

## SETHU INSTITUTE OF TECHNOLOGY (An Autonomous Institution Accredited with 'A++' Grade by NAAC)



Pulloor, Kariapatti – Taluk. Virudhunagar Dist-626115.

Department of Electrical and Electronics Engineering						
Name	Dr. S.Suga	nya				
Date of Birth	13-03-199	92				
Unique ID	1-438463	76491				
Educational Qualifications	B.E., M.E.,	Ph.D				
Designation	Associate Professor					
Email ID	suganya@sethu.ac.in					
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	Teaching	Others	Total			
Experience	7 Years	3 Years	10 Years			
Date of Joining the Institution	06.08.2025					
Area of Specialization	Power S					
Courses taught	Basics of Electrical and Electronics Engineering, Power system operation and control, Power system Analysis, Transmission and Distribution, Digital Logic Circuits, Protection and Switchgear, Principles of Management. Power System Simulation Laboratory.					
Research Focus	Renewable Energy Systems, Electric Vehicle.					
Subject Competency	Power System, Renewable Energy System.					
No. of papers published	International Journals		Conferences			
		13		10		
PG Specialization	Power Sy	ystems Engineering				
Ph.D. Specialization	Electrical Engineering					
Patents (Filed & Granted)	03					
No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	<ol> <li>K.Padmapriya, N.Rajesh Kumar, S.Suganya, P.S.R.Senthil Maharaj, 2025, 'MEMS Design', Suchitra Publications, ISBN: 978-93-7382-245-8</li> <li>S.Suganya, A. Nandha Kumar, 2025, 'Measurement and Instrumentation', Scientific International Publishing house, ISBN: 978-93-6674-417-9.</li> <li>S.Suganya, K. Padmapriya, 2024, 'Therapeutic Equipments', Lakshmi</li> </ol>					
	<ul> <li>Publications, ISBN: 978-93-87950-92-4.</li> <li>4. S.Suganya, Sunila, B.Subramanian, B.Haewon, 2024, 'Deep Learning: Neural Network and beyond', Xoffencer Publications, ISBN No.: 978-91-976738-0-1.</li> </ul>					

).	S.Suganya,	Septem	ber 2020,	'COVID -	19 a	and women	in de	veloping
	countries',	book	entitled	Impact	of	Pandemic	on	women
	empowerment, Shanlax Publications, ISBN: 978-93-90082-43-8.							

## Academic Credentials

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Level	Degree	Specialization	University	Year of Completion	
UG	B.E	Electrical and Electronics Engineering	Anna University	2013	
PG	M.E	Power System Engineering	Anna University	2015	
Ph.D.		Electrical Engineering	Anna University	2018	

## **Details of Journal Publication:**

- 1. V.Saravanan, M.Arthy, S.Arun Jayakar, **S.Suganya**, T.Archana, M.Thirumalai, 2025 'Hierarchical ZnCo<sub>2</sub>O<sub>4</sub>/ MoS<sub>2</sub> @ rGO nanocomposite on nickel foam: a promising electrode for advanced energy storage', Ionics, Impact Factor: 2.6.
- 2. S.Jayasankari, C.Gunasundari, Thatikonda Radhika, S.Navaneethan, **S.Suganya**, T.Chandrasekar, 2024 'Enhancing transformer maintenance with predictive analytics: A Cost Effective and Reliable Solution using Machine Learning, IEEE Xplore, DOI: 10.1109/SUSTAINED63638.2024.11073993.
- 3. **S. Suganya**, K. Padma Priya, 2024, 'Neural Network based decision support system for forecasting the power needs of Electric Vehicle', Journal of Propulsion Technology, Vol. 45, pp. 2895-2904, Impact Factor: 1.
- 4. **S. Suganya**, T. Eswaran, 2024, 'Impact evaluation of different Plug-in Electric Vehicles emission using precise pricing scheme', Journal of Propulsion Technology, Vol. 44, pp.63-70, Impact Factor: 1.
- 5. **Suganya**, S. Charles Raja, & P. Venkatesh, 2018, 'Smart utilization of renewable energy sources in a micro grid system integrated with plug-in hybrid electric vehicles', International Journal of Energy Research, vol. 42, no. 3, pp. 1210-1224. Impact factor: 5.164.
- 6. G.R.Hemanth, **S.Suganya**, S.Charles Raja, P.Venkatesh, 2018, 'Neural network based demand side management using load shifting', IEEE Xplore, DOI: 10.1109/NPEC.2018.8476754.
- 7. A.Akshaya Preethi, S.Suganya, J.Jeslin Drusila Nesamalar, , S.Charles Raja, 2018, 'Economic Scheduling of plug-in Hybrid Electric Vehicle considering various travel patterns', IEEE Xplore, DOI: 10.1109/NPEC.2018.8476752.
- 8 **S. Suganya**, S. Charles Raja, & P. Venkatesh, 2017, 'Simultaneous coordination of distinct plug- in Hybrid Electric Vehicle charging stations: A modified Particle Swarm Optimization approach', Energy Elsevier, vol. 138, pp. 92 102. Impact factor: 8.857.

- 9. **S. Suganya**, S. Charles Raja, & P. Venkatesh, 2017, 'Smart management of distinct plug-in hybrid electric vehicle charging stations considering mobility pattern and site characteristics', International Journal of Energy Research, vol. 41, no. 14, pp. 2268–2281. Impact factor: 5.164.
- 10. **S.Suganya**, A. Marimuthu, 2014, 'Voltage Stability in Wind Farms using Particle Swarm Optimization', Advances in Natural and Applied Sciences, vol. 8, no. 20, pp. 34-40, (Impact factor: 2.698)
- 11. **S.Suganya**, A. Marimuthu, 2014, 'Maximum Loadability of Power Systems using Heuristic Optimization Techniques', International Journal of Applied Engineering Research, vol. 9, no. 24, pp. 8280-8286. (Impact factor: 0.16)
- 12 **S.Suganya**, A.Marimuthu, 2014, 'Computation of Maximum Loadability of Power systems including wind farms using Particle Swarm Optimization', IEEE Xplore Digital Library, DOI: 10.1109/NCETNRESEM.2014.7088731, Pages: 9-14.
- 13. S.Jeyadevi, **S.Suganya**, P.Jothipriya, M.Thivya Bharathi, 2013, 'Harmonic Mitigation using Active Power Filter in Photovoltaic System', Indian Streams Research Journal, vol. 3, no. 4, pp. 1-6. (Impact factor: 4.1625).

## **Details of Conference attended:**

- 1. Electric Vehicle BMS with charge monitoring and protection using Arduino UNO in proceedings of 3rd International conference on Recent Advances and innovations in science, Engineering, Technology and Management, 2025.
- 2. Novel Eco-friendly pesticides and fertilizers spraying drone for agriculture land in proceedings of the second international conference, CRC Press (Taylor & Francis), ISBN: 978-1-032-99905-0, 2024.
- 3. Electrical rewinding automation using Artificial Intelligence in proceedings of the International Conference on Environmental Development Using Computer Science, E3S Web of Conference, ISBN: 978-93-6039-498-1, 2024.
- 4. Optimal placement of PHEV charging station and Distributed Generations in a Radial Distribution System, IEEE Power Electronics, Drives and Energy systems conference, IIT Madras (Accepted).
- 5. Economic scheduling of Plug-in Hybrid Electric Vehicle considering various travel patterns in Proceedings of Sixth National Conference on Power Engineering, IEEE Digital Library, ISBN: 978-1-5386-3803-3, Pages: 1-7.
- 6. Neural Network based Demand Side Management using Load Shifting in Proceedings of Sixth National Conference on Power Engineering, IEEE Digital Library, ISBN: 978-1-5386-3803-3, Pages:1-9.
- 7. Voltage Stability in Wind Farms using Particle Swarm Optimization in Proceedings of International Conference on Electrical, Electronics, Instrumentation and Computer Communication, Pages: 165-169, 2014.
- 8. Maximum Loadability of Power System using Heuristic Optimization Techniques in Proceedings of International Conference on Emerging Electrical Systems and Control, Pages: 12, 2014.
- 9. Computation of Maximum Loadability of Power Systems including Wind Farms using Particle Swarm Optimization in Proceedings of National Conference on Emerging Trends in New and Renewable Energy Sources and Energy Management, Pages: 99-104, 2014.
- 10. Harmonic Mitigation using Active Power Filter in Photovoltaic System in Proceedings of Methods Enriching Power & Energy Developments, Pages: 1-6, 2013.