



Vishnu Institute of Technology (Autonomous)

Approved by AICTE, Accredited by NBA & NAAC-A: Permanently Affiliated
to JNTUK.

Vishnupur, Bhimavaram – 534202: West Godavari Dist. A.P.

Department of Electrical and Electronics Engineering

2022* FACULTY PUBLICATIONS

1. Nasir A.W., Kasireddy I., Tiwari R., Ahmed B.K.I., Furquan A. (2022) Data-Based Tuning of PI Controller for First-order System. In: Bhaumik S., Chattopadhyay S., Chattopadhyay T., Bhattacharya S. (eds) Proceedings of International Conference on Industrial Instrumentation and Control. Lecture Notes in Electrical Engineering, vol 815. Springer, Singapore. https://doi.org/10.1007/978-981-16-7011-4_52

2021 FACULTY PUBLICATIONS

1. Jnaneswar, K., Mallikarjuna, B., Devaraj, S. et al. A real-time DWT and traveling waves-based multi-functional scheme for transmission line protection reinforcement. *Electr Eng* 103, 965–981 (2021). <https://doi.org/10.1007/s00202-020-01117-0>
2. Synchrophasor Sensors Assisted Novel Algorithm for Power System Protection Reinforcement and Health Monitoring," in *IEEE Sensors Journal*, vol. 20, no. 15, pp. 8213-8222, 1 Aug.1, 2020, doi: 10.1109/JSEN.2020.2986087.
3. Balimidi Mallikarjuna; Rishabh Devagupta; Maddikara Jaya Bharata Reddy; Dusmanta Kumar Mohanta, S. Saravanan, K. Karunanithi and S. Pragaspathy, A Novel Topology for Bidirectional Converter with High Buck Boost Gain, *Journal of Circuits, Systems and Computers*, Vol. 29, No. 14, 2050222 (2020).
4. Madaboina Ramesh; Balimidi Mallikarjuna; T. Rajasekar, A Novel Investigation on Single-Input Three-Output DC-DC Buck Converter For Electrical Vehicles," 2021 7th International Conference on Electrical Energy Systems (ICEES), 2021, pp. 141-146, doi: 10.1109/ICEES51510.2021.9383635.
5. S. Pragaspathy, Ch. Phani Kumar, V.S.N. Narasimha Raju, Kalyan Sagar Kadali, S. Saravanan, A high gain multi-port bidirectional converter with reduced voltage stress, *Materials Today: Proceedings*, 2021.
6. S. Menaga, J. Paruvathavardhini, S. Pragaspathy, R. Dhanapal, D. Jebakumar Immanuel, An efficient biometric based authenticated geographic opportunistic routing for IoT applications using secure wireless sensor network, *Materials Today: Proceedings*, 2021.
7. Kumar, D.G., Ganesh, A., Bhoopal, N., Saravanan, S., Prameela, M., Dsnmrao, Kasireddy, I. (2021). Evolutionary algorithms for real time engineering problems: A comprehensive review. *Ingénierie des Systèmes d'Information*, Vol. 26, No. 2, pp. 179-190. <https://doi.org/10.18280/isi.260205>
8. Ch. Phani Kumar; S. Pragaspathy; V. Karthikeyan; K. N. S. Durga Prakash, Power Quality Improvement for a Hybrid Renewable Farm Using UPQC, *International Conference on Artificial Intelligence and Smart Systems (ICAIS)*, 25-27 March 2021. <https://ieeexplore.ieee.org/document/9396048>

9. B.N. Ch.V. Chakravarthi; P. Naveen; S. Pragaspathy; V S N Narasimha Raju, Performance of Induction Motor with hybrid Multi level inverter for Electric vehicles, International Conference on Artificial Intelligence and Smart Systems (ICAIS), 25-27 March 2021.

<https://ieeexplore.ieee.org/document/9395885>

10. Saravanan S., Kalaiyarasi M., Karunanithi K., Karthi S., Pragaspathy S., Kadali K.S. (2022) Iot Based Healthcare System for Patient Monitoring. In: Nayak P., Pal S., Peng SL. (eds) IoT and Analytics for Sensor Networks. Lecture Notes in Networks and Systems, vol 244. Springer, Singapore. https://doi.org/10.1007/978-981-16-2919-8_40

11. Ramu Bhukya¹, KalyanSagar Kadali², Asapu Siva³, Y T R Palleswari¹, Pragaspathy² and S Saravanan³, Experimental Validation with FPGA Controller to A Switched-Capacitor Interleaved Bidirectional DC-DC Converter for A Renewable Energy Storage Systems, Journal of Physics: Conference Series, 2021.

12. Nilesh, Idamakanti Kasireddy, Design of PID controller using strawberry algorithm for load frequency control of multi-area interconnected power system with and without non-linearity, EPREC 2021.(Accepted)

13. I V Vijetha, Analysis of 3-Phase DC Power Converter for Fuel cell, International Conference on Communication and Electronic systems, 2021.(Accepted)

14. Kasireddy I., Nasir A.W., Rahul, Rama Rao R.V.D. (2021) Stable Zones of Fractional Based Controller for Two-Area System Having Communication Delay. In: Sheth A., Sinhal A., Shrivastava A., Pandey A.K. (eds) Intelligent Systems. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-16-2248-9_14

15. S. Pragaspathy, Hybrid Renewable Energy Fed Battery Electric Vehicle Charging Station, ICESC 2021, 2021.

16. Bhoopal, N., Rao, D.S.M., Narukullapati, B.K., Kasireddy, I., Kumar, D.G. (2021). Selective harmonic elimination based THD minimization of a symmetric 9-level inverter using ant colony optimization. Mathematical Modelling of Engineering Problems, Vol. 8, No. 5, pp. 769-774. <https://doi.org/10.18280/mmep.080512>

17. Ramesh, K., Madasu, S. D., & Kasireddy, I. (2022). Real-Time Monitoring of Smart Meters Based on Blockchain Technology. In N. Jain, J. Maherchandani, N. Agrawal, & T. Gupta (Ed.), Optimal Planning of Smart Grid With Renewable Energy

Resources (pp. 208-218). IGI Global. <https://doi.org/10.4018/978-1-6684-4012-4.ch007>

18. S. Pragaspathy, Photovoltaic based Hybrid Integration of DC Microgrid into Public Ported Electric Vehicle, CRC Press (Taylor & Francis), 2021.(Accepted)

19. NSD Prakash Korlepara, G Phani Chandra, B Seshagiri, VSN Narasimha Raju, N Veeraiah, S Pragaspathy, Novel freshness indication packaging technology for frozen shrimps, 2021 International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA), pp.1-5.

20. VSN NarasimhaRaju, M Premalatha, S Pragaspathy, NSDP Korlepara, Implementation of Instantaneous Symmetrical Component Theory based Hysteresis Controller for DSTATCOM, 2021 International Conference on Advancements in Electrical, Electronics, 2021.

21. R. Sureshkumar¹, S. J. Suji Prasad², G. Karthikeyan³, Ch. Phani Kumar⁴, and S. V. Pravina, Three phase induction motor position control using V20 drive, AIP Conference Proceedings , Volume 2387, Issue 1, 2021. 10.1063/5.0068770.

22. KS Kumar, AW Nasir, P Mani, I Kasireddy, M SivaramKrishnan, Design and Investigation of Bio-inspired Optimization based I-PD controller for pH Neutralization Process, 2021 2nd International Conference on Smart Electronics and Communication (ICOSEC), pp. 739-744, 2021.

23. Mamatha, Grounding technology in floating solar PV applications, 5th International conference on electronics,communication and Aerospace Technology, 2021.(Accepted)

24. S Pragaspathy, RVD Rama Rao, KNSD Prakash, Analysis and Appropriate Choice of Power Converters for Electric Vehicle Charging Infrastructure, ICAIS 2022.(accepted)

25. B. Swamy, N. Veeraiah, E. Nagaraju and B. N. C. V. Chakravarthi, "Review of Non-Conventional power electronic converters for Solar PV with Non-linear loads," 6th International Conference on Communication and Electronics Systems (ICCES), 2021, pp.358-361.

26. I. Kasireddy, A. W. Nasir, S. K. Reddy, N. Veeraiah, "Determination of stable zones of LFC for a power system considering communication delay," International Conference on Research in Sciences, Engineering and Technology (ICRSET 2021), February 12-13, 2021.

27. Ch. Phani Kumar, N. Veeraiah, P.Naveen “Mitigation of Uncertainties in Hybrid Renewable Energy Systems” has been published in International Journal of Engineering Research & Technology (IJERT) during January, 2021 Vol. 10 Issue 01, January-2021 ISSN: 2278-0181

2020 FACULTY PUBLICATIONS

1. Jnaneswar, K., Mallikarjuna, B., Devaraj, S. et al. A real-time DWT and traveling waves-based multi-functional scheme for transmission line protection reinforcement. *Electr Eng* 103, 965–981 (2021). <https://doi.org/10.1007/s00202-020-01117-0>
2. B. Mallikarjuna, D. Rishabh, M. Jaya Bharata Reddy and D. K. Mohanta, “Synchrophasor Sensors Assisted Novel Algorithm for Power System Protection Reinforcement and Health Monitoring” *IEEE Sensors Journal*, vol. 20, no. 15, pp. 8213-8222, 2020.
3. Saravanan, S., K. Karunanithi, and S. Pragaspathy. "A Novel Topology for Bidirectional Converter with High Buck Boost Gain" *Journal of Circuits, Systems and Computers*, vol. 29, no. 14, pp. 2050222, 2020.

2019 FACULTY PUBLICATIONS

1. S. Pragaspathy and B. Anand, "An Experimental Validation on Adaptive Controllers in Tracking and Smoothing of Wind Power for a Variable-Speed System", *Journal of Testing and Evaluation*, vol. 47, no. 4 pp. 2405-2434, 2019
2. I. G. S. Babu and T. Chiranjeevi, "Synthesis and Application of CeO₂ and ZrO₂ nanoparticles for enhancement of dielectric strength of transformer oil", *International Journal of Innovative Technology and Exploring Engineering*, vol. 8, no. 9, pp. 593-595, 2019.
3. K. Kumar, M. Bhattacharya, S. Garlapati and S. Banerjee, "Impact of Gallium Nitride Semiconductor Devices in Tri-state Boost Converter," 2019 IEEE International Conference on Sustainable Energy Technologies and Systems (ICSETS), 2019, pp. 292-296, doi: 10.1109/ICSETS.2019.8744791.

2018 FACULTY PUBLICATIONS

1. V. Karthikeyan, S. Rajasekar, S. Pragaspathy and F. Blaabjerg, "Core Loss Estimation of Magnetic Links in DAB Converter Operated in High-Frequency Non-Sinusoidal Flux Waveforms," 2018 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES), IIT Madras, India, 2018, pp. 1-5, doi: 10.1109/PEDES.2018.8707857.
2. V. Karthikeyan, S. Rajasekar, S. Pragaspathy and F. Blaabjerg, "A High Efficient DAB Converter under Heavy Load Conditions Using Inner Phase Shift Control," 2018 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES), IIT Madras, India, 2018, pp. 1-6, doi: 10.1109/PEDES.2018.8707705.