

FACULTY PROFILE

Name of Teaching Staff / RMK ID	Dr. K. R. Senthilkumar / T0685		
Designation	Professor and Head		
Department	Mechanical Engineering		
Date of Joining the Institution	14.12.2011 (Regular)		
Qualifications	B.E. (Mechanical Engineering)	M.E. (Automobile Engineering)	Ph.D. (IITM)
Total Experience	Overall : 31 Years		in RMK : 14 Years
Papers Published in Journal	Overall : 24	After Joining RMK : 20	
List of Papers Published	1. A Review on the Performance of Oscillating Heat Pipe used in Battery Cooling 2. Design and Fabrication of Multi functioned Seed Sowing Machine. 3. Machine Learning Designed identification on cervical cancers in patient. 4. Study of flow and heat transfer characteristics of diesel spray impinging on a flat wall--a CFD approach. 5. Effect of Exhaust Gas Recirculation (EGR) on the Performance and Emission Characteristics of Diesel Engine with Sunflower Oil Methyl Ester. 6. Improvement of performance and emission characteristics of a DI diesel Engine with turbulence induced piston (Internal jet piston) using Biodiesel blends. 7. Performance and emissions characteristics of a diesel engine with internal jet piston using biodiesel. 8. Combustion and Emission Characteristics of A Biodiesel Fuelled Diesel Engine with the Effect of Thermal Barrier Coated Internal Jet Piston. 9. Reduction of NOx and smoke emission on a diesel engine with internal jet piston using bio-diesel with exhaust gas recirculation technique 10. Experimental studies on the performance, emission and combustion characteristics of a biodiesel-fuelled (Pongamia methyl ester) diesel engine with diethyl ether as an oxygenated fuel additive. 11. Performance, emission and combustion characteristics of a diesel engine with the effect of thermal barrier coating on the piston crown using biodiesel. 12. Experimental analysis of a Diesel Engine fuelled with Biodiesel Blend using Di-ethyl ether as fuel additive Experimental investigation on the performance and emission characteristics of diesel engine with the effect of ferrocene as an additive to diesel fuel. 13. Effect of piston bowl geometry on the performance of		



	a diesel engine using corn biodiesel and its diesel blends. 14. Green fuel utilization for diesel engine, combustion and emission analysis fuelled with CNSO diesel blends with Diethyl ether as additive. 15. Experimental study of diesel engine using cashew nut shell oil (CNSO) with varying injection pressures. 16. Effect of piston bowl geometry and different injection pressure on the performance, emission and combustion characteristics of diesel engine using biodiesel blend. 17. Experimental investigation on efficiency enhancement of the solar panels with mirrors and parabolic platform using fuzzy logic. 18. Storage Using Phase Change Materials in Spherical Shell Storage System. 19. Experimental study on solar energy storage in phase change materials using cylindrical shell type heat exchanger. 20. Impact of nozzle opening pressure on the performance and emission behaviours of the CI engine using yellow oleander biodiesel. 21. Experimental studies on efficiency enhancement of the parabolic solar collector combined with mirrors using the artificial neural network. 22. Experimental study on diesel engine working characteristics using yellow oleander biodiesel with the effect of different injection timings. 23. Performance assessment of DI Diesel engine using Waste Transformer Oil with Different Compression Ratios. 24. A comparative study of spherical and cylindrical shells thermal energy storage systems using paraffin wax-palmitic acid and their eutectic mixture.	
Papers Presented in Conferences (Scopus / WoS indexed only)	Overall : 15	After Joining RMK : 13
Ph.Ds / Projects Guided	Ph.Ds Guided : 01	Student Projects Guided : 22
Books Published :	Count : 08	
	List : 1. Applications Of 3d Printing Technology 2. CNC Machining Technology 3. Foundations of Education Psychology 4. Human Resource Management 5. Heat and Mass Transfer 6. Renewable Energy sources 7. Lean Manufacturing and Six Sigma 8. HR Analytics	
	Published Count : 04	Granted Count : 02

Patents	List : 1. Design and Fabrication of Robotic Arm 2. Automatic Air Filling System 3. Aerofoil Shape for Aeromobile 4. Chimney Incorporated Solar Still 5. Dual Power Generation from Bike Silencer 6. A Robotic arm device for wall painting
Professional Memberships	Count : 03
	List : ISTE, IEI, IEEE
Consultancy Projects Completed	Count : NIL
Awards Received	Count : 2
	List : 1. IEI – Academic Excellence Award (2023) 2. IEI – Best Faculty Adviser Award (2023)
Research grants Received	1. Modernization of CAD/CAM Laboratory by establishing Generative Design technique and 3D printing to Facilitate for Training on New Product Design and Development for the era of Industry 4.0 2. Modernisation of Internal Combustion Engines Laboratory with latest Equipments.
Orchid Link / ID	ID : 0000-0003-2619-5670
Google Scholar Link / ID	ID : ykRKxcUAAAAJ
Vidwan Link / ID	ID : 305201
Research Gate Link / ID	ID: AAF-2819-2019
Scopus Link / ID	ID : 56472544100