

### Faculty publications during 2023-24

SL.No	Faculty Name	Title of publication	Journal/Conference	Publisher	Year of publication	DOI/ISSN No/Page No
1	Dr.Reshma Gopi	Optimal reconfiguration, renewable DGs, and energy storage units'	SCI Journal	International Journal of Modelling and Simulation TJMS	May 6,2024	<a href="https://doi.org/10.1080/02286203.2024.2363605">https://doi.org/10.1080/02286203.2024.2363605</a>
2	Dr.Reshma Gopi	Prefeasibility techno-economic analysis of hybrid renewable energy system	Scopus Journal	Elsevier,e-Prime Advances in Electrical Engineering, Electronics and Energy	January, 2024	<a href="https://doi.org/10.1016/j.prime.2024.100443">https://doi.org/10.1016/j.prime.2024.100443</a> .
3	Ms.Jeepa K.J	Optimization of Lead-Free Cs <sub>2</sub> TiBr <sub>6</sub> Green Perovskite Solar Cell for Future Renewable Energy Applications	SCI Journal	Current Nanoscience	April 2024	<a href="http://dx.doi.org/10.2174/0115734137286096240320075126">http://dx.doi.org/10.2174/0115734137286096240320075126</a>

4	Ms.Jeepa K.J	Comparing the Performance of Lead-based and Lead-free Inorganic Perovskite Solar Cell Using SCAPS	Journal	NanoWorld,J 9(S5): S106-S108, ID: 21100926589 , Volume 20	2023	<a href="https://doi.org/10.17756/nwj.2023-s5-021">https://doi.org/10.17756/nwj.2023-s5-021</a>
5	Ms.Preethi Sebastian	FRT capability improvement of a wind power system using support vector regression and deep neural network models	Journal	Australian Journal of Electrical and Electronics Engineering, 1–12. Pages 157-168	28 <sup>th</sup> May 2024	<a href="https://doi.org/10.1080/1448837X.2024.2355000">https://doi.org/10.1080/1448837X.2024.2355000</a>
6	Ms.Sreekala V M	A regulatory power split strategy for energy management with battery and ultracapacitor.	Journal	International Journal of Applied Power Engineering (IJAPE)	Vol. 13, No. 2, June 2024, pp. 442~452 Nov,2023	ISSN: 2252-8792, DOI: 10.11591/ijape.v13.i2.pp442-452

7	Dr.Reshma Gopi	Energy Harvesting Using Vertical Axis Wind Turbine from Highway Traffic Vehicles Movement	Conference	Proceedings of International conference on smart Innovations in Electrical Engineering,( ICSIEE 2024),pp 54-60.	May 10 2024	
8	Dr.Reshma Gopi	Novel Single Phase Cuk Derived Bridgeless PFC Converter for ON Board EV Charger with Alternate DC Source and Reduced Number of Components	Conference	Proceedings of International conference on smart Innovations in Electrical Engineering,( ICSIEE 2024),pp 124-133.	May 10 2024	<p>doi:10.2015/RC SPBOOKS/2024 05001</p> <p>ISSN:978-93-92504-58-7</p>

9	Dr.Reshma Gopi	Third Eye for Blind	Conference	Proceedings of International conference on smart Innovations in Electrical Engineering,( ICSIEE 2024),pp 139	May 10 2024	

10	Ms.Preethi Sebastian	Efficiency Analysis of Gear Change Control Strategy of Clutchless Automatic Manual Transmission of an Electric Vehicle”,	Conference	Proceedings of International conference on smart Innovations in Electrical Engineering,( ICSIEE 2024),pp 109-113.	
11	Dr.Honey Baby	DC-DC Converter with Single Input and Dual Output for Electric Vehicles	Conference	Proceedings of International conference on smart Innovations in Electrical Engineering,( ICSIEE 2024),pp 134.	
12	Dr.Honey Baby	Power Quality Enhancement in Electrical System by Incorporating Renewable Energy Resources with UPQC		Proceedings of International conference on smart Innovations in Electrical Engineering,( ICSIEE 2024),pp 138.	

13	Mr.Arun Chandrakumar K	DC-DC Converter with Single Input and Dual Output for Electric Vehicles	Conference	Proceedings of International conference on smart Innovations in Electrical Engineering,( ICSIEE 2024),pp 134.	
14	Ms.Shoma Mani	Efficient Dual Motor Power Train for Two wheeled Electric Cycle	Conference	International conference on smart Innovations in Electrical Engineering,( ICSIEE 2024),pp 97-103.ISSN:978-93-92504-58-7	May 10 2024
15	Ms.Jolly George	An Intelligent Vacuum Based Grass Cutter for Agricultural Application Grid –Tied Solar Panel Companion Inverter	Conference	International conference on smart Innovations in Electrical Engineering,( ICSIEE 2024),pp 104-113.	May 10 2024

16	Ms.Jolly George	Grid Tied Solar Companion Inverter	Conference	International conference on smart Innovations in Electrical Engineering,( ICSIEE 2024),pp 137.ISSN:97 8-93-92504-58-7	May 10 2024
17	Ms.Aiswarya Chandran	An Intelligent Vacuum Based Grass Cutter for Agricultural Application Grid –Tied Solar Panel Companion Inverter	Conference	International conference on smart Innovations in Electrical Engineering,( ICSIEE 2024),pp 104-113.ISSN:97 8-93-92504-58-7	May 10 2024
18	Ms.Aiswarya Chandran	A Comparative Study of the Recent High Gain Boost Converters Topology for Renewable	Conference	International conference on smart Innovations in Electrical Engineering,( ICSIEE	

		Energy Applications.		2024),pp 135.		
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1	Ms. Jeepa K.J	A hybrid technique employed for efficiency improvement of tandem perovskite solar cell	SCI Journal	Progress in Photovoltaics , Research Wiley	July 2022	<a href="https://doi.org/10.1002/pip.3610">https://doi.org/10.1002/pip.3610</a>
2	Dr. Bincy K Jose	A new MPPT technique for PV systems under partially shaded conditions	IEEE Conference	International Conference on Communication Embedded-VLSI Systems for Electric Vehicle proceedings	July2023	DOI: 10.1049/icp.2023.1415  ISBN :978-1-83953-902-2



3	Ms.Preethi Sebastian and Ms.Rahumath Beeby K.A	Inertia for Smart Grid Utility with Existing Grid Energy in Tropical Power Systems	UGC Journal	International Journal for Modern Trends in Science and Technology	June 2022	DOI: <a href="https://doi.org/10.46501/IJMTST08S0901">https://doi.org/10.46501/IJMTST08S0901</a>
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### Patents published during 2024-25

Sl.No	Faculty Name	Title of Invention	Application Number	Publication Date
1	Smart Grid Load Balancing Using AI-Predictive Control and Decentralized Energy Storage Units.	Dr Honey Baby	202541041936 A	30/05/2025
		Mr. Arun Chandrakumar K		
		Ms. Lekshmi Nair J		
		Ms. Jolly George		
		Ms.Sreekala V.M		
2	Piezoelectric-Based Energy Harvesting System for Low-Power Industrial IoT Devices	Ms.Krishna Priya T K	No.202541041930 A	
		Ms. Lekshmi Nair J		

		Mr.Arun Chandrakumar K		
		Ms. Sreekala V M		
3	AI-Optimized Modular Fast-Charging Station for Urban Electric Vehicle Infrastructure	Ms. Krishna Priya T K	No.202541041931 A	
		Ms. Shilpa Rajan		
		Ms. Aiswarya Chandran		
		Ms. Shoma Mani		
4	High-Frequency Resonant Wireless Power Transfer System for Multi-Device Charging Platforms	Ms. Lekshmi Nair J	No.202541041935 A	
		Dr. Honey baby		
		Ms. Sreekala V M		
		Ms. Jolly George		

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1	Iot-Enabled Solar-Powered Smart Irrigation System Integrated With Real-Time Weather Monitoring For Enhanced Agricultural Water Management	Dr Honey Baby	No.202441030734 A
		Ms.Sreekala V. M	
		Ms.Jeepa K J	
		Ms.Aiswarya Chandran	
2	Solar-Powered Grass Cutting Robot-Innovative Solution For Sustainable Lawn Maintenance	Dr Honey Baby	No.202441030774 A
		Ms.Sreekala V. M	
		Ms.Shoma Mani	
		Ms.Anupama M	
3	Dynamic Wireless Charging Technology For Electric Vehicles-Advancing Sustainability And Convenience	Dr Honey Baby	No.202441030773 A
		Ms.Sreekala V. M	
		Ms.Preethi Sebastian	
		Jolly George	
4	Enhancement Of Thermoelectric Power Generation Using Residential Waste Heat	Dr Honey Baby	No.202441030772 A
		Ms.Sreekala V. M	

26/04/2024

		Ms.Preethi Sebastian	
		Ms.Anupama M	