

Name of Faculty Dr. B. Krishna Chaitanya

Designation Assistant Professor

Nature of Job/Appointment Regular

Date of Joining 28 - 01 - 2021



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#### Education Qualifications

Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (Power Systems)	Awarded
PG	M. Tech. (Power Systems & Automation)	Distinction
UG	B. Tech. (EEE)	Distinction

#### Work Experience

Teaching	6 Years
Research	5 years
Industry	--
Others	--

#### Area of Specialization

Smart Grids, Power System, Micro-grid, Signal processing Application to Power System, Artificial Intelligence, Machine Learning /Deep Learning, Internet of Things.

#### Professional Memberships

1. Research Coordinator of Department of EEE
2. Member of CBIT-SIH committee
3. Member of Newsletter committee
4. Member of Energy Audit Committee
5. Assistant Coordinator for Energy Savers' club

#### Responsibilities held at Institution Level

1. Electrical Simulation Lab In-charge.
2. Coordinator for ELECTRET-2024 & ELECTRET-2025 (SUDHEE)
3. UG NBA Criterion-5 In-charge
4. PG NBA file In-charge for P-2 and P-24 files
5. NAAC Criteria-6 In-charge.
6. Class Teacher
7. Member in Course expert group.

#### Responsibilities held at Department Level

#### Research Guidance

#### Awards Received

#### Courses Handled at Under Graduate / Post Graduate Level.

Basic Electrical Engineering, Power Systems Operation and Control, Power System Protection, Smart Grid, Real Time Applications for Power Systems, Basic Electrical Engineering Lab, Power Systems Lab, Electrical Machines-I Lab, Control Systems Lab, Electrical Simulation Lab

#### No. of Papers Published

National Journals – 00 International Journals – 16

National Conference – 00 International Conference – 07

#### Projects Carried out

#### Patents

#### Technology Transfer

#### Invited Speaker

#### No. of Books/Chapter Published with details

1. Olusegun D. Samuel, Ufuoma Peter Anaithuno, Fidelis I. Abam, Christopher C. Enweremadu and B. Krishna Chaitanya, " Esterification and Property Assessment of Hybrid Biodiesel from Palm Kernel-Waste Cooking Oil: Case of Pretreatment by Taguchi Technique," Book Chapter, Scopus Indexed
2. Published one book chapter titled "A comprehensive review of islanding detection methods", in book titled "Uncertainties in Modern Power Systems". Publication: Academic press (Elsevier), 2020, pp.

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Trainings (**Attended and/or Organized**).

1. Attended (1-week) STTP on “IoT, Cyber security, Block chain technology” by Department of CET, CBIT (A), 06-01-2025 to 10-01-2025.
2. Five-day faculty development programme on “Outcome based Education and Accreditation Process”, 25/11/2024 to 29/11/2024, National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh
3. Five-day faculty development programme on “Zero Trust Cloud Security”, 05/08/2024 to 09/08/2024, National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh
4. One week MHRD-Sponsored INDO-US International Workshop on “IoT and ML Based Microgrid & Energy Management” organized by Department of EEE, CBIT (A), Hyderabad during 19th to 23rd Feb 2024.
5. Five-day faculty development programme on “Smart Grid and Integration of Distributed Generation”, 28th August to 1st September, 2023, National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh
6. Five-day faculty development programme on “ANSYS-EM for Electrical Engineering Application”, 17th to 21st July, 2023, National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh
7. Five day FDP on "Energy efficient and Decarbonization Technologies" from 5-6-2023 to 09-06-2023 Organized by NITTTR, Chandigarh.
8. One Week online short-term training program on “Raspberry Pi and its Interfacing” at CBIT, Hyderabad, during 27-02-2023 to 03-03-2023
9. One Week online short-term training program on “Big data Applications in Electrical Engineering” at NITTTR, Chandigarh, during 20-02-2023 to 24-02-2023
10. Five-day faculty development programme on “Data-Driven Strategies in Smart Power System and Control”, 22-26 November, 2021, National Institute of Technology, Andhra Pradesh
11. Five-day faculty development programme on “Renewable Energy Integration Using AI and Big data Analytics”, 15-19 November, 2021, P. A. College of Engineering and Technology.
12. Workshop on "Research Challenges in Electrical Power and Energy", during 10-12 May, 2021, Organised by the Department of EEE, Sri Venkateswara Engineering College, Tirupati.
13. Short term training program on “Recent Trends in Power Electronics, Power System and Renewable Energy System”, during 17-21 February, 2020, Organised by the Department of EE, National Institute of Technology Raipur.
14. Workshop on “Artificial Intelligence”, during 22-26 September, 2019, Organised by AICTE Training And Learning (ATAL) Academy conducted at NIT Raipur.
15. Global Initiative of Academic Networks (GIAN) course on “Recent trends in Protection of Microgrids with high DER penetration: Issues, Challenges and Mitigation” during 12-16 February, 2018, Organised at Delhi Technological University, Delhi.
16. Training course on “Hands-On Protection Relay School” during 5-10 February, 2018, Organised by the Power systems division, Central power research institute (CPRI) Bangalore.
17. Workshop on “Power Quality challenges with Renewable Energy integration in Smart Grid” during 23-24 February, 2017, Organised at CPRI Bangalore.

Details of Journal Publications/Conferences (**National and International**)

**International Journals**

1. Bokka Krishna Chaitanya, Kumarraja Andanapalli, V Varshitha, M Siddhartha, M Uday, Kiran Goud, “TVF-EMD based Fault Detection and Classification Technique for Micro-Grid”, Journal of Engineering Science and Technology Review 18 (5) (2025) 240-247. (Scopus Indexed Journal) (Q4)
2. Pavan Kumar Gorle, Srinivasu Nakka, B. Krishna Chaitanya, H. M. Majahar, Shaik M. Irshad and Syed Suraya,

- "Frequency Profile Improvement of Hybrid Power System with PIFODD Controller using White Shark Optimizer", *Journal of Engineering Science and Technology Review* 18 (4) (2025) 1-5. (Scopus Indexed Journal) (Q4)
3. Yojitha Chilukuri, T. Jhansi Rani, N. Lakshmi pathi Anantha, Gopisetty Rathnamma, B. Krishna Chaitanya, Ulligaddala Srinivasarao, et.al., "An Aspect-Based Sentiment Classification Method Using the Pachinko Allocation Model", *Engineering, Technology & Applied Science Research*, Vol. 15, No. 4, 2025, 25844-25850, (SCI indexed) (Q2).
  4. M.Dhananjaya, B.Krishna Chaitanya, T.Sudhakar Babu, et al., : Design of multi-input single output DC–DC converter with preserved output voltage under source-fault. *IET Power Electronics*. 1–11 (2023). (SCI journal) (Q1) (<https://doi.org/10.1049/pel2.12488>)
  5. B. Krishna Chaitanya, A. Yadav, "Empirical Wavelet Transform Based Differential Protection Scheme for Micro-Grid," *Journal of The Institution of Engineers (India): Series B*, 2023. (Scopus Indexed Journal) (Q3).
  6. Mohammad Pazoki, B Krishna Chaitanya, Anamika Yadav, "A new wave-based fault detection scheme during power swing", *Electric Power Systems Research (Elsevier)*, Volume 216, March 2023, 109077. (SCI journal) (Q1) (<https://doi.org/10.1016/j.epsr.2022.109077>)
  7. M.Dhananjaya, D.Potnuru, B. Krishna Chaitanya, N.Patnana, J.K.Bokam, "A single-input dual-output DC-DC converter for powertrain of PEM fuel cell vehicle". *Journal of New Materials for Electrochemical Systems*, Vol. 25, No. 3, pp. 162-171, 2022. (SCI journal) (Q4), <https://doi.org/10.14447/jnmes.v25i3.a02>
  8. B. Krishna Chaitanya, A. Yadav and M. Pazoki, "Reliable Islanding Detection Scheme for Distributed Generation Based on Pattern-Recognition," in *IEEE Transactions on Industrial Informatics*, vol. 17, no. 8, pp. 5230-5238, Aug. 2021, doi: 10.1109/TII.2020.3029675.
  9. B. K. Chaitanya, A. Yadav and M. Pazoki, "An Advanced Signal Decomposition Technique for Islanding Detection in DG System," in *IEEE Systems Journal*, vol. 15, no. 3, pp. 3220-3229, Sept. 2021, doi: 10.1109/JSYST.2020.3017157.
  10. B.K. Chaitanya, Anamika Yadav, and Mohammad Pazoki, "An Intelligent Detection of High-Impedance Faults for Distribution Lines Integrated With Distributed Generators," *IEEE Systems Journal*, vol. 14, no. 1, pp. 870-879, March 2020.
  11. B.K. Chaitanya, Anamika Yadav, "An Intelligent Faulty Line Identification Scheme for Micro-grids", *Iranian Journal of Science and Technology, Transactions of Electrical Engineering (Springer)*, Volume 44, Pages 537-549, 2020.
  12. B.K. Chaitanya, Anamika Yadav, and Mohammad Pazoki, "Wide area monitoring and protection of microgrid with DGs using modular artificial neural networks", *Neural Computing & Applications (Springer)* 32, 2125–2139 (2020).
  13. B.K. Chaitanya, Anamika Yadav, and Mohammad Pazoki, "An improved differential protection scheme for micro-grid using time-frequency transform", *Electrical Power & Energy Systems (Elsevier)*, Volume 111, Pages 132-143, ISSN 0142-0615, 2019.
  14. B.K. Chaitanya, and Anamika Yadav, "Decision tree aided travelling wave based fault section identification and location scheme for multi-terminal transmission lines", *Measurement (Elsevier)*, Volume 135, Pages 312-322, ISSN 0263-2241, 2019.
  15. B.K. Chaitanya, and Anamika Yadav, "An intelligent fault detection and classification scheme for distribution lines integrated with distributed generators", *Computers & Electrical Engineering (Elsevier)*, Volume 69, Pages 28-40, ISSN 0045-7906, 2018.
  16. B. K. Chaitanya, A.K. Soni and Anamika Yadav, "Communication assisted fuzzy based adaptive protective relaying scheme for micro-grid", *Journal of Power of Technologies* 2018, 98(1), pp. 57-69.

#### International Conference

1. B. Krishna Chaitanya, T. Sudhakar Babu, T. Mahveen, S. Sharma and M. J. Paul Aaron, "Smart IoT-Enabled Toll System with Deep Learning-based Vehicle Classification," 2025 3rd IEEE International Conference on Sustainable Computing and Data Communication Systems (ICSCDS), Erode, India, 2025, pp. 601-607, IEEE, Scopus Indexed
2. B. Akshaya, V. Rohitha Raga, G. Sridhar Reddy, B. Krishna Chaitanya, "Implementation of Silicon Wafer Defect Classification Web Application Using Deep Learning", *International Conference on Advancements in Power, Communication and Intelligent Systems (APCI-2024)*, June 21-22, 2024, Government College of Engineering Kannur, Kerala, India, IEEE, Scopus Indexed. DOI: 10.1109/APCI61480.2024.10616637
3. T.P. Bhargav, B. K. Chaitanya and A.Yadav, "Bus-Bar fault detection and classification using Fast Stransform and Artificial Neural Networks", *1st International Conference on Power Electronics and Energy (ICPEE)*, KIIT University, India, 2021, pp. 1-6.
4. B. K. Chaitanya, AnamikaYadav, and Mohammad Pazoki, "High Impedance Fault Detection Scheme for Active Distribution Network Using Empirical Wavelet Transform and Support Vector Machine", Published in *IPAPS-2021*, Shiraz University, Iran.
5. B. K. Chaitanya and A.Yadav, "Hilbert–huang transform based islanding detection scheme for Distributed generation", *PIICON, NIT Kurukshetra*, India, 2018, pp. 1-5.
6. B. K. Chaitanya, A. Yadav, K. Andanapalli and B. R. K. Varma, "A comparative study of different signal processing techniques for fault location on transmission lines using hybrid Generalized Regression Neural Network," 2016 *International Conference on Signal Processing, Communication, Power and Embedded System (SCOPEs)*, Paralakhemundi, India, 2016, pp. 1246-1250, doi: 10.1109/SCOPEs.2016.7955640.
7. B. K. Chaitanya, K. Andanapalli and B. R. K. Varma, "Fault location for double-circuit transmission lines using travelling-wave theory with unsynchronized measurements," 2015 *International Conference on Energy, Power and Environment: Towards Sustainable Growth (ICEPE)*, Shillong, India, 2015, pp. 1-6, doi: 10.1109/EPETSG.2015.7510123.