

RESUME

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Academic Qualifications (University/College from where attained, year of passing, class, Thesis title etc.)

S.No.	Degree	Institution	Year	Class
1	Ph.D	SASTRA UNIVERSITY Thanjavur	2012	-
2	M.Tech	National Institute of Technology -Trichy	2002	First Class
3	B.E	Shanmugha College of Engineering Thanjavur	1996	First Class

Thesis title:

Experimental Investigations on Operating Characteristics of a Single Cylinder CI Engine and Variable Compression Ratio Engine using Biodiesel

LIST OF PUBLICATIONS

International journals:

1. **K.Murugu Mohan Kumar, T.Mohanraj and G.Rajmohan.** Operational characteristics of diesel engine run by ester of sun flower oil and compared with diesel fuel operation: International Journal of Sustainable Development 2009; 2(2): 84- 89.
2. **K.Murugu Mohan Kumar, T.Mohanraj and G.Rajmohan.** Investigation on the performance of diesel engine using various biofuel and the effect of temperature variation: International Journal of Sustainable Development 2009; 2(3): 176-182.
3. **T.Mohanraj, K.Murugu Mohan Kumar.** Comparative performance study of a direct injection diesel engine using blends of diesel fuel with tamanu oil: International Journal of Applied Engineering Research 2009; 5(15): 2723-2732. **(Scopus)**
4. **T.Mohanraj, K.Murugu Mohan Kumar and Perumal Kumar.** Biodiesel from pungan seed oil and its effect on engine performance with a computerized engine test rig: Pertanika Journal of Science and Technology 2010; 19(1): 117-127. **(Scopus)**
5. **T.Mohanraj, K.Murugu Mohan Kumar.** Performance analysis of a single cylinder DI diesel engine using different biodiesel: International Journal of Oil, Gas, and Coal Technology 2011; 4(4): 387 – 397. **(SCI)**
6. **T.Mohanraj, K.Murugu Mohan Kumar.** Performance and emission characteristics of an agricultural diesel engine using biodiesel fuel: International Journal of Engineering 2011; 1(4): 11-17.
7. **T.Mohanraj, K.Murugu Mohan Kumar.** Operating characteristics of a variable compression ratio engine using esterified tamanu oil: International Journal of Green Energy 2012;9(5):954-963. **IF 0.71 (SCI-E)**
8. **T.Mohanraj, K.Murugu Mohan Kumar.** Tamanu oil –An Alternative Fuel for Variable Compression Ratio Engine : International Journal of Energy and Environmental Engineering 2012;318: 1-8. **(Scopus)**

9. **S.Somasundaram, T.Mohanraj, S.Pasupathy Raju.** Effect of methanol additive with LPG in three cylinder four stroke S.I engine: Applied mechanics and materials 2014,592.1503-1509. (Scopus)
10. **T.Mohanraj, S.Krishnamani and R.Suresh.** Analysis of Combustion and Performance Characteristics of Low Heat Rejection Engine using Diesel-DEE Blended Fuel .International Journal of Applied Engineering Research.2014,9(20) 6493-6505. (Scopus)
11. **T.Asokkumar, R.Chandramouly and T.Mohanraj.** Performance and emission characteristics of esterified pinnai oil tested in VCR. International journal of Ecotoxicology and environmental safety. 2015,(121) 51-56. IF:2.762 (SCI)
12. **T.Mohanraj, S.Krishnamani, K.Murugu Mohan Kumar.** Thermal analysis of ceramic coated Aluminum alloy piston using Finite Element Method . Indian Journal of Science and Technology.2016, 9 (15). (Scopus) SIF:1.63
- 13.**T.Mohanraj and S.Krishnamani** "Experimental Investigation on performance,combustion and emission characteristics of a low heat rejection engine using rapeseed methyl ester and Diethyl ether". Indian Journal of Science and Technology.2016, 9(22), 378-389. (Scopus) SIF:1.63
14. **S.Pasupathy Raju, S.Somasundaram, T.Mohanraj** “ Effect of Turbocharger on C.I. Engine Performance and Emissions using Biodiesel Blend” *Journal of Environmental Biology* .2016,37 (1),1437-1441. (Scopus)
15. **S.Somasundaram, T.Mohanraj, S.Pasupathy Raju, K.Murugu Mohankumar,**“ Operating Characteristics of Multi Cylinder Petrol Engine Using LPG with Methanol ” *Springer Lecture Notes in Mechanical Engineering*. 2017. 1, 507-516. (Scopus)

16.S.Somasundaram, T.Mohanraj and S.Pasupathy Raju “Performance and Exhaust Emission study of LPG with Ethanol in three cylinder Carburetted SI Engine” *Journal of Engineering Science and Technology*.
(Scopus)

17. G.Rajamohan, P.Kumar, and T.Mohanraj”Analysis of Solar Water Heater with Parabolic Dish Collector and Conical Absorber” Proceedings of the 29th Symposium of Malaysian Chemical Engineers (SOMChE) 2016 Miri, Sarawak, Malaysia, December 1 – 3, 2016.

(Scopus)

18. Mohanraj.T,Barathwaj.V,Marshal Andru.M “Experimental Investigations and Operating Characteristics of Diesel Engine using Biodiesel”*International Journal of Pure and Applied Mathematics*. 2017.114(11) , 231-240.
(Scopus)

19. S.Krishnamani, T.Mohanraj B.Ravikumar. “ An Experimental Investigation on Performance, Combustion and Emission Characteristics of a Low Heat Rejection Engine using Diesel and Diethyl Ether Blends” **ASME 2017 Internal Combustion Fall Technical Conference**, Oct 15-18.Washington.
(Scopus)

20. T. Mohanraj. D.Venkatesan, Nikhil Raghavan Guduri, Kalyan Kiran Chippada. “Improved Method of CI Engine Performance Using Pongamia Oil for Various Blends of Biofuel” **International Journal of Engineering Research in Mechanical and Civil Engineering (IJERMCE)**. 2017. 2(9) , 55-62.
IF: 3.8

21. S. Pasupathy Raju, T.Mohanraj “Experimental Phase Stability Analysis of Diesel Ethanol Blended Fuel with Esterified Rice Bran Oil as an Emulsifier **International Journal of Mechanical Engineering and Technology (IJMET)** .2018.9 (1), . 289–296. (Scopus).

22. Mohamed Musthafa M, Ashok Kumar T, mohanraj T, chandramouli R. “A comparative study of performance, combustion and emission characteristics of diesel engine fueled by biodiesel blends with and without an additive” *FUEL* 225. 2018, 343-348.

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23. S.Krishnamani^{a*}, V.Harish, V.HariShankar, T.Mohan Raj. “The experimental investigation on performance and emission characteristics of ceramic coated diesel engine using diesel and biodiesel” [Materials today: proceedings](#) 5(8):16327-16337 · January 2018.

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24. Ravikumar M, Mohanraj T and Venkatesan D. Improved Design of Air Flow for a Two Stroke Internal Combustion Engine to Promote Cleaner Combustion. *ARPJ Journal of Engineering and Applied Sciences*.2018,13 (5),1932-1942. **(Scopus)**

25. M.Ravikumar, T. Mohanraj, D.Venkatesan. “Improved design of air flow for a Two stroke Internal combustion engine for enhanced in combustion” *International Journal of Mechanical and Production Engineering Research and Development(IJMPERD)*,ISSN-2249-6890.

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26. Krishnamani,S,. Harish,V., HariShankar, V., Mohan Raj,T., The experimental investigation on performance and emission characteristics of ceramic coated diesel engine using diesel and biodiesel, [Materials today: proceedings](#) 5(8) ,2018, 6327-16337”

27. Suresh R, Venkatesan D, Mohanraj T, Akilesh Kesavan S .Experimental Investigations on Combustion and Emission Characteristics of Biofuel Prepared from Cotton Seed oil at Various Injection Pressures . *International Journal of Mechanical Engineering and Technology*. 2018, 9 (1), 172-180. **(Scopus)**

28. M. Senthil Kumar,S. Pasupathy Raju and T. Mohan Raj.Experimental Investigations on The Impact of Addition of Different High Octane Fuels on Engine’s Behavior of a Mahua Oil

Based Diesel Engine. SAE International.2018. Paper Offer Number: 18PFL-0208.

(Scopus)

29. M.Senthil Kumar, N. Ganesan ,S. Pasupathy Raju and T. Mohan Raj.Investigations on the Combined Effect of Oxygen Enrichment and Water Injection Techniques on Engine's Performance, Emission and Combustion of a Mahua Oil Based Compression Ignition Engine .SAE International.2018. **2018-01-0929.** (Scopus)

30. S.Krishnamani and Mohan Raj T. “Experimental study on performance, combustion and emission characteristics of a diesel engine using biodiesel-diethyl ether blend”. Energy sources, part A: recovery, utilization, and environmental effects. [2019.DOI:10.1080/15567036.2019.1623950](https://doi.org/10.1080/15567036.2019.1623950). (SCI IF: 0.894_)

31. Ashok Kumar T, Mohamed Musthafa M, Chandramouli R, Mohanraj T, Sridharan G. Performance characteristics of a variable compression ratio CI engine simulation using an artificial neural network. Energy sources, Part A: recovery, utilization, and environmental effect, 2019. DOI: 10.1080/[15567036.2019.1648595](https://doi.org/10.1080/15567036.2019.1648595)(IF: 0.894)

32. Pasupathy Raju S. and Mohan Raj T., “Optimisation and effective utilisation of esterified rice bran oil in a turbocharged VCR engine by analysing its operating characteristics”. Energy sources, part a: recovery, utilization, and environmental effects. [2019.DOI:10.1080/15567036.2019.1640314](https://doi.org/10.1080/15567036.2019.1640314). (SCI IF: 0.894_)

33. Pasupathy Raju S. and Mohan Raj T., “A novel approach to utilize esterified rice bran oil as an additive with gasoline and ethanol blends in MPFI SI engine” energy sources, part a: recovery, utilization, and environmental effects .1556-7230 (Online) .Journal homepage: <https://www.tandfonline.com/loi/ueso20>. (SCI IF: 0.894_)

34. S.Krishnamani and Mohan Raj T. “The effects of fuel injection pressure on combustion and emission characteristics of a diesel engine using frying oil methyl ester”. Energy sources, part A: recovery, utilization, and environmental effects. [2019.DOI:10.1080/15567036.2019.1675818](https://doi.org/10.1080/15567036.2019.1675818). (SCI IF: 0.894_)