List of Faculty Publications from EEE Department

For the Academic year 2020-21

International Journals:

- Karra.Jangaiah, K.Chandra Sekhar "Performance Analysis Of Micro grid Using Homer Grid For Net Metering" Journal of Advanced Research in Dynamical and Control Systems

 JARDCS, Volume 12 | 02-Special Issue 2020, Pages: 2216-2222, ISSN: DOI: 10.5373/JARDCS/V12I2/S20201266.
- Shaik Mohammad Tayyab, K.Chandra Sekhar "Role of Novel PDMS Panels in Monitoring Partial Discharges in GIS" International Journal of Engineering Research & Technology (IJERT), Vol. 9 Issue 10, October-2020, Pages: 613-616. ISSN: 2278-0181
- Shaik Mohammad Tayyab, K.Chandra Sekhar "A Meticulous method for the measurement of partial discharges in gas insulated switchgears" International Journal of Emerging trends in Engineering Research (IJETER), Vol. 9 Issue 3, March-2021, Pages: 189-192. ISSN: 2347-3983
- Yannam Ravi Sankar, K. Chandra Sekhar, "Design and Control of Hybrid energy microgrid system using renewable energy sources" International Journal of Ambient Energy, 2021, DOI: 10.1080/01430750.2021.1909653
- M. Venkatesh, K.Chandra Sekhar "Analysis and Simulation of Current Control Techniques for Circulating Control of Modular Multi-Level Converter" Advances in Mathematics: Scientific Journal, 9 (2020), no.10, 8227–8235, ISSN: 1857-8365 (printed); 1857-8438 (electronic). https://doi.org/10.37418/amsj.9.10.52; Spec. Iss. on AOAOCEP-2020
- 6. M. Nagaiah, K.Chandra Sekhar "Optimal Operation of Standalone Hybrid System Containing Solar and Wind Generating Units with the help of Boost and Bidirectional Converters Operated by ANFIS Controllers" Global Journal of Engineering Science and Research Management, Volume 7(6): June, 2020, Pg.No.11-20; ISSN 2349-4506. DOI: 10.5281/zenodo.3895567
- M. Venkatesh, K.Chandra Sekhar "A Modified Sliding Mode Control for Circulating Current Control and Voltage Balancing in Modular Multilevel Converter" International Journal of Advanced Trends in Computer Science and Engineering, Volume 9, No.4, July

August 2020,Pg.No.4895-4902 ISSN 2278-3091.
 <u>https://doi.org/10.30534/ijatcse/2020/101942020</u>

- M. Venkatesh, K.Chandra Sekhar "AC Circulating Current Control in Modular Multilevel Converter based on Estimation of Capacitor Voltages through Kalman Observer" International Journal of Emerging Trends in Engineering Research, Volume 8. No. 8, August 2020,Pg.No.4206-4212; ISSN 2347 – 3983. <u>https://doi.org/10.30534/ijeter/2020/28882020</u>
- Podili Manisha, Dr. K. Chandra Sekhar, "RSC-MLC Controlled DSTATCOM for PQ Improvement and Real Power injection in Distribution System", Test Engineering & Management, March-April 2020, page:27185-27190, ISSN:0193-4120. (Scopus Indexed)
- Padala Navya Meghana, Dr K Swarnasri, Ponnam Venkata K Babu, "Smart Customer Demand Forecast With Substantial Energy Demand Variability", International Journal of Advanced Science and Technology, Vol. 29, No.7, 2020, pp.8458-8464.
- 11. Sappidi Bhargavi, Dr K Swarnasri, Dr. Ponnam Venkata K Babu, "An Intelligent Protection of Microgrid scheme using differential and adaptive Over Current Relay by using Fuzzy Logic Controller", High Technology Letters, Vol. 26, Issue.12, 2020, pp.244-248, ISSN: 1006-6748. (Scopus Indexed)
- 12. K. Praveena, K. Swarna Sri, "Circulating current harmonics suppression with fuzzy controller in modular multi-level inverter" Materials Today: Proceedings, March 2021, Elsevier.
- Shaik Yalavarthi Hussain, Dr. K. Radha Rani, Dr. N. Chaitanya, entitled 'SRM Drive for Electric Vehicle Application Driven by SPV System with Energy Control Technique' in Solid State Technology Journal, Vol.63, Issue.5, 2020, ISSN:0038-111X, pp.10355-10363. (Scopus Indexed)
- 14. CH.Naga sai kalyan, G.Sambasiva Rao "Combined frequency and voltage stabilization of multi-area multisource system by DE-AEFA optimized PID controller with coordinated performance of IPFC and RFBs" International Journal of Ambient Energy, https://doi.org/10.1080/01430750.2020.1860130, Print ISSN: 0143-0750 Online ISSN: 2162-8246, (Taylor and Frnacis), (Scopus Indexed).
- 15. CH.Naga sai kalyan, **G.Sambasiva Rao**, "Frequency and voltage stabilization in combined load frequency control and automatic voltage regulation of multi area system

with hybrid generation utilities by AC/DC links", International journal of sustainable Energy (Taylor and Frnacis). https://doi.org/10.1080/14786451.2020.1797740, 30 Jul 2020, Pages 1009-1029, (ESCI, Scopus Indexed, ISSN: 1478-646X).

- 16. CH.Naga sai kalyan, G.Sambasiva Rao, "Performance comparison of various energy storage devices in combined LFC and AVR of multi area system with renewable energy integration", International Journal of Renewable Energy Research (IJRER), June-2020, Vol.10, No.02, pp.933-944. (Web of Science, ESCI, Scopus Indexed, ISSN:1309-0127)
- 17. CH.Naga sai kalyan, G.Sambasiva Rao, "Coordinated SMES and TCSC damping controller for load frequency control of multi area power system with diverse sources" International Journal on electrical Engineering and informatics, volume 12 number 4, December 2020, Pages: 747-769
- 18. CH.Naga sai kalyan, G.Sambasiva Rao, "Impact of communication time delays on combined LFC and AVR of a multi-area hybrid system with IPFC-RFBs coordinated control strategy" Protection and control of modern power systems, 2021
- Krishna Chaitanya Marri, Sambasiva Rao Gudapati, "A Generalized SVPWM scheme for multilevel inverters with fixed computational time" International Journal of advanced trends in computer science and engineering, volume 9, no. 5, October 2020, ISSN: 2278-3091
- 20. G.V.V.Nagaraju, G. SambasivaRao, "Three-phase five-level CHB inverter fed induction motor for renewable applications" International Journal of Power electronics and drive systems (IJPEDS), Volume 11, No. 3, September 2020, pages: 1145-1152, ISSN: 2088-8694
- 21. Krishna Chaitanya. M, G. Sambasiva Rao, "An Advanced Control Strategy for an efficient Solar inverter to Grid connected Applications", International Journal of Emerging Trends in Research, Volume 8, No. 9, September 2020, pages: 5947-5951, ISSN:2347-3983.
- 22. L. NarayanaGadupudi, Dr. G. Sambasiva Rao, "Recent Advances of STATCOM in Power transmission lines – A review" Turkish Journal of computer and mathematics education, Volume 12, no. 3, April 2021, pages: 4621-4326

- **23.** Gaddala Jayaraju, **Dr. G. Sambasiva Rao**, "31-level asymmetrical cascaded multilevel inverter with DC-DC flyback converter for hybrid power distribution" Journal of information and computational science, volume 13, issue 9, 2020, ISSN: 1548-7741
- 24. Gaddala Jayaraju, Dr. G. Sambasiva Rao, "Power quality improvement of intelligent control based 31-level asymmetrical cascaded multilevel inverter with DC-DC flyback converter for hybrid power distribution" Slid state technology, volume 63, issue 5, 2020
- 25. Krishna Chaitanya Marri, Sambasiva Rao Gudapati, "Smart Solar Grid integrated PV System with Faulty Performance Enhancement: For Better Rural Electrification in India" International Journal of Advanced Trends in Computer Sciences and Engineering, Vol.9, No.4, Aug. 2020 (Scopus Indexed). ISSN 2278-3091.
- 26. G. Lakshminarayana and G. Sambasiva Rao "7-Level Transformers Integrated Voltage Source Converter Based STATCOM for Voltage Profile Enhancement", Solid State Technology, Volume: 63 Issue: 5, 2020, Page: 3134-3141, ISSN 0038-111X (online), (Scopus Indexed).
- 27. G. Lakshminarayana and G. Sambasiva Rao "9-Level VSC based STATCOM for Reactive Power Management and Voltage Stability Improvement" Journal of Green Engineering (JGE), Volume-10, Issue-11, November 2020, Page: 10275-10287, ISSN: 2245-4586. (Scopus Indexed)
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- 29. Prathipati Manisha, Dr. Gudapati Sambasiva Rao, "Simulation and Control of PV/Wind based Micro Grid System" TEST Engineering & Management, March-April 2020, page:27191-27197, ISSN:0193-4120. (Scopus Indexed)
- 30. Atmakuri V N Durga Harika, Dr. N. C. Kotaiah, entitled "Zig-Zag Transformer based Current Injection Technique for enhancement of Power Quality in Utility Grid" Journal of Critical of Critical Reviews, Volume-7, Issue-15, 2020, Page: 5706-5712, ISSN: 2394-5125. (Scopus Indexed)
- 31. G. Sambasivarao and Dr.A. Ramakoteswararao, "Compensation of Utility Current Using Active Power Filter for PV-Grid Tied System with Non-Linear Load", Journal of

Advanced Research in Dynamical and Control Systems, vol. 12, no.7, pp. 721-729, July 2020. (Scopus Indexed).

- 32. S. Vijayaraju, N. Chaitanya, K. Radha Rani, entitled 'Hybrd Optimization Model for Solar Wind Systems using Fuzzy Logic Control' in Journal of critical reviews, Vol.7, Issue.15, 2020, ISSN: 2394-5125, pp.6311-6318. (Scopus)
- 33. Bahatam Yaswanth Sai, Dr. Y. Ravindranath Tagore, "Speed Range Improvement of DWIG in Wind Power Systems using Boost Converter", Journal of Critical Reviews, ISSN:2394-5125, Vol. 7, Issue.15. 2020, pp. 6319-6325. (Scopus Indexed)
- 34. Yadlapalli, R.T., Kotapati, A. "Modeling and control of laptop computer voltage regulator module with multiple power sources", Journal Européen des Systèmes Automatisés, ISSN: 1269-6935 (print); 2116-7087 (online), Vol. 53, No. 3, 2020, pp. 421-427, https://doi.org/10.18280/jesa.530313. (Scopus Indexed)
- 35. Yadlapalli, R.T., Kotapati, A. "Analysis, design and implementation of a fixed frequency PWM-based sliding-mode controller for quadratic buck converter", Int. J. Power Electronics, ISSN online 1756-6398, ISSN print 1756-638X, Vol. 13, No. 1, 2021, pp. 66-82. https://doi.org/10.1504/IJPELEC.2021.111857. (Scopus Indexed)
- 36. Ravindranath Tagore Yadlapalli, Anuradha kotapati, Rajani kandipati, "Advancements in power conditioning units for electric vehicle applications" International journal of electric and hybrid vehicles, ISSN online 1751-4096 ISSN print 1751-4088, Vol. 13, No. 1, 2021, pp. 81-115. https://doi.org/10.1504/IJEHV.2021.115198. (Scopus/ESCI indexed)
- 37. Ravindranath Tagore Yadlapalli, "Modelling and control of hybrid power sourced high gain DC-DC converter" Journal of engineering science technology and review, ISSN: 1791-2377, Vol. 14, No. 1, 2021, pp. 119-127. https://doi.org/ <u>10.25103/jestr.141.14</u>. (Scopus Indexed)
- 38. Ravindranath Tagore Yadlapalli, Anuradha Kotapati, Rajani Kandipati, Srinivasa Rao Balusu, Chandra Sekhar Koritala, "Advancements in energy efficient GaN power devices and power modules for electric vehicle applications: a review", International Journal of Energy Research, ISSN:1099-114X, Vol. 45, No. 9, 2021, pp. 12638-12664. https://doi.org/ 10.1002/er.6683. (SCI Expanded/Scopus/Web of Science Indexed: IMPACT FACTOR 5.164)

- 39. Vemula Anka Lakshmi, Dr.G.V. Prasanna Anjaneyulu, "Integrated AC and DC Micro Grid of Power Management Scheme" in Journal of Critical Reviews, ISSN: 2394-5125, Vol. 7, Issue.15, 2020, pp: 6326-6333. (Scopus Indexed)
- 40. Sk. A. Johny Begum, Dr. G. V. Prasanna Anjaneyulu, Hothri Ravikindi "Control technique and structure of AC/DC combined Micro-grid for smart load application" PENSEE Journal, Volume - 51, Issue 02 - 2021.
- 41. Sk. Abdul Kalam, Dr. G. V. Prasanna Anjaneyulu, Hothri Ravikindi, "Speed control of a BLDC motor using improved fuzzy PID controller" International journal of advanced technology in engineering and science, Vol, 9, Issue 4, april 2021
- 42. Y. Suribabu, K. Chandra Sekhar, "Current-Fed Switched Boost Inverter fed 5-phase Induction Motor Drive for EV Application", Solid State Technology, Volume-63, Issue-6, 2020, Page: 20335-20349, ISSN: 0038-111X. (Scopus Indexed)
- 43. Syed Abdul Mujeer, Ramesh Jayaram, Puchanuthala Siva Krishna, SIvaprasad kollati, M. Raja nayak, "FOPID and state space analysis based PSS for damping of oscillationin multi machine system" Elsevier ltd., Materials today, 2021
- 44. Venkata K Babu Ponnam and K. Swarnasri, "Optimal integration of different types of DGs in radial distribution system by using Harris hawk optimization algorithm", Cogent Engineering (Taylor & Francis), Vol. 7, 2020. doi: /10.1080/ 23311916. 2020. 1823156. (Scopus Indexed)
- 45. Venkata K Babu Ponnam and K. Swarnasri, "Multi-Objective Optimal Allocation of Electric Vehicle Charging Stations and Distributed Generators in Radial Distribution Systems using Metaheuristic Optimization Algorithms", Engineering, Technology & Applied Science Research, Vol. 10, No.3, pp. 5837–5844, 2020. doi: /10.48084/etasr.3517. (Scopus Indexed)
- **46. Tripura Pidikiti**, Kishore Yadlapati, Gudavalli Madhavi, K. Reddy Madhavi, "Application of IOT for human safety on road" Turkish journal of computer and mathematics education, vol 12, no.2, pages 2156-2162, april 2021,ISSN: 1309-4653.
- 47. Tripura Pidikiti, Kishore Yadlapati, Fredric Samson Kirubakaran, Gudavalli Madhavi, K. Reddy Madhavi, "Wireless greenhouse monitoring system using raspberry PI" Turkish journal of computer and mathematics education, vol 12, no.2, pages 2163-2169, april 2021, ISSN: 1309-4653.

International Conferences:

- 1. **Dr. Chandra Sekhar**, "A scrupulous way of Analysis & Diagnosing the Partial Discharges in High Voltage Equipments" in proceedings of International Conference on Emerging Technologies in Electrical Engineering (ICETEE-2021), June 18 & 19 2021, organized by EEE Department, Malla Reddy College of Engineering & Technology, Hyderabad, India.
- 2. Shaik Yalavarthi Hussain, Dr. K. Radha Rani, "Z-Source Inverter for RES-EVS with Flexible Energy Control Functions" in proceedings of International Conference on Smart and Intelligent Systems (SIS-2021), 25th to 26th February 2021, organized by EEE Department, VRSEC, A.P., India.
- **3.** G. Lakshminarayana and **G. Sambasiva Rao**, "RECENT ADVANCES OF STATCOM IN POWER TRANSMISSION LINES A REVIEW" International Conference on Modern Research & Computations in Electrical Technology (ICMRCET–2020), organised by CMR College of Engineering and Technology and Internal Quality Assurance, (IQAC) during 7th& 8th January, 2021."
- **4. G. Sambasiva Rao**, "31-level asymmetrical cascaded multilevel inverter with DC-DC flyback converter for hybrid power distribution " International Conference on Recent innovations in science, engineering, humanities and management (SEHM–2020), organised by Tirumala Engineering College during 25th & 26th september, 2020.
- CH.Naga sai kalyan, G.Sambasiva Rao, "Demonstrating the effect of Excitation Cross Coupling and Communication Time Delays on Automatic Generation Control" International Conference on Nascent Technologies in Engineering (ICNTE 2021), NIT Jamshedpur.
- **6.** Dr. RamakoteswaraRao Alla, Sarayu Vunnam "Blockhain technology: A smart technology for demand response in smart grids" 2nd Electrc power and renewable energy conference (EPREC 2021) during 28-30th may 2021.
- 7. Dharani Kumar Narne, T.A. Ramesh Kumar, Dr. RamakoteswaraRao Alla, "A Brief Review on Conventional and Renewable Power Generation Scenario in India" 2nd Electrc power and renewable energy conference (EPREC 2021) during 28-30th may 2021.
- 8. **G V Prasanna Anjaneyulu** "Transient Response performance based comparative studies of TBC fed UPQC in Multibus based system with conventional converter" in International Conference on Smart and Intelligent Systems (SIS-2021) Organized by EEE Department, VRSEC, A.P., India.
- 9. **B. V. Vasantha Rao** "Energy monitoring framework utilizing Internet of Things" in International Conference on Smart and Intelligent Systems (SIS-2021) Organized by EEE Department, VRSEC, A.P., India.
- A. Dahlmann, V. Y, S. Kouro, M. Aguirre and T. Pidikiti, "Modulated Model Predictive Current Control of a Three-Phase Photovoltaic Central Inverter," 2020 IEEE International Power and Renewable Energy Conference, Karunagappally, India, 2020, pp. 1-6.

11. Y. Mllikarjuna Rao, B. Sarath Chandra, Dr. N. C. Kotaiah, "Novel control method on unified power quality conditioner (UPQC) for harmonic distribution using PSOfuzzy logic", in Proceedings of the first International Conference on Computing, Communication and Control System, Bharath University, Chennai, 7th to 8th June 2021.