

Name of Faculty Dr. N JANARDHAN  
 Designation Assistant Professor  
 Nature of Job/Appointment Regular



Date of Joining 02- 12 - 2010  
 E-mail njanardhan\_mech@cbit.ac.in

Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (Mechanical)	Awarded
PG	M. Tech. (Thermal)	Distinction
UG	B. E. (Mechanical)	First

Work Experience

Teaching	18
Research	06 years
Industry	5
Others	04 Months

Area of Specialization Thermal Engineering

Professional Memberships Member, IEEE membership, 99912769

Responsibilities held at Institution Level

Responsibilities held at Department Level

1. Member, Course Expert Group
2. Heat Transfer Lab In charge

Research Guidance --

Awards Received --

Courses Handled at Under Graduate / Post Graduate Level. Thermodynamics, ATDHT, Refrigeration & Air conditioning, Artificial Intelligence, Finite Element Analysis, Fluid Mechanics & Hydraulic Machines, CAD & D, Applied Thermodynamics, Heat Transfer, Failure Analysis and Design

No. of Papers Published National Journals – International Journals – 55

National Conference – 01 International Conference – 2

**Consultancy Project-DRDO**

Projects Carried out

1. Thermo-Structural Stability of a RCC Tunnel, worth of 9.89 lakhs
2. Development of Image Matching Techniques For Camouflaging Of Various Terrains / Assets Of Sites, worth of 9.50 lakhs

Patents

1. Control of aldehydes in high grade insulated diesel engine with low cost catalytic converter  
 M.V.S.Murali Krishna, K.Kishor, Y.Nagini, N.Janardhan,  
 Date of filing application 06/07/2022,  
 Date of publishing- 15/07/2022,  
 Application No. 202241039527
2. Spark ignition engine with copper coated piston, copper coated liner and copper coated cylinder head  
 M.V.S.Murali Krishna, K.Kishor, N.Janardhan, K.N.V. Sreedevi  
 Date of filing Application 06/07/2022  
 Date of publishing 15/07/2022  
 Application No 202241039530
3. Diesel engine with different levels of Insulation for controlling pollution levels  
 M.V.S.Murali Krishna, R.P.Chowdary, V.V.R.Seshagiri Rao,  
 N.Janardhanan  
 Date of filing Application 06/07/2022

Technology Transfer

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Invited Speaker

1. Invited guest lecture for a talk on 'Advanced Thermodynamics' on 5<sup>th</sup> April, 2017 in GURU NANAK INSTITUTIONS TECHNICAL CAMPUS.
2. Invited guest lecture on 'Basics of Mechanical Engineering for Non Mechanical Personnel' from 30<sup>th</sup> November to 4<sup>th</sup> December, 2018.
3. Delivered lecture on 'Thermodynamics Refrigeration' for the employees of Dr. Reddy's Laboratories from 12-02-2014 to 06-05-2014.
4. Invited guest lecture for a talk on 'Basics of Finite Elemental Techniques' on 7<sup>th</sup> April, 2019 in GURU NANAK INSTITUTIONS TECHNICAL CAMPUS

No. of Books/Chapter Published with details

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Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops/Other Trainings (**Attended and/or Organized**).

1. Participated one week Faculty Development Programme on "Outcome Based Education and NBA Accreditation Process", during 28-may-2020 into 01-06-2020.
2. Participated one week Programme of online Faculty Development Programme on "INDUSTRY 4.0- A VISION OF DESIGN AND MANUFACTURING", conducted by the Department of Mechanical Engineering during 16<sup>th</sup>-20<sup>th</sup> June, 2020.
3. Participated one week online programme on "ADVANCED MATERIALS AND MANUFACTURING" from 29<sup>th</sup>/06/2020 to 03/07/2020 in KITS warangal
4. Participated one week faculty Development programme on "Finite Element Applications in Mechanical & Civil Engineering" Organized by the Department of Mechanical Engineering, CBIT, Hyderabad. 23-28, 2017.
5. Organized STTP on "IoT, IIoT and Applications" 10 - 15 July, 2023, in association with LETFLIX Technologies.

Details of Journal Publications/Conferences (**National and International**)

**International Journal**

1. Mudasar Basha 1,2 , Munuswamy Siva Kumar 1, Mangali Chinna Chinnaiyah 2,3,\* , Siew-Kei Lam 3, Thambipillai Srikanthan 4, Narambhatla Janardhan 5, Dodde Hari Krishna 6 and Sanjay Dubey 7, "A Versatile Approach to Polygonal Object Avoidance in Indoor Environments with Hardware Schemes Using an FPGA-Based Multi-Robot"(MDPI), <https://doi.org/10.3390/s23239480>, Published: 28 November 2023,
2. Chinnaiyah M C, Member, IEEE, G. Divya Vani, Srinivasa Rao Karumuri, Member, IEEE, Thambipillai Srikanthan , Senior Member, IEEE, Siew-kei Lam, Senior Member, IEEE, Janardhan Narambhatla, D Hari Krishna and Sanjay Dubey, "Geometry-based Parking Assistance using Sensor Fusion for Robots with Hardware Schemes", IEEE SENSORS JOURNAL, VOL. XX, NO. XX, XXXX 2023
3. M C Chinnaiyah<sup>1</sup>, Sanjay Dubey<sup>2</sup>, N Janardhan<sup>3</sup>, Venkata Pathi<sup>4</sup>, Nandan K<sup>1</sup>, Anusha M<sup>1</sup>, "Analysis of Pitta Imbalance in young Indian adult using Machine Learning Algorithm", 2022 2nd International Conference on Intelligent Technologies (CONIT), Karnataka, India. June 24-26, 2022 (IEEE)
4. Divya Vani G 1,2, Srinivasa Rao Karumuri 1,\* , Chinnaiyah M C 2,3,\* , Siew-Kei Lam 3, Janardhan Narambhatlu 4, and Sanjay Dubey 2 "Hardware-Efficient Scheme for Trailer Robot Parking by Truck Robot in an Indoor Environment with Rendezvous", Rendezvous. Sensors 2023, 23, 5097. <https://doi.org/10.3390/s23115097> (MDPI)
5. N. Janardhan , N. V. Sreenivasulu, Y. Nagini, Experimental Investigations on Bio-Diesel with Nano Additive on High Grade Insulated Combustion Chamber at their recommended and Optimum Timings GRADIVA REVIEW JOURNAL, ISSN NO : 0363-8057, VOLUME 8 ISSUE 5 2022, Page 508
6. Dr. N Janardhan, MVS Muralikrishna Comparative Investigations On The Performance Parameters Of Tobacco Seed Oil Biodiesel In A Low Heat Rejection Diesel Engine, ISSN Print: 0976-6340, Volume 13, Issue 2, pp. 6-22, February 2022.
7. Dr. N. Janardhan , Dr. M V S. Mural Krishna, Testing of spark Ignition Engine with Alcohol, International Journal of Mechanical and Production Engineering Research and Development, ISSN: 2249-6890, vol - 11, issue - 3, Jun 2021
8. Dr. N Janardhan, Reduction Of Exhaust Emissions Of Semi Adiabatic Diesel Engine With Alternative Fuels, International Journal of Mechanical Engineering and Technology, ISSN: 0976-6359, Volume 12, Issue 3, pp:9-19, March, 2021 (scopus)

9. R.P. Chowdary, N.Janardhan, Performance of Waste Fried Oil based Biodiesel in a Stationary Diesel Engine, International Journal of Innovative Technology and Exploring Engineering, ISSN: 2278-3075, Volume-9 Issue-6, April,2020
10. N. Janardhan, R. P. Chowdary, Performance of Semi Adiabatic DI Diesel Engine with Supercharged air using Crude Jatropa Oil, International Journal of Soft Computing and Engineering, ISSN: 2231-2307, Volume-9 Issue-5, Jan,2020
11. N.Venkateswara Rao, M.V.S.Murali Krishna, R.Peraiah Chowdary, N.Janardhan, V.V.R.Seshagiri Rao and T.Ratna Reddy, Experimental investigations on pollution levels from supercharged partially adiabatic diesel engine with tamarind biodiesel blended with diethyl ether, Pollution Research, ISSN: : 0257-8050, 37(4),235-240, December,2019
12. Dr. N Janardhan, Dr.R.P Chowdary "Performance of Semi Adiabatic DI Diesel Engine with Supercharged air using Crude Jatropa Oil" International Journal of Soft Computing and Engineering (IJSCE) ISSN: 2231-2307, Volume-9 Issue-5, January 2020.
13. Dr. R.P Chowdary, Dr.N Janardhan," Performance of waste fried Oil Based Bio Diesel in a Stationary Diesel Engine" International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-9 Issue-6, April 2020
14. N. Janardhan , N. V. Sreenivasulu, Y. Nagini, Experimental Investigations on Bio-Diesel with Nano Additive on High Grade Insulated Combustion Chamber at their recommended and Optimum Timings GRADIVA REVIEW JOURNAL, ISSN NO : 0363-8057, VOLUME 8 ISSUE 5 2022, Page 508
15. V.V.R.Seshagiri Rao<sup>1</sup>, M.V.S. Murali Krishna<sup>2\*</sup>, R.P.Chowdary<sup>3</sup> and N.Janardhan Investigations on exhaust emissions of insulated engine fueled with rice brawn biodiesel, Gradiva Review Journal, ISSN NO : 0363-8057, VOLUME 8 ISSUE 5 2022
16. Dr. N Janardhan, MVS Muralikrishna Comparative Investigations On The Performance Parameters Of Tobacco Seed Oil Biodiesel In A Low Heat Rejection Diesel Engine, ISSN Print: 0976-6340, Volume 13, Issue 2, pp. 6-22, February 2022
17. Dr. N. Janardhan , Dr. M V S.murali krishna, Testing of spark Ignition Engine with Alcohol, International Journal of Mechanical and Production Engineering Research and Development, ISSN: 2249-6890, vol - 11, issue – 3, Jun 2021
18. Dr. N Janardhan, Reduction Of Exhaust Emissions Of Semi Adiabatic Diesel Engine With Alternative Fuels, International Journal of Mechanical Engineering and Technology, ISSN: 0976-6359, Volume 12, Issue 3, pp:9-19, March, 2021(scopus)
19. R.P. Chowdary, N.Janardhan, Performance of Waste Fried Oil based Biodiesel in a Stationary Diesel Engine, International Journal of Innovative Technology and Exploring Engineering, ISSN: 2278-3075, Volume-9 Issue-6, April,2020
20. N. Janardhan, R. P. Chowdary, Performance of Semi Adiabatic DI Diesel Engine with Supercharged air using Crude Jatropa Oil, International Journal of Soft Computing and Engineering, ISSN: 2231-2307, Volume-9 Issue-5, Jan,2020
21. N.Venkateswara Rao, M.V.S.Murali Krishna, R.Peraiah Chowdary, N.Janardhan, V.V.R.Seshagiri Rao and T.Ratna Reddy, Experimental investigations on pollution levels from supercharged partially adiabatic diesel engine with tamarind biodiesel blended with diethyl ether, Pollution Research, ISSN: : 0257-8050, 37(4),235-240, December,2019
22. Dr. N. Janardhan, Study of Smoke Levels Using crude Jatropa Oil with Preheated Condition and at Normal Condition Injection in High Grade Low Heat Rejection Combustion Chamber of Diesel Engine at Different Operating Pressures , International Journal of Application or Innovation in Engineering & Management (IJAIEM), ISSN 2319 – 4847, Volume 8, Issue 6, June 2019, ISSN 2319 – 4847, Volume 8, Issue 6, June 2019
23. N.Venkateswara Rao, M.V.S.Murali Krishna, R.Peraiah Chowdary, N.Janardhan, V.V.R.Seshagiri Rao and T.Ratna Reddy (2018), Experimental investigations on pollution levels from supercharged partially adiabatic diesel engine with tamarind biodiesel blended with diethyl ether, Pollution Research, ISSN: : 0257-8050, December, 37(4),235-240. (Scopus index journal)
24. N.Venkateswara Rao, M.V.S.Murali Krishna, R.Peraiah Chowdary, N.Janardhan, V.V.R.Seshagiri Rao and T.Ratna Reddy (2018), Experimental investigations on pollution levels from supercharged partially adiabatic diesel engine with tamarind biodiesel blended with diethyl ether, Pollution Research, ISSN: : 0257-8050, December, 37(4),235-240. (Scopus index journal) (Impact factor-4.8)
25. Dr. N Janardhan, Reduction Of Nox Levels In Diesel Engine With Jatropa Oil Using Selective Catalytic Technique, International Journal Of Engineering Sciences & Research Technology, ISSN: 2277-9655, DOI: 10.5281/zenodo.1135985 January, 2018
26. Dr. N Janardhan, Influence Of Varied Injection Timing On Exhaust Emissions With Crude Jatropa Oil On Di Diesel Engine With High Grade Insulated Combustion, IRE Journals, ISSN: 2456-8880,Volume 1 Issue 6, Dec 2017
27. Dr. N Janardhan, Experimental Investigations on Di Diesel Engine with High Grade Insulated Combustion Chamber with Varied Injection Pressure, IRE Journals, ISSN: 2456-8880, Volume 1 Issue 6, Dec 2017
28. Dr. N Janardhan(2017 Dec),\_Studies On Influence Of Injection Pressure On Exhaust Emissions Of Diesel Engine With Medium Grade Insulated Combustion Chamber With Crude Jatropa Oil Operation, International Journal of Engineering Research and General Science, ISSN 2091-2730, Volume 5, Issue 6, November-December, 2017
29. Dr.N. Janardhan(2017 Dec), Effect Of Injection Timing On Exhaust Emissions And Combustion Characteristics Of Direct Injection Diesel Engine With Air Gap Insulation, International Journal of Current Engineering and Technology, Volume 5, Issue 6,

30. N.Janardhan, M. Ravi Chandra and M.V.S.Murali Krishna, (2017), Experimental investigations on DI diesel engine with high grade insulated combustion chamber with varied injection timing, *International Journal of Current Engineering and Technology*, ISSN:2347-5161, August, July 7(4), 1482-1489. (Impact factor=6.125)
31. N.Janardhan, M.V.S.Murali Krishna, Ch.Kesava Reddy, N.Durga Prasada Rao and L.Suresh Kumar, (2016), Studies on exhaust emissions and combustion characteristics of DI diesel engine with air gap insulation with varied injection timing and injector opening pressure, *International Journal of Current Engineering & Technology*, ISSN:2347 – 5161, 6(1), January, 117–125 (Impact Factor=5.4)
32. N. Janardhan, M.V.S. Murali Krishna, Ch. Kesava Reddy, Durga Prasada Rao. And L.Suresh Kumar. (2016). Studies on exhaust emissions and combustion characteristics of DI diesel engine with air gap insulation with injection timing and injector opening pressure, *International Journal of Current Engineering and Technology*, ISSN 2347–5161, 6(1), February, 117–125 (Impact Factor=5.126)
33. Raavi.Peraiah Chowdary, Maddali V.S. Murali Krishna, T.Kishen Kumar Reddy, D.Srikanth, N. Janardhan and P.V.Krishna Murthy, (2015). Experimental Investigations on DI diesel engine with low heat rejection diesel engine with waste fried vegetable oil and its biodiesel, (MECE 53202) *ASME Journal of Heat Transfer and Thermal Engineering*, Volume–88, November, Paper No. IMECE2015–53202, pp. V08BT10A059; 14pages doi:10.1115/IMECE2015–53202
34. N.Janardhan, M.V.S.Murali Krishna and P.Usha Sri, (2015), Influence of injection timing on exhaust emissions and combustion characteristics of low heat rejection diesel engine with air gap insulation, *International Journal of Current Engineering and Technology*, ISSN 2347–5161, October, 5(5), 3364–3371
35. M.V.S. Murali Krishna, T.Ohm Prakash, P.Usha Sri, N.Janardhan and P.V. Krishna Murthy. (2015). Experimental Investigations on direct injection diesel engine with ceramic coated combustion chamber with carbureted alcohols and crude jatropha oil, *Renewable and Sustainable Energy Reviews*, ISSN: 1364–0321, <http://dx.doi.org/10.1016/j.rser.2015.09.011>, September, 53, 606–628, Elsevier Publications, (Impact factor= 5.9, Five year Impact factor=6.7).
36. N. Janardhan, M.V.S. Murali Krishna and P.Usha Sri. (2015), Studies on influence of injection pressure on performance parameters of diesel engine with high grade insulated combustion chamber with crude jatropha oil operation, *International Journal of Current Engineering Technology*, ISSN: 2347–5161, June, 5(4), 2360–2369 (Impact factor= 3.2)
37. N. Janardhan, M.V.S. Murali Krishna and P.Usha Sri. (2015), Studies on influence of injection pressure on exhaust emissions of diesel engine with high grade insulated combustion chamber with crude jatropha oil operation, *International Journal of Current Engineering Technology*, ISSN: 2347–5161, June, 5(3), 966–973 (Impact factor= 3.2)
38. N. Janardhan, M.V.S. Murali Krishna and P.Usha Sri. (2015), Studies on influence of injection pressure on performance parameters of diesel engine with medium grade low heat rejection combustion chamber, *International Journal of Application or Innovation in Engineering and Management*, ISSN: 2319–487, June, 4(5), 362–375. (Impact factor= 3.2)
39. N. Janardhan, M.V.S. Murali Krishna, Ch. Kesava Reddy and N.Durga Prasada Rao. (2015), Effect of injection timing on performance parameters of DI diesel engine with air gap insulation, *International Journal of Thermal Technologies*, ISSN: 2277–4114, March, 5(1), 9–17, (Impact factor= 1.129)
40. N. Janardhan, M.V.S. Murali Krishna, and P. Usha Sri, (2015), Experimental investigations of performance parameters of diesel engine with ceramic coated insulated chamber with jatropha oil with varied injection pressure, *International Journal of Thermal Technologies*, ISSN: 2277–4114, March, 5(2), 112–121 (Impact factor= 1.129)
41. N. Janardhan, M.V.S. Murali Krishna, Ch.Kesava Reddy and N.Durga Prasada Rao. (2015), Influence of injector opening pressure on performance parameters of DI diesel engine with three levels of insulation, *International Journal of Current Engineering Technology*, ISSN: 2347 – 5161, February, 5(1), 53–60. (Impact factor= 4.55)
42. N. Janardhan, M.V.S. Murali Krishna, Ch.Kesava Reddy and N.Durga Prasada Rao. (2015), Effect of injection timing on exhaust emissions and combustion characteristics of direct injection diesel engine with ceramic coated cylinder head, *International Journal of Current Engineering Technology*, ISSN: 2347 – 5161 February, 5(1), 46–52. (Impact factor= 4.55)
43. N. Janardhan, M.V.S. Murali Krishna, Ch.Kesava Reddy and N.Durga Prasada Rao. (2014), Effect of injection timing on performance parameters of DI diesel engine with ceramic coated cylinder head, *International Journal of Scientific and Engineering Research*, ISSN: 2229–5518, December, 5(12), 1596–1607 (Impact factor= 3.2)
44. N. Janardhan, M.V.S. Murali Krishna, Ch.Kesava Reddy and N.Durga Prasada Rao. (2014), Effect of injection timing on exhaust emissions and combustion characteristics of direct injection diesel engine with high grade insulated combustion chamber, *International Journal of Application or Innovation in Engineering and Management*, ISSN: 2319–4847, December, 3(12), 213–221. (Impact factor=3.15)
45. N. Janardhan, M.V.S. Murali Krishna and P.Ushasri. (2014). Influence of injector opening pressure on exhaust emissions in DI diesel engine with three levels of insulation with diesel operation, *International Journal of Mechanical Engineering and Technology*, ISSN: 0976–6340, May, 5(5), 54–61 (Impact factor= 7.53). (Scopus Journal)
46. N. Janardhan, M.V.S. Murali Krishna and P.Ushasri. (2014). Influence of injector opening pressure on performance and exhaust emissions in DI diesel engine with air gap insulated piston and air gap insulated liner with diesel operation, *International Journal for Advance Research in Engineering and Technology*, ISSN: 2320–6802, April, 2(4), 107–115. (Impact factor=1.57)
47. N. Janardhan, M.V.S Murali Krishna, P. Ushasri and P.V.K. Murthy. (2013). Performance of evaluation of a low heat rejection diesel engine with jatropha oil. *International Journal of*

- Engineering Research in Africa. ISSN: 1663–4144, doi.10.4028/www.scientific.net/JERA.11.27, October, 11,27–44. (Scopus) (Switzerland)
48. N. Janardhan, M.V.S. Murali Krishna, P. Ushasri and P.V.K. Murthy (2013). Control of exhaust emissions of jatropha oil in crude form and biodiesel from high grade low heat rejection diesel engine, International Journal of Mechanical and Production Engineering Research and Development, ISSN: 2249-6890, June, 3(2), 199–212.(Impact factor=5.219) (Scopus Journal)
  49. P.V. Krishna Murthy, M.V.S. Murali Krishna, A. Sitarama Raju, N. Janardhan and P.Ushasri. (2013).Performance evaluation of a low heat rejection diesel engine with jatropha oil based biodiesel. International Journal of Renewable Energy, ISSN: 1309–0127, June, (Thailand), 8(1),31–48.
  50. N. Janardhan, M.V.S. Murali Krishna, P. Ushasri and P.V.K. Murthy. (2013).Comparative studies on performance, exhaust emissions and combustion characteristics of jatropha oil in crude form and in biodiesel form in a medium grade low heat rejection diesel engine, International Journal of Innovative Technology and Exploring Engineering, ISSN:2278–3075,(Tokyo), April, 2(5), 5–15. (Impact factor=1.0)
  51. N. Janardhan, M.V. S. Murali Krishna, P. Ushasri and P.V.K. Murthy. (2013). Exhaust emissions and combustion characteristics of jatropha oil in crude form and biodiesel of low heat rejection diesel engine. International Journal of Soft Computing and Engineering, ISSN: 2231–2307, (CSIR) March, 3(1), 91–95. (Impact factor=1.0)
  52. N. Janardhan, P. Usha Sri , M.V.S. Murali Krishna and P.V.K. Murthy. (2012). Performance of biodiesel in low heat rejection diesel engine with catalytic converter. International Journal of Engineering and Advanced Technology, ISSN: 2249–8958, (Tokyo), December, 2(2), 97–109. (Impact factor=1.0)
  53. N. Janardhan, M.V. S. Murali Krishna, P. Ushasri and P.V.K. Murthy. (2012). Performance of a low heat rejection diesel engine with jatropha. International Journal of Engineering Inventions, ISSN: 2278–7461, (Tokyo),September, 1(2), 23–35.(On line at [www.ijejournal.com](http://www.ijejournal.com)), (Impact factor=1.212)
  54. N. Janardhan, M.V. S. Murali Krishna, P. Ushasri and P.V.K. Murthy. (2012). Potential of a medium grade low heat rejection diesel engine with crude jatropha oil. International Journal of Automotive Engineering and Technologies, (Turkey), ISSN: 2146–9067, July, 1(2), 1–16 (Impact factor=0.6)
  55. N.Venkateswara Rao, M.V.S.Murali Krishna, R.Peraiah Chowdary, N.Janardhan, V.V.R.Seshagiri Rao and T.Ratna Reddy (2018), Experimental investigations on pollution levels from supercharged partially adiabatic diesel engine with tamarind biodiesel blended with diethyl ether, Pollution Research, ISSN: : 0257-8050, December, 37(4),235-240. (Scopus index journal)

**Conferences:**

1. M C Chinnaiyah , Sanjay Dubey, N Janardhan , Venkata Pathi , Nandan K, Anusha M, “Analysis of Pitta Imbalance in young Indian adult using Machine Learning Algorithm ”, 2022 2nd International Conference on Intelligent Technologies (CONIT), 978-1-6654-8407-7/22/\$31.00 ©2022 IEEE

