# Dr. M. Parthasarathy Associate Professor Department of Automobile Engineering, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Avadi Chennai 600 062



### **Career Objective**

Aim to be placed in a challenging organization that gives me scope to update my knowledge & skills in accordance with the latest trends and be a part of team that dynamically works towards growth of organization thereof.

1. Name Dr. M. Parthasarathy

**2. Father's Name** Murugesan

**3. Date of Birth** 18.05.1989

**4. Mother's name** M. Vishalatshi

5. Sex Male

6. Marital Status Married

**7. Nationality** Indian

**8. Address for Correspondence** 207, Veltech Staff Quarters,

New vellanur,

Opposite to T7 Tank factory police

station, Avadi, Chennai 600 062.

**9. Mobile Number** 7708000726

10. E-mail Id nparthasarathy@veltechuniv.edu.in

msarathymech@gmail.com

**11. Area of Specialization** Internal Combustion Engines/

**HCCI** Engines

# 12. Qualifications

Course	Branch	Class	Marks / CGPA	Year of Passing	University / Board
Ph.D	Faculty of Mechanical Engineering - Automobile Engineering	First class	8.5	2017	MIT, Anna University, Chennai.
M.E.	Automobile Engineering	First class	8.2	2012	MIT, Anna University, Chennai.
B.E	Mechanical Engineering	First class	74%	2010	Ranippettai Engineering College, Anna University, Chennai.
HSE	Maths – Biology	First class	66.8%	2006	Sri Ramakrishna- BHEL Hr. Sec. School, <b>State Board</b>
SSLC	-	First class	87.6%	2004	Sri Ramakrishna- BHEL Hr. Sec. School, <b>State Board</b>

13. Teaching Experience

Name & address of	Designation	Period of service		Duration		
the Institution/ Organization		From	То	Y	M	D
School of Mechanical and Construction, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology	Assistant Professor	21.06.2017	Till date 20.11.2020	3	5	0
Dept. of Automobile Engg., MIT, Anna University	Teaching Fellow	18.06.2014	20.06.2017	3	0	2

# 14. Research Experience

Name & address of the Institution/	Period of service			Duration		
Organization	From	То	Υ	M	D	
Dept. of Automobile Engg., MIT, Anna University	30.07.2012	17.06.2014	1	10	18	

## **15.LIST OF PUBLICATIONS**

SI.No	Title	Name of the Publisher	Year
1	Experimental investigation to reduce environmental pollutants using biofuel nano-water emulsion in thermal barrier coated engine	Fuel, 285, 119200	2021
2	Performance analysis of HCCI engine powered by tamanu methyl ester with various inlet air temperature and exhaust gas recirculation ratios	Fuel 282, 118833	2020
3	An assessment on production and engine characterization of a novel environment-friendly fuel	Fuel 279, 118558	2020
4	Effect of additives on the stability of ethanol-diesel blends for IC engine application	Environmental Science and Pollution Research, <a href="https://doi.org/10.1007/s">https://doi.org/10.1007/s</a> <a href="https://doi.org/10.10934-6">11356-020-10934-6</a>	2020
5	An experimental study on harmful pollution reduction technique in low heat rejection engine fuelled with blends of pre-heated linseed oil and nano additive	Journal of Cleaner Production, 124617	2020
6	Assessment of Numerical Analysis and Experimental Investigation of Latest Technology Supercharged Cross Breed Engine under Bharath Stage-VI Norms	SAE, 2020-28-0447 (Impact Factor: 0.5)	2020
7	Effect of Cobalt Chromite on the Investigation of Traditional CI Engine Powered with Raw Citronella Fuel for the Future Sustainable Renewable Source	SAE, 2020-28-0445 (Impact Factor: 0.5)	2020
8	Experimental analysis of LHR engine powered by blends of waste plastic oil and diesel	International Journal of Vehicle Structures & Systems (Impact Factor: 0.3) Vol. 11 (2)	2019
9	Optimizing the Performance of HCCI Engine Fueled with Tamanu Methyl Ester	International Journal of Vehicle Structures & Systems (Impact Factor: 0.3)	2019

		Vol. 11 (2)	
10	Influence of various flow rates of CNG in CI engine with blend of Tamanu Methyl Ester and Ethanol	International Journal of Vehicle Structures & Systems (Impact Factor: 0.3) Vol. 11 (2)	2019
11	Production of Garcinia gummi-gutta methyl ester (GGME) as a Potential alternative feedstock for existing unmodified DI diesel engine: combustion, performance and emission characteristics	ASTM International Journal of Testing and Evaluation (Impact Factor: 0.64) Vol. 46, pp. 2661- 2678	2018
12	Novel Garcinia gummi-gutta methyl ester (GGME) as a potential alternative feedstock for existing unmodified DI diesel engine	Renewable Energy (Impact Factor: 5.44) 125, 568-577	2018
13	Effect of hydrogen on ethanol–biodiesel blend on performance and emission characteristics of a direct injection diesel engine	Ecotoxicology and Environmental Safety ( <i>Impact Factor</i> : <b>3.75</b> ) vol. 134, pp. 433–439	2016
14	Pooled effect of injection pressure and turbulence inducer piston on performance, combustion, and emission characteristics of a DI diesel engine powered with biodiesel blend	Ecotoxicology and Environmental Safety ( <i>Impact Factor</i> : 3.75) vol. 134, pp. 336–343	2016
15	An assessment on performance, combustion and emission behavior of a diesel engine powered by ceria nanoparticle blended emulsified biofuel	Energy Conversion and Management (Impact Factor: 5.59) 123 (2016) 372–380	2016
16	An assessment on performance, emission and combustion characteristics of single cylinder diesel engine powered by Cymbopogon flexuosus biofuel	Energy Conversion and Management (Impact Factor: 5.59) 117:466-474	2016
17	Experimental investigation of combustion, performance and emission characteristics of a modified piston	Journal of Mechanical Science and Technology ( <i>Impact</i> <i>Factor</i> : 0.838) 29 (10) 4519~4525	2015
18	An experimental analysis on the influence of fuel borne additives on the single cylinder diesel engine powered by Cymbopogon flexuosus biofuel	Journal of energy institute (Impact Factor: 0.6) DOI: 10.1016/j.joei.2016.04 .010	2016

19	Experimental Investigation on Combustion and Emission Characteristics of Modified Piston in an IDI Diesel Engine Fueled with Ethyl Alcohol	Advanced Materials Research ( <i>Impact Factor</i> : 0.7), Vol.984, pp-873-877 (AU - Annexure II)	2014
20	Comparison Of Performance And Emission Characteristic of Tamuna, Mahua And Pongamia Biodiesel In A DI Diesel Engine	Advanced Materials Research (Impact Factor: 0.7), Vol.768, pp-218-225 (AU - Annexure II)	2013
21	Effect of injection pressure on B20 blend in single cylinder diesel engine	Journal of Chemical and Pharmaceutical Sciences( <i>Impact</i> <i>Factor</i> : 0.684) (7) pp- 426-428 (AU - Annexure II)	2015
22	Experimental investigation of a diesel engine with diesel/water emulsion at various injection timing	Journal of Chemical and Pharmaceutical Sciences( <i>Impact</i> <i>Factor</i> : 0.684) (7) pp- 03-07 (AU - Annexure II)	2015
23	Experimental Study of Acetylene Enriched Air in DI Diesel Engine Powered by Biodiesel-Diesel Blends	Journal of Chemical and Pharmaceutical Sciences( <i>Impact</i> <i>Factor</i> : 0.684) (4) pp- 231-233 (AU - Annexure II)	2014
24	Study on performance and emission characteristics for diesel engine powered with biodiesel	Journal of Chemical and Pharmaceutical Sciences( <i>Impact</i> <i>Factor</i> : 0.684) (4) pp- 238-230 (AU - Annexure II)	2014
25	Influence of Ethanol Blending on CI Engine Performance and Exhaust Emissions Operated with Mangoseed Oil Methyl Ester	Journal of Chemical and Pharmaceutical Sciences( <i>Impact</i> <i>Factor</i> : 0.684) Special issue 7 pp- 325-330 (AU - Annexure II)	2015
26	Performance Improvement on A Single Cylinder Diesel Engine Powered With Pongamia Biodiesel By Incorporating Swirling Grooves	Advanced Materials Research ( <i>Impact Factor</i> : 0.7), Vol.768, pp-199-205 (AU - Annexure II)	2013

27	Structural Analysis on Swirling Grooved SCC Piston	Advanced Materials Research ( <i>Impact Factor: 0.7</i> ), Vol.984, pp- 452-455 (AU - Annexure II)	2014
28	Experimental investigation on D.I Diesel engine with renewable biodiesel - Adelfa	Journal of Chemical and Pharmaceutical Sciences(Impact Factor: 0.684) Special issue 7 pp- 325-330 (AU - Annexure II)	2014
29	Performance characteristics and emission analysis of a single cylinder diesel engine operated on blends of diesel and waste cooking oil	IEEE Xplore DOI: 10.1109/ICEETS.201 3.6533484 (Impact Factor: 5.466) pp- 781-785	2013
30	Performance and Emission Characteristics of a Diesel Engine Fueled with Blend of Vegetable Oil Esters	International Journal of Science, Engineering and Technology Research (Impact Factor: 3.59) Vol.1 (2), pp-6-9	2012

#### 16. INTERNATIONAL CONFERENCES

- M.Parthasarathy, J.Isaac JoshuaRamesh Lalvani, Lingeshwaran, B.Dhinesh, K.Annamalai, "Effect of Acetylene enriched air in DI Diesel Engine Fuelled with Tamanu methyl ester", International Conference On Advances In Mechanical Engineering 2015 Organized by University college of engineering, villupuram held on 15 & 16 Oct 2015.
- M. Parthasarathy, J. Isaac JoshuaRamesh Lalvani, B.Dhinesh and K. Annamalai., "Effect of hydrogen on ethanol-biodiesel blend on performance and emission characteristics of a direct injection diesel engine" Green Technology for Environment pollution prevention and control-2014, Organized by National Institute of Technology, Trichy held on 27-29 Sep-2014.
- M. Parthasarathy, J. Isaac JoshuaRamesh Lalvani, E. Prakash and K. Annamalai., "Performance and emission characteristics of hydrogen enrich-air induction in DI Diesel engine operated by Biodiesel" Innovative Research in Engineering & Technology-2014, Organized by E.G.S Pillay Engineering College, Nagapattinam held on 2-May & 3-May-2014.
- M.Parthasarathy, J.Isaac JoshuaRamesh Lalvani, K.Annamalai, "Comparison of performance and emission characteristics of tamanu, mahua and pongamia Biodiesel in a DI diesel Engine"

- ICEETS 2013, Organized by St. Xavier's Catholic College of Engineering, Nagercoil during 10-Apr-2013 to 12-Apr-2013.
- M. Parthasarathy, J. Isaac JoshuaRameshLalvani, E. Prakash and K. Annamalai., "Experimental Investigation on combustion and emission characteristic of modified piston in an IDI Diesel engine with Ethanol" ICRMID 2014, Organized by Ponjesly College of Engineering, Nagercoil during 7 Mar & 8 Mar-2014.

#### 17. NATIONAL CONFERENCES

- M. Parthasarathy, J. Isaac JoshuaRamesh Lalvani, S. Arthis and K. Annamalai., "Experimental investigation on CI engine using Acetylene with Biodiesel" ETIMC 2016, Organized by Bharat University, Chennai held on 4<sup>th</sup> April 2016.
- M. Parthasarathy, J. Isaac JoshuaRamesh Lalvani, V.N. Banugopan and K. Annamalai., "Experimental studies on DI Diesel engine using Hydrogen with Tamanu-Ethanol blends" NCICEC 2013, Organized by SVNIT, Surat, India from 13-Dec-2013 to 16-Dec-2013.
- M. Parthasarathy, Mohamed Azarudeen, P.Senthil Kumar., "Combustion and heat transfer analysis on a Squish piston in an IDI Diesel engine fuelled with Ethanol" Recent Advances in Engineering and Technology (RAET' 12) organized by Sri Muthukumaran Institute of Technology, Chennai on 27-Apr-2012.
- M. Parthasarathy, Mohamed Azarudeen, J. Isaac JoshuaRamesh Lalvani, P.Senthil Kumar., "Combustion of heat transfer analysis on a modified piston with thermal barrier coating in an IDI Diesel engine" AMPT' 12 organized by Prist university during 17-Feb-2012 to 18-Feb-2012.

#### 18. MEMBER IN PROFESSIONAL BODIES

- International Association of Computer Science and Information Technology (IACSIT).
- International Association of Engineers (IAENG).

#### 19. WORKSHOPS ATTENDED

- Participated on the workshop on "Testing on Internal Combustion Engine with Practical Demonstration Using Combustion Analyzer, Smoke meter and Exhaust Gas Analyzer", conducted by Government college of Engineering, Bargur.
- Participated on the workshop on "How to Write for and Get Published in Scientific Journals and publish Manuscripts", conducted by Springer and Edanz along with Department of Information Science and Technology, Anna University, Chennai.
- Participated on the Short term Course on "Research Methodology, Techniques of writing Research Articles for SCI Journals and Ph.D thesis preparation", conducted by Department of Automobile Engineering, MIT campus, Anna University, Chennai.

- Attended a workshop on "Innovation and Entrepreneurship Skills" conducted by Centre for Technology Development Transfer, Anna University, Chennai.
- Attended a workshop on "Renewable Energy Resources The Need of the Hour" conducted by Institute of Road and Transport Technology, Erode.
- Attended a workshop on "Introduction to Research Methodologies", conducted by Indian Institute of Technology, Bombay.
- Participated on the One day Workshop on "Recent Trends in
- Vehicle Technology", conducted by Department of Automobile Engineering, MIT campus, Anna University, Chennai.

#### 20. ADDITIONAL RESPONSIBILITIES UNDERTAKEN

#### (i) Project coordinator

Project coordinator & Faculty Advisor for UG final year student 2016

#### (ii) Motor Sports events

- As a faculty advisor guideline to students were participated to Mahindra BAJA SAE India held on 18–19th Feb, 2017 in Indore.
- As faculty advisor guidelines to students were participated to National Kart Racing Championship held on 29 Sep to 3 Oct, 2016 in Kolhapur.

#### (iii) PG end semester examination

Assisted to Dr.K. Annamalai for conducting PG end semester examination – Jan 2016.

#### (iv) Programme Organizing

Assisted to Dr.K. Annamalai for conducting Faculty development programme on "Automotive Electrical and Electronics" - 10<sup>th</sup> to16<sup>th</sup> of June 2013, organized by Department of Automobile engineering.

#### (iv)Hostel Resident Counselor

Serving as a residential counselor on MIT hostel – Anna University from September 2013 to October 2016.

#### (v) Journal reviewer

journal of mechanical science and technology (Springer)

#### 21. DECLARATION

I hereby declare that all the information given above is true to the best of my knowledge and belief.

Place: Chennai Yours Faithfully,

Date: 20.11.2020

(M.Parthasarathy)