Name	Dr. G.KUMARESAN
Designation	Associate Professor
Department	Institute of Energy studies
Name of the Organization/Institute	Anna University, Chennai
Place	Chennai
Pincode	600025
Whether affiliated to Anna university	Yes
Mobile No.	9444222660
E-Mail	gkumaresan@annauniv.edu
Area of Specialization	Solar Thermal System

JOURNAL PUBLICATIONS

- 1. Vigneswaran, V. S., et al. "Energy, Exergy, and Economic analysis of low thermal conductivity basin solar still integrated with Phase Change Material for energy storage." Journal of Energy Storage 34: 102194.
- 2. Babu, A. K., et al. "CFD studies on different configurations of drying chamber for thin-layer drying of leaves." Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 42.18 (2020): 2227-2239.
- 3. Santosh, R., et al. "Experimental Evaluation of PVA as Novel Humidifier Material for Humidification-Dehumidification Applications." Journal of Testing and Evaluation 49.4 (2020).
- 4. Sudhakar, P., et al. "Performance augmentation of solar photovoltaic panel through PCM integrated natural water circulation cooling technique." Renewable Energy (2020).
- 5. RV P. Sudhakar, R. Santosh, B. Asthalakshmi, G. Kumaresan, "Performance augmentation of solar photovoltaic panel through PCM integrated natural water circulation cooling technique", Renewable Energy, 1-16.
- 6. RV S. Karthikeyan, K. Ravikumar, G. Kumaresan," Enthalpy based mathematical modelling for thermal energy storage filled with paraffin encapsulated balls as storage material", Materials Today: Proceedings, 1-5.
- 7. Babu, A. K., et al. "Experimental Investigations of Thin-layer Drying of Leaves in a Heat-Pump Assisted Tray-type Batch Drying Chamber." Strojniski Vestnik/Journal of Mechanical Engineering 66.4 (2020).
- 8. Santosh, R., et al. "Experimental parametric investigation of waste heat powered humidification dehumidification system for production of freshwater from wastewater." Desalination 484 (2020): 114422.

- 9. Selvaraj, Suppurayan, Govindaraj Kumaresan, and Mohammed Ali Jagabar Sathik. "Modified "K"-type multilevel inverter topology with reduced switches, DC sources, and power loss." *International Transactions on Electrical Energy Systems* 30.5 (2020): e12345.
- 10. Santosh, R., et al. "Investigation of humidification-dehumidification desalination system through waste heat recovery from household air conditioning unit." *Desalination* 467 (2019): 1-11.
- 11. Kumaresan, G., et al. "CFD and experimental analysis of phase change material behaviour encapsulated in internally finned spherical capsule." (2019).
- 12. Vigneswaran, V. S., et al. "Augmenting the productivity of solar still using multiple PCMs as heat energy storage." *Journal of Energy Storage* 26 (2019): 101019.
- 13. Pramothraj, M., et al. "Study of effect of Al and Cu microparticles dispersed in D-Mannitol PCM for effective solar thermal energy storage." Journal of Thermal Analysis and Calorimetry 139.2 (2020): 895-904.
- 14. Vigneswaran, V. S., et al. "Heat transfer studies on solar still assisted with and without latent heat storage material." DESALINATION AND WATER TREATMENT 140 (2019): 1-6.
- 15. Santosh, R., et al. "Technological advancements in solar energy driven humidification-dehumidification desalination systems-A review." Journal of Cleaner Production 207 (2019): 826-845.
- 16. Kumaresan, G., et al. "Experimental and numerical investigation of solar flat plate cooking unit for domestic applications." Energy 157 (2018): 436-447.
- 17. Babu, A. K., et al. "Review of leaf drying: Mechanism and influencing parameters, drying methods, nutrient preservation, and mathematical models." Renewable and Sustainable Energy Reviews 90 (2018): 536-556.
- 18. Kumaresan, Govindaraj, et al. "Numerical analysis of baffle cut on shell side heat exchanger performance with inclined baffles." Heat Transfer Engineering 39.13-14 (2018): 1156-1165.
- 19. Govindaraj, Kumaresan, et al. "Effect of fin orientations in a spherically encapsulated phase change materials for effective heat transfer enhancement." *Chemical Engineering Transactions* 62 (2017): 277-282.
- 20. Sudhakar, P., G. Kumaresan, and R. Velraj. "Experimental analysis of solar photovoltaic unit integrated with free cool thermal energy storage system." *Solar Energy* 158 (2017): 837-844.
- 21. Hariharan, Kandasamy, et al. "Investigation on phase change behavior of paraffin phase change material in a spherical capsule for solar thermal storage units." *Heat Transfer Engineering* 39.9 (2018): 775-783.
- 22. Kumaresan, G., et al. "Experimental and numerical studies of thermal performance enhancement in the receiver part of solar parabolic trough collectors." *Renewable and Sustainable Energy Reviews* 77 (2017): 1363-1374.
- 23. Vigneswaran, V. S., et al. "Performance evaluation of solar box cooker assisted with latent heat energy storage system for cooking application." *IOP Conference Series: Earth and Environmental Science*. Vol. 67. No. 1. 2017.

- 24. Kumaresan, G., et al. "Performance assessment of a solar domestic cooking unit integrated with thermal energy storage system." *Journal of Energy Storage* 6 (2016): 70-79.
- 25. Babu, Ayyasamy Krishnamoorthy, V. ANTONY AROUL Raj, and G. Kumaresan. "Misfire Detection in A Multi-Cylinder Diesel Engine: A Machine Learning Approach." *J. Eng. Sci. Technol* 11.2 (2016): 278-295.
- 26. Gopinath, A., et al. "Effects of the properties and the structural configurations of fatty acid methyl esters on the properties of biodiesel fuel: a review." *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering* 229.3 (2015): 357-390.
- 27. Shaafi, T., et al. "Effect of dispersion of various nanoadditives on the performance and emission characteristics of a CI engine fuelled with diesel, biodiesel and blends—a review." *Renewable and Sustainable Energy Reviews* 49 (2015): 563-573.
- 28. Kumaresan, G., et al. "CFD analysis of flow and geometric parameter for a double walled solar cooking unit." *Applied Mathematical Modelling* 39.1 (2015): 137-146.