

1 Name of Faculty Dr. P.KOWSTUBHA
 2 Designation Associate Professor
 3 Nature of Job/Appointment Regular
 4 Date of Joining 11 – 08 - 2010
 5 E-mail kowstubha_eee@cbit.ac.in



6 Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (Resonant Converters)	Awarded
PG	M.E (Power Electronics)	First
UG	B.Tech (Electrical and Electronics Engineering)	First

7 Work Experience

Teaching	21Years
Research	--
Industry	--
Others	--

8 Area of Specialization Power Electronics, Control Engineering and Analog Electronics, Integrated Circuits

9 Professional Memberships

ISTE Membership with number LM 60429 IETE Membership

1. PG Program Coordinator for Power Systems and Power Electronics
2. Coordinator for Chaitanya Spandana, a wing of Chaitanya Seva Club, CBIT.
3. Convenor for Women Development Cell
4. Member for Student Grievance Cell

10 Responsibilities held at Institution Level

5. Convenor for campus and stage decoration committee in view of Shruthi Cultural Events
6. Committee member of Direct Feedback from students- B, E/B. Tech IV & VI Semester
7. Auditor for mentoring process
8. In charge for Medical Task Force (Covid-19)

11 Responsibilities held at Department Level

1. PG Program Coordinator
2. Coordinator for PG Accreditation- January 2023
3. Department Academic Affairs Coordinator
4. Coordinator for PG BoS-R23
5. NAAC AQAR_Coordinator
6. Coordinator for UG Accreditation- December 2021
7. Co- Coordinator for PG Accreditation -Jan 2020
8. Member -DAB, PAQIC, Internal BoS, External BoS
9. In-charge, Course Expert Group PG and UG
10. Member, Course Expert Group PG and UG
11. Mentor for M.E
12. Coordinator for Semester Readiness Program
13. Lab in charge for Analog Electronics Lab
14. Online Exam Coordinator
15. Virtual lab Coordinator.

12 Research Guidance Recently recognized as PhD supervisor by OU.

13 Awards Received

1. Gold Medal received by IE(I) Springer Publication for the paper "Electronic Power Conditioner for Ku-Band Travelling Wave Tube," published in 2017.
2. ISRO-Bangalore –ME Project with performance record as Very Good in 2003.

14 Courses Handled at Under Graduate / Post Graduate Level.

UG:
Theory-
 Digital Electronics
 Electrical Estimation and Costing
 Analog Electronics Circuits

Linear Integrated Circuits
 Power Electronics
 Linear Control Systems
 Advanced Control Systems
 Electrical Measurements & Instrumentation
 Microprocessor & Micro controllers
 Basic Electrical Engineering
 Elements of Electrical engineering
 Principles of Electrical Engineering,
 Electrical Technology and Mechanical Technology

Labs-

Analog Electronics Circuits Lab
 Linear Integrated Circuits Lab
 Power Electronics Lab
 Linear Control Systems Lab
 Microprocessor & Micro controllers Lab
 Basic Electrical Engineering Lab
 Electrical Technology Lab
 and all related Laboratory Courses

PG:

Analysis of Power Converters
 Advanced Power Converters
 Advanced Power Electronic Circuits
 Power Semiconductor Devices & circuits,
 Digital Control Systems.

National Journals – -- International Journals – 14

National Conference – 02 International Conference – 22

15 No. of Papers Published

16 Projects Carried out

17 Patents

18 Technology Transfer

19 Invited Speaker

International FDP on Modern Trends in Power Electronics and their Applications ,28th June to 2nd July 2021, VJIT, Hyderabad
 Laboratory Experiment Analysis for Reinforcement of Nexus (LEARN), 18th-29th January CBIT, Hyderabad

20 No. of Books/Chapter Published with details

1. Mallala, B., Venkata Prasad, P., Palle, K. (2023). Multi-objective Optimization with Practical Constraints Using AALOA. In: Choudrie, J., Mahalle, P.N., Perumal, T., Joshi, A. (eds) ICT with Intelligent Applications. ICTIS 2023. Lecture Notes in Networks and Systems, vol 719. Springer, Singapore. https://doi.org/10.1007/978-981-99-3758-5_16
2. Published book chapter-Power Quality Conditioner with Fuzzy Logic Controller, Book title Information and Communication Technology for Competitive Strategies, Springer Publishing House, ISBN 978-981-19-9304-6 (eBook)

Attended:

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

1. One-week Online STTP on Electrical Safety-Challenges and Solutions, organized by Department of EEE, CBIT(A) during 26-6-2024 to 2-7-2024 .
2. One-week AICTE Recognized Faculty Development Programme on Arduino based system design using Tinker CAD Free Simulator Conducted by Electronics and Communication Engineering Department from 05/02/2024 to 09/02/2024 (One Week) at NITTTR, Chandigarh
3. One-week online FDP on “Quality Education through OBE”, organized by CBIT in association with with IEEE Education Society Student Branch Chapter CBIT, 22-01-2024 to 27-01-2024
4. One Week STC on “Smart Grid and Integration of

- Distributed Generation”, by CBIT in collaboration with NITTTTR Chandigarh, 28-08-2023 to 01-09-2023.
5. One Week STC on “OBE and NBA Accreditation”, by CBIT in collaboration with NITTTTR Chandigarh, 07-08-2023 to 11-08-2023.
 6. One Week STC on “ANSYS-EM for Electrical Engineering Application”, by CBIT in collaboration with NITTTTR Chandigarh, 17-07-2023 to 21-07-2023.
 7. One Week Short Term Training Program on “Soft Computing Techniques in Electrical Systems”, by Bapatla Engineering College, A.P, 14th-19th March 2022
 8. AICTE sponsored one-week online FDP on “Inculcating Universal Human Values in Technical Education ” organized by All India Council for Technical Education (AICTE), AICTE (online), 7th February, 2022 to 11th February, 2022
 9. AICTE sponsored one week online FDP on “ Recent Advances in EV Technologies” (Series D), Matrusri Engineering College, Hyderabad, 12th July to 17th July 2021
 10. AICTE _Online STTP recent advances in EV Technologies –Series C, Matrusri Engineering College, Hyderabad, 14th -19th June 2021
 11. 2DAY International workshop on international workshop on stress & coping : strategies to De-stress, Organized by Women Empowerment cell, GITAM (Deemed to be University), Visakapatnam, A.P., India, 12th & 13th June 2021
 12. One week STTP (online), “Recent Advances in EV Technologies, series- B by Matrusri Engineering College, Hyderabad, 17th – 22nd May 2021
 13. One week FDP (online) “Teaching and Learning of Power Converters and Control techniques for renewable Energy Systems” by NIT Warangal during 8th -13th March 2021
 14. One week STTP on “Recent Trends in Renewable Energy Sources and their Integration to Smart Grid” by St. peters Engineering College, Hyderabad from 30.11.2020 to 05.12.2020.
 15. A 2-Day workshop on "LaTeXScientific Documentation Tool", by IEEE student branch NITW,(online) during 11th-12 th June 2020.
 16. One week FDP on "Outcome Based Education and NBA Accreditation Process-(UG)" by CBIT(online) during 28 th May - 01 st June 2020.
 17. One week FDP on "Recent Advances in Power electronics Applications with Matlab Simulations" by E&ICT Academy NIT Patna, (Online) during 25th- 30th May 2020.
 18. A 3 Day STTP "Artificial Intelligence Methods For Energy Auditing, Technologies And Management (Aim for E-Atm) by CBIT(online) during 21st- 23rd May 2020
 19. Successfully Completed “Grammar & Punctuation” an online non-credit course authorized by UCI Division of continuing education which is offered through Coursera on 19-05-2020.
 20. Successfully Completed “AI for Everyone” an online non-credit course authorized by deeplearning.ai which is offered through Coursera on 18-05-2020.
 21. Successfully Completed “Python Basics” an online non-credit course authorized by University of MICHIGAN which is offered through Coursera on 16-05-2020.
 22. Successfully Completed “Linear circuits 2” an online non-credit course authorized by Georgia Institute of Technology which is offered through Coursera on 09-

- 05-2020.
23. Successfully Completed "Linear circuits 1" an online non-credit course authorized by Georgia Institute of Technology which is offered through Coursera on 01-05-2020.
 24. Successfully Completed "Introduction to Electronics" an online non-credit course authorized by Georgia Institute of Technology which is offered through Coursera on 01-05-2020.
 25. AICTE approved FDP-NPTEL Course on "NBA Accreditation & Teaching Learning in Engineering Jan - April 2020 .
 26. A 1 Day Workshop "Research Opportunities in Electrical Engineering for power Engineers "at Sri Ramakrishna Engineering College , Coimbatore 28th Feb 2020.
 27. A 2 Day FDP on "Control and Application of resonant Inverters" at NIT, Warangal during 14th-15th February 2020.
 28. A 8 week faculty development programme on "Advanced power electronics and control" from IIT Roorkee, (NPTEL online Certification) Jan-Mar, 2019
 29. A two-day faculty development programme on "Contemporary Power Systems & Power Electronics Applications" at Matrusri Engineering college, Hyderabad, during 10th& 11th Oct 2018.
 30. A five day QIP course on Integrated Circuits, MOSFET, Op-amps and their Applications held at IISc, Bangalore from 4th to 8th Dec 2017, conducted by Department of Electronic Systems Engineering, IISc Bangalore sponsored by AICTE, New Delhi, India.
 31. Two Week Refresher course on "Solar Energy Technologies", at NIT-Tiruchirappalli during 8-18 May 2017

Organized:

1. A one-week Indo-US International Workshop on IoT and ML Based Microgrid & Energy Management from 19th – 23rd February 2024 (Hybrid Mode) .
2. one week Short Term Training Program on "Placement Oriented Electrical Engineering Training (POET) from 22nd, 29th of July 2023 and 12th ,19th, 26th of August 2023
3. one-week Short Term Course (STC) in collaboration with "NITTTR-Chandigarh "on OBE and NBA Accreditation from 07-08-2023 to 11-08-2023
4. Value added course on MATLAB and Machine Learning for Engineering Applications from 29th -30th September 2023, and 5th -6th and 12th October 2023.
5. one-week Short Time Course (STC) on "Big data applications in Electrical Engineering" through online mode from 20th to 24th February 2023 by National Institute of Technical Teachers Training and Research (NITTTR- Chandigarh).
6. Bharateeya Chaitanyam, a series of 7 webinars under Geervana Bharathi Club of CBIT between 29th June-5 th July 2020.
7. Co- Coordinator for Decoration Committee under shruthi, a 3day Cultural Fest of CBIT.
8. National Level Student technical symposium "Electrect-2017" as a part of SUDHEE-2017 in CBIT during 16-17, September 2017.
9. Workshop on MATLAB using simulink in CBIT during 15th-16th September 2017.

International Journal from the Year 2017:

1. Balasubbareddy Mallala, Venkata Prasad Pavana and Kowstubha Palle, Multi-Objective Optimization in the Presence of OGIPFC Using NSMMP Algorithm, Journal of Recent Advances in Electrical & Electronic Engineering, January 2024.
Dol: <http://dx.doi.org/10.2174/2352096516666230504105054>
2. Balasubbareddy Mallala, Venkata Prasad Pavana, Ravindra Sangu, Kowstubha Palle, Venkata Krishna Reddy Chinthalacheruvu, "Multi-Objective Optimal Power Flow Solution Using a Non-Dominated Sorting Hybrid Fruit Fly-Based Artificial Bee Colony", Energies 2022, 15, 4063. <https://doi.org/10.3390/en15114063>
3. Kowstubha Palle (June 2021) , "Field Oriented Control for Induction Motor in Electric Vehicle Applications", Journal of Science, Technology and Development, Volume X Issue VI ,pp 90-97
4. Kowstubha Palle, Bandela Supriya, C Mahesh, Dongari Vamshy(May/2021), "Multi carrier IPD-PWM Technique for Three Phase Diode Clamped and Cascaded H-Bridge Multilevel Inverters" AEGAEUM Journal, Volume 9, Issue 5,pp. 151-162.
5. P.Kowstubha, K.Krishnaveni, Bandela Supriya, C.Mahesh (April/2021) "A new Hybrid Control scheme for Seven –level Asymmetric Cascaded H- bridge Multilevel Inverter " Journal of Interdisciplinary Cycle Research, Volume XIII, Issue IV,pp 2079-2087
6. P.Kowstubha (July 2020) "Review on Different Control Methods used for Induction Heating Applications" International J. Electrical Engineering & Technology, vol.11, no.5, pp.55-63.
7. Kowstubha Palle, A. Bhanuchandar (2020) "A Novel Modified Voltage oriented Control of an Active Front-End Rectifier used for PMSG based Wind Turbine Systems," International Journal of Innovative Technology and Exploring Engineering, Volume-9 Issue-8, pp. 659-663.
8. P. Kowstubha,(2018) " Current mode Control Method used for LLC Resonant DC-DC Converter suitable for portable applications," International J. Electrical Engineering & Technology, vol.9, no.1, pp.58-66.
9. P. Kowstubha, (2017) " New Control Strategy for LLC Resonant Converter used in DPS," International J. Electrical Engineering & Technology, vol.8, no.6, pp.57-65.
10. P. Kowstubha,(2017) " Review on Different Load Resonant Converters suitable for Distributed Power Systems(DPS," International J. Electrical Engineering & Technology, vol.8, no.8, pp.45-53.
11. Kowstubha Palle, K. Krishnaveni and Kolli Ramesh Reddy (2017) "Optimum Design of LLC Resonant Converter Using Inductance Ratio (Lm/Lr)," Springer: J. Inst. Eng. India Ser. B vol 98, no.3, pp.337-352.
12. Palle Kowstubha, K. Krishnaveni and K Ramesh Reddy (2017) "Electronic Power Conditioner for Ku-Band Travelling Wave Tube," Springer: J. Inst. Eng. India Ser. B vol 98, no 2, pp.213-220.
13. P. Kowstubha, (2017) " Control method for LCC Current output Resonant Converter," International J. Electrical Engineering & Technology, vol.8, no.2, pp.101-110.
14. P. Kowstubha, K.Krishnaveni, (2017) " Development of 13-level Cascaded H-Bridge Multilevel Inverter-MATLAB Simulation," International J. Electrical Engineering & Technology, vol.8, no.1, pp.80-92.

National Conferences from the Year 2017:

15. P.Kowstubha,K.Krishnaveni, (2020) " Design and Control of LLC Resonant Converter used in Distributed Power Systems ", National Conference on Power Engineering Research Summit PERS'20, Coimbatore.P.Vinay Mathew,
16. P.Kowstubha (2019) "Induction Motor Control using FOC for Electric Vehicle Applications" in the proceedings of Research Day , CBIT.

International Conferences from the Year 2017:

17. Balasubbareddy Mallala., Pavana, V.P., Palle, K. (2024). Power Quality Conditioner with Hybrid Ant Colony Optimization. In: Asirvatham, D., Gonzalez-Longatt, F.M., Falkowski-Gilski, P., Kanthavel, R. (eds) Evolutionary Artificial Intelligence. ICEASSM 2017. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-99-8438-1_28
18. Balasubbareddy Mallala, Azka Ihtesham Uddin Ahmed, P. Venkata Prasad, P. Kowstubha, Development of Renewable Energy System for Enhancing Reliability of Power, Procedia Computer Science, Vol 230,2023, Pages 1-10, <https://doi.org/10.1016/j.procs.2023.12.055>
19. Balasubbareddy Mallala, Venkata Prasad, P., Palle, K. (2023). Multi-objective Optimization with Practical Constraints Using AALOA. In: Choudrie, J., Mahalle, P.N., Perumal, T., Joshi, A. (eds) ICT with Intelligent Applications. ICTIS 2023. Lecture Notes in Networks and Systems, vol 719. Springer, Singapore. https://doi.org/10.1007/978-981-99-3758-5_16

20. D. Singh, S. Gopinath, Kowstubha. Palle, P. V. Prasad, Balasubbareddy Mallala and S. Pund, "Generative Adversarial Networks for Synthesizing Abnormal Medical Images," 2023 IEEE International Conference on Paradigm Shift in Information Technologies with Innovative Applications in Global Scenario (ICPSITIAGS), Indore, India, 2023, pp. 212-218, <https://ieeexplore.ieee.org/document/10527563>
21. S. Babu, S. Pandey, Kowstubha Palle, P. V. Prasad, Balasubbareddy Mallala and S. Pund, "Adaptive Medical Image Segmentation Using Deep Convolutional Neural Networks," 2023 IEEE International Conference on Paradigm Shift in Information Technologies with Innovative Applications in Global Scenario (ICPSITIAGS), Indore, India, 2023, pp. 15-21, <https://ieeexplore.ieee.org/document/10527488>
22. S. Mishra, V. J. Vijayalakshmi, Kowstubha Palle, P. V. Prasad, Balasubbareddy Mallala and S. Pund, "Accurate Cardiac Arrest Risk Forecasting with Ensemble Learning," 2023 IEEE International Conference on Paradigm Shift in Information Technologies with Innovative Applications in Global Scenario (ICPSITIAGS), Indore, India, 2023, pp. 8-14, <https://ieeexplore.ieee.org/document/10527454>
23. R. Mishra, A. Thangamani, K. Palle, P. V. Prasad, Balasubbareddy Mallala and T. R. V. Lakshmi, "Adversarial Transfer Learning for Surgical Instrument Segmentation in Endoscopic Images," 2023 IEEE International Conference on Paradigm Shift in Information Technologies with Innovative Applications in Global Scenario (ICPSITIAGS), Indore, India, 2023, pp. 28-34, <https://ieeexplore.ieee.org/document/10527520>
24. S. H. OBAIDI al-Khafaji, Kowstubha. Palle, L. Thingbaijam, P. V. Prasad, Balasubbareddy Mallala and S. Pund, "An Improved Convolutional Neural Network for Medical Image Segmentation," 2023 IEEE International Conference on Paradigm Shift in Information Technologies with Innovative Applications in Global Scenario (ICPSITIAGS), Indore, India, 2023, pp. 42-47, <https://ieeexplore.ieee.org/document/10527722>
25. Khaza Izharuddin, Kowstubha Palle, A. Bhanuchander, and Gumalapuram Gopal, "Single phase Grid Connected 5 level switched capacitor Inverter using PLES Tool," Springer Conference Intelligent Control, Robotics, and IndustrialAutomation, 18 November 2023, pp705-714
26. M Balasubbareddy, P Venkata Prasad, Kowstubha Palle, " Power Quality Conditioner with Hybrid Ant Colony Optimization," 2023 International Conference on Evolutionary Artificial Intelligence (ICEAI 2023), RVS College of Engineering and Technology, Coimbatore, India, 13th -14th September 2023, ISBN: 2524-7573
27. Balasubbareddy Mallala, Azka Ihtesham Uddin Ahmed, P. Venkata Prasad, P. Kowstubha (2023), "Development of Renewable Energy System For Enhancing Reliability of Power", International Conference on Evolutionary Computing and Networks (ICECMSN 2023), during 9th -10th November 2023 at Hindusthan Institute of Technology in Coimbatore, Tamil Nadu, India, <https://doi.org/10.1016/j.procs.2023.12.055>
28. Balasubbareddy Mallala, Venkata Prasad Papan, Ravindra Sangu, Kowstubha Palle, Venkata Krishna Reddy Chinthalacheruvu, "Multi-Objective Optimal Power Flow Solution Using a Non-Dominated Sorting Hybrid Fruit Fly-Based Artificial Bee Colony", *Energies* 2022, 15, 4063. DOI: <https://doi.org/10.3390/en15114063>
29. Kavya Tammali, Sai Srujan Vangala, Sushmitha Vattikonda, Kowstubha Palle, A Bhanuchandar, Kasoju Bharath Kuma "An Asymmetric Source Configuration of Single Phase CHB-MLI Topology with a Generalized Reduced-Carrier Modulation Technique" "1st International Conference On Intelligent Controller And Computing For Smart Power (ICICCSP 2022)" organized by the Department of Electrical and Electronics Engineering (EEE), Sreenidhi Institute of Science And Technology (SNIST), Hyderabad, India during 21st-23rd July 2022. DOI: <https://doi.org/10.1109/ICICCSP53532.2022.9862515>
30. Kowstubha Palle , Sai Srujan Vangala ,Kavya Tammali, A Bhanuchandar, Sushmitha Vattikonda, A Mohandas, "A Generalized Non-Carrier Modulation Technique for an Asymmetric Source Configuration of Single-Phase CHB-MLI Topology Using PLECS Tool ", " 2022 IEEE 2nd International Conference on Sustainable Energy and Future Electric Transportation (SeFeT 2022)" organized by Gokaraju Rangaraju Institute of Engineering and Technology Department of Electrical and Electronics Engineering (EEE), Hyderabad, India during 4th – 6th August 2022. <https://doi.org/10.1109/SeFeT55524.2022.9909071>
31. K. B. Kumar, A. Bhanuchandar, B. Supriya, D. Vamshy, Kowstubha. Palle and R. Sakile, "A Unipolar Phase Disposition Pulse Width Modulation Technique for an Asymmetrical Multilevel Inverter Topology," 2021 IEEE International Conference on Intelligent Systems, Smart and Green Technologies (ICISSGT), 2021, pp. 156-161, doi: 10.1109/ICISSGT52025.2021.00041. organized by November 13-14, 2021, IEEE Vizag Bay section.
32. Pavan Kumar Dharmoju, Karthik Yeluripati, Jahnavi Guduri, Kowstubha Palle "Forecasting Electrical Demand for the Residential Sector at the National Level Using Deep Learning" 1st IEEE International Conference on Artificial Intelligence and Machine Vision (AIMV) - 2021, organized by the Department of Computer Science and Engineering, School of Technology, Pandit Deendayal Energy University, Gandhinagar, during 24th - 26th September, 2021.

33. Rajakumar Sakhile, A. Bhanuchandar, Marco Rivera, Bandela Supriya, Kowstubha Palle, Dongari Vamshy "A New Asymmetric 23-Level Inverter Topology with Nearest Level and Unipolar Phase Disposition Control Techniques, 1st International Conference on Smart Energy and Advancement in Power Technologies (ICSEAPT-2021) organized by the Department of Electrical Engineering, in National Institute of Technology, Jamshedpur, Jharkhand, India during 6th – 8th September 2021.
34. Rajakumar Sakhile, A. Bhanuchandar, Marco Rivera, Bandela Supriya, Kowstubha Palle, Dongari Vamshy "A New Asymmetric 23-Level Inverter Topology with Nearest Level and Unipolar Phase Disposition Control Techniques, 1st International Conference on Smart Energy and Advancement in Power Technologies (ICSEAPT-2021) organized by the Department of Electrical Engineering, in National Institute of Technology, Jamshedpur, Jharkhand, India during 6th – 8th September 2021.
35. Kasoju Bharath kumar, A. Bhanuchandar, Rajakumar Sakhile, Bandela Supriya, Kowstubha Palle, C Mahesh, "Symmetric Source Configuration of Nine Level Multi Level DC Link Inverter Topology Using Nearest Level Control and Unipolar Phase Disposition PWM Techniques", International Conference on Smart Energy and Advancement in Power Technologies (ICSEAPT-2021) held at NIT Jamshedpur,(6th -8th September 2021).
36. Bandela Supriya, Kowstubha Palle, A. Bhanuchandar, Rajakumar Sakhile, Dingari Vamshy and Kasoju Bharath Kumar "A Current Control Scheme of Three Phase Three- Level Neutral Point Clamped Grid Connected Inverter Using Min-Max Algorithm Approach ", International Conference on Smart Energy and Advancement in Power Technologies (ICSEAPT-2021) held at NIT Jamshedpur,(6th -8th September 2021)
37. R. Sakile, A. Bhanuchandar, K. B. Kumar, D. Vamshy, B. Supriya and K. Palle, "A Nearest Level Control Scheme for Reduced Switch Count Cascaded Half-Bridge Based Multilevel DC Link Inverter Topology," 2021 8th International Conference on Signal Processing and Integrated Networks (SPIN), 2021, pp. 287-292, doi: 10.1109/SPIN52536.2021.9566056. IEEE conference held on 26th - 27th Aug. 2021
38. P.Kowstubha, Bandela Supriya, "A Novel Current Control Scheme for Three Phase Three Level Grid Tied Neutral Point Clamped Inverter " Springer Conference 2nd Electric Power and Renewable Energy Conference (EPREC-2021), held at NIT Jamshedpur,(28-30 May 2021)

