

Name of Faculty Dr M V S MURALI KRISHNA  
 Designation Professor  
 Nature of Job/Appointment Regular  
 Date of Joining 05-08-1987  
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Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (Mechanical Engineering)	Awarded
PG	M, E (Production Engineering)	First
UG	B. Tech (Mechanical Engineering)	First

Work Experience

Teaching	33 Years (Includes Research Experience)
Research	22 years
Industry	2.5 years

Area of Specialization Thermal Engineering

Professional Memberships FIE (F012132), FSESc, FSPE, FSCSc, MISTE, MISME, LMCI (1082), MSES (1179/LM/2006), MIAENG (139164);

Responsibilities held at Institution Level

1. Head, Department of Mechanical Engineering from 19-10-2018 to 31-05-2020
2. Worked as Member in Academic Council in CBIT from 02-03-2010 to 31.05.2020

Responsibilities held at Department Level

1. M.E Course Coordinator Member in CBIT from inception of the course to 18-10-2018
2. Member, BoS from 02-03-2010 till date

Research Guidance Awarded 10; Guiding 15;

Courses Handled at Under Graduate / Post Graduate Level. All subjects related to thermal engineering-33 for undergraduate course; Four subjects for PG course in Thermal Engineering and handled laboratories concerned to Thermal Engineering independently.

No. of Papers Published National Journals -38 International Journals - 263

National Conference - 36 International Conference -35

Projects Carried out AICTE project entitled "Studies on air gap insulated piston", with financial assistance of 7.7 lakhs was sanctioned in December 1995, and completed the project in 2002. Dr. M.V.S. Murali Krishna was coordinator for this project.

Patents

- 1) CONTROL ON POLLUTION LEVELS OF PETROL ENGINE WITH LOW COST CATALYTIC CONVERTER, Date of filing of Application :04/10/2021, Publication Date : 05/11/2021, The Patent Office Journal No. 45/2021 Dated 05/11/2021, 52288
- 2) CONTROL OF EXHAUST EMISSIONS OF AUTO RICKSHAW ENGINE RUN WITH DIESEL FUEL, Date of filing of Application :04/10/2021, Publication Date : 05/11/2021, The Patent Office Journal No. 45/2021 Dated 05/11/2021, 52289.
- 3) INSULATED PARTIALLY ADIABATIC DIESEL ENGINE OPERATED WITH METHANOL AND VEGETABLE OIL, Date of filing of Application :04/10/2021, Publication Date : 05/11/2021, The Patent Office Journal No. 45/2021 Dated 05/11/2021 52290

Technology Transfer Nil

Invited Speaker "Alcohol Engines", A two-day workshop on Alternative Liquid Fuels, Chaitanya Bharathi Institute of Technology, February 17, 2017

No. of Books/Chapter Published with details

1) Reduction of pollutants in 2-stroke petrol engine, *Advanced Aspects of Engineering Research Vol. 9*, Print ISBN: 978-93-90888-74-0, eBook ISBN: 978-93-90888-79-5, May 2021, DOI: 10.9734/bpi/aaer/v9/2004F

2) Investigations on exhaust emissions of a low heat rejection diesel engine with alternative fuels, *Challenging Issues On Environment And Earth Science, Chapter-11*, Print ISBN: 978-93-91473-65-5, eBook ISBN: 978-93-91473-68-6, 2021, DOI: 10.9734/bpi/ciees/v6/11298D

3) *Influence of injector opening pressure on exhaust emissions in insulated diesel engine, Current Approaches in Science, Technology and Research, Chapter-8*, ISBN: 978-93-91595-94-4, eBook ISBN: 978-93-91595-99-9, Volume-13, August, 2021, DOI: 10.9734/bpi/castr/v13/1794C

4) Determining the performance parameters of carbureted butanol and plastic oil blended with diethyl ether, *Novel Perspectives of Engineering Research Vol. 5*, ISBN: 978-93-5547-418-6, eBook ISBN: 978-93-5547-419-3 2021, DOI: 10.9734/bpi/nper/v5/15136D

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

1. Attended one week Faculty Development Program on "Emerging Research Areas in Mechanical Engineering," CMR-TC, Hyderabad, during 29.06.2020 to 03.07.2020
2. Attended one week Faculty Development Training Program on "Enhancing and Research and Consultancy Skills", during 22.06.2020 to 26.06.2020, Rajarambabu Institute of Technology, Sakharale, Sanli, Maharashtra.
3. Attended one week Faculty Development Training Program on "Industry 4.0-A Vision Of Design And Manufacturing" during 16.06.2020 to 20.06.2020, Department of Mechanical Engineering, Chaitanya Bharathi Institute of Technology, Hyderabad.
4. Attended one week Faculty Development Training Program on "Outcome Based Education and NBA Accreditation Process (UG) during 28.05.2020 to 01.06.2020, Chaitanya Bharathi Institute of Technology, Hyderabad.

## International/National Journals from the Year 2017

1. Vamsi Krishna Kolli, Sastry Gadepally, John Deb Barma, Murali Krishna Maddali, Sreeran Baratulla and Naresh Kumar Reddy Siddavatam, (2019), Establishment of lower exhaust emissions by using EGR coupled low heat loss diesel engine with fuel blends of micro-algae biodiesel oxygenated additive DEE antioxidant DPPD, Thermal Science and Engineering Progress, ISSN: 2451-9049, October, 13, 100401, <https://doi.org/10.1016/j.tsep.2019.100401>, (Elsevier Publications).
2. K.N.V.Sreedevi, M.V.S.Murali Krishna, Sunayana and Bhoomica (2019), Effect of EGR on performance of CI engine with diesel and cottonseed oil as fuels, International Journal of Mechanical and Production Engineering Research and Development, ISSN: 2249-80011, 9(5), 973-984
3. K.Laxmi, K.N.V.Sreedevi and M.V.S.Murali Krishna, (2019), Control of pollution levels in insulated diesel engine, International Journal of Energy, Ecology and Conservation, ISSN-0971-765X, Special Issue, November, 25, pp S 225-S231.
4. G.Sainna, M.V.S.Murali Krishna and P.Usha Sri, (2020), Experimental investigations on semi adiabatic diesel engine with exhaust gas recirculation fuelled with tamarind biodiesel, International Journal of Production Technology & Management, ISSN Print: 0976- 6383, January-June, 11(1), 8-21. (UGC Approved, Impact factor 7.2150)
5. Maddela Sai Krishna Kanth, M.V.S.Murali Krishna and Sankhe Narasimhulu, (2020) Experimental investigations on exhaust emissions with biodiesel blended with nano particles in CI engine, International Journal of Production Technology & Management, ISSN Print: 0976- 6383, January-June, 11(1), 22-31 (UGC Approved, Impact factor 7.2150)
6. B.Taraji Naik and M.V.S.Murali Krishna, (2020), Study on processing of waste plastic oil from micro plastic waste collection to prepare biodiesel, Journal of Engineering Sciences, ISSN : 0377-9254, January, 11(1), 331-335. (UGC Approved, Impact factor=6.54)
7. Ipsita Mohanti, M V S Murali Krishna, and M.Ravi Chandra, (2020, Butanol blend reduces pollutants in spark ignition engine, International Journal of Mechanical and Production Engineering Research and Development, April 10(2), 1031-1038.(Impact factor=8.87)
8. Yerramsetty Nagini, Maddali V S Murali Krishna and S.Naga Sarada (2020), Reduction of pollutants in SI engine with varied ignition timing, International Journal of Automobile Engineering Research & Development ISSN: ISSN: 2277-4785; June, 10(3), 59-66. (Impact Factor 5.8)
9. Yerramsetty Nagini, Maddali V S Murali Krishna and S.Naga Sarada (2020), Impact of spark ignition timing on pollutants of modified combustion chamber of SI engine, International Journal of Mechanical and Production Engineering Research and Development, ISSN: 2249-6890, June, 10(3), 1131-1138. (Impact factor=8.87)
10. G.Sainna, M.V.S. Murali Krishna, P.Usha Sri and M.Ravi Chandra, (2020), Experimental investigations on exhaust emissions of semi-adiabatic diesel engine with exhaust gas recirculation, International Journal of Pollution Research, ISSN:0257-8050, June, 39(3), 172-178.
11. N.Venkateswara Rao and M V S Murali Krishna (2020), Control of exhaust emissions in catalytically activated SI engine with induction of magnetism, International Journal of Mechanical and Production Engineering Research and Development, ISSN: 2249-6890, June, 10(3), 1273-1280.(Impact factor=8.87)
12. 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)
13. D.Srikanth, M.V.S. Murali Krishna, P.Usha Sri and M.Ravi Chandra, (2017), Experimental investigations on pollution levels of low heat rejection diesel engine with varied air gap thickness, International Journal of Innovation in Engineering and Management, ISSN: 2319-847, July, 6(7), 218-226.(Impact factor=7.319)
14. D.S.Madhuri, M.Ravi Chandra and M.V.S. Murali Krishna, (2017), Influence of injection pressure on performance parameters of semi adiabatic diesel engine with crude vegetable oil with magnetic induction, International Journal of Research in Science, Engineering and Technology, ISSN: 2394-739X, August, 62-71, 4(7), (Impact factor= 6.209))
15. R.Chanakya, D.Srikanth, M.Ravi Chandra and M.V.S. Murali Krishna, (2017), Experimental investigations on low grade low heat rejection diesel engine with crude cottonseed oil with butanol, International Journal of Current Engineering and Technology, ISSN:2347-5161, August, 7(4), 1589-1597. (Impact factor=6.125)
16. D.Srikanth, M.V.S. Murali Krishna, P.Usha Sri and M.Ravi Chandra, (2017), Experimental investigations on performance parameters with low heat rejection diesel engine with varied air gap thickness, International Journal of Current Engineering and Technology, ISSN:2347-5161, August, 7(4), 1598-1604(Impact factor=6.125)
17. D.S.Madhuri, M. Ravi Chandra and M.V.S. Murali Krishna, (2017), Experimental investigations on exhaust emissions with low heat rejection diesel engine with crude vegetable oil with magnetic induction, International Journal of Thermal Technologies, ISSN: 2277 – 4114, September, 7(3), (Impact factor= 3.110)
18. D.Srikanth, M.Ravi Chandra and M.V.S. Murali Krishna, (2017), Control of exhaust emissions of low grade low heat rejection diesel engine with cottonseed oil blended with butanol, International Journal for Research in Science, Engineering and Technology, ISSN:2394-739X, October, 4(10), 1-8(Impact factor=0.833)
19. K.N.V.Sridevi, P.Radha Krishna Prasad, M.V.S. Murali Krishna and Jaswanth Nag Gangireddy, (2019), Modeling and analysis of a disc brake, International Journal of Science and Research, ISSN:2319-7064, February, 8(2), 874-879. (Journal Impact factor-7.426)
20. Ravi Kumar Kotturi, M.V.S.Murali Krishna, B.Sudhher Prem Kumawr and M.Ravi Chandra, Control of pollutants in supercharged partially adiabatic diesel engine with carbureted methanol and crude karanja oil blended with DEE, International Journal of Ambient Energy, ISSN:

- <https://doi.org/10.1080/01430750.2019.1567587> (Francis and Taylor Publications)
21. M.V.S.Murali Krishna, S.Narasimha Kumar, K.Vamsi Krishna, and Sri Ram Bharathula, (2019), Experimental investigation on SI engine emissions via EGR and catalytic converter with air injection mechanism, *Journal of Mechanical Engineering*, ISSN 1823- 5514 , April, 16(1), 33-46. (Scopus Index, Malasian Journal)
  22. Y.Nagini, M.V.S.Murali Krishna and S.Naga Sarada, (2019), Thermal analysis of modified combustion chamber of spark ignition engine, *International Journal of Mechanical Engineering & Technology*, ISSN: 0976-6340, May,10(5), 75-82. (Scopus Index)
  23. 23) R.P. Chowdary, M.Ravi Chandra and M.V.S.Murali Krishna, Effect of air gap thickness on exhaust emissions of partially adiabatic diesel engine with tamarind biodiesel , *International Journal of Pollution Research*, ISSN:: 0257-8050,38(2), 254-260.I
  24. 24) K. Vamsi Krishna, G Ravi Kiran Sastry, M.V.S. Murali Krishna, John Deb Barma, (2018), Investigation on performance and emission characteristics of EGR coupled semi adiabatic diesel engine fuelled by DEE blended rubber seed biodiesel, *International Journal (Scopus Journal) of Engineering Science & Technology*, February, Elsevier Publications <https://doi.org/10.1016/j.jestch.2018.02.010>, 21, 122–129.
  25. 25) K.V.Krishna, G.R.K.Sastry and M.V.S.M.Krishna, (2018), Analysis of EGR coupled less heat rejection model of diesel engine with blends of jatropha biodiesel, diesel and diethyl ether: an experimental approach, *International Journal of Automotive and Mechanical Engineering*, ISSN: 2229-8649 , March, 15(1),DOI: <https://doi.org/10.15282/ijame.15.1.2018.15.0394>, 5097-5109 (Scopus Journal) (Malaysian Journal)(Impact factor=1.6)
  26. 26) Ch.Indira Priyadarsini, M.V.S.Murali Krishna and P.Usha Sri, (2018), Effect of copper coated piston on thermal and structural stability of four stroke SI engine combustion chamber, *International Journal of Innovating Research & Studies*, ISSN: 2319-9725, May, 8(5), 4-9.(Impact Factor=5.50)
  27. 27) R.P.Chowdary and M.V.S. Murali Krishna, (2018), Experimental investigations on performance parameters on DI diesel engine with alternative fuels, *International Journal of Emerging Technologies and Innovative Research*, ISSN:2349-5162, 5(6), 287-292.(Impact Factor=5.87, UGC Approved]
  28. 28) Gangaraju Srinivasa Sharma and M.V. S. Murali Krishna, (2018), Theoretical analysis of off design performance characteristics of single shaft gas turbine for power generation using biomass gasified fuel, *International Journal of Modern Engineering and Research Technology*, ISSN: 2348-8565, June,5,Special Issue, 51–58.
  29. 29) 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)
  30. 30) Ch.Indira Priyadarsini, M.V.S.Murali Krishna, Ipsita Mohanti, Y.Nagini, S.Narasimha Kumar and K.Kishor, (2018), Control of exhaust emissions from copper coated spark ignition engine with butanol blended gasoline with catalytic converter with different catalysts, *Pollution Research*, ISSN:: 0257-8050, December, 37(4),278-282, (Scopus index journal)

#### **International/ National Conferences from the Year 2017**

1. G.Srinivasa Sharma and M.V.S. Murali Krishna (2018), Exergic optimization of biomass integrated gasifier/gas turbine technology for power generation using genetic algorithm, *Proceedings of International Conference on Bioprocess for Sustainable Environment and Energy (ICBSEE)-2018*, National Institute of Technology, Rourkela, December 6-7. (Best Paper Award)
2. K.Vamsi Krishna, G.R.K.Sastry, John Deb Barma, C.S.P.Rao, M.V.S. Murali Krishna and B.V.Sreeram, (2018), Experimental exploration on the potentiality of renewable blends alge biodiesel -additive diethyl ether with an ordinary diesel engine coupled by supercharging and EGR, *Proceedings of International Conference on Bioprocess for Sustainable Environment and Energy (ICBSEE)-2018*, National Institute of Technology, Rourkela, December 6-7.
3. Ch.Indira Priyadarsini and M.V.S.Murali Krishna. (2018), Thermal analysis of slotted and drilled disc brakem *Proceedings of 1<sup>ST</sup> International Conference on Advances in Mechanical Engineering, (ICAME-2018)*, Department of Mechanical Engineering, CMR College of Engineering, Hyderabad, 21<sup>st</sup> and 22<sup>nd</sup> December
4. Ch. Kesava Reddy and M.V.S.Murali Krishna (2018), Effect of low thermal conductivity materials on performance of compression ignition engine-A Review and Experimentation, *Proceedings of 1<sup>ST</sup> International Conference on Advances in Mechanical Engineering, (ICAME-2018)*, Department of Mechanical Engineering, CMR College of Engineering, Hyderabad, 21<sup>st</sup> and 22<sup>nd</sup> December
5. Chirra. Kesava Reddy, M. Manzoor Hussain, S.Satyanarayana, M.V.S. Murali Krishna, (2018), Experimental investigation – magnetic assisted electro discharge machining, *IOP Conf. Series: Materials Science and Engineering* 346 (2018) 012062 doi:10.1088/1757-899X/346/1/012062
6. Ch.Indira Priyadarsini, M.V.S. Murali Krishna and P.Usha Sri, (2018), Thermal and structural analysis of four stroke SI engine combustion chamber, *Proceedings of International Conference on Innovative Trends in Engineering, Applied Science and Management, (ICITEAM-2018)*, Osmania University, Hyderabad, May 20.
7. K.Vamsi Krishna, G.S.R.K.Sastry and M.V.S.Murali Krishna, (2017), Analysis on performance and emission characteristics of semi adiabatic diesel engine fuelled by linseed biodiesel, *Proceedings of 25th National Conference on Internal Combustion Engines and Combustion (XXVNCICEC2017)*, NIT Suratkhal, Karnataka, December 15-17.
8. Gangaraju Srinivasa Sharma and M.V.S. Murali Krishna, (2018), Theoretical Analysis of Off design Performance characteristics of single shaft Gas Turbine for Power Generation using biomass gasified fuel, *Proceedings of National Conference on Trends in Mechanical Engineering and Nano Technology*, Department of Mechanical Engineering, Osmania University, June 29-30.

