

Faculty Profile



Dr. Monica P Suresh, M.E., Ph.D
Associate Professor/ EEE

HIGHLIGHTS:

- Number of Journal Publications: 13
- H-Index: 04
- i-10 Index : 02
- Patents Published: 5
- Patents Granted: 1

PROFESSIONAL LINKS:

- Scopus ID: Suresh Monica P
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=57192238808>
- Google Scholar ID: Monica P Suresh
- Anna University Faculty ID: 2657551970
- AICTE Faculty ID: AICTE – 1- 472607812
- LinkedIn: [linkedin.com/in/monica-suresh-66b57b20](https://www.linkedin.com/in/monica-suresh-66b57b20)

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 31 Years
- Industrial Experience: 1 Year

AREA OF SPECIALIZATION:

- Digital System Design
- Digital Signal Processing
- Micro Electro Mechanical Systems

PATENTS PUBLISHED/GRANTED:

Published:

- IOT based Sailing Vessel Stem Bulb Mounted Sail Course Recorder
- Creating an Automated Pest Detection and Control System using Machine Learning and Robotics.

- Designing a Smart Livestock Monitoring System using Wireless Networks and Data Analytics

Granted:

- Sun tracking Solar Panel

PUBLICATIONS:

1. **MP Suresh**, VB Sree, JA Kumar, N Sujitha, A novel multi-source 35-level reduced-switch inverter for hybrid electric vehicle applications, *Sādhanā* 51 (4), 346(2026), <https://doi.org/10.1007/s12046-026-03376-2>
2. S Ravichandran, JA Kumar, **MP Suresh**, J Jasper, Smooth synchronization of microgrid integrated with multiple renewable sources using MFOTID controller and jellyfish search optimizer, *Electrical Engineering* (2026) <https://doi.org/10.1007/s00202-025-03440-w>
3. **MP Suresh**, SJ Isac, M Joly, JA Kumar, Automatic fault detection and stability management using intelligent hybrid controller, *Electric Power Systems Research* 238, 111075, (2025), <https://doi.org/10.1016/j.epsr.2024.111075>
4. J Anishkumar, **MP Suresh**, S Sengottaian, S Krishnan, Multi-aggregator Electric Vehicle Charge Scheduling Using a Novel Harmonic Masterpiece Optimization, *Iranian Journal of Science and Technology, Transactions of Electrical Engineering*,(2025) <https://link.springer.com/article/10.1007/s40998-025-00953-9>
5. **Monica P Suresh**, Yuvaraj T, Sudhakar Babu Thanikanti, Nnamdi Nwulu, Optimizing smart microgrid performance: Integrating solar generation and static VAR compensator for EV charging impact, emphasizing SCOPE index, *Energy Reports*, Volume 11, 2024, Pages 3224-3244, ISSN 2352-4847, <https://doi.org/10.1016/j.egyr.2024.02.050>.
6. **MP Suresh**, A Vimala Juliet, Design of a Valveless Micro-Pump for Variable Rate of Insulin Delivery- *Indian Journal for Science and Technology* Issue 44/ Vol 9/ Nov '2016 ISSN (Online) : 0974-5645,ISSN (Print) : 0974-6846,Scopus Indexed.
7. **Suresh, M.P.**,K Yuvasri, R Dinesh Kumar - IoT Based Electric Vehicle Battery Management System- *Innovative Computing and Communications, Proceedings of ICICC 2026*, Vol 4 Lecture Notes in Networks and Systems-2022. <https://doi.org/10.1007/978-3-032-28591-1>
8. **MP Suresh**, D Lavanya, R A Kumaar, R Denisha, Solar Floor Cleaning Robot, *International Conference on Universal Threats in Expert Applications and Solutions, Proceedings of 4th UNI-TEAS 2025*,Volume 1 Lecture Notes in Networks and Systems,1452, <https://doi.org/10.1007/978-981-96-7292-4>
9. **MP Suresh**, M Dinethkumar, M Lingeshekumar, Load Cell-Based Motor Control System in Electric Vehicle, *International Conference on Universal Threats in Expert Applications and Solutions, Proceedings of 4th UNI-TEAS 2025*,Volume 1 Lecture Notes in Networks and Systems,1452- <https://doi.org/10.1007/978-981-96-7292-4>
10. **MP Suresh**, R N Aathikshun, S Al Mansoor, IOT Based Wireless Battery Monitoring System, *International Conference on Universal Threats in Expert Applications and Solutions, Proceedings of 4th UNI-TEAS 2025*,Volume 2 Lecture Notes in Networks and Systems-1452- <https://doi.org/10.1007/978-981-96-7292-4>
11. **Suresh, M.P.**, Bency Sharon, S., Mukeshvelan, D.S. (2024). EV Charging Station Using Full-Bridge DC-DC Converter Using Solar Energy. -*Emerging Trends in Expert Applications and Security. ICE-TEAS 2024. Lecture Notes in Networks and Systems*, vol 1030. Springer, Singapore. https://doi.org/10.1007/978-981-97-3745-1_36
12. **Suresh, M.P.** (2023). Design of a Robot for Detection of Human Beings Amidst Fire and Wreckage. -*Emerging Trends in Expert Applications and Security. ICETEAS 2023.*

Lecture Notes in Networks and Systems, vol 682. Springer, Singapore.

https://doi.org/10.1007/978-981-99-1946-8_41

13. **M. P. Suresh**, V. R. Vedha Rhythesh, J. Dinesh, K. Deepak and J. Manikandan, "An Arduino Uno Controlled Fire Fighting Robot for Fires in Enclosed Spaces," 2022 Sixth International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), Dharan, Nepal, 2022, pp. 398-402, doi: 10.1109/I-SMAC55078.2022.9987432

CERTIFIED COURSES COMPLETED:

- Effective Engineering Teaching in Practice
- Making Learning Engaging through Interactive Games

PROFESSIONAL MEMBERSHIPS:

- Life Member of ISSS
- Life member of ISTE