

FACULTY PROFILE

Name of Teaching Staff/RMK ID	Dr. R. Suresh Kumar/ T0370			
Designation	Professor			
Department	Mechanical Engineering			
Date of Joining the Institution	09-01-2006 (Regular)			
Qualifications	B.E. (Mechanical Engineering)	M.E. (Thermal Power)	Ph.D.	
Total Experience	Overall: 25.11 years		In RMK: 20.9 years	
Papers Published in Journal	Overall: 29		After Joining RMK : 29	
List of Papers Published	1. Suresh kumar, R, Tharves Mohideen, S & Nethaji, N 2013, 'Heat transfer characteristics of nanofluids in heatpipes : A review', Renewable and Sustainable Energy reviews, vol. 20,pp.397-410. DOI:10.1016/j.rser.2012.11.044 2. Sureshkumar,R&TharvesMohideen,S2013,'Simulation studies on performance of micro heat pipes used in laptops', International Journal of Energy Technology and Policy, vol. 9, no. 1, pp. 65-81. https://doi.org/10.1504/IJETP.2013.055815 3. Tharves Mohideen, S & Suresh kumar, R 2014, 'An experimental investigation of the thermal performance of two-phase closed thermosyphon (TPCT)using zirconia(ZrO₂ +H₂O)nanofluid', ThermalScience. DOI:10.2298/TSCI140403116T 4. Suresh kumar, R &Tharves Mohideen, S 2014, 'Thermal performance of thermosyphon heat pipe using CuO nanofluids', International Journal of Applied Engineering Research, vol.9, no.26, pp.9003-9006 (ISSN 0973-4562). 5. N.Jayanthi, R.Suresh Kumar, GopaluKarunakaran, M.Venkatesh 2019, "Experimental Investigation on the thermal performance of Heat Pipe Solar Collector (HPSC)", MaterialsToday:Proceedings.Volume26,Part4,2020, Pages3569-3575 https://doi.org/10.1016/j.matpr.2019.07.607 6. R. Suresh kumar, S. Tharves Mohideen , N. Jayanthi , M.Venkatesh2020,"Thermal analysis of two-phase closed thermosyphon (TPCT)using nanofluids", Materials Today: Proceedings. Volume 26, Part 4, 2020, Pages A1-A5 https://doi.org/10.1016/j.matpr.2020.05.700 7. S.Rajesh, R.SureshKumar, S.Madhankumar, M. Sheshan,			

8.	M.Vignesh, R.SanjayKumar, "Study of the mechanical properties of Al7075 alloy, silicon carbide and fly ash composites manufactured by stir casting technique", Materials Today: Proceedings, Volume 45, Year 2020, Pages6438-6443. https://doi.org/10.1016/j.matpr.2020.11.278 9. R.Suresh Kumar, Aakash Ram, Adhishwar, Athivaragan , "Automatic air filling system using Image processing", Pensee Journal, Volume , Year 2020 10. Jayanthi N, Venkatesh M, Suresh Kumar R, Sekar S," A review on performance of nanofluids in various heatpipe solar collector", Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering. https://doi.org/10.1177/095440892110670 11. R. Suresh Kumar, N. Jayanthi, K. Sudhakar, K. Muralidharan, J. Jayaprabakar 2023, "A review on the performance of oscillating heat pipe used in battery cooling", Environmental Quality Management. https://doi.org/10.1002/tqem.21968 12. GaneshBabu Loganathan, Pon Maheskumar, N.Jayanthi, R.Suresh Kumar, S.Sakthi, R.Girimurugan 2023, "Development of novel environmental proficient hybrid composites based on marble dust and poultry's eggshell", MaterialsToday:Proceedings . https://doi.org/10.1016/j.matpr.2023.02.108 13. R. Suresh Kumar , N. Jayanthi , S.S.K. Deepak, Jitendra Singh Yadav, Omprakash Dewangan, R. Pugazhenthii, Naveen Agrawal 2023, "Development of copra dryer incorporated with convective steam turbine", Materials Today: Proceedings. https://doi.org/10.1016/j.matpr.2023.05.318 14. K. Harinisri, N. Jayanthi, R. Suresh Kumar 2023, "Diverse application of green nanotechnology – A review", Materials Today:Proceedings. https://doi.org/10.1016/j.matpr.2023.06.085 15. Thangavel Palaniappan, Vignesh S, Suresh kumar R, Gowrishankar A, Girimurugan R and Nanthakumar S 2023, " Study on Mechanical Properties of Polylactic Acid Matrix Added with Fly Ash and Tamarind Kernel Powder Micro Fillers", NanoWorld Journal https://doi.org/10.17756/nwj.2023-s1-121 16. D. Dinesh Kumar, A. Balamurugan, K. C. Suresh, R. Suresh Kumar, N. Jayanthi,T. Ramakrishnan , S. K. Hasane Ahammad, S. Mayakannan and S. Venkatesa Prabhu 2023, "Study of Microstructure and Wear Resistance of AA5052/B4C Nano composites as a Function of Volume Fraction Reinforcement to Particle Size Ratio by ANN", Journal of Chemistry, Vol. 2023, Article ID 2554098, 12 pages https://doi.org/10.1155/2023/2554098 17. J. Senthilkumar, K. Dharun, T. Sanchit Kumar, R. Suresh
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	Kumar, N. Jayanthi, S. Venkatesh 2023, "Impact of nano catalyst in the biodiesel production for direct injection diesel engine: A review", Environmental Quality Management, pp.1–10. https://doi.org/10.1002/tqem.22057 18. D. Dinesh Kumar, A. Balamurugan, K. C. Suresh, R. Suresh Kumar, N. Jayanthi, T. Ramakrishnan, S. K. Hasane Ahammad, S. Mayakannan, and S. Venkatesa Prabhu 2023, "Study of Microstructure and Wear Resistance of AA5052/B4C Nano composites as a Function of Volume Fraction Reinforcement to Particle Size Ratio by ANN", Journal of Chemistry, Volume 2023, Article ID 2554098, 12 pages. https://doi.org/10.1155/2023/2554098(Citations – 31) 19. K. Harinisri, N. Jayanthi, R. Suresh Kumar 2023, "Diverse application of green nanotechnology – A review", Materials Today:Proceedings. https://doi.org/10.1016/j.matpr.2023.06.085 (Citations – 18) 20. Thangavel Palaniappan, Vignesh S, Sureshkumar R, Gowrishankar A, Girimurugan R and Nanthakumar S 2023, "Study on Mechanical Properties of Polylactic Acid Matrix Added with Fly Ash and Tamarind Kernel Powder Micro Fillers", NanoWorld Journal, 9(S1): S626-S630. https://doi.org/10.17756/nwj.2023-s1-121(Citations – 19) 21. N. Mohanrajhu, S. Sekar, Ravikumar Jayabal, R. Sureshkumar 2024, "Screening nano additives for favorable NOx/smoke emissions trade-off in a CRDI diesel engine fueled by industry leather waste fat biodiesel blend", Process Safety and Environmental Protection, 187 (2024) 332–342. https://doi.org/10.1016/j.psep.2024.04.115 (Citations – 41) 22. P J Lokesh Kumar, S Shankaranarayanan, C Jayabalan, S D Sekar, K Sengottaiyan, R Suresh Kumar 2024, "A Review of Recent Advancements in The Field of Friction Stir Welding of Dissimilar Joints Made of Aluminium and Magnesium", Journal of Polymer & Composites, Volume 12, Special Issue 1, 134-142. DOI (Journal): 10.37591/JoPC 23. Muhammad Nurtanto, V Pramila, Ramadevi Chappala, R. Suresh Kumar, Abhinav Kataria, J Godwin John 2025, "Advanced Robotics and AI in Manufacturing: Enhancing Efficiency and Precision", IEEE Explore. https://doi.org/10.1109/ICAICCIT64383.2024.10912410 24. K.G Chandi Priya; Sarvdaman Sharma; M. Sunil Kumar; Prashant Kumar Gangwar; R. Aarthi; R.Suresh Kumar 2024, "Optimizing Urban Mobility in Smart Cities Through Deep Learning-Based Traffic Management", IEEE Explore. https://doi.org/10.1109/ICCCNT61001.2024.10724627 25. N. Mohanrajhu, S. Sekar, Ravikumar Jayabal, R. Suresh Kumar 2024, "Impact of Aluminum Nitrate and Graphene Oxide Nanoplate on Performance and Emission Characteristics of a CRDI Diesel Engine Powered by Industrial Leather Waste Fat Biodiesel", International Journal of Automotive Technology, https://doi.org/10.1007/s12239-024-00205-5 26. Jayanthi N, Venkatesh M, Suresh Kumar R, Ramesh Babu S, Prajith Prabakar 2025, "Experimental evaluation of CuO and Al₂O₃ nanofluids for enhanced heat transfer in evacuated tube heat pipe solar collectors", Results in Engineering, 27 (2025) 06299. https://doi.org/10.1016/j.rineng.2025.106299 27. N. Nethaji, R. Suresh Kumar, N. Jayanthi, G. Murali, P. V. Elumalai, M. Murugan, S. Prabhakar & Jin Zhang , "Efficiency
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	enhancement of solar PV panel by incorporating wickless loop heat pipes with plate type evaporator”, Scientific Reports, (2025) 15:35605.https://doi.org/10.1038/s41598-025-18557-y 28. N. Jayanthi, M. Venkatesh, R. Suresh Kumar 2025, “Hydrothermally synthesised functionalised CuO nanostructures for enhanced thermophysical performance in evacuated tube heat pipes”, Digest Journal of Nanomaterials and Biostructures, Vol. 20, No. 4, October-December 2025, p. 1177-1187. https://doi.org/10.15251/DJNB.2025.204.1177 29. N. Jayanthi, R. Suresh Kumar, M. Mudhukrishnan, “Surface functionalized Al₂O₃ nanofluids for enhanced thermal performance of evacuated tube heat pipe solar collectors”, Journal of Thermal Analysis and Calorimetry, Vol. 151, pp. 8939–8950. https://doi.org/10.1007/s10973-026-15657-3	
Papers Presented in Conferences (Scopus/WoS indexed only)	Overall:08	After Joining RMK :08
Ph.Ds/Projects Guided	Ph.Ds Guided: Nil	Student Projects Guided: 70
Books Published:	Count: 01	
	List: 1. Heat and Mass Transfer	
Patents	Published Count: 04	Granted Count: 01
	List: 1. Title of the Patent: Automatic tyre pressure Inflation system, SamBennyhinn HongtonK, SandeepR, Sakthivel M, R.Suresh kumar, K.R. Senthil kumar, Application No: 202141058740, Publication Date: 04-02-2022 2. Title of the Patent: Automatic air filling system for Automobiles, K.R.SenthilKumar, R.SureshKumar, M. Mudhu Krishnan, Application No: 202041045228, Publication Date: 20-04-2022 3. Title of the Patent: Nano Particle-Based Air Purifier, M. Venkatesh, V. T. Jeleyaganga, N. Jayanthi, R. Suresh Kumar, B. Srividya, K. Vanasundari, and R. Keerthiga. Application No: 397632-001, Publication Date: 14-12-2023 4. Title of the Patent: Dual Power Generation from Bike Silencer, Dr. K. Sengottaiyan, Dr. R. Suresh Kumar, Dr. M. Mudhu Krishnan, Dr. K. R. Senthil Kumar, Athav S, Hakesh K, Application No: 202341080376, Patent No: 597145 - Granted	
Professional Memberships	Count: 04	
	List: 1. ISTE-Life Member 2. Indian Society of Systems for Science & Engineering (ISSE)- Life member 3. The Society of Digital Information and Wireless Communications (SDIWC) 4. International Association of Engineers(IAENG)	

Consultancy Projects Completed	Count:04
Awards Received	Count:10
	List: 1. Appreciation Award by TEXAS INSTRUMENTS, 2018. 2. NATIONAL LEVEL AWARD –BEST MENTOR–2019 by Dr.Kalam Educational Trust 3. ISTE BEST STUDENT CHAPTER FACULTY ADVISOR AWARD– 2020 by ISTE Tamilnadu section 4. IEI BEST FACULTY ADVISOR AWARD – 2022 received from IEI Tamilnadu Section 5. IEI ACADEMIC EXCELLENCE AWARD – 2022 received from IEI Tamilnadu Section 6. IZOR International Academic Excellence Award – 2023 7. ISTE Best Student Chapter Faculty Advisor Award – 2023 8. ISTE Best Chapter Secretary Award – 2024 9. IEI Best Faculty Advisor Award – 2024 10. IEI Best Faculty Advisor Award – 2025
Research grants Received	1. Project Title: IMPROVING COP OF AIRCONDITIONER USING HEAT PIPES Funding Agency : ISHRAE Grant received:Rs.15,000 2. Project Title: AUTOMATED GUIDED VEHICLE (AGV) Funding Agency : R.M.K. Engineering College Grant received:Rs.2,02,600 3. Project Title: LOW COST EVACUATED TUBE HEAT PIPE SOLAR WATER HEATER FOR VILLAGES Funding Agency : Unnath Bharath Abhiyan (UBA) Grant received:Rs.1,00,000
OrchidLink/ID	ID:0000-0001-9487-2755
GoogleScholarLink/ID	ID: JPRxidEAAAAJ
VidwanLink/ID	ID: 305219
ResearchGateLink/ID	https://www.researchgate.net/profile/Suresh-Kumar-Ramasamy-4
ScopusLink/ID	ID: 57521630500