

Agnel Charities

Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai, Maharashtra

Paper/Journal Publications

Calendar Year 2009-2024

List of Journal Papers:

1. Dipti Patil, Bindu S, Sushil Thale, "Arc Fault Detection and Classification in DC Microgrid Using Deep Neural Network" International Journal of Electronics and Communication Engineering, Volume 11 Issue 8, 131-139, August 2024, doi.org/10.14445/23488549/IJECE-V11I8P114
2. Kiruthika, Dr Bindu S "A security enabled real time fault detection and classification of power system conditions" International Journal of Advanced Technology and Engineering Exploration, , Vol 10(Issue 107), October 2023, ISSN (Print):2394-5443 ISSN (Online):2394-7454
1. Dipti D. Patil, Bindu S, SushilThale "A Novel Method for Real Time Protection of DC Microgrid Using Cumulative Summation and Wavelet Transform" International Journal of Advanced Technology and Engineering Exploration Volume 13, Number 4, 2022 . pp.311-321, DOI: <https://doi.org/10.32985/ijeces.13.4.7>
2. Dipti D. Patil, Bindu S, SushilThale "Deep Neural Network Enabled Fault Detection in LVDC Microgrid Using Empirical Mode Decomposition" International Journal of Advanced Technology and Engineering Exploration, Vol 9(87), ISSN (Print): 2394-5443 ISSN (Online): 2394-7454 <http://dx.doi.org/10.19101/IJATEE.2021.874973>.
3. Kiruthika, Dr Bindu S "Secured protection of transmission line by distance relay using data mining approach" Indonesian Journal of Electrical Engineering and Computer Science Vol. 23, No. 1, July 2021, pp. 1~13 ISSN: 2502-4752, DOI: 10.11591/ijeecs.v23.i1.pp1-13
4. Ninad. P. Totare1, Dr. Bindu. S, "Total Factor Productivity Analysis in the Regime of Multi-Year Tariff Policy Using Fisher Index Method" International Review of Electrical Engineering (I.R.E.E.) Praise worthy publication, Vol. 16, N. 2 ISSN 1827- 6660 March – April 2021
5. Neelam Pinchari, Dr Bindu S "Compact Solid-State Marx Generator for Repetitive Applications" International Journal "Engineering, Technology & Applied Science Research", Vol. 10, No. 5, 2020, 6224-6230
6. Kiruthika, Dr Bindu S "Classification of Electrical Power System Conditions with Convolutional Neural Networks" International Journal of Engineering, Technology & Applied Science Research Vol. 10, No. 3, 2020, 5759-5768

7. S.Bindu, H.A Mangalvedeker, Mrunal Parekh, Archana Sharma, D.P Chakravarthy, K.C Mittal (2012) "Electrodynamic Simulation of High Voltage Peaking Switch" IEEE Transaction on Plasma Science, Vol 40,No.11, pp 3093-3400.
8. S.Bindu, Mrunal Parekh, H.A Mangalvedeker, Archana Sharma, D.P Chakravarthy, (2013) "Modelling and analysis of High Pressure Peaking Switch" J. Phys.: Conf. Ser. 377 012098, pp 1-8.
9. S.Bindu, H.A Mangalvedeker, Archana Sharma, P C Saroj, D.P Chakravarthy, A K Ray (2013) "Development of Transfer Function Model and Analysis of the Peaking Capacitor and Switch" IEEE Transaction on Plasma Science, Vol 41,No.08, pp 2415-2420
10. S.Bindu, Sachin U, H.A Mangalvedeker, Archana Sharma, P C Saroj, K C Mittal (2013) "Peaking Capacitor Parameter Evaluation with Transfer Function Model" IEEE Transaction on Plasma Science, Vol 42,No.2, pp 336-339
11. Sachin U, S.Bindu, H.A Mangalvedeker, Archana Sharma, D.P Chakravarthy, P C Saroj, K C Mittal, D P Chakravarthy (2014) "Analysis of HTEM Horn-Type Antenna for High-Power Impulse Radiation Applications ", IEEE Transaction on Plasma Science, Vol 42,No.2, pp 336-339

List of Conference Papers:

1. Bindu S, Sincy George "The effects of energy storage compensation in a non-sinusoidal power system" National Conference CIEEPS'06, Pondecherry Engg. College Sep 07-08, 2006
2. Bindu S, Mini N, Reshmi K "A method to improve the Reliability of Energy Storage Element in reactive power compensation" National Conference INDICON-2007 Bangalore, 2007
3. Bindu S, Mini N " Reactive Power Compensation in Three Phase Circuits by different Power Defenitions: A Comparative Study" International Conference TENCON- 2008, IEEE Hyderabad section, Hyderabad ,Nov 18-21 2008, DOI: 10.1109/TENCON.2008.4766619
4. Bindu S, Reshmi K "Effect of Local compensation using Energy storage element:A case study" National Conference on Recent Trends in Engineering and Technology presented in Zenith-2009 Agnel Polytechnic, Vashi. National Conference ,Dec 30-31 2009
5. Bindu S, Raji M P "Reactive Power Compensation Using Shunt Active FilterNational Conference on Recent Trends in Engineering and Technology.", presented in Zenith-2009 Agnel Polytechnic, Vashi. National Conference ,Dec 30-31 2009

6. Mrunal Parekh, S.Bindu, H.A Mangalvedeker (2011) "Arc Modelling in Circuit Breaker" SWICON, 2011,pp.245-249.
7. S.Bindu, H.A Mangalvedeker, Sachin U, Archana Sharma, D.P Chakravarthy, K.C Mittal, P C Saroj (2012) "Dynamic modelling of Spark gap Switch" ICPADM - 2012 International Conference on Properties and Application of Dielectric Materials, CPRI, 24-28. DOI: 10.1109/ICPADM.2012.6318933
8. Mrunal Parekh, S.Bindu, H.A Mangalvedeker, (2012) "Electromagnetic modelling of high pressure spark gap peaking switch" Electromagnetic launch symposium Beijing,China. DOI: 10.1109/EML.2012.6325059
9. H.A Mangalvedeker, S Bindu, (2012) "Breakdown of insulator under DC and pulsed conditions" Pulsed power conference, BARC.
10. Sachin U, S.Bindu, H.A Mangalvedeker, Archana Sharma, D.P Chakravarthy, P C Saroj (2012) "Optimization of Half TEM horn antenna integrated with Marx generator for UWB application" IEEE Proceeding, 12th INCEMIC,pp. 305-308.
11. Sachin U, S.Bindu, H.A Mangalvedeker, Archana Sharma, D.P Chakravarthy, P C Saroj (2012) "Coupled Analysis of Circuit Model and Electromagnetic Model of Peaking Switch" IEEE Proceeding 12th INCEMIC, pp. 309-312.
12. Sachin U, S.Bindu, H.A Mangalvedeker, Archana Sharma, D.P Chakravarthy, P C Saroj, K C Mittal, D P Chakravarthy (2013) "Analysis of TEM Horn Antenna UWB system", Pulse power and plasma science conference, United states, DOI: 10.1109/PPC.2013.6627662
13. Mohini Kher, S. Bindu "Electromagnetic modelling of UHVDC valve casing" International conference ICACACT, Mumbai 10-11 Aug 2013
14. Ajay Ingle, S. Bindu (2013) " Simulation and modelling of low voltage circuit breaker under fault condition" International conference ICACACT , Mumbai 10-11 Aug 2013
15. Ajay Ingle, S. Bindu "Electrical and coupled field analysis of low voltage circuit breaker under fault condition" Tap Energy conference 2013 pg. no. 77
16. Sachin U, S.Bindu, H.A Mangalvedeker, Archana Sharma, D.P Chakravarthy, P C Saroj, K C Mittal, D P Chakravarthy (2013) "Modeling and analysis of Half TEM Horn Antenna and Jolt Antenna for High Power UWB Application: A Comparative Study" The National Symposium on High Power RF & Microwaves HPRFM-2013, 4-6 September-2013, Institute for Plasma Research, Gandhinagar, Gujarat (India)
17. Mohini Kher, S. Bindu (2013) "Electromagnetic modeling of three phase UHVDC valve casing" National Conference INDICON-2013, Mumbai 13-15 Dec 2013, DOI: 10.1109/INDCON.2013.6725986

18. Rakshita D, Bindu S, Sincy George, P C Saroj, Archana Sharma “Design and simulation of 30 kV solid state DC source” International Conference on Magnetics and Drives(ICMMD), AICERA-2014, Kerala 24th to 26th July 2014, DOI: 10.1109/AICERA.2014.6908242
19. Harshada, Bindu S, Sincy George, P C Saroj, Archana Sharma “Design and Simulation of 50 kV, 50 A solid state Marx generator” International Conference on Magnetics and Drives(ICMMD), AICERA-2014, Kerala 24th to 26th July 2014, DOI: 10.1109/AICERA.2014.6908236
20. Sachin B. Umbarkar, S. Bindu, H. A. Mangalvedekar, A. Saxena, N. M. Singh, Archana Sharma, P. C. Saroj, K. C. Mittal” Particle in Cell Simulation of Peaking Switch for Breakdown Evaluation” International Symposium on Discharges and Electrical Insulation in Vacuum (ISDEIV-2014) September 28- October 3, 2014 Worli, DOI: 10.1109/DEIV.2014.6961678
21. Rashmi V. Chaugule , Ruchi Harchandani, Bindu S. “Solid state Bipolar Marx Generator Topologies: A Comparative study” ICNTE-2015 January 9-10, 2015, ISSN: 2278-0181
22. Rakshita Dhar, Bindu S, Sincy George PC Saroj, Archana Sharma “A High Voltage Zero Current Switching- Series Resonant Converter Using DSP” ICNTE-2015 January 9-10, 2015
23. Shreyashi De , Bindu S. “ Design and Simulation of Solid state Marx Generator” ICRTIET-2015 May 1-2, 2015, Ongole
24. Neha Wanjari, Bindu S. “Modeling of Bipolar Solid state Marx Generator Including Parasitic Capacitance Effect” ICCDT-2015 October 11th Mumbai, 2015
25. Shreyashi De , Bindu S. “ Design and Implementation of DSP based Unipolar Solid-State Marx Generator” ICIIECS'16 , March 17-18, 2016, Karpagam, ISSN (Print): 2278-8948, Volume-4 Issue-2, May 2015
26. Rupali Shah, Bindu S “A DC source of Current-fed Cockcroft-Walton Multiplier with High Gain DC-DC Converter” ICNTE-2017, Jan 13-14, 2017, Mumbai, DOI: 10.1109/ICNTE.2017.7947944
27. Rashmi Chaugule, Bindu S. and Ruchi Harchandani “Design and Hardware Implementation of Two Stage Solid State Bipolar Marx Generator” RTEICT-2016, DOI: 10.1109/RTEICT.2016.7807910
28. Harshada, Bindu S, Sincy George, Meera S, P C Saroj “Performance Analysis of Solid State Marx generator- A Comparative Study of Self Driven Gate Driver Circuit with Conventional Driver” IEEE International Conference on Recent Trends in Electronics information Communication Technology(RTEICT), May 19th to 20th 2017, India, DOI: 10.1109/RTEICT.2017.8256634

29. Ruchi Singh, Bindu S, Sincy George, Meera S, P C Saroj “Issues and Mitigation of High Voltage Isolation in Solid State Marx Generator” IEEE International Conference on Recent Trends in Electronics Information Communication Technology(RTEICT), May19th to 20th 2017, India, DOI: 10.1109/RTEICT.2017.8256825
30. Neelam Pinchari, Dr Bindu S “Performance analysis of Bipolar Marx Generator Topologies with input switch charging and Inductive charging method” IEEE &CSI sponsored ICISIM-2017 , Oct 5th and 6th,Aurangabad, Maharashtra, India, DOI: 10.1109/ICISIM.2017.8122187
31. Neelam Pinchari, Ruchi Singh, Bindu S “Analysis and Comparative Study of various Charging Methods Implemented for Solid State Marx Generator “ (ICAER 2017) IIT Bombay, Powai, Mumbai 12-14 December, 2017. Chapter in Springer Proceeding in Energy - Advances in Energy Research, Chapter No. 70, Vol 2, pp.no.773-785, 2020. ISBN: 978- 981-15-2661-9.
32. Dipti D Patil, Bindu S “Real time protection technique for DC micro grid using local measurements” 2018 IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2018). DOI: 10.1109/ICSESP.2018.8376667
33. M.Kiruthika, Bindu.S “Performance Analysis of a Distance Relay for Zone Identification” 2nd IEEE International conference on Power Electronics, Intelligent Control and Energy systems (ICPEICES) held on Oct.22-24, 2018. DOI 10.1109/ICPEICES.2018.8897426
34. M.Kiruthika ,Bindu.S “Fault Identification and Zone Protection in Transmission Line Using Phasor Measurement Units” IEEE International conference on New Trends in Engineering & Technology(ICNTET) held on Sept 7-8 2018. ISBN: 978-1-7281-0630-4
35. Mr Totre, Bindu.S “Impact of Various Factors on Tariff during Multi Year Tariff Period” International Conference on Smart Electric Drives and Power System (ICSEDPS) 12th -13 June 2018, Nagpur. DOI: 10.1109/ICSEDPS.2018.8536052
36. Mr Totre, Bindu.S “Multi Year Tariff Structure Impact on Financial Status of electric Utility” IEEE International Conference on Innovative Technologies in Engineering (ICITE-2018), 11th -13 April 2018, Hyderabad. ISBN: 978-1-5386-5793-5
37. Daniel Dsa, Uma L, Bindu S “Performance Comparison of Two-Level Voltage Source Converter with Sinusoidal PWM and Space Vector PWM for HVDC application” ICNTE 2019, January 2019, DOI: 10.1109/ICNTE44896.2019.8945916

38. Neelam Pinchari, Bindu S “Design, Analysis and Hardware Implementation of Modified Bipolar Solid-State Marx Generator. “ (ICAER 2019) IIT Bombay, Powai, Mumbai 10-12 December, 2019. The paper is published in Springer Proceedings of the 7th International Conference on Advances in Energy Research. Print ISBN: 978-981-15-5954-9.
39. Saurabh Patil, Mahendra Rane , Bindu S “ Issues with High Voltage Measurement and its Mitigation “2019 4th International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT-2019), MAY 17th & 18th 2019, DOI: 10.1109/RTEICT46194.2019.9016734
40. Abhishek D Chalwadi, M.Kiruthika, Bindu.S , “Phasor Measurement Unit based Impedance Relay: A Case Study” 4th International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT-2019), May 17th & 18th 2019, DOI: 10.1109/RTEICT46194.2019.9016695
41. Abhishek D Chalwadi, M.Kiruthika, Bindu.S “PMU and DVR based Power System Monitoring, Controlling and voltage sag Compensation” International Conference on Automation, Computing and Communication 2020 (ICACC-2020)27th - 28th June 2020, DOI: <https://doi.org/10.1051/itmconf/20203201006>
42. Fabian Tauro. Bindu S, Rane “Design of a Full-Bridge Converter for Lead-Acid Battery Charging and Powering DC Loads” IEEE International Power and Renewable Energy Conference, IPRECON 2020,30 November to 1st December DOI:10.1109/IPRECON49514.2020.9315265
43. Dipti D. Patil, Bindu S, SushilThale “Arc Fault Detection in DC Microgrid Using Deep Neural Network” International conference on Nascent Technologies ICNTE 2021, 15th and 16th January DOI: 10.1109/ICNTE51185.2021.9487585
44. Ninad P Totare , Bindu S “Electricity Distribution Firm Tariff Rationalization in Multi Year Tariff Policy” International conference on Nascent Technologies ICNTE 2021, 15th and 16th January DOI: 10.1109/ICNTE51185.2021.9487769
45. Sachin U, S.Bindu, H.A Mangalvedeker, Archana Sharma, P C Saroj “Mathematical Modeling of Peaking Switch” International conference on Nascent Technologies ICNTE 2021, 15th and 16th January, DOI: 10.1109/ICNTE51185.2021.9487580
46. N. Swaraj, M. Yadnesh, M. Sahil, V. Jaydeep , Bindu S “Classification of Power Transmission Line Fault Types and Location Using Machine Learning Techniques” 7th International Conference on Innovation and Research in Technology and Engineering, ICIRTE – 2022, Maharashtra, India, April 9-10, 2022
47. Neelam S. Pinjari, Bindu S, "Analysis of a Solid-State Switch as Peaking Switch in a Solid-State Marx Generator"Second International Conference on Next Generation Intelligent Systems (ICNGIS), Kerala, India, July. 29-31, 2022, DOI:10.1109/ICNGIS54955.2022.10079746

48. Ninad Totre, Bindu S "A Novel Approach for Operational Efficiency Assessment of Electrical Utilities"5th Biennial International Conference on Nascent Technologies in Engineering, Vashi, Navi Mumbai, India, Jan 20-21, 2023 DOI:10.1109/ICNTE56631.2023.10146646
49. Rupali Saha, Bindu S, Ruchi Harchandani ” Cockcroft-Walton Voltage Multiplier based High Gain DC-DC Converter as DC Source for Impulse Load” 2023 World Conference on Communication & Computing (WCONF), RAIPUR, India, 14-16 July 2023 DOI:10.1109/WCONF58270.2023.10235205
50. Aniruddha Ray, Bindu S. “Issues and Solution of Distance Protectionof Grid Integrated with Solar PV plants” 2023 IEEE 2nd International Conference on Industrial Electronics: Developments & Applications (ICIDeA 2023) NIT Manipur on 29th–30th Sep 2023.
51. Devendra Shantaram Patole, Bindu S. “Anticipating Cleaning Schedules for 22 KV Porcelain Insulators through Leakage Current Analysis with Machine Learning” International Conference on Electrical Electronics Information and Communication Technologies ICEEICT(2024), K. Ramakrishnan College of Engineering Tiruchirappalli, Tamil Nadu, 24-26 July 2024