



**LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING**

(An Autonomous Institution since 2010)

Approved by AICTE, New Delhi and Permanently Affiliated to JNTUK, Kakinada

L.B. Reddy Nagar, Mylavaram, NTR District, Andhra Pradesh - 521230



## DEPARTMENT OF MECHANICAL ENGINEERING

### JOURNAL PUBLICATIONS for the A.Y: 2023-24

| Type of journal     | SCI / SCIE | ESCI | Scopus | Conf. Proceedings | Open Access | Total |
|---------------------|------------|------|--------|-------------------|-------------|-------|
| No. of publications | 10         | 8    | 8      | 12                | 03          | 41    |

#### SCI/SCIE Papers –10

1. Pinjala Tejomurthi, **K.Dilip Kumar**, Bhanavathu Balakrishna, Experimental investigation of the using graphene oxide and titanium dioxide nanolubricant for a refrigeration system operated by mixed refrigerant, Journal of Thermal Analysis and Calorimetry, 144, 10227–10239, 2023, ISSN: 1388-6150, <https://doi.org/10.1007/s10973-023-12388-7>
2. **Vallapudi Dhana Raju**, Ibbam Veza, Harish Venu, Manzoore Elahi M. Soudagar, M. A. Kalam Tansir Ahamad, Prabhu Appavu, Jayashri N. Nair and S. M. Ashrafur Rahman, Comprehensive Analysis of Compression Ratio, Exhaust Gas Recirculation, and Pilot Fuel Injection in a Diesel Engine Fuelled with Tamarind Biodiesel, SUSTAINABILITY, 15(21), 15222, 2023, ISSN: 2071-1050, <https://doi.org/10.3390/su152115222>
3. **Seelam Rami Reddy**, Saroj Kumar Sarangi, Influence of zinc oxide and graphene nanoparticles on diesel engine's emission and vibration while fuelled with waste mango seed oil biodiesel, International Journal of Chemical Reactor Engineering, 2023, 2194-5748, <https://doi.org/10.1515/ijcre-2023-0154>
4. **Konka Dilip Kumar**, Ganesan Ramya, NarayanasamyAmbikeswari, Sathyamurthy Ravishankar, Jayaprakash Venugopal, Raviteja Surakasi, Uthirapathy Tamilarasan, T. Sathish, V. Vijayan, Investigation on the influence of the MWCNT, Al<sub>2</sub>O<sub>3</sub> and CuO nano fluid in the ETSC, Thermal Science, 27 (6), 4807-4814, 2023, ISSN: 2334-7163, <https://doi.org/10.2298/TSCI220919246K>
5. Chendrasekhar Sunnapu, **Murahari Kolli**, Role of tool shoulder profile and tool rotational speed on the mechanical performance of friction stir welded Al5083 joints, MATERIALWISSENSCHAFT UND WERKSTOFFTECHNIK, 54 (12), 1640-1647, 2023, ISSN: 0933-5137, <https://doi.org/10.1002/mawe.202300071>

6. **A Nageswara Rao**, R Jeyapaul, Sajad Ahmad Najar, **B Chaitanya**, Driving errors as a function of listening to music and FM radio: A simulator study, Traffic injury prevention, 25 (1), 49-56,2023, ISSN: 1538-9588, <https://doi.org/10.1080/15389588.2023.2263119>
7. Murahari Kolli, Sai naresh Dasari, Kosaraju Satyanarayana, Investigation on Mechanical Properties of Agro and Industrial Waste Reinforcement,Archives Of Metallurgy And Materials, 69(2), 545-552, ISSN: 1733-3490/2300-1909, DOI: <https://doi.org/10.24425/amm.2024.149782>
8. **S. Rami Reddy** ,Saroj Kumar Sarangi,A comprehensive combustion, performance, and environmental analyses of algae biofuel, hydrogen gas, and nano-sized particles (liquid-gas-solid mix) in agricultural CRDI engines, International Journal of Chemical Reactor Engineering, 22(5), 481-503, ISSN: 2194-5748/ 1542-6580, <https://doi.org/10.1515/ijcre-2023-0183>
9. Harish Venu , Tiong Sieh Kiong , Manzoore Elahi M. Soudagar , N.M. Razali , S. Ramesh, Yasser Fouad, Armin Rajabi, Prabhu Appavu, **V. Dhana Raju**, Ibham Veza, Lingesan Subrmani, M.A. Kalam, Ümit Ağbulut, A comprehensive combustion, performance, and environmental analyses of algae biofuel, hydrogen gas, and nano-sized particles (liquid-gas-solid mix) in agricultural CRDI engines, INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, 73, 839-855, ISSN: 0360-3199/1879-3487, <https://doi.org/10.1016/j.ijhydene.2024.05.209>,
10. P. Venkataramana, V. Mani Kumar, N. Raghu ram, **Siva Sankara Babu Chinka**, Experimental investigation of air jet impingement cooling in car radiator with hollow cone nozzle plate spacing using nanofluids, Heat and Mass Transfer, ISSN:1432-1181/0947-7411 DOI: <https://doi.org/10.1007/s00231-024-03493-w>

#### **ESCI Papers –08**

1. Naga Venkata Sairam Yellapragada, **Seelam Pichi Reddy**, Vadlamudi Tara Chand, Srikanth Kumar Mangalagiri, Bandaru Satish Babu, Sameer Kumar Devarakonda, The Potentiality of LHA Nanoparticle Reinforced AA2024 Composites: A Focus on Microstructure, Mechanical Properties, Annales de Chimie - Science des Matériaux, Vol. 48, No. 3, pp. 401-408. <https://doi.org/10.18280/acsm.480312>.
2. Harish Venu, Prabhu Appavu, Venkatesan Krishnan, Jayaprabakar Jayaraman, Mudhu Krishnan Manimuthu, Sudhakar Kosinapogu, **Dhana Raju Vallapudi**, Emission study on a direct injection diesel engine powered with blends of Moringa oleifera biodiesel-diesel, Environmental Quality Management, 2023, ISSN: 1520-6483,<https://onlinelibrary.wiley.com/doi/abs/10.1002/tqem.22088>
3. **Seelam Pichi Reddy**, Jagan Mohan Reddy Danda, **Murahari Kolli** & Anusha Yaramala, Artificial neural network modelling of aluminium/Al<sub>2</sub>O<sub>3</sub>/fly ash hybrid composites prepared by powder metallurgy, 2023, ISSN: 1955-2513, <https://doi.org/10.1007/s12008-023-01574-4>

4. **Murahari Kolli**, Dasari Sai Naresh, Aruri Devaraju & Kosaraju Satyanarayana, Investigation of mechanical properties in friction stir processing parameters of Cu-TiB<sub>2</sub> composite using Taguchi approach, International Journal on Interactive Design and Manufacturing (IJIDeM), 2023, 1955-2513, <https://doi.org/10.1007/s12008-023-01586-0>
5. Amol J. Asalekar, D.V. A. Rama Sastry, **M.B.S. Sreekara Reddy**, Surendra D. Barewar, Analysis of thermophysical properties of novel hybrid nanoparticles based vegetable nanofluid, Journal of Thermal Engineering, 9(6), 1466-1477, 2023, ISSN: **2148-7847**, <https://doi.org/10.18186/thermal.1397183>
6. Chendrasekhar Sunnapu, **Murahari Kolli**, Experimental investigation of Al 5083 alloy using friction stir welding process through taguchi method, International Journal on Interactive Design and Manufacturing (IJIDeM), 2024, ISSN: 1955-2513, <https://link.springer.com/article/10.1007/s12008-024-01746-w>
7. Chendrasekhar Sunnapu and **Murahari Kolli**, Assessing the role of friction stir Welding tool shoulder profile and parameters on mechanical performance of Al 5083 weld joints pre and post corrosion exposure, Engineering Research Express, 6(1), 015524, 2024, ISSN: 2631-8695, <https://iopscience.iop.org/article/10.1088/2631-8695/ad2f89>
8. K. Satyanarayana, B. Prasanna, B. Vaishnavi, Ch. Kavya, M. Vinolika, **Murahari Kolli**, Experimental investigation of air jet impingement cooling in car radiator with hollow cone nozzle plate spacing using nanofluids, International Journal on Interactive Design and Manufacturing (IJIDeM), 2024, ISSN: 1955-2513, <https://doi.org/10.1007/s12008-024-01977-x>

### Scopus Papers-08

1. M.Bala Chennaia, G.Dilli Babu, M.Sumalatha, **K.Dillip Kumar**, T Srinivasarao, Tribological and Mechanical Properties of Al 6061/SiC/ GO Hybrid Composites Produced with Stir Casting, Journal of Mines, Metals and Fuels, 71 (9), 1262-1270, 2023, ISSN: 0022-2755, <https://doi.org/10.18311/jmmf/2023/35445>
2. Pinjala Tejomurthi, **K.Dilip Kumar**, Bhanavathu Balakrishna, Experimental Investigation on Vapour Compression Refrigerator System Using Propane as Working Fluid with Graphene Oxide Nanoparticles & Pag Lubricant, Journal of Harbin Engineering University, 44(8), 138-150, 2023, ISSN: 1006-7043, <https://harbinengineeringjournal.com/index.php/journal/article/view/832>
3. S. Sivarajeswari, Soumya Nikhil Hublikar, Yogendra Kumar, Shobana D., A. Deepak, **Meduri Oliva**, Multiple Level Inverter Scheme for Improved Power Quality of Renewable Energy Solar Panel, International Journal of Intelligent Systems and Applications in Engineering, 12(1), 9-105, 2023, ISSN: <https://ijisae.org/index.php/IJISAE/article/view/3398>

4. K Yamini, PS Kishore, **V Dhana Raju**, Experimental studies on performance, combustion, and emission characteristics of diesel engine powered with subabul seed biodiesel blends, International Journal of Ambient Energy, 2024, ISSN: 2162-8246, <https://doi.org/10.1080/01430750.2024.2304740>
5. K Srinivasa Reddy, Y Venkata Hanumantha Rao, **V Dhana Raju**, Experimental assessment of copper oxide nanoparticles on the attributes of diesel engines fuelled with waste plastic biodiesel, International Journal of Ambient Energy, 2024, ISSN: 2162-8246, <https://doi.org/10.1080/01430750.2024.2307414>
6. M. Thiruchitrambalam, Putta Nageswara Rao, **Siva Sankara Babu Chinka**, R. Sampath Kumar, Mohammad Jahidul Islam, B. Ashok Kumar, "Study of the Analysis of the Corrosion Resistance of Ti6Al4V and CoCrMo Metallic Alloys", Int. J. Vehicle Structures & Systems, ISSN:0975-3540, 16(1), 164-169, 2024, doi: 10.4273/ijvss.16.2.06
7. **A Nageswara Rao**, R Jeyapaul, **B Chaitanya**, Effect of Visual Distraction on Driving Performance: Driving Simulator Experiment, International Journal of Vehicle Structures & Systems, 15(5), 603-607, ISSN: 0975-3060/0975-3540, DOI:10.4273/ijvss.15.5.03
8. Gundreddi Deepika Reddy, Nageswara Rao Medikondur, T. Vijaya Kumar, Vinjamuri Venkata Kamesh, **Perumalla Vijaya Kumar**, Smart Factory Navigation: Sensor-Driven Access Point Selection for Automated Guided Vehicles, Journal Of Nano- And Electronic Physics, 16(3), ISSN:2077-6772/2306-4277. DOI: 10.21272/jnep.16(3).03019

### Scopus Conference Proceedings – 12

1. Sudheer Hanumanthakari; Neha Garg; P Chandrakanth; Navdeep Dhaliwal; R Ramadevi; **Siva Sankara Babu Chinka**, Deep Learning based Fault Diagnosis in Electrical Machinery in Industrial Sector based on Data Mining Techniques, IEEE, 959-964, Aug-2023, [10.1109/ICIRCA57980.2023.10220712](https://doi.org/10.1109/ICIRCA57980.2023.10220712)
2. Naveen Kumar Bind; **Siva Sankara Babu Chinka**; Shaik Vaseem Akram; Neelamegan Sengodan; Md. Shakil Hossain, Fault Analysis of An Induction Motors Using AI and ML: An Efficient Way, IEEE, 1424-1430, July 2023, [10.1109/ICACITE57410.2023.10183215](https://doi.org/10.1109/ICACITE57410.2023.10183215).
3. **K. Srinivasa Rao; K. V. Viswanadh; M. Oliva; A. Dhanujay Kumar; A. Pratyush;** N. R. Medikondur, MATLAB coding and experimental analysis of spiral plate heat exchanger, AIP Conference Proceedings, 2821, NOV 2023, ISSN: 1551-7616, <https://doi.org/10.1063/5.0169441>.
4. N. R. Medikondur; Kona Ram Prasad; **Oliva Meduri;** K. Prakash Babu; A. Sri Harsha; B. V. Dharmendra, Data mining-based prediction for operational completion time and mean flow time, AIP Conference Proceedings, 2821, NOV 2023, ISSN: 1551-7616, <https://doi.org/10.1063/5.0158476>.

5. N. R. Medikundu; **Oliva Meduri**; K. Prakash Babu; Kona Ram Prasad; A. Sri Harsha; B. V. Dharmendra, A data mining based heuristic algorithm implementation for intelligence system, AIP Conference Proceedings, 2821, NOV 2023, ISSN: 1551-7616, <https://doi.org/10.1063/5.0158475>
6. **Mallikarjuna Rao Dandu**; **K. Sai Babu**; M. Bhuvaneshwari; **V. Dhana Raju**; **B. Udaya Lakshmi**; **K. V. Viswanadh**, The experimental research on diesel engine characteristics with annona squamosa biodiesel, AIP Conference Proceedings, 2821, NOV 2023, ISSN: 1551-7616, <https://doi.org/10.1063/5.0158593>
7. Sri Harsha; Mohammad Arshad; **V. Sankara Rao**; K. Prakash Babu; N. R. Medikundu; B. V. Dharmendra, Data mining application in task scheduling system, AIP Conference Proceedings, 2821, 70013, NOV 2023, ISSN: 1551-7616, <https://doi.org/10.1063/5.0158472>
8. N. R. Medikundu; **V. Sankara Rao**; Jaya Raju Gandepudi; K. Prakash Babu; A. Sri Harsha; B. V. Dharmendra, Improve the performance of complex system through artificial intelligence, AIP Conference Proceedings, 2821, 70012, NOV 2023, ISSN: 1551-7616, <https://doi.org/10.1063/5.0158471>
9. Md. K. M. Farokhi; N. R. Medikundu; P. V. Chalapathi; A. Sri Harsha; **P. Vijaya Kumar**; B. V. Dharmendra, Soft computing techniques for task scheduling, AIP Conference Proceedings, 2821, 70007, NOV 2023, ISSN: 1551-7616, <https://doi.org/10.1063/5.0158463>
10. Sri Harsha; **P. Vijaya Kumar**; Arumalla Nagaraju; K. Prakash Babu; N. R. Medikundu; B. V. Dharmendra, Mining knowledge for NP-complete scheduling problems, AIP Conference Proceedings, 2821, 70014, NOV 2023, ISSN: 1551-7616, <https://doi.org/10.1063/5.0158474>
11. Md. K. M. Farokhi; P. V. Chalapathi; N. R. Medikundu; **P. Vijaya Kumar**; A. Sri Harsha; B. V. Dharmendra, Artificial intelligence technique for industry 4.0, AIP Conference Proceedings, 2821, 70008, NOV 2023, ISSN: 1551-7616, <https://doi.org/10.1063/5.0158465>
12. N. R. Medikundu; N. Madhu Bindu; **P. Vijaya Kumar**; Kareemulla Shaik; A. Sri Harsha; B. V. Dharmendra, Implementation of beam search algorithm for expert system, AIP Conference Proceedings, 2821, 70009, NOV 2023, ISSN: 1551-7616, <https://doi.org/10.1063/5.0158466>,

#### **Open Access Journal - 03**

1. **Kolahalam Sai Babu**, T. N.Charyulu, An Intense Study on The Efficiency and Effectiveness of Gilled Tube Economizer in Thermal Power Plant by Using LMTD And NTU Methods, United International Journal of Engineering and Sciences (UIJES),4(3), 17-23, ISSN: 2582-5887, [DOI:10.53414/UIJES:2024.43.23](https://doi.org/10.53414/UIJES:2024.43.23)
2. **Dhanunjay Kumar Ammisetti**; S. S. Harish Kruthiventi; **Sankararao Vinjavarapu**; Nelakuditi Naresh Babu; Jaya Raju Gandepudi; **Sudheer Kumar Battula**, A review on reinforcements, fabrication methods, and mechanical and wear properties of titanium metal matrix composites, Journal of Engineering and Applied Science, **71**, 60 (2024), ISSN: 2536-9512, <https://doi.org/10.1186/s44147-024-00392-z>

3. **Venkateswara Reddy Kolagotla, Sai Babu Kolahalam, Emmanuel Buradagunta, Naresh Babu Nelakuditi, Pichi Reddy Seelam, Dhana Raju Vallapudi and Mallikarjuna Rao Dandu**, Comparative Thermal Analysis by Using Simulation of Circular Fin Manufactured with Several Materials, Nano World Journal, 9(S4), 15-19, 2023, ISSN: 2379-1101, DoI: 10.17756/nwj.2023-s4-003