii. Dr.P.anusha completed a course titled “Email writing skills” Through INFOSYS Springboard platform on 20/01/2022.
- xviii. Dr.P.anusha completed a course titled “Interactive skills” Through INFOSYS Springboard platform on 20/01/2022.

Following faculty are completed NPTEL courses

- i. Mr.M.V.H.Sathish Kumar successfully completed a course titled “ Steam and gas power systems” authorized by IIT Roorkee and offered through NPTEL during February – April 2022.

- ii. Mr.T.J.Prasanna Kumar successfully completed a course titled “ IC Engines and Gas Turbines” authorized by IIT Gouhathi and offered through NPTEL during January – April 2022.
- iii. Mr.T.J.Prasanna Kumar successfully mentored students for a course titled “ Air craft Propulsion” authorized by IIT Kharagpur and offered through NPTEL during February – April 2022.
- iv. Mrs.M. Rajya Lakshmi successfully completed a course titled “Ethics in Engineering practice” authorized by IIT Kharagpur and offered through NPTEL during February-April 2022.
- v. Dr.K.Sri Vidya successfully completed a course titled “An introduction to programming through C++” authorized by IIT Madras and offered through NPTEL during January-April 2022.
- vi. Mr.P.Gopala Krishnaiah successfully completed a course titled “ Enhancing Soft skills and personality” authorized by IIT Kanpur and offered through NPTEL during February – April 2022.
- vii. Dr.K.Ravi Prakash Babu successfully completed a course titled “Introduction to Internet of Things” authorized by IIT Kharagpur and offered through NPTEL during January-April 2022.
- viii. Dr.P.Anusha successfully completed a course titled “ IC Engines and Gas Turbines” authorized by IIT Gouhathi and offered through NPTEL during January – April 2022.
- ix. Mr.P.Mastan Rao successfully completed a course titled “ Conduction and Convection heat transfer” authorized by IIT Kharagpur and offered through NPTEL during January – April 2022.

8. Industrial Visits:

- i. II B.Tech II semester (Section- 2) of Mechanical Engineering students visited kristna Engg works on 22/3/2022
- ii. II B.Tech II semester (Section- 1) of Mechanical Engineering students visited kristna Engg works on 24/3/2022.
- iii. III B.Tech II semester (Section- 1) of Mechanical Engineering students visited GS Alloy Castings on 28/4/2022
- iv. III B.Tech II semester (Section- 2) of Mechanical Engineering students visited GS Alloy Castings on 29/4/2022.

9. Students' achievements:

a) Co-curricular Activities:

- i. M.Jaya Madhuri of III B.Tech. participated in the event, ‘Tech Jam’ and won 1st Prize in SITAR 2K22 - A National Level Techno-Cultural Fest held on 25th March,2022 organized by PVP Siddhartha Institute of Technology, Vijayawada.

- ii. J.Yasaswi of II B.Tech. participated in the event, 'Tech Jam' and won 2nd Prize in SITAR 2K22 - A National Level Techno-Cultural Fest held on 25th March,2022 organized by PVP Siddhartha Institute of Technology, Vijayawada.
- iii. D.Nokesh of III B.Tech. participated in the event, 'Tech Jam' and won 3rd Prize in SITAR 2K22 - A National Level Techno-Cultural Fest held on 25th March,2022 organized by PVP Siddhartha Institute of Technology, Vijayawada.
- iv. M.Jaya Madhuri,D. Nokesh of III B.Tech. participated in the event, 'Technical Paper Presentation' and won 1st Prize in SITAR 2K22 - A National Level Techno-Cultural Fest held on 25th March,2022 organized by PVP Siddhartha Institute of Technology, Vijayawada.
- v. K. Uday Gopal of III B.Tech. participated in the event, 'Technical Paper Presentation' and won 2nd Prize in SITAR 2K22 - A National Level Techno-Cultural Fest held on 25th March,2022 organized by PVP Siddhartha Institute of Technology, Vijayawada.
- vi. V.Venkateswarlu of IV B.Tech. participated in the event, 'Technical Paper Presentation' and won 3rd Prize in SITAR 2K22 - A National Level Techno-Cultural Fest held on 25th March,2022 organized by PVP Siddhartha Institute of Technology, Vijayawada.
- vii. K.Sai Dikshit,Md. Sameer of III B.Tech. participated in the India Design Week Competition powered by Autodesk Organized by ICT Academy and won 3rd Place.
- viii. 20 students of Mechanical Engineering participated in the event, "Tech Jam" in SITAR 2K22 - A National Level Techno-Cultural Fest held on 25th March,2022 organized by PVP Siddhartha Institute of Technology, Vijayawada.
- ix. 28 students of Mechanical Engineering participated in the event, "Technical Paper Presentation" in SITAR 2K22 - A National Level Techno-Cultural Fest held on 25th March,2022 organized by PVP Siddhartha Institute of Technology, Vijayawada.

b) Extra-curricular Activities:

- i. M.Jaya Madhuri of III B.Tech. participated in the event, 'Tech-JAM' in a Two-day National Level Techno Cultural Virtual Fest, 'SITAR2K22' and won 1st Prize held on 25th March, 2022 organized by Prasad V Potluri iddhartha Institute of Technology, Vijayawada.
- ii. J. Yasaswi of III B.Tech. participated in the event, 'Tech-JAM' in a Two-day National Level Techno Cultural Virtual Fest, 'SITAR2K22' and won 2nd Prize held on 25th March, 2022 organized by Prasad V Potluri iddhartha Institute of Technology, Vijayawada.
- iii. D. Nokesh of III B.Tech. participated in the event, 'Tech-JAM' in a Two-day National Level Techno Cultural Virtual Fest, 'SITAR2K22' and won 3rd Prize held on 25th March, 2022 organized by Prasad V Potluri iddhartha Institute of Technology, Vijayawada.
- iv. M.Jaya Madhuri of III B.Tech. participated in the event, 'Technical Paper Presentation contest' in a Two-day National Level Techno Cultural Virtual Fest, 'SITAR2K22' and won 1st Prize held on 25th March, 2022 organized by Prasad V Potluri iddhartha Institute of Technology, Vijayawada.

- v. K.Uday Gopal of III B.Tech. participated in the event, 'Technical Paper Presentation contest' in a Two-day National Level Techno Cultural Virtual Fest, 'SITAR2K22' and won 2nd Prize held on 25th March, 2022 organized by Prasad V Potluri iddhartha Institute of Technology, Vijayawada.
- vi. K.Vekateswarlu of III B.Tech. participated in the event, 'Technical Paper Presentation contest' in a Two-day National Level Techno Cultural Virtual Fest, 'SITAR2K22' and won 3rd Prize held on 25th March, 2022 organized by Prasad V Potluri iddhartha Institute of Technology, Vijayawada.
- vii. K.Sai Susheth of III B.Tech. participated in the event, 'Seva Short Video' in a Two-day National Level Techno Cultural Virtual Fest, 'SITAR2K22' and won 2nd Prize held on 26th March, 2022 organized by Prasad V Potluri iddhartha Institute of Technology, Vijayawada.
- viii. B.Aditya of III B.Tech. participated in the event, 'AD-Making' in a Two-day National Level Techno Cultural Virtual Fest, 'SITAR2K22' and won 2nd Prize held on 26th March, 2022 organized by Prasad V Potluri iddhartha Institute of Technology, Vijayawada.

c) Coursera/NPTEL Details of the students:

III B.Tech. students of ME completed 17 certification courses through Coursera & Infosys Springboard platforms.

- i. Mr. Y.Ayyappa completed a course titled "Programming for Everybody (Getting started with Pythin)" authorized by University of Michigan and offered through Coursera on 20/02/2022.
- ii. Mr. Sivananda Uddagiri completed a course titled "Modeling and Design for Mechanical Engineers with Autodesk Fusion 360" authorized by Autodesk and offered through Coursera on 10/06/2022.
- iii. Mr. Sivananda Uddagiri completed a course titled "Finite Element Analysis Convergence and Mesh Independence" authorized by Coursera Project Network and offered through Coursera on 18/05/2022.
- iv. Mr. Pathan Sharukh Khan completed a course titled "Internet of Things 201" Through INFOSYS Springboard platform on 13/01/2022.
- v. Mr. Sivananda Uddagiri completed a course titled "Digital Skills: Artificial Intelligence" authorized by Coursera Project Network and offered through Coursera on 18/05/2022.
- vi. Mr. Sivananda Uddagiri completed a course titled "Using Python to access web data" Through INFOSYS Springboard platform on 23/01/2022.
- vii. Mr. Sivananda Uddagiri completed a course titled "Capstone: Retrieving, Processing, and Visualizing Data with Python" Through INFOSYS Springboard platform on 23/02/2022.
- viii. Mr. Sivananda Uddagiri completed a course titled "Python for Everybody" authorized by University of Michigan and offered through Coursera on 23/02/2022.
- ix. Mr. Sivananda Uddagiri completed a course titled "Using Databases with Python" authorized by University of Michigan and offered through Coursera on 21/02/2022.

- x. Yarlagadda Ayyappa completed a course titled “C++ Tutorial” authorized by Great Learning Academy on February 2022.
- xi. Yarlagadda Ayyappa completed a course titled “Data base Management Systems” authorized by Great Learning Academy on February 2022.
- xii. Mr. Sivananda Uddagiri completed a course titled “Python Data Structures” authorized by University of Michigan and offered through Coursera on 03/01/2022.
- xiii. Yarlagadda Ayyappa completed a course titled “Python Fundamentals for Beginners” authorized by Great Learning Academy on January 2022.
- xiv. Mr. Sivananda Uddagiri completed a course titled “Capstone: Retrieving, Processing, and Visualizing Data with Python” authorized by University of Michigan and offered through Coursera on 23/02/2022.
- xv. Mr. Sivananda Uddagiri completed a course titled “Using Python to Access Web Data” authorized by University of Michigan and offered through Coursera on 23/01/2022.
- xvi. Mr. Sivananda Uddagiri completed a course titled “Python for Everybody” authorized by University of Michigan and offered through Coursera on 23/06/2022.
- xvii. Mr. Sivananda Uddagiri completed a course titled “Modeling and Design for Mechanical Engineers with Autodesk Fusion 360” authorized by ATODESK and offered through Coursera on 10/07/2022.

10. Higher Education:

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

- i. Guttikonda Pranathi (17501A0335) of 2017-2021 Batch joined MS in Industrial Engineering at Southern Illinois university, Edwardsville, US.
- ii. K. Sai Phani Teja (17501A0357) of 2017-2021 Batch joined MS in Mechanical Engineering at New Jersey Institute of Technology, Newark.
- iii. Namala Abhisheak (17501A0372) of 2017-2021 Batch joined MSc in Mechanical Engineering at Teesside University, Middlesbrough campus, UK.
- iv. D Venkata Rishmanth Yadav (16501A0322) of 2016-2020 Batch joined MS in Mechanical Engineering at Cleveland state University, US.

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

- i. Five students (18501A0343, 18501A0366, 18501A0378, 18501A03A7, 14501A0374) qualified for the GRE examination.
- ii. Four students (18501A0343, 18501A0347, 18501A03A7, 17501A0301) qualified for the TOEFL examination.
- iii. Five students (18501A0392, 18501A03A4, 17501A0389, 15501A0328, 14501A0374) qualified for IELTS examination.

- iv. Four students (18501A0320, 18501A0385, 17501A0331, 17501A0336) qualified for the GATE examination.
- v. Four students (17501A0395, 16501A0346, 15501A0328, 14501A0374) qualified for the DUOLINGO examination.

11. Other Information:

a) Students and Staff membership of professional bodies:-

S.No	Name of the professional membership	No. of Faculty
1	ISTE	29
2	IE	03
3	IAENG	06
4	IRED	10
5	SFA	01
6	IIM	01
7	PMAI	01
8	MRSI	01
9	CMSI	01

S.No	Name of the Professional Society	No. of Students
1	ISTE	53
2	IE	64

b) Equipment Procured:-

S. NO	Name of the Laboratory	Name of the Equipment	Date of Purchase	COST (Rs.)
1.	Composite Materials Lab	Air Quality PM Measuring Instrument for Indoor	11.03.2022	48,200/-
2.		Vacuum bagging manufacturing Kit of Composite materials	10.03.2022	41,037/-
3.	Metrology Lab	Profile Projector	04.04.2022	3,82,686/-
4.	CAD Lab	ANSYS AMC (License Renewal)	01.04.2022	1,39,200/-
5.		Creo Elements /Pro-E University Pius Lab Bundle (License Renewal)	07.04.2022	1,71,680/-
6.	Machine Tools Lab-1	Digital Drill Tool Dynamo meter with Data Logger	11.03.2022	49,880/-
