

Name: DR.J. KAMALAKANNAN				
Designation:	ASSOCIATE PROFESSOR			
Qualification:	B.E., M.E., PhD.			
Area of specialization:	THERMAL ENGINEERING			
Experience:	Industrial Experience		Teaching Experience	
	NIL		23 Years 6 Month	
Number of workshops / FDP attended:	Number of Workshops		Number of FDPs	
	7		24	
Publications:	Conference		Journal	
	National	International	National	International
	5	1	7	8
Books / Book Chapters	Nil			
Patents:	National		International	
	7		Nil	
Professional Body Membership	SAE-7240410401 IEEE-Senoir member-98538623			
Staff Achievements	Best Senoir Faculty awarded by Novel research Academy at 5th September 2022			

Educational Qualifications:

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks/ Grades obtained	Class obtained
Diploma	DAE	Automobile	1999	Valliammai Polytechnic College	DOTTE	89.65 %	I Class with Honours
UG	B.E	Mechanical	2002	GKM College of Engineering	Madars University	74.65 %	I Class
PG	M.E	Internal Combustion Engines	2008	College of Engineering, Guindy	Anna University	7.25	I Class
PhD	PhD	Alternative Fuels	2021	College of Engineering, Guindy	Anna University	-	-

Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Valliammai Polytechnic College	Lecturer	07-08-2002	18-09-2006	4	1	12
Shri Andal Alagar College of Engineering	Assistant Professor	19-09-2006	23-05-2011	4	8	4
GKM College of Engineering and Technology	Assistant Professor	03-06-2011	09-06-2022	11	-	7
Sri Sairam Institute of Technology	Assistant Professor	10-06-2022	05-06-2024	1	11	25
Sri Sairam Institute of Technology	Associate Professor	06-06-2024	27-08-2025	1	2	21
Sri Sairam Engineering College	Associate Professor	28-08-2025	Till date	-	6	-
				23	5	9

Workshops/Seminars attended:

Name of the Programme	Duration	Organization/Institution
CAD /CAM using CNC	6 Days	College of Engineering, Guindy
Diesel Engines – Basic and Emission control	One Day	College of Engineering, Guindy
Electronic Engine Management Systems for reduction of emissions	5 days	Velammal Engineering College, Chennai.
NAAC Awareness on Quality System in Higher Education	2 days	AnnaUniveristy –Internal Quality Assurance Cell
Diesel Engine Exhaust gas Treatment	1 day	St Joseph Institute of Technology
Battery Operated Electric Vehicle – Research Perspective	1 day	Crescent Institute of Science and Technology
Innovation & Entrepreneurship Development Program	Three Days	Entrepreneurship Development Institute Guindy, AnnaUniveristy.
Recent Development in Automotives	Two Days	Dr.M.G.R Educational and Research Institute University
EDUMEET	One Day	MIT, AnnaUniveristy, Chennai
ISO- QMS Internal Auditor Course	One Week	GKM College of Engineering and Technology

FDP/STTP Attended:

1. Participated in One Week FDP on “Engineering Drawing Through AutoCAD” from 10th to 15th November 2022 at CVR College of Engineering, Hyderabad.
2. Participated in Webinar on “Electrical Technology ” on 3-01-2023 at Institution of Engineers Tiruchirappalli
3. Reviewer in IEEE MYSURUCON 2022- The 2nd Edition of the Mysore Subsection Flagship International Conference on 16th & 17th October 2022.
4. Participated in Professional Development Course on “AI and Drone Applications” from 10/06/2024 14/06/2024 at NITTR Chennai.
5. Participated in Five days ATAL FDP on “*Embedded Systems in Automotive Industry: An Industry 4.0 Perspective at MRK INSTITUTE OF TECHNOLOGY from 06/01/2025 to 11/01/2025.*”
6. Participated in Six Days FDP on “ADDITIVE MANUFACTURING ADVANCEMENTS IN DIFFERENT APPLICATIONS” SRM Institute of Science and Technology, Ramapuram from 26 th to 30 th December 2023.
7. Participated in Six-day Online Faculty Development Program on “Battery Thermal Management System: Design, Optimization and ML Techniques” from 9th to 14th February 2026.

8. Participated in Five days ATAL FDP on “Hydrogen and Electric Powered Vehicles at B S Abdur Rahman Crescent Institute of Science and Technology from 09/12/2024 to 14/12/2024.
9. Participated in Six-day Online Faculty Development Program on “Recent Advancements in Electric and Hybrid Technologies” from 05-11-2026 to 10-11-2026.
10. Participated in Faculty Development Program on “Frontiers in Mechanical Engineering Embracing Modern Trends and Innovation” from 21-03-2024 to 27-03-2024.
11. Participated in one week Faculty Development Program on” Autodesk Inventor” conducted by ICT Academy on 10 Feb 2025 to 15 Feb 2025 at Sri Sairam Institute of Technology, Chennai.
12. Participated in the Six Day Online International Faculty Development Program on Additive Manufacturing Advancements in Different Applications (AMADA-24) organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology, Ramapuram Campus, Chennai 89, During 21 during 21st to 26th October 2024.
13. Participated in Faculty Development Program on “ Hybrid and Electric Vehicle Technology” at Shri Prince Padmavathy Engineering College , from 15-07-2024 to 22-07-2024.
14. Successfully Completed the ISO 21001 LEAD AUDITOR Course the Knowledge Academy During July 2024.

Conference Attended:

1. Presented a paper titled “Experimental Investigation of synthetic fibre reinforced composite ” in International Conference on SRM Materials & Manufacturing for Sustainable Developments 2022. During 15 & 16 th September 2022.
2. Presented a paper titled “Performance and combustion and emission characteristics of higher blends of Deccan Hemp oil methyl ester in single cylinder diesel engine. During 26 & 27 th November 2022. Egypt.
3. National seminar on Solid waste management a Programme Sponsored by CSIR and Organized and attended by GKM College Of Engineering and Technology during 21st August 2013.
4. International workshop on Energy, Environment and Efficiency Programme Sponsored by DST and Organized by GKM College Of Engineering and Technology during 12th and 13th September 2013.
5. International Conference on Solar and Biomass Energy Sponsored by AICTE and Organized and attended by GKM College of Engineering and Technology during 7th and 8th January 2014.
6. International workshop on Energy Efficient Green Building Sponsored by MNRE and Organized and attended by GKM College of Engineering and Technology during 19th and 20th September 2014.

7. 2nd International Conference on Recent trends in Science and Technology Organized and attended by GKM College of Engineering and Technology during 20th March 2019

Completed / Ongoing Projects:Nil

Patent:

1. Lemon Grass Oil Composition –Diesel blend as Alternative Fuel For Diesel Engine.
Application No. 201941048053, Publication Date: 06/12/2019
2. Geared Electric Bike, Official Journal of the Patent Office, Issue No 48/2020 Dated : 27.11.2020
3. Patent Grant in Wearable System For Continuously Monitoring the Sleep Activity Of A Driver
Dated Jan 2024. Patent Number: 571259.
4. Internal Combustion Engine system with Novel Alternative Fuel Alternative Fuel Injection System
and Method. Application No. 202441006619A , Publication Date: 09/02/2024.
5. Sustainable Dust Compression by Mist Spray Safety System For coal Yard. Application No.
202441070421, Publication Date: 18/09/2024.
6. Compressed Air Production and Energy Generation Using Vehicle Suspension. Application No.
202241040206 A, Publication Date: 22/07/2022.

Journal Publications:

1. Economic impacts and reliability evaluation of battery by adopting Electric Vehicle
Published in 2022 International Conference on Power, Energy, Control and Transmission Systems,
DOI: 10.1109/ICPECTS56089.2022.10046786.
2. Experimental Investigations To Study the Characteristics of Rubber-Seed-Oil-Fueled Diesel
Engine Supplemented with Diethyl Ether, Published in Energy & Fuels 2009,
<https://doi.org/10.1021/ef800552f>.
3. Maximizing efficiency and environmental benefits of an algae biodiesel-hydrogen dual fuel engine
through operational parameter optimization using response surface methodology, Published in
International Journal of Hydrogen Energy-2023, <https://doi.org/10.1016/j.ijhydene.2023>.
4. Effect of hydrogen addition on performance, emission, and combustion characteristics of Deccan
hemp oil and its methyl ester–fuelled CI engine, Published in Environmental Science and Pollution
Research-2019, <https://doi.org/10.1007/s11356-019-04286-z>.
5. Comparative study of sintered and composite brake pad for wind turbine applications, Published in
Proc IMechE Part J: J Engineering Tribology-2023, DOI: 10.1177/13506501231159188.
6. Assessing the impact of sargassum algae biodiesel blends on energy conversion in a modified

single-cylinder diesel engine with a silica-incorporated diamond-like coated piston. Published in Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Taylor & Francis-2024, <https://doi.org/10.1080/15567036.2024.2356709>

7. Exploring the combustion, emission and performance of n-Butanol with Deccan hemp oil methyl ester on dual fuel diesel engine , Published in Scientific Reports-2024,
8. Performance, Emissions, and Combustion In Turbocharged Diesel Engines: The Effect Of Rapeseed Oil Biodiesel-Diesel Blends, Published in Thermal science-2023, [DOI 10.2298/TSCI2302219J](https://doi.org/10.2298/TSCI2302219J).
9. Design of Hybrid Energy Storage and Management System in Hybrid Electric Vehicle Using Machine Learning Approach, Published in Proceedings of the 4th International Conference on Smart Electronics and Communication-2023, [DOI:10.1109/ICOSEC58147.2023.10276076](https://doi.org/10.1109/ICOSEC58147.2023.10276076)
10. Characterization of Properties of Used Cooking Oil-Derived Biodiesel and Liquid Insulation Towards Sustainable and Environmental Friendly Reclaimed Products, Published in Iranian Journal of Chemistry and Chemical Engineering - 2024,[DOI:10.30492/ijcce.2024.2016829.6338](https://doi.org/10.30492/ijcce.2024.2016829.6338).
11. Improving thermal performance of the CI engine using a bio-diesel with nano-additives, Published in Material Today Proceedings-2023, <https://doi.org/10.1016/j.matpr.2022.07.462>.
12. Improving solar still productivity with pebbles and ceramic tiles: An analysis of thermal efficiency and water yield, Published in AIP Conference Proceedings-2025, <https://doi.org/10.1063/5.0262540>.
13. Designing and testing of renewable energy based electric vehicle with GSM technology, Published in AIP Conference Proceeding-2023, <https://doi.org/10.1063/5.0120393>
14. Experimental Investigation of synthetic fibre reinforced composite, Published in Material Today: Proceedings -2023, <https://doi.org/10.1016/j.matpr.2023.04.553>.
15. Influence of Nano-additive on the Performance of Diesel with Rape Seed Oil as Bio-diesel, Published in Journal of Physics: Conference Series-2022, [DOI 10.1088/1742-6596/2272/1/012011](https://doi.org/10.1088/1742-6596/2272/1/012011).

Books / Book Chapters: Nil

- **Awards** : Best Senoir Faculty awarded by Novel research Academy at 5th September 2022
 - Certificate of Recognition has played a pivotal role as a Faculty Coordinator in the successful completion of the District Eco-SDG Championship 2024. Certificate of Recognition by APEX SDG & APEX SDG Trust.

- IGEN GREENDAY 2024, Promoted as IGEN Ambassador for successfully mentoring and inspiring more than 50 students to pledge for green during 22nd to 29 Oct, 2024.

Startup: Nil

Resource Person:

1. Resource person to present a session for five days FDP on “Engineering Thermodynamics” organized by department of Mechanical Engineering, Valliammai Engineering College, Chennai from 29.05.24 to 04.06.24.
2. Resource person to present a session for five days FDP on “Design of Transmission System” organized by department of Mechanical Engineering, Valliammai Engineering College, Chennai from 16.05.25 to 20.05.25.

Online Courses:

1. Successfully completed the Internal Auditor Training Course on Educational Organizations Management Systems October 19 - 20, 2022. BUREAU VERTIAS.
2. Successfully Completed the ISO 21001 LEAD AUDITOR Course the Knowledge Academy During July 2024.
3. Successfully Completed AICTE QIP at IITDM-KURNOOL- Internet of Things during June 2025 to December 2026
4. Successfully Completed Advanced Certification in AI and Data Science Course - June 2025 to December 2026
5. NPTEL Online Course for the Following subject Completed
 1. Applied Thermodynamics
 2. Introduction to Industry 4.0 and Industrial Internet of Things
 3. Data Science for Engineers
 4. Introduction To Internet Of Things
 5. Python for Data Science
 6. Heat Transfer
 7. Waste to Energy Conversion
 8. Engineering Metrology
 9. IC Engines and Gas Turbin

NITTTR Courses: Successfully completed 8 - Module for National Initiative for Technical Teachers Training.

Professional Membership: SAE-7240410401 , IEEE-Senior member-98538623