



THE - Impact Rankings 2025



Ensure access to affordable, reliable, sustainable and modern energy for all

7.4.4) Policy development for clean energy tech

Inform and support governments though in clean energy and energy-efficient technology policy development.

1. KARE provides information and support to the government in terms of clean energy and energy-saving technology policies. The relevant actions are as follows:

Policy Name	URL
Energy Policy	https://www.kalasalingam.ac.in/wp-content/uploads/2021/11/Energy-Policy.pdf
Sustainable Development Policy	https://kalasalingam.ac.in/wp-content/uploads/docs/Sustainable Environment.pdf
E-Waste Policy	https://www.kalasalingam.ac.in/wp-content/uploads/2021/11/e-waste_policy.pdf
Maintenance Policy	https://www.kalasalingam.ac.in/wp-content/uploads/2021/11/Maintenance-Policy.pdf
Re-Cycle Policy	https://www.kalasalingam.ac.in/wp-content/uploads/2021/11/Recycle-Policy.pdf
Water-Conservation Policy	https://www.kalasalingam.ac.in/wp-content/uploads/2021/11/Water-Conservation-Policy.pdf

2. Faculties of the KARE has participated in the conferences and published their research articles and puts forward a number of suggestions on feasible ways to save energy.

S.No	Authors	Title	Year	Source Title
1.	Kumar P.G.A., Jeyanthi P.A., Devaraj D.	Hybrid multi-objective method based on ant colony optimization and firefly algorithm for renewable energy sources	2022	Sustainable Computing: Informatics and Systems
2.	Gokul M., Anisha M., Reshmi C.K., Sathish S.M.,	Piezoelectric Energy Harvest for Wearable Devices	2022	International Conference on Edge Computing



	Meghana P, Pandi S.G.			and Applications, ICECAA 2022 - Proceedings
3.	Madhumitha R., Priya P., Saravanan S.	Hybrid Renewable Energy Based Electric Vehicles Charging Station	2022	2022 2nd International Conference on Advance Computing and Innovative Technologies in Engineering, ICACITE 2022
4.	Baranitharan B., Sivapragasam C., Rajesh K.	Long term monthly prediction of energy requirements from a probabilistic perspective - A case study in southern States of India	2022	Sustainable Energy Technologies and Assessments
5.	Sakthivel K., Krishnasamy R., Balasubramanian K., Krishnakumar V., Ganesan M.	Averaged state space modeling and the applicability of the series Compensated Buck-Boost converter for harvesting solar Photo Voltaic energy	2022	Sustainable Energy Technologies and Assessments
6.	Nagavenkatesh K.R., Sambathkumar C., Nallamuthu N., Kumar M.K., Devendran P.	Investigation of electrochemical behaviour and annealing effect on zinc cobaltite nanoparticles as working electrode material for energy storage device	2022	Journal of Materials Science: Materials in Electronics
7.	Ramya R., Srinivasan S., Vasudevan K., Poonguzhali I.	Energy efficient Enhanced LEACH Protocol for IoT based applications in Wireless Sensor Networks	2022	5th International Conference on Inventive Computation Technologies, ICICT 2022 - Proceedings
8.	Hussain I., Ullah I., Ramalakshmi R., Tanzila, Ashfaq M., Nayab D.-E.	Smart Energy Management System for University Campus using Sine-Cosine Optimization Algorithm		2022 International Virtual Conference on Power



				Engineering Computing and Control: Developments in Electric Vehicles and Energy Sector for Sustainable Future, PECCON 2022
9.	Karthikeyan K., Sunder R., Shankar K., Lakshmanprabu S.K., Vijayakumar V., Elhoseny M., Manogaran G.	Retraction Note: Energy consumption analysis of Virtual Machine migration in cloud using hybrid swarm optimization (ABC- BA) (The Journal of Supercomputing, (2020), 76, (3374-3390), 10.1007/s11227-018-2583-3)	2022	Journal of Supercomputing
10.	Shenbagavalli S., Muthuvinayagam M., Revathy M.S.	Enhancement of electrical and electrochemical properties of sodium bromide incorporated with poly (ethylene oxide)/poly (vinylidene fluoridehexafluoropropylene) solid blend polymer electrolytes for electrochemical double layer capacitors	2022	Journal of Energy Storage
11.	Shanmugapriya V., Arunpandiyan S., Hariharan G., Bharathi S., Selvakumar B., Arivarasan A.	Enhanced electrochemical performance of mixed metal oxide (Bi ₂ O ₃ /ZnO) loaded multiwalled carbon nanotube for highperformance asymmetric supercapacitors	2022	Journal of Energy Storage
12.	Venkatesan M., Gouse Basha S., Ramkumar A., Manikandan R., Easwaran M., Khan B.	Switched Capacitor Based High StepUp Multilevel Inverter with SelfBalancing Ability and Low Switching Stress	2022	International Transactions on Electrical Energy Systems
13.	Ramya W.M.T., Siva V., Murugan A., Shameem A., Kannan S., Venkatachalam K.	A Novel Biodegradable PolymerBased Hybrid Nanocomposites for Flexible Energy Storage Systems	2022	Journal of Polymers and the Environment



3. Patents

Professors of KARE have made remarkable strides in the field of sustainable development, earning various patents for their innovative low-carbon technologies. These patents include cutting-edge solutions that focus on reducing carbon emissions, enhancing energy efficiency, and promoting renewable energy sources.

[URL: https://kalasalingam.ac.in/wp-content/uploads/2023/11/patent.pdf](https://kalasalingam.ac.in/wp-content/uploads/2023/11/patent.pdf)

4. Faculty Awards and Recognitions

S.No	Faculty Name	Department	Awarding Agency	Award / Recognition	Date
	Dr. S. Shantkriti	Biotechnology	Sustainable Materials and Technologies for Bio and Energy Applications (SMTBEA 2022)	Best Paper Presentation Award	13.07.2022 to 15.07.2022