

List of Faculty Publications from EEE Department

For the Academic year 2021-22

International Journals:

1. Shaik Mohammad Tayyab, **K. Chandra Sekhar**, “A Comprehensive Procedure for the Partial Discharge Measurements & Power Frequency Withstand Test on GIS in Transmission Substations” International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878 (Online), Volume-10 Issue-4, November, 2021, pp:124-128. DOI: 10.35940/ijrte.D6592.1110421
2. Thulluru Mounika, **Dr. K. Chandra Sekhar, Dr. K. Radha Rani**, entitled ‘Control and Management of Photovoltaic/ Wind/ Battery based Hybrid Micro grid System’, Design Engineering Journal, Issue 08, pp.8698-8706, ISSN: 0011-9342, Oct 2021. (Scopus)
<http://www.thedesignengineering.com/index.php/DE/article/view/5915>
3. Praveena K , **Dr. Katragadda Swarnasri**, Performance Of Pd, Pod And Apod Based Modular Multilevel Converter For Single Phase Grid Connected Pv System, Turkish Online Journal of Qualitative Inquiry (TOJQI) Volume 12, Issue 3, July 2021:3063-3083
4. NUTHAKKI PRAVEEN KUMAR, **Dr. K. SWARNASRI, Dr.PONNAM VENKATA K BABU** Solar pv powered srm drive for electric vehicles with flexible energy control functions Using incremental conductance algorithm. Design Engineering, 8957-896 Vol 2021 Issue 8. (Scopus)
5. P. Sobha Rani, M.S. Giridhar, **K. Radha Rani**, entitled ‘Adaptive Grasshopper Optimization Algorithm for Multi-Objective Dynamic Optimal Power Flow in Renewable Energy Integrated Microgrid’ in International Journal of Intelligent Engineering & Systems, Vol.15, No.3, 2022, ISSN: 2185-3118, pp.242-252. (Scopus) DOI:10.22266/ijies2022.0630.21
6. M.S. Giridhar, **K. Radha Rani**, P. Sobha Rani, entitled ‘Mayfly Algorithm for Optimal Integration of Hybrid Photovoltaic / Battery Energy Storage/ D-STATCOM System for Islanding Operation’ in International Journal of Intelligent Engineering & Systems,

Vol.15, No.3, 2022, ISSN: 2185-3118, pp.225-232. (Scopus)
DOI:10.22266/ijies2022.0630.19

7. **K. Radha Rani**, P. Sobha Rani, N. Chaitanya, entitled 'Improved Bald Eagle Search for Optimal Allocation of D-STATCOM in Modern Electrical Distribution Networks with Emerging Loads' in International Journal of Intelligent Engineering & Systems, Vol.15, No.2, 2022, ISSN:2185-3118, pp.554-563. (Scopus)
DOI:10.22266/ijies2022.0430.49
8. **K. Radha Rani**, entitled 'Optimal allocation of solar photovoltaic distributed generation in electrical distribution networks using Archimedes optimization algorithm' in Clean Energy, issue.6, 2022, ISSN: 2515-396X, pp.1036-1052. (Web of Science, Scopus, ESCI) DOI: 10.1093/ce/zkac010
9. **K. Radha Rani**, **N. Chaithanya**, entitled 'Performance Analysis of a DG Based Inverter Connected with Microgrid' in ARPN Journal of Engineering and Applied Sciences, Vol.17, No.1, January 2022, ISSN: 1819-6608, pp.2877-2882. (Scopus)
http://www.arnpjournals.org/jeas/research_papers/rp_2022/jeas_0122_8817.pdf
10. Pandranki Sowjanya, **Dr. K. Radha Rani**, **Dr. N. Chaitanya**, entitled 'Implementation of Optimization Techniques to Improve the Performance of Hybrid System' in Design Engineering (Toronto) Journal, Issue.8, 2021, ISSN:0011-9342, pp.8348-8363. (Scopus) <http://www.thedesignengineering.com/index.php/DE/article/view/5876>
11. **N.C.Kotaiah**, **Dr.G.V.P Anjaneyulu**, Shabana Banu Shaik "Power Controlled DSTATCOM Using Fuzzy Logic Controller in Distribution System Applications", Design Engineering, Volume 2021, Issue 8 pp 7137-7145, ISSN: 0011-9342 (Scopus)
12. **N.C.Kotaiah**, Chinnapothula Sowjanya, **Dr.Gudapati Sambasivarao** "Dynamic Wireless Power Transfer for Electric Vehicles With Dc-Dc Buck-Boost Converter", Design Engineering, Volume 2021, Issue 8 pp 9568-9581, ISSN: 0011-9342 (Scopus)
13. L. Narayana Gadupudi, **Gudapati Sambasiva Rao**, Ramesh Devarapalli and Fausto Pedro García Márquez "Seven Level Voltage Source Converter Based Static Synchronous Compensator with a Constant DC-Link Voltage", Applied Sciences, Vol. 11, Issue No.16, August-2021, ISSN: 2076-3417, <https://doi.org/10.3390/app11167330>, (Scopus, SCIE, Web of Science).

14. CH.Naga sai kalyan, **Gudapati Sambasiva Rao**, "Coordinated control strategy for simultaneous frequency and voltage stabilization of multi-area interconnected system considering communication time delays" *International Journal of Ambient Energy*, Vol-41, August-2021, <https://doi.org/10.1080/01430750.2021.1967192>, Print ISSN: 0143-0750 Online ISSN: 2162-8246, (Taylor and Francis), (**Scopus Indexed**).
15. **N. Chaitanya, Sumanth Yamparala, K. Radha Rani**, P. Phani Prasanthi, entitled 'Optimized Power Management Control Scheme for Transportation System Electrified with High Voltage DC Microgrid' in *International Journal of Renewable Energy Research*, Vol.12, No.1, March 2022, ISSN:1309-0127, pp.536-546. (**Web of Science, Scopus, ESCI**) <https://doi.org/10.20508/ijrer.v12i1.12793.g8427>
16. Prasanthi, P.P., Srinag, T., Ram, N.R., Krishna, T.R., **Chaitanya, N**, "Energy-absorbing capacity of natural hybrid fiber-epoxy composites under impact loading", *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 2022, 44(6), 236. <https://doi.org/10.1007/s40430-022-03537-4>. (**SCI, SCOPUS INDEXED**).
17. P. Phani Prasanthi*, K. Sivaji Babu, M.S.R. Niranjan Kumar, **N.Chitanya**, "ELASTIC PROPERTIES OF CNT MIXED/CNT COATED SISAL FRP COMPOSITES USING EXPERIMENTAL AND FE METHODS", *New Materials, Compounds and Applications* Vol.6, No.1, 2022, pp.12-26, (**SCOPUS INDEXED**) http://jomardpublishing.com/UploadFiles/Files/journals/NMCA/V6N1/Prasanthi_et_al.pdf
18. **Yadlapalli, R.T.**, Kotapati, A., B. Srinivasa rao: Fuzzy logic control based high step up converter for electric vehicle applications, *Int. J. Innovative Computing and Applications*. Vol. 13, No. 1, 2022, pp. 41-56. (**SCOPUS**)
19. **Ravindranath Tagore Yadlapalli, RamaKoteswara Rao Alla**, Rajani Kandipati, Anuradha Kotapati, Super capacitors for energy storage: Progress, applications and challenges, *Journal of Energy Storage*, Volume 49, 2022, 104194. (**SCIE IMPACT FACTOR: 6.583/SCOPUS**)
20. **Ravindranath Tagore Yadlapalli**, Anuradha Kotapati, Rajani Kandipati, **Chandra Sekhar Koritala**, A review on energy efficient technologies for electric vehicle

applications, Journal of Energy Storage, Volume 50, 2022, 104212. (SCIE IMPACT FACTOR: 6.583/SCOPUS)

21. Attuluri Rakada Vijay Babu, D K Dheer, **Y R Tagore**, Sathish Kumar T M, Sadulla Shaik, Gorantla Srinivasa Rao: A review on the progress of intermetallic solid-state hydrogen storage material for fuel cell vehicles, Eur. Chem. Bull. 2022, 11(1), 17-29. (SCOPUS)
22. **Y. Ravindranath Tagore**, A. R. Vijay Babu, Y. Srinivasarao, P. Manoj Kumar, K. Anuradha: Experimental Validation of Fuel Cell Powered Energy Efficient Gallium Nitride Multilevel Inverter for Industrial Applications, Journal of New Materials for Electrochemical Systems. Vol. 24, No. 3, 2021, pp. 159-165. (SCIE)
23. **G.V. Prasanna Anjaneyul**, **Kotiah.N.C**, Nagaraja Kumari.CH, entitled 'An Application of Hunter-Prey Optimization for Maximizing Photovoltaic Hosting Capacity Along with Multi-Objective Optimization in Radial Distribution Network' International Journal of Intelligent Engineering and Systems, Vol.15, No.4, 2022, ISSN:2185-3118, pp.575-584. DOI: 10.22266/ijies2022.0831.52 (Scopus)
24. **Yaramasu Suri Babu**, **Dr. K. Chandra Sekhar**, entitled 'Investigation of Common Mode Voltage Problems in five-phase Induction Motor Drive', Design Engineering Journal, Issue 06, pp.6074-6087, ISSN: 0011-9342, 2021. (Scopus)
25. **Yaramasu Suri Babu**, **Koritala Chandra Sekhar**, "Five-phase induction motor drive for electric vehicle with high gain switched-inductor quasi impedance source inverter", International Journal Power Electronics and Drive Systems (IJPEDS), ISSN:2088-8694, Vol.13, No.1, March 2022, pp.411-422, (Scopus Indexed) <http://doi.org/10.11591/ijpeds.v13.i1.pp411-422>
26. Dogga Raveendhra, Poojitha Rajana, Beeramangalla Lakshminarasaiiah Narasimharaju, **Yaramasu Suri Babu**, Eugen Rusu, Hady Habib Fayek, "Analysis and Operation of a High DC-AC Gain 3- ϕ Capacitor Clamped Boost Inverter", Energies, April 2022. <https://doi.org/10.3390/en15082955> (web of science, Scopus).
27. **Sarayu Vunnam**, M. VanithaSri, **A. RamaKoteswaraRao**, "Performance analysis of mono crystalline, poly crystalline and thin film material based 6×6 T-C-T PV array under different partial shading situations", Optik, Vol. 248, December 2021, Elsevier

(SCI, Web of Science & Scopus Indexed).

<https://doi.org/10.1016/j.ijleo.2021.168055>

28. **Anitha M, Kotaiah N.C**, Rajesh Patil, Nagaraja Kumari CH, entitled ‘White Shark Optimizer for Multi-Objective Optimal Allocation of Photovoltaic Distribution Generation in Electrical Distribution Networks Considering Different Kinds of Load Models and Penetration Levels’, International Journal of Intelligent Engineering and Systems, Vol.15, No.4, 2022, ISSN:2185-3118, pp.458-467. DOI: 10.22266/ijies2022.0831.41 (**Scopus**)
29. **Chegudi RangaRao**, R.Balamurugan, **RamaKoteswaraRao Alla**, “Simulation and Stability Analysis of Three-Phase Shunt Active Filter Based on Internal Model Controller (IMC)”, Journal of Engineering Science and Technology Review, Vol. 14, No.6, PP-154-161, December 2021. (**Scopus Indexed**). doi:10.25103/jestr.146.18
30. Koganti Srilakshmi, Sravanthy Gaddameedhi, **Sumanth Yamparala**, Srinivas Nakka, YSR Kamal, B.Surendra Babu, Guduguntla Anil, “Artificial Intelligence based Multi-Objective Hybrid Controller for PV-Battery Unified Power Quality Conditioner”, International Journal of Renewable Energy Research, Vol.12, No.1, PP-495-504, March 2022. (**Scopus, Web of Science Indexed**).
31. **Ponnam Venkata K. Babu** , **K. Swarnasri** , P. Vijetha, "Multi-Objective Optimal planning of Renewable Energy Sources & Electric Vehicle Charging Stations in Unbalanced Radial Distribution Systems using Harris Hawk Optimization Algorithm ", International Journal of Renewable Energy Research, Vol. 12, No.1, pp. 58–69, 2022. DOI: <https://doi.org/10.20508/ijrer.v12i1> -- (**SCOPUS**)
32. **Veeranjaneyulu Gopu**, Dr.M.S.Nagaraj, ‘Multi Renewable Source Integrated Distribution System for Optimal Power Sharing with Synchronization to Grid’, International Journal of Renewable Energy Research, Vol.11, No.04, pp. 1517-1525, Dec 2021. (**Web of Science, Scopus**)
33. **P.Venkata Mahesh**, S.Meyyappan, **RamaKoteswaraRao Alla**,“Multivariate Linear Regression MPPT Algorithm for Solar PV Systems with Boost Converter”, The ECTI Transactions on Electrical Engineering, Electronics, and Communications, Vol.20, No.2, PP 269-281,June 2022.(**Scopus**). DOI: 10.37936/ecti-eec.2022202.246909

34. V.B.Murali Krishna, V. Sandeep, Kishore Yadlapati, **Tripura Pidikiti**, “A study on Excitation Requirement and Power Balance of Self Excitation Induction Generator for Off-grid Applications Through Experiment and Simulation”, Journal of Engineering Science and Technology Review, Vol.14, No.6, PP:162-168, 2021, ISSN:1791-2377. DOI:10.25103/jestr.146.19 (**Scopus**)

International Conferences:

1. M. Chiranjeevi, **K. Swarnasri**, “Certain Analytical Aspects of Power Systems in the Presence of FACTS CONTROLLERS - SVC AND TCSC” at ICAEEE-2022 24-26 February, 2022. Department of EEE, DUET, Gazipur
2. **N.Dharani Kumar, A.Rama Koteswara Rao** ‘Fuzzy Control Design for A Stand-Alone Wind Energy Conversion System’, Virtual International Conference on Recent Trends in Power Systems and Power Electronics-2K21, Narasaraopeta Engineering College, Narasaraopet, July 28 -29, 2021.
3. **V.Sarayu, A.Rama Koteswara Rao** ‘PSO- RNN based MPPT of wind energy conversion system’, Virtual International Conference on Recent Trends in Power Systems and Power Electronics-2K21, Narasaraopeta Engineering College, Narasaraopet, July 28 -29, 2021.
4. **Ch.RangaRao, A.Rama Koteswara Rao** ‘Loop Power Controller for Power Control in Distribution Feeders’, Virtual International Conference on Recent Trends in Power Systems and Power Electronics-2K21, Narasaraopeta Engineering College, Narasaraopet, July 28 -29, 2021.
5. A.V. Sravanthi, K. Rajani, **A.Rama Koteswara Rao** ‘Global Maximum Power Tracking of PV System under Partial Shading’, 1st International Online Conference on Sustainable Development in Civil and Electrical Engineering, National Institute of Technology Kurukshetra, Dec 17-19, 2021.
6. **Ch.RangaRao, R.Balamurugan, Dr.A.RamaKoteswaraRao** “Improvement of Power Quality Using Various Control Approaches in Shunt Active Power Filter”, DST-SERB, Govt. of India Sponsored 1st International Conference on Emerging

Trends in Electric Vehicles and Smart Technologies (ICETEVST-22) in association with SRMTRPEC IEEE Student branch, SRM TRP Engineering College (SRM Group), Tiruchirappalli, Tamilnadu, India, during April 21st & 22nd, 2022.

7. **V.Sarayu**, M.VanithaSri, **Dr.A.RamaKoteswaraRao** “Material Selection for Enhancing PV Array Performance: A Brief Review”, DST-SERB, Govt. of India Sponsored 1st International Conference on Emerging Trends in Electric Vehicles and Smart Technologies (ICETEVST-22) in association with SRMTRPEC IEEE Student branch, SRM TRP Engineering College (SRM Group), Tiruchirappalli, Tamilnadu, India, during April 21st & 22nd, 2022.
8. **N.Dharani Kumar**, T.A. Ramesh Kumar, **Dr.A.RamaKoteswaraRao** “An Overview on Various PV Array Configurations for Extracting Optimal Power”, DST-SERB, Govt. of India Sponsored 1st International Conference on Emerging Trends in Electric Vehicles and Smart Technologies (ICETEVST-22) in association with SRMTRPEC IEEE Student branch, SRM TRP Engineering College (SRM Group), Tiruchirappalli, Tamilnadu, India, during April 21st & 22nd, 2022.
9. **Dr.A.RamaKoteswaraRao**, Ganjerupalli Sai Sumanth, Kandipati Rajani “Position Control of DC Servo System Using Fractional Order PID Controller Based on Particle Swarm Optimization” 3rd Electric Power and Renewable Energy Conference (EPREC-2022) organized by Department of Electrical Engineering, NIT Jamshedpur, Jharkhand during 27th -29th May 2022.
10. **N.Dharani Kumar**, T.A.Ramesh Kumar, **RamaKoteswaraRao Alla** “A Brief Review on Conventional and Renewable Power Generation Scenario in India”. Recent Advances in Power Systems. Lecture Notes in Electrical Engineering, Vol. 812, February-2022, Springer, Singapore. https://doi.org/10.1007/978-981-16-6970-5_47 (Scopus Indexed).
11. **RamaKoteswaraRao Alla**, **Sarayu Vunnam** “Blockchain Technology: A Smart Technology for Demand Response in Smart Grids”, Control Applications in Modern Power Systems. Lecture Notes in Electrical Engineering, Vol. 870, May-2022, Springer, Singapore. https://doi.org/10.1007/978-981-19-0193-5_24 (Scopus Indexed).