

1 Name of Faculty Dr. M BALASUBBAREDDY  
 2 Designation Professor  
 3 Nature of Job/Appointment Regular  
 4 Date of Joining 03-07-2017  
 5 E-mail balasubbareddy\_eee@cbit.ac.in



6 Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (EEE)	Awarded
PG	M. Tech. (PS)	First
UG	B. E. (EEE)	First

7 Work Experience

Teaching	22 Years
Research	16 years
Industry	--
Others	--

8 Area of Specialization Machine Learning, IoT Applications, Soft computing Techniques, Power Quality

9 Professional Memberships

1. Senior Member, IEEE Number: 944077447
2. Life Member, ISTE Number: LM 51721
3. Life Member, IE(I) Number: M-151055-4
4. Life Member, Computer Society of India: 5022240071
5. Member, IAENG Number: 148199
6. Fellow Member, ISRD Number: F3140900251
7. Fellow Member, IRED Number: SNM10100057613
8. Member, Society for Engineering Education Enrichment, SEEE Number: IND TN 9999 9999 7667 (2020)

10 Responsibilities held at Institution Level

1. Head of the department in CBIT from 01-03-2023 to till date
2. Member, Academic Council in CBIT from 20-05-2024 to till date
3. Member, College Academic Committee in CBIT from 17-07-2023 to till date
4. Member, Anti Ragging Committee in CBIT from 31-07-2023 to till date
5. Member, Intellectual Property Right (IPR) Cell in CBIT from 31-07-2023 to till date
6. Member, Exams & Results Committee in CBIT from 31-07-2023 to till date
7. Member, Library Committee in CBIT from 31-07-2023 to till date
8. Member, Planning & Evaluation Committee in CBIT from 31-07-2023 to till date
9. Convener, Ethics Committee in CBIT from 27-11-2021 to 30-07-2023
10. Worked as R&D Coordinator in CBIT from 17-01-2019 to till date
11. Member, Program Content Committee, from 31-01-2020 to 11-04-2021
12. Member, Disciplinary Committee, from 25-02-2020 to 11-04-2021
13. Member, Institute Innovation Cell, from 25-02-2020 to 11-04-2021
14. Member, NBA Accreditation Committee, from 08-06-2021 to date
15. Member, Institute Industry Cell, from 12-04-2021 to date
16. Member, Innovation-Teaching, Learning & Evaluation Committee, from 12-04-2021 to till date
17. Member, Patenting Committee, from 12-04-2021 to date

11 Responsibilities held at Department Level

1. Chairman Board of Studies
2. Convener, Departmental Research Committee
3. Member, Course Expert Group

12	Research Guidance	05 (In Progress)
13	Awards Received	<ol style="list-style-type: none"> <li>1. Best Researcher of the year 2009 award from JNT University, Kakinada, 01-11-2009</li> <li>2. National Award for Teaching Excellence - 2013 from Indus Foundation at Hyderabad, 11-11-2013</li> <li>3. Research Excellence -2016 from Indus Foundation at Bangalore, 23-09-2016</li> <li>4. Educational Leadership-2017 from Indo-Global Education Summit and Expo 2017 at Hyderabad, 19-07-2017</li> <li>5. Adarsh Vidya Saraswati Rashtriya Puraskar (National Award of Excellence 2018) from Global Management Council, Ahmedabad, 02-10-2018</li> <li>6. Best Faculty from EET CRS Academic Brilliance Awards-19, Noid, 27-01-2019</li> <li>7. Honorable Jury mention (Scientist category) from EET CRS 4th South Asian Education Awards-19, Hyderabad, 10-03-2019</li> <li>8. Excellence in Research from EET CRS 8th Academic Brilliance Awards-2020, 08-03-2020</li> <li>9. Dr. Radhakrishna Award for Engineering College Teacher Award-2020, from Society for Engineering Education Enrichment SEE Awards 2020, 20-12-2020</li> <li>10. Best Teacher of the year 2021 from Chaitanya Bharathi Institute of Technology, Hyderabad, 06-03-2021</li> <li>11. Global eminent scientist award 2021 from Vij Trust Thirunindravur, TN, 29-03-2021</li> <li>12. Best Open Source Learner Award 2022 from knowledge research academy Coimbatore, TM, International award ceremony on Star Achievers in Engineering, Management, Arts and Science (SAEMAS - 2022), 14-08-2022</li> <li>13. Award of Excellence in Research 2022, IJMTST Excellence awards 2022 from Vijayawada, 25-09-2022</li> <li>14. Received the "Best Open Source Learner Award" from International Award Ceremony on Star Achievers in Engineering, Management, Arts, and Science (SAEMAS-2022), Hyderabad, 14-08-2022</li> <li>15. Received Best Paper Award during 5th Research Day 2023, on 18th November 2023, at Chaitanya Bharathi Institute of Technology, Hyderabad</li> <li>16. Received Best Paper Award paper title "Salp swarm algorithm for solving optimal power flow problem with thyristor-controlled series capacitor" from Journal of Electronic Science and Technology, Oct 2024.</li> <li>17. Received Best Paper Award paper title "Enhancing Electricity Forecasting with Random Forest: Utilizing Correlation Metrics for Advanced Feature Engineering" from 1st International conference on Power Energy and Secure Smart Technologies (ICPEST-2024) held during 13-14 December 2024</li> </ol>
14	Courses Handled at Under Graduate / Post Graduate Level.	<p>Electrical Machines – I, Electrical Machines – II, Power Systems – I, Power Systems – II, Power System Analysis, Power system operation and control, Modeling of Power system Components, Control Systems, Advanced Control Systems, Linear System analysis, Utilization of electrical energy, HVDC Transmission systems, Digital Signal processing, Computer methods in Power systems, Power electronics, Power semiconductor drives, Basic Electrical Engineering, Power semiconductor devices and circuits, Advanced computer methods in power systems, Simulation techniques for Electrical Engineering, Power Electronic Converters, Machine Learning and Applications.</p>
15	No. of Papers Published	<p>National Journals – 01                      International Journals – 94</p> <p>National Conference – 02                  International Conference – 34</p>
16	Projects Carried out	<p><b>Completed Projects: 01</b></p> <ol style="list-style-type: none"> <li>1. Received the total grant of Rs 1100000/-for conduct of project under Research Promotion Scheme (RPS) during the financial year 2019-20 from AICTE for RPS titled "An</li> </ol>

Efficient Low Cost Flexible Quality Conditioner to mitigate Power Quality Issue

**Ongoing Projects: 03**

2. Sanctioned International Collaborative Research fund (Rs 7,50,000/- approx.) cooperation between University Malaysia Perlis and Chaitanya Bharathi Institute of Technology, entitled IoT-Based Smart power quality Analyzer. (2022)
3. Sanctioned the total grant of Rs 47.96 Lakhs for conduction of project under Scheme for Promotion of Academic and Research Collaboration (SPARC) during the financial year 2022-24 from MHRD, titled " Design and Development of IOT based Cooperative Isolated Renewable Energy Systems (IRES) using Multi-objective optimization for Enhancing Reliability of Power in Rural India
4. Sanctioned International Collaborative Research fund (Rs 5,66,000/- approx.) cooperation between University Malaysia Perlis and Chaitanya Bharathi Institute of Technology, entitled Development of Smart Greenhouse Management System Using IoT & ML. (2024)

**Published:04**

1. Dr M Balasubbareddy, Kondapalli Venkata Sri Ram, Dr P. Venkata Prasad, filled a Patent on 28-12-2022 and published on 06-01-2023 with journal no. 01/2023 with application no. **202241076313 A** with the title of invention as "Hardware design of FPGA based Unified Power Quality Conditioner (UPQC)"
2. Dr M Balasubbareddy, Kondapalli Venkata Sri Ram, Dr P. Venkata Prasad, filled a Patent on 26-02-2022 and published on 04-03-2022 with journal no. 09/2022 with application no. 202241010487 A with the title of invention as "Design of Power Quality Analyzer (PQA) using Field Programmable Gate Array (FPGA)"
3. Dr M Balasubbareddy, Dr P. Venkata Prasad, Dr.Nireekshana Turaka, filled a Patent on 27-10-2021 and published on 05-11-2021 with journal no. 45/2021 with application no. **202141049019 A** with the title of invention as "System for Mitigating Circulating Current in type Modular Multilevel Converter (MMC)" **Granted**
4. M Balasubbareddy, Divyanshi Dwivedi, P. Venkata Prasad, filled a Patent on 27-05-2021 and published on 11-06-2021 with journal no. 24/2021 with application no. 202141023572 in the field of "A Power Transmission Network Based on Optimal Generalized Interline Power Flow Controller (OGIPFC) for Optimal Power Flow for Complex Networks to Meet Increased Load Demand"

17 Patents

**Copyright:02**

5. Dr M Balasubbareddy, K Venkata Sri Ram, Y Ranadheer, a Copyright is filed with Diary number: 30821/2021-CO/L, date of filing of application: 20.12.2021 and granted with Registration number L-112510/2022, granted date: 28.02.2022 with title of "Bidirectional isolated dc-dc converter circuit for EV battery storage
6. Balasubbareddy Mallala, K Venkata Sri Ram, a Copyright is filed with Diary number: 22469/2022-CO/L, date of filing of application: 31.10.2022 and granted with Registration number L-135831/2023, granted date: 09.11.2023 with the title of A Fuzzy based SoC control for battery life extension

18 Technology Transfer

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19 Invited Speaker

1. Resource person for the IEEE-CASS Hyderabad Sponsored Two day Hands on workshop on Smart Devices and IoT Systems for Beginners, at Joginpally BR Engineering College, Hyderabad", EEE Dept. CBIT, Hyderabad, 30-11-2024
2. Resource person in delivering a session on " Tools used for Attainment calculations on 20-02-2024 at G.Narayanamma Institute of Technology & Science for

Women, Hyderabad

3. Resource person for the one-week Short Term Programme on Placement Oriented Electrical Engineering Training (POET), talk on "AC-DC Converter, AC-AC Converters", EEE Dept. CBIT, Hyderabad, 27-07-2023
4. Resource person for the one-week Short Term Programme on Placement Oriented Electrical Engineering Training (POET), talk on "DC-DC Converter, DC-AC Inverters", EEE Dept. CBIT, Hyderabad, 27-07-2023
5. Resource person for the invited talk on "Machine Learning for Engineering Applications", EEE Dept. Ramireddy Subbarami Reddy Engineering College, Kavali, 06-01-2023
6. Resource person for the invited talk on "Introduction to Arduino Programming", EEE Dept. Ramireddy Subbarami Reddy Engineering College, Kavali, 20-03-2023
7. Resource person for the invited talk on "Hands-on MATLAB Programming", EEE Dept. Newton's Institute of Engineering, Macherla, 16-05-2022
8. Resource person for the invited talk on "Design of Power Quality Conditioner to Mitigate Power Quality issues", EEE Dept. Newton's Institute of Engineering, Macherla, 04-04-2022
9. Resource person for the AICTE sponsored two-week online FDP (phase-II) talk on "Implementation of Teaching Learning Based Optimization (TLBO) in MATLAB", EEE Dept. VVIT, Guntur, 07-12-2020
10. Resource person for the AICTE sponsored two-week online FDP (phase-II) talk on "Machine learning for Engineering Applications", EEE Dept. VVIT, Guntur, 04-12-2020
11. Resource person for the AICTE sponsored two-week online FDP (phase-I) talk on "A case study on solar plant installation operation and economic aspects", EEE Dept. VVIT, Guntur, 15-11-2020
12. Resource person for the A Five Days e-Workshop on "Application of MATLAB in Electrical Engineering", EEE Dept. TIRUMALA ENGINEERING COLLEGE, Narasaraopet, 03-07-2020 to 06-07-2020
13. Resource person for the Webinar on "Implementation of Teaching Learning Based Optimization (TLBO) in MATLAB", EEE Dept. SVCET, Chittoor, 15-06-2020
14. Resource person for the Webinar on "A case study on solar plant installation operation and economic aspects", EEE Dept. SV College of Engineering, Kadapa, 12-06-2020
15. Resource person for the Webinar on "Machine learning for Engineering Applications", EEE & ECE Dept. SV College of Engineering, Kadapa, 14-05-2020
16. Resource person for the AICTE-STTP on "Introduction to Research Methodologies and MATLAB Programming for Optimization Techniques", EEE Dept. CBIT, 26-11-2019 & 28-11-2019.
17. Resource person for the three-day workshop on "Simulation of Power Electronic Converters-2018", EEE Dept. CBIT, 28-02-2018
18. Resource person for the one day guest lecture on "Power Electronic", EEE Dept. Avanathi Institute of Engineering and Technology, 28-10-2017
19. Act as session chair International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing (EECCMC)-2018, organized by Priyadarshini Engineering College, Vaniyambadi, Vellore during 28th & 29th January 2018
20. Act as session chair in International conference on power control signals and Instrumentation Engineering (ICPCSI)-2017, organized by Saveetha Engineering College, Thandalam, Chennai, during 21st & 22nd September 2017
21. Act as session chair in the 2017 International Conference on Computational intelligence: Theories, Applications and future directions (ICCI-2017) during 6th to 8th December, 2017 at Indian Institute of Technology, Kanpur

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No. of Books/Chapter Published with details

1. DC Machines and Transformers, Scientific International Publishing House, edition-1(2024), ISBN No: 978-93-6674-025-6
2. Electromagnetic Theory, Scientific International Publishing House, edition-1(2024), ISBN No: 978-93-6674-713-2
3. Vijay Babu Pamshetti, Anil Kumar Annamraju, Mallala Balasubbareddy, Ravi Ponnala, 10 - Optimal integration of renewable based distributed generation into distribution networks in presence of plug in electric vehicles: a multi objective framework, Editor(s): Thanikanti Sudhakar Babu, Praveen Kumar Balachandran, Nnamdi Nwulu, Renewable Energy for Plug-In Electric Vehicles, Elsevier,2024,Pages 157-178, ISBN 9780443289552 <https://doi.org/10.1016/B978-0-443-28955-2.00010-X>
4. Sarasij Adhikary, Pabitra Kumar Biswas, Thanikanti Sudhakar Babu, Mallala Balasubbareddy, 12 - Bidirectional operation of electric vehicle charger incorporating grids and home energy storage: V2G/G2V/V2H/V2X for sustainable development, Editor(s): Thanikanti Sudhakar Babu, Praveen Kumar Balachandran, Nnamdi Nwulu, Renewable Energy for Plug-In Electric Vehicles,Elsevier, 2024, Pages 191-207, ISBN 9780443289552, <https://doi.org/10.1016/B978-0-443-28955-2.00012-3>
5. Thogaru Ram Babu, Naware Dipanshu, Prasad Papan Venkata, Mallala Balasubbareddy, 15 - Conceptualizing grid-to-vehicle and vehicle-to-grid modes of electric vehicles for energy management in direct current microgrid coupled with demand response, Editor(s): Thanikanti Sudhakar Babu, Praveen Kumar Balachandran, Nnamdi Nwulu, Renewable Energy for Plug-In Electric Vehicles, Elsevier, 2024, Pages 235-262, ISBN 9780443289552, <https://doi.org/10.1016/B978-0-443-28955-2.00015-9>
6. Design analysis of support Insulators for HVDC Gas Insulated Switchgear, Integrated Publications, New Delhi, edition-1(2023), ISBN: 978-93-5834-003-7
7. Efficient Estimation of Dilution of Precision (DoP) for GPS AND IRNSS Systems, AkiNik Publications, New Delhi, ISBN: 978-93-5570-749-9
8. Published book chapter- Machine Learning Based Cyber-attack Resistant Microgrid System with IRNSS Synchronization, Book title Emerging Trends in Engineering, Management, Arts and Science, TECH PRESS publication, ISBN : 978-93-91697-09-9
9. Published book chapter- Design and Simulation of STATCOM based Reactive Power Compensation, Book title Dynamic Research Trends in Engineering and Management, Paramount Publishing House, ISBN : 978-93-90631-50-6
10. Published One Chapter-- Multi-objective OPF Problem Analysis with Practical Constraints in the Presence of FACTS Devices Using NSHCSA, Book Titled "Computational Intelligence: Theories, Applications and Future Directions—Volume II" Springer Nature Singapore Pte Ltd, 2019, ISSN 2194-5357
11. Generation and Utilization of electrical energy" Pearson publications, Delhi, ISBN: 9789332515673, June 2010
12. Electric Energy: Generation, Utilization and Conservation - Pearson publications, ISBN: 978813167740, e-ISBN: 9788131798775, 2011, Delhi
13. Power semiconductor drives", PHI learning private limited, ISBN-978-81-203-3658-2, 2009, New Delhi
14. Power electronics", PHI learning private limited, ISBN-978-81-203-3840-1, 2010, New Delhi
15. HVDC Transmission", Ridged Publications, Hyderabad

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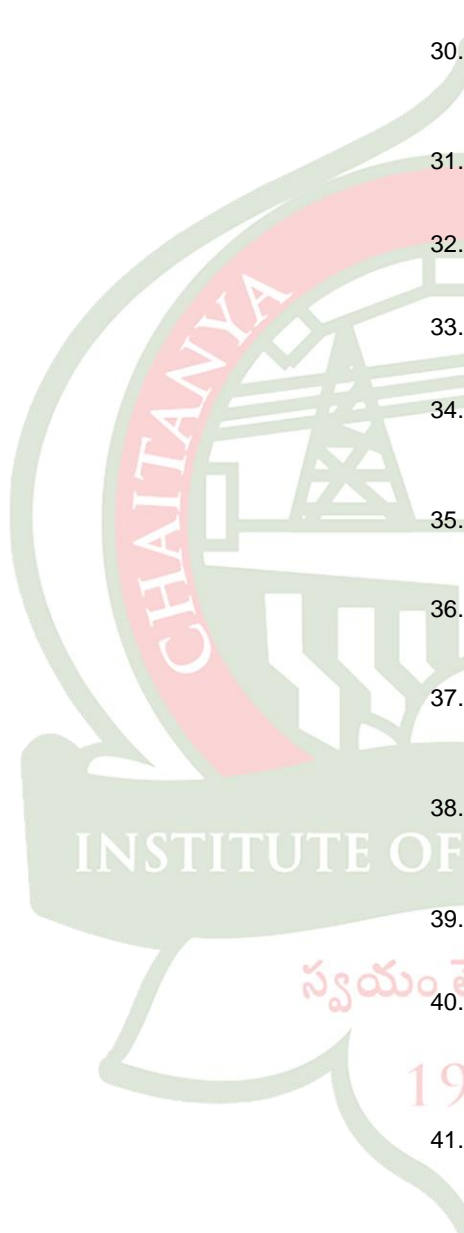
Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Trainings (**Attended and/or Organized**).

1. Successfully Completed "Introduction to Artificial Intelligence" an online course authorized by Infosys Springboard during Jul 29, 2024
2. Successfully Completed "Explore Machine Learning using Python" an online course authorized by Infosys Springboard during Jul 29, 2024

3. Successfully Completed "Introduction to Data Science" an online course authorized by Infosys Springboard during Jul 29, 2024
4. Successfully Completed "Python for Data Science" an online course authorized by Infosys Springboard during Jul 30, 2024
5. Successfully Completed "Data Visualisation using Python" an online course authorized by Infosys Springboard during Jul 30, 2024
6. Successfully Completed "Machine Learning" an online Program authorized by Infosys Springboard during Jul 30, 2024
7. One Week AICTE Recognized Faculty Development Programme on "IoT Enabled Embedded Systems" at CBIT, Hyderabad, during 22-07-2024 to 26-07-2024
8. One Week AICTE Recognized Faculty Development Programme on "Data Science using Python" at NITTTR, Chandigarh, during 25-11-2024 to 29-11-2024
9. One Week AICTE Recognized Faculty Development Programme on "Open Source Applications in Engineering Education" at NITTTR, Chandigarh, during 18-11-2024 to 22-11-2024
10. One Week AICTE Recognized Faculty Development Programme on "Deep Learning for Engineering Applications" at NITTTR, Chandigarh, during 02-09-2024 to 06-09-2024
11. One Week AICTE Recognized Faculty Development Programme on "Data Science and Machine Learning" at NITTTR, Chandigarh, during 23-09-2024 to 27-09-2024
- 12.
13. Organized one week workshop on "Internet of Things Hardware Design Approach with Arduino Uno", during 27-08-2024 to 31-08-2024
14. Organized guest lecture on "Toward optimal multi-microgrid design and operation for Enhancing supply security and Reliability", during 09-11-2024.
15. Organized guest lecture on "Research Paper Writing, Publishing, and Citation Management", during 16-11-2024
16. Organized one week workshop on "Open Source Applications in Engineering Education", during 18-11-2024 to 22-11-2024
17. Organized 1st International Conference on Power Energy and Secure Smart Technologies (ICPEST 2024), during 13-12-2024 to 14-12-2024
18. One Week Short Term Course and Faculty Development Programme on "Applications of Machine Learning Techniques in Sustainable Technologies (AMLST-2024)" at NIT Rourkela, Odisha, during 24-01-2024 to 28-01-2024
19. Three Day SERB Sponsored Seminar on "Electric Vehicles: Battery Technologies, Challenging Strategies and Charging Station Placement", at Sri Venkateswara College of Engineering, Tirupati, during 18-12-2023 to 20-12-2023
20. One Week AICTE Recognized Faculty Development Programme on "IoT and its Applications" at NITTTR, Chandigarh, during 06-11-2023 to 10-11-2023
21. One Week AICTE Recognized Faculty Development Programme on "IoT and Sensor Networks" at NITTTR, Chandigarh, during 09-10-2023 to 13-10-2023
22. One Week AICTE Recognized Faculty Development Programme on "Smart Grid and Integration of Distributed Generation" at CBIT, Hyderabad, during 28-08-2023 to 01-09-2023
23. One Week AICTE Recognized Faculty Development Programme on "Sustainable Development Goals: Challenges and Opportunities" at CBIT, Hyderabad, during 21-08-2023 to 25-08-2023
24. One Week AICTE Recognized Faculty Development Programme on "OBE and NBA Accreditation" at CBIT, Hyderabad, during 07-08-2023 to 11-08-2023
25. One Week AICTE Recognized Faculty Development Programme on "ANSYS-EM for Electrical Engineering



- Application” at CBIT, Hyderabad, during 17-07-2023 to 21-07-2023
26. One Week online short-term training program on “Energy Efficient and Decarbonisation Technologies” at CBIT, Hyderabad, during 05-06-2023 to 09-06-2023
  27. One Week online short-term training program on “Raspberry Pi and its Interfacing” at CBIT, Hyderabad, during 27-02-2023 to 03-03-2023
  28. 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
  29. One Week online short-term training program on “Power Quality Problems and solutions” at NITTTR, Chandigarh, during 30-01-2023 to 03-02-2023
  30. One Week online short-term training program on “Design, implementation and control of Electrical Systems using MATLAB” at Bapatla Engineering college, Bapatla, during 03-01-2023 to 07-01-2023
  31. One Week online short-term training program on “LabVIEW Programming” at NITTTR, Chandigarh, during 08-08-2022 to 12-08-2022
  32. One Week online short-term training program on “MATLAB and SIMULINK basics for hardware Projects” at NITTTR, Chandigarh, during 01-08-2022 to 05-08-2022
  33. One Week online short-term training program on “Smart Materials Processing and Applications” at NITTTR, Chandigarh, during 25-07-2022 to 29-07-2022
  34. One Week online short-term training program on “Simulation of Smart Electric Vehicles (in collaboration with Typhoon HIL)” at NITTTR, Chandigarh, during 18-07-2022 to 22-07-2022
  35. A one week AICTE Recognized Faculty Development Programme on “Data Analytics using Python”, organized by NITTTR, Chandigarh, during 18-04-2022 to 22-04-2022
  36. A one week AICTE Recognized Faculty Development Programme on “Smart Grid Technologies”, organized by NITTTR, Chandigarh, during 04-04-2022 to 08-04-2022
  37. A one week Online National Workshop on “nature Inspired Optimization Techniques and Microgrid applications” organized by the Silicon Institute of Technology, Sambalpur during 21-03-2022 to 26-03-2022
  38. A Five Day National Level Workshop on “Simulation and Analysis of Power System Case Studies using MiPower”, organized by Presidency University, Bengaluru, during 14-02-2022 to 18-02-2022
  39. A five day Online AICTE Recognized Faculty Development Programme on “IoT and Sensor Networks”, at NITTTR, Chandigarh, during 20-09-2021 to 24-09-2021
  40. Successfully completed AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Design and Optimization of EV Charging Technology in Smart Grid Platform" during 13-09-2021 to 17-09-2021 at Puducherry Technological University
  41. A six-day Short term training program (STTP) on “Smart grid and big data analysis”, Sponsored by AICTE, organized by IPS academy, Indore, during 09-08-2021 to 14-08-2021
  42. Successfully Completed “Innovation Ambassador training (Advanced Level)” conducted by MoE's Innovation Cell & AICTE during the period during 30-06-2021- 30-07-2021 in online mode
  43. A five day online Faculty Development Program on “Power Quality Analysis of Various Power Electronics” at NITTTR, Chandigarh, during 14-12-2020 to 18-12-2020
  44. A five day online Faculty Development Program on “Smart grid features and Blockchain Technologies for smart grid” at IEEE Student branch, NIT-Trichy, during 16-11-2020 to 20-11-2020
  45. Two Week online National Faculty Development Program on “Applications of Power Electronics in Renewable Energy



- Systems" G VVIT, Namburu, during 02-11-2020 to 14-11-2020
46. One Week online National Faculty Development Program on "Artificial Intelligence using Python" G. Narayanamma Institute of Technology and Science (for Women), Hyderabad, during 14-09-2020 to 19-09-2020
  47. One Week online National Faculty Development Program on "Computational Intelligence Techniques for Machine Learning" Jaypee University of Information Technology, Wanknaghat, during 31-08-2020 to 05-09-2020
  48. A four day online Faculty Development Program on "Challenges and Opportunities of Energy and Sensor Applications" at JNTUACEA, Ananthapur, during 23-09-2020 to 26-09-2020
  49. A Webinar on "Island Innovation in India" at Island Innovation & Renewable Energy Society of India (RESI), on 05-09-2020
  50. One Week online National Faculty Development Program on "Blockchain Technology in Electrical power Systems Applications" at SNIST, Hyderabad, during 31-08-2020 to 04-09-2020
  51. A three day online Faculty Development Program on "Driving Technologies for Smart grid" at Tirumal Engineering College, Narasaraopet, during 25-08-2020 to 27-08-2020
  52. A five day online Faculty Development Program on "Future Energy Trends & its Impact" at SJB Institute of Technology, Bengaluru, during 24-08-2020 to 28-08-2020
  53. A Webinar on "Use of LMS, virtual teaching and OBE software for Engineering College" at Vmedulife software services, Pune, on 20-08-2020
  54. A Webinar on "Exploration of main group compounds for promoting metal-free transformation in industries" at St. Joseph's College of Engineering, Chennai on 19-08-2020
  55. One Week online National Faculty Development Program on "Unlockdown 3.0: A period of Reorienting the Teaching & Learning" at GITAM School of Science, Bengalure, during 17-08-2020 to 23-08-2020
  56. A Webinar on "Transforming Youth into Responsible Citizens and Engage them in developing the Nation" at Lead India Foundation, Hyderabad, on 15-08-2020
  57. One Week online National Faculty Development Program on "Current Research Trends in Power Systems and Power Electronics" at Vignana's Nirula Institute of Technology and Science for women, Guntur, during 20-07-2020 to 25-07-2020
  58. A five day online Faculty Development Program on "Applications of Artificial Intelligence for modern power system" at St. Joseph's College of Engineering, Chennai, during 20-07-2020 to 24-07-2020
  59. A Webinar on "Online Teaching" at VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, during 13-07-2020 to 14-07-2020
  60. A Webinar on "Research Opportunities in Electrical Drives" at Sharnbasva University on 10-07-2020
  61. A Webinar on "Employability post COVID Era: Expectation of Industry Vs Education System's Preparedness" at Assocham India on 10-07-2020
  62. A Webinar on "Applied Artificial Intelligence" at PSG Institute of Technology and Applied Research on 08-07-2020



63. A five day online Faculty Development Program on "AI Techniques to Electrical Engineering" at JNTU, Hyderabad, during 06-07-2020 to 10-07-2020
64. One Week online National Faculty Development Program on "Bharateeya Chaitanyam" at Chaitanya Bharathi Institute of Technology, Hyderabad, during 29-06-2020 to 05-07-2020
65. One Week online National Faculty Development Program on "Arduino" at S.V Engineering College, Tirupati, during 29-06-2020 to 03-07-2020
66. One Week online National Faculty Development Program on "Applications of Optimization Techniques to Electrical Engineering" at Department of Electrical and Electronics Engineering, Gayatri Vidya Parishad College of Engineering for Women, Visakhapatnam during 22-06-2020 to 26-06-2020
67. One Week International Faculty Development Program on "Recent Strategies on Micro- and Smart-Grid Technologies" at Department of Electrical & Electronics Engineering, GMR Institute of Technology, Rajam, during 15-06-2020 to 19-06-2020
68. A Webinar on "Tools for Documentation: Conference, Journal and Thesis Writing" at Vaagdevi College of Engineering, Hyderabad, on 13-06-2020
69. A Webinar on "CO-PO attainment computation and outcomes analysis" at inpods-Ed tech on 13-06-2020
70. A one week online Faculty Development Program on "Design of Solar PV System Using PVsyst Software" at Vaagdevi College of Engineering, Hyderabad during 09-06-2020 to 13-06-2020
71. A five day online Faculty development program on "Recent Trends in Electrical Engineering" at Vishnu Institute of Technology, Bhimavaram, during 08-06-2020 to 12-06-2020
72. A five day Faculty Development Program on "Technological Advances in Power Switching Converters for Renewable Energy Sources and Fuel Cell Technology for E-vehicles" at Bapatla Engineering College, Bapatla, during 01-06-2020 to 05-06-2020
73. A one day workshop on "Role of Energy Storage & Plug-in Electric Vehicles in Smart Grid : Challenges & Opportunities" at Audisankara Group of Institutions, Gudur, during 30-05-2020
74. A Webinar on "Recent Trends In Electrical Engineering" at MLR Institute of Technology, Hyderabad, on 30-05-2020
75. A one week Faculty Development Program on, "Outcome Based Education and NBA Accreditation Process-(UG)" at Chaitanya Bharathi Institute of Technology, Hyderabad, during 28-05-2020 to 01-06-2020
76. A one week online Faculty Development Program On "Power Electronics Applications In Smart Grid And Electric Vehicles" at Santhiram Engineering College, Nandyal during 26-05-2020 to 31-05-2020
77. One Week Online Faculty Development Program on "Innovation, Entrepreneurship and its Relevance in Industry 4.0 Practices in the Post Covid-19 Situation" at Terna Engineering College, NAVI MUMBAI, during 25-05-2020 to 29-05-2020
78. Five day National Level Online Faculty Development Program on "Artificial Intelligence" at SIR C.R Reddy College of Engineering, in association with National Youth Council of India and BrainOVision Solutions India Pvt. Ltd. during 22-05-2020 to 26-05-2020
79. A webinar trio, on "Artificial Intelligence Methods For Energy Auditing, Technologies And Management (Aim for E-Atm)" at Chaitanya Bharathi Institute of Technology, Hyderabad, during 21-05-2020 to 23-05-2020
80. Two day online Faculty Development Program on "Research opportunities in Electrical Engineering" at Kallam Haranadhareddy Institute of Technology, Gunture,

during 20-05-2020 to 21-05-2020

81. A online seminar on "Quality Assurance in Online Teaching – Learning & Evaluation" at Vellore Institute of Technology, Vellore, India, on 19-05-2020
82. A two day online workshop on "Power Train and Electromagnetic Transients" at PWSIM solutions for Electrification, during 18-05-2020 to 19-05-2020
83. A online Short Term Training Program on "MATLAB based Teaching-Learning in Mathematics, Science & Engineering, at Ramrao Adik Institute of Technology, Nerul, Navi Mumbai in collaboration with DesignTech Systems Pvt. Ltd., during 18-05-2020 to 22-05-2020
84. One week online Faculty Development Program on "Outcome Based Education: A step towards Excellence" at Government College of Engineering, Karad, during 11-05-2020 to 15-05-2020
85. A one day online workshop on "Electromagnetic and Thermal simulation of PMSM (IPM) Motor" at Altair Webinar (ANZ ASEAN India), on 07-05-2020
86. A two day online course on "Understanding Citations and Tips to improve h-index" at Learning with Chandan in association with Voice of Environment, during 06-05-2020 to 07-05-2020
87. A online Training on "Internet of Things" at MSME-Technology Development Centre (PPDC), Government of India, during 27-04-2020 to 01-05-2020
88. A Webinar on "Employability Skills In Curriculum Design" at Audisankara College Of Engineering & Technology, on 26-04-2020
89. A Webinar on "Online Teaching Learning and online Assessment Demo" at inpods-Ed tech on 24-04-2020
90. A Webinar on "NAAC accreditation Management System demo" at inpods-Ed tech on 17-04-2020
91. A Webinar on "Identifying weaker students and remedial action" at inpods-Ed tech on 04-04-2020
92. A five day quality improvement programme on "Applied optimal control and state Estimation" at Centre for Continuing Education, IISc, Bengaluru during 02-07-2018 to 06-07-2018
93. A one day workshop on "Smart Research publications in Referred Journals" at SV College of Engineering, Tirupati, on 17-06-2017

## INSTITUTE OF TECHNOLOGY NPTEL-AICTE FDP

94. A Twelve Week Faculty Development Program on "Introduction to Industry 4.0 and Industrial Internet of Things", at NPTEL-AICTE during Jul-Oct 2024
95. A Twelve Week Faculty Development Program on "Learning Analytics Tools", at NPTEL-AICTE during Jul-Oct 2024
96. A Twelve Week Faculty Development Program on "Soft Skills", at NPTEL-AICTE during Jul-Oct 2024
97. A Twelve Week Faculty Development Program on "Artificial Intelligence and Machine Learning in Materials Engineering", at NPTEL-AICTE during Jul-Oct 2024
98. A Twelve Week Faculty Development Program on "Google Cloud Computing Foundations", at NPTEL-AICTE during Jul-Oct 2024
99. A Twelve Week Faculty Development Program on "Fundamentals of Artificial Intelligence", at NPTEL-AICTE during Jul-Oct 2024
100. A Twelve Week Faculty Development Program on "Software Testing", at NPTEL-AICTE during Jul-Oct 2023
101. A twelve Week Faculty Development Program on "Machine Learning and Deep Learning-Fundamentals and Applications", at NPTEL-AICTE during Jul-Oct 2023
102. A eight Week Faculty Development Program on

- "Introduction to Machine Learning", at NPTEL-AICTE during Jul-Sep 2023
- 103.A eight Week Faculty Development Program on " Cloud Computing", at NPTEL-AICTE during Jan-April 2023
- 104.A eight Week Faculty Development Program on " Data Analytics with Python", at NPTEL-AICTE during Jan-April 2023
- 105.A eight Week Faculty Development Program on " Data Mining", at NPTEL-AICTE during Jan-Mar 2023
- 106.A eight Week Faculty Development Program on "Cloud Computing and Distributed Systems", at NPTEL-AICTE during Jan-Mar 2023
- 107.A eight Week Faculty Development Program on " Digital protection of Power system", at NPTEL-AICTE during Jan-Mar 2022
- 108.A eight Week Faculty Development Program on " Big data computing", at NPTEL-AICTE during Aug-Oct 2021
- 109.A eight Week Faculty Development Program on " Big data computing", at NPTEL-AICTE during Aug-Sep 2021
- 110.A four Week Faculty Development Program on " Innovation by Design", at NPTEL-AICTE during July-Sep 2021
- 111.A eight Week Faculty Development Program on " Entrepreneurship and IP strategy", at NPTEL-AICTE during July-Sep 2021
- 112.A eight Week Faculty Development Program on " DC Microgrid and Control System", at NPTEL-AICTE during Sep-Nov 2020
- 113.A four Week Faculty Development Program on " Python for data science", at NPTEL-AICTE during Sep-Oct 2020
- 114.A eight Week Faculty Development Program on "Advances in UHV Transmission and Distribution ", at NPTEL-AICTE during Jan-Mar 2019
- 115.A eight Week Faculty Development Program on " Advance power electronics and Control ", at NPTEL-AICTE during Jan-Mar 2019
- 116.A eight Week Faculty Development Program on " Enhancing Soft Skills and Personality ", at NPTEL-AICTE during Feb-Apr 2019
- 117.A twelve Week Faculty Development Program on "Joy of computing using Python ", at NPTEL-AICTE during Jan-Apr 2019
- 118.A eight Week Faculty Development Program on "Introduction to smart grid", at NPTEL-AICTE during Aug-Sep 2018
- 119.A eight Week Faculty Development Program on "Electrical distribution system analysis", at NPTEL-AICTE during Aug-Sep 2018
- 120.A eight Week Faculty Development Program on " Advanced linear continuous control systems: Applications with MATLAB programming and Simulink ", at NPTEL-AICTE during Aug-Oct 2018

#### **Coursera & NPTEL**

- 121.Successfully Completed "Introduction to Industry 4.0 and Industrial Internet of Things" an online 3-credit course authorized by IIT Kharagpur, and offered through NPTEL during Jul-Oct 2024
- 122.Successfully Completed "Learning Analytics Tools" an online 3-credit course authorized by IIT Bombay, and offered through NPTEL during Jul-Oct 2024
- 123.Successfully Completed "Soft Skills" an online 3-credit course authorized by IIT Roorkee, and offered through NPTEL during Jul-Oct 2024
- 124.Successfully Completed "Artificial Intelligence and Machine Learning in Materials Engineering" an online 3-credit course authorized by IIT Kanpur, and offered through

- NPTEL during Jul-Oct 2024
125. Successfully Completed "Google Cloud Computing Foundations" an online 3-credit course authorized by IIT Kharagpur, and offered through NPTEL during Jul-Oct 2024
  126. Successfully Completed "Fundamentals of Artificial Intelligence" an online 3-credit course authorized by IIT Guwahati, and offered through NPTEL during Jul-Oct 2024
  127. Successfully Completed "Software Testing" an online 3-credit course authorized by IIT Bangalore, and offered through NPTEL during Jul-Oct 2023
  128. Successfully Completed "Machine Learning and Deep Learning-Fundamentals and Applications" an online 3-credit course authorized by IIT Guwahati, and offered through NPTEL during Jul-Oct 2023
  129. Successfully Completed "Introduction to Machine Learning" an online 2-credit course authorized by IIT Kharagpur and offered through NPTEL during Jul-Sep 2023
  130. Successfully Completed " Cloud Computing" an online 3-credit course authorized by IIT Kharagpur and offered through NPTEL during Jan-April 2023
  131. Successfully Completed " Data Analytics with Python " an online 3-credit course authorized by IIT Roorkee and offered through NPTEL during Jan-April 2023
  132. Successfully Completed "Data Mining" an online 2-credit course authorized by IIT Kharagpur and offered through NPTEL during Jan-March 2023
  133. Successfully Completed "Cloud Computing and Distributed Systems" an online 2-credit course authorized by IIT Kanpur and offered through NPTEL during Jan-March 2023
  134. Successfully Completed " Introduction to Internet of Things " an online 3-credit course authorized by IIT Kharagpur and offered through NPTEL/SWAYAM during Jan-Apr 2022
  135. Successfully Completed " Digital Protection of Power System " an online 2-credit course authorized by IIT Roorkee and offered through NPTEL/SWAYAM during Jan-Mar 2022
  136. Successfully Completed "Innovation by design" an online 1-credit course authorized by IIT Bombay and offered through NPTEL/SWAYAM during Aug-Sep 2021
  137. Successfully Completed " Entrepreneurship and IP Strategy " an online 2-credit course authorized by IIT Kharagpur and offered through NPTEL/SWAYAM during July-Sep 2021
  138. Successfully Completed " Big data computing " an online 2-credit course authorized by IIT Kanpur and offered through NPTEL/SWAYAM during Aug-Oct 2021
  139. Successfully Completed " Accreditation and Outcome Based Learning " an online 2-credit course authorized by IIT Kharagpur and offered through NPTEL/SWAYAM during July-Sep 2021
  140. Successfully Completed " LabVIEW Programming & Its Applications" an online non-credit course authorized Deogiri Institute of Engineering and Management Studies, Aurangabad, during 24-08-2020 to 29-08-2020
  141. Successfully Completed " Deep learning- Primitive Neurons" an online non-credit course authorized GUVI Geek Network Pvt Ltd, Chennai on 24-08-2020
  142. Successfully Completed " Deep learning- Getting started" an online non-credit course authorized GUVI Geek Network Pvt Ltd, Chennai on 20-07-2020
  143. Successfully Completed " Learn to Design your own Solar Home System" an online non-credit course authorized Energy Literacy Drive of the Energy Swaraj Foundation, on 01-07-2020
  144. Successfully Completed "Create Interactive Dashboards with Streamlit and Python" an online non-credit course authorized by Rhyme and offered through Coursera on 16-05-2020
  145. Successfully Completed "Build a Full Website using



- WordPress" an online non-credit course authorized by Rhyme and offered through Coursera on 16-05-2020
146. Successfully Completed "Retrieve Data using Single-Table SQL Queries" an online non-credit course authorized by Rhyme and offered through Coursera on 16-05-2020
  147. Successfully Completed " Neural Network Visualizer Web App with Python" an online non-credit course authorized by Rhyme and offered through Coursera on 16-05-2020
  148. Successfully Completed "Cybersecurity and the Internet of Things" an online non-credit course authorized by University System of Georgia and offered through Coursera on 15-05-2020
  149. Successfully Completed "Python Classes and Inheritance" an online non-credit course authorized by University of Michigan and offered through Coursera on 12-05-2020
  150. Successfully Completed "An Introduction to Interactive Programming in Python (Part 1)" an online non-credit course authorized by Rice University and offered through Coursera on 12-05-2020
  151. Successfully Completed "Python Basics" an online non-credit course authorized by University of Michigan and offered through Coursera on 06-05-2020
  152. Successfully Completed "Electric Power Systems" an online non-credit course authorized by University at Buffalo and The State University of New York and offered through Coursera on 01-05-2020
  153. Successfully Completed "SQL for Data Science" an online non-credit course authorized by University of California, Davis and offered through Coursera on 30-04-2020
  154. Successfully Completed "Data Collection and Processing with Python" an online non-credit course authorized by University of Michigan and offered through Coursera on 30-04-2020
  155. Successfully Completed "An Introduction to Interactive Programming in Python (Part 2)" an online non-credit course authorized by Rice University and offered through Coursera on 28-04-2020
  156. Successfully Completed "Create Your First Python Program" an online non-credit course authorized by Rhyme and offered through Coursera on 24-04-2020
  157. Successfully Completed "AI For Everyone" an online non-credit course authorized by deeplearning.ai and offered through Coursera on 24-04-2020
  158. Successfully Completed "Capstone: Retrieving, Processing, and Visualizing Data with Python" an online non-credit course authorized by University of Michigan and offered through Coursera on 21-04-2020
  159. Successfully Completed "Using Python to Access Web Data" an online non-credit course authorized by University of Michigan and offered through Coursera on 17-04-2020
  160. Successfully Completed "Python Data Structures" an online non-credit course authorized by University of Michigan and offered through Coursera on 17-04-2020
  161. Successfully Completed "Programming for Everybody (Getting Started with Python)" an online non-credit course authorized by University of Michigan and offered through Coursera on 15-04-2020
  162. Successfully Completed "Introduction to Programming with MATLAB" an online non-credit course authorized by Vanderbilt University and offered through Coursera on 09-04-2020
  163. Successfully Completed "Photovoltaic solar energy" an online non-credit course authorized by École Polytechnique and offered through Coursera on 31-03-2020
  164. Successfully Completed "Blockchain 360: A State of the Art for Professionals" an online non-credit course authorized by EIT Digital and offered through Coursera on 28-03-2020
  165. Successfully Completed " DC Microgrid and Control



- System" an online 2-credit course authorized by IIT Roorkee and offered through NPTEL during Sep-Nov 2020
166. Successfully Completed " Power Electronics" an online 3-credit course authorized by IIT Madras and offered through NPTEL during Sep-Dec 2020
167. Successfully Completed " Python for data science" an online 1-credit course authorized by IIT Madras and offered through NPTEL during Sep-Oct 2020
168. Successfully Completed "Introduction to Blockchain Technology and Applications " an online 2-credit course authorized by IIT Kanpur and offered through NPTEL during Feb-April 2020
169. Successfully Completed " Deep Learning - Part 1" an online 3-credit course authorized by IIT Madras and offered through NPTEL during Jan-April 2020
170. Successfully Completed "NBA Accreditation and Teaching-Learning in Engineering (NATE)" an online 3-credit course authorized by IISc Bangalore and offered through NPTEL during Jan-April 2020
171. Successfully Completed "DC Power Transmission Systems " an online 3-credit course authorized by IIT Madras and offered through NPTEL during Jan-April 2020
172. Successfully Completed "Computer Aided Applied Single Objective Optimization " an online 2-credit course authorized by IIT Guwahati and offered through NPTEL during Jan-April 2020
173. Successfully Completed "Design and Simulation of Power conversion using open source tools " an online 1-credit course authorized by IISc Bangalore and offered through NPTEL during Jan-Feb 2020
174. Successfully Completed "Enhancing Soft Skills and Personality " an online 2-credit course authorized by IIT Madras and offered through NPTEL during Feb-Apr 2019
175. Successfully Completed "Joy of computing using Python " an online 3-credit course authorized by IIT Madras and offered through NPTEL during Jan-Apr 2019
176. Successfully Completed "Power System Engineering" an online 3-credit course authorized by IIT Kharagpur and offered through NPTEL during Jan-Apr 2019
177. Successfully Completed "Advance power electronics and Control" an online 2-credit course authorized by IIT Roorkee and offered through NPTEL during Jan-Mar 2019
178. Successfully Completed "Advances in UHV Transmission and Distribution " an online 2-credit course authorized by IISc Bangalore and offered through NPTEL during Jan-Mar 2019
179. Successfully Completed "Advanced linear continuous control systems: Applications with MATLAB programming and Simulink " an online 2-credit course authorized IIT Roorkee and offered through NPTEL during Aug-Oct 2018
180. Successfully Completed "Electrical distribution system analysis " an online 2-credit course authorized IIT Roorkee and offered through NPTEL during Aug-Sep 2018
181. Successfully Completed "Introduction to smart grid " an online 2-credit course authorized IIT Roorkee and offered through NPTEL during Aug-Sep 2018
182. Successfully Completed "Fundamentals of Electrical Engineering " an online 3-credit course authorized IIT Kharagpur and offered through NPTEL during Jul-Oct 2018
183. Successfully Completed "Education Leadership" an online 2-credit course authorized IIT Kharagpur and offered through NPTEL during Feb-Mar 2018
184. Successfully Completed "MATLAB Programming for Numerical computation " an online 2-credit course authorized IIT Madras and offered through NPTEL during Feb-Mar 2018
185. Successfully Completed "Effective Engineering Teaching in Practice " an online 1-credit course authorized IIT Madras and offered through NPTEL during Feb-Mar 2018
186. Successfully Completed "Introduction to Internet of Things " an online 3-credit course authorized IIT Kharagpur and



- offered through NPTEL during Jan-Apr 2018
187. Successfully Completed "Electrical Machines-I" an online 3-credit course authorized IIT Kharagpur and offered through NPTEL during Jul-Oct 2017
  188. Successfully Completed "Design of Photovoltaic systems " an online 3-credit course authorized IISc Bangalore and offered through NPTEL during Jul-Oct 2017
  189. Organized one week short term course on " Big data applications in Electrical Engineering", during 20-02-2023 to 24-02-2023
  190. Organized a webinar on "EV Drive-train Sizing", during 16-04-2022.
  191. Organized Lecture on "IPR-Innovating for better future", during 26-04-2022
  192. Organized A Webinar on "Building product portfolios through innovation" New Product Creation & Commercialization, during 30-01-2021
  193. Organized webinar on "Building product portfolios through innovation" product lifecycles & portfolio management, during 06-02-2021
  194. Organized a Webinar on "Smart Grid for a Green Future", during 23-10-2021
  195. Organized a AICTE-STTP on " Introduction to Research Methodologies and MATLAB Programming for Optimization Techniques", during 25-11-2019 to 30-11-2020

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

**International Journals**

1. B. Mallala, M. F. N. Tajuddin, S. B. Thanikanti and R. R. Manyam (2025), "Experimental Analysis using IoT based Smart Power Quality Analyser System with Remote Data Access and GSM Alerting Mechanism," in *IEEE Access*, doi: 10.1109/ACCESS.2025.3529685
2. Balasubbareddy Mallala, Azka Ihtesham Uddin Ahmed, Sastry V Pamidi, Md Omar Faruque, Rajasekhar Reddy M (2025), Forecasting global sustainable energy from renewable sources using random forest algorithm, *Results in Engineering*, Volume 25, 2025, <https://doi.org/10.1016/j.rineng.2024.103789>
3. A. Manjula, Umesh Trambakrao Kute, Chinthalacheruvu Venkata Krishna Reddy, Balasubbareddy Mallala (2025), Power quality improvement of microgrid for photovoltaic ev charging station with hybrid energy storage system using RPO-ADGAN approach, *Journal of Energy Storage*, Volume 108, 2025, <https://doi.org/10.1016/j.est.2024.114970>
4. Sivakumar Thankaraj Ambujam, Balasubbareddy Mallala, Puneet kumar Aggarwal, Papana Venkata Prasad (2025), Enhanced IoT-enabled community microgrid energy management with hybrid COA-HQNN approach with battery degradation consideration, *Journal of Energy Storage*, Volume 107, 2025, ISSN 2352-152X, <https://doi.org/10.1016/j.est.2024.114739>
5. Banothu. Balasubramanyam, Balasubbareddy Mallala, G. Mallesham (2024), "Performance Enhancement of PMSG Wind Farm with Adaptive Fuzzy-Based PID Regulator in Non-Linear Backstepping Controller," *SSRG International Journal of Electrical and Electronics Engineering*, vol. 11, no. 11, pp. 139-149, 2024. *Crossref*, <https://doi.org/10.14445/23488379/IJEEE-V11I11P115>
6. Balasubbareddy Mallala, Mohammad Faridun Naim Tajuddin and Sudhakar Babu Thanikanti, Design and Development of a Unified Power Quality Conditioner (UPQC) for Power Quality Enhancement in Distribution System, *Recent Advances in Electrical & Electronic Engineering*, 16 Oct 2024 (Accepted)
7. Mallala Balasubbareddy, Tajuddin Faridun Naim Mohammad, Thanikanti Babu Sudhakar, Designing a Power Quality Analyzer Using a Field Programmable GateArray, *Recent Advances in Electrical & Electronic Engineering*; Volume 17, Year 2024, e190624231093. DOI: [10.2174/0123520965314734240606073640](https://doi.org/10.2174/0123520965314734240606073640)
8. Mahammad Ahmad Masood, Reddy Praveen Kumar Y., Mallala Balasubbareddy, Prasad Venkata P., Performance Analysis of Approximate Parallel Prefix Adders Realized with Field-programmable Gate Array Technology, *Recent Advances in Electrical & Electronic Engineering*; Volume 17, Year 2024, e140524229943, DOI: [10.2174/0123520965311872240509092528](https://doi.org/10.2174/0123520965311872240509092528)
9. Srimatha, S., Mallala, B. & Upendar, J. A novel ANFIS-controlled customized UPQC device for power quality enhancement. *Journal of Electrical Systems and Inf Technol* 10, 55 (2023). <https://doi.org/10.1186/s43067-023-00121-1>
10. G. Nagaraju, Rajiv Kumar Nath, P. Chinniah, K. Balasubramanian, S. Kirubakaran, Balasubbareddy Mallala (2024), "A Comparative analysis of Advanced Machine Learning Techniques for Enhancing Brain Tumor Detection", *Journal of Electrical Systems (JES)*, Vol.20, Issue. 2s, pp: 901-909. DOI:

<https://doi.org/10.52783/jes.1687>

11. Basavaraju Bennehalli, Lavakush Singh, Silas Stephen D, P. Venkata Prasad, Balasubbareddy Mallala, A Purna ChandraRao (2024), "Machine learning Approach to Battery Management and Balancing Techniques for Enhancing Electric Vehicle Battery Performance", Journal of Electrical Systems (JES), Vol.20, Issue. 2s, pp: 885-892. DOI: <https://doi.org/10.52783/jes.1670>
12. Varun Krishna Paravasthu, Balasubbareddy Mallala, B.Mangu (2024), Optimal Deployment of DGs, DSTATCOMs and EVCSs in Distribution System using Multi-Objective Artificial Hummingbird Optimization, Journal of Electrical Systems (JES), Vol.20, Issue.3, pp:1709-1729, DOI: <https://doi.org/10.52783/jes.3665>
13. Sriramula Srimatha, Balasubbareddy Mallala, Upendra J (2024), ABC-WOA Optimization Strategy for UPQC Fuzzy PI Tuning, Journal of Electrical Systems (JES), Vol.20, Issue.4s, pp: 2351-2363. DOI: <https://doi.org/10.52783/jes.2440>
14. Banothu.Balasubramanyam, Balasubbareddy Mallala, G.Mallesham, A fuzzy integrated non-linear backstepping control of a grid connected PMSG wind farm, Journal of Electrical Systems (JES), Vol.20, Issue.3, pp: 1983-1991, DOI: <https://doi.org/10.52783/jes.3998>
15. Varun Krishna Paravasthu, Balasubbareddy Mallala and B. Mangu (2024), An Enhanced Multi-Objective Evolutionary Optimization Algorithm based on Decomposition for Optimal Placement of Distributed Generation and EV Fast Charging Stations in Distribution System. IJEER 12(2), 575-580. DOI: 10.37391/IJEER-120232.
16. **Balasubbareddy Mallala** (2023), "MATLAB software/code for optimal placement of GIPFC device in power networks using AALO algorithm", Software Impacts, Vol. 17, September 2023, pp. 1-5, <https://doi.org/10.1016/j.simpa.2023.100550>
17. N. V. Rajeesh Kumar, N. Jaya Lakshmi, **Balasubbareddy Mallala**, Vaishali Jadhav (2023), "Secure trust aware multi-objective routing protocol based on battle competitive swarm optimization in IoT", Artificial Intelligence Review, Vol.56, Issue.2, October 2023, pp.1685-1709. <https://doi.org/10.1007/s10462-023-10560-x>
18. **Balasubbareddy Mallala**, Venkata Prasad Pavana, Kowstubha Palle (2023), "Multi-Objective Optimization in the Presence of OGIPFC using NSMMP Algorithm", Recent Advances in Electrical & Electronic Engineering, Vol. 17, Issue 1, pp: 60-81, <https://benthamscience.com/article/131470>
19. **Balasubbareddy Mallala**, Divyanshi Dwivedi (2022), "Salp swarm algorithm for solving optimal power flow problem with thyristor-controlled series capacitor", Journal of Electronic Science and Technology, 2022, Volume 20, Issue 2, pp. 1-9. <https://doi.org/10.1016/j.jnlest.2022.100156>
20. **M Balasubbareddy** (2016) "Multi-objective optimization in the presence of ramp-rate limits using non-dominated sorting hybrid fruit fly algorithm", Ain Shams Engineering Journal, Volume 7, Issue 2 pp. 895-905, <https://doi.org/10.1016/j.asej.2016.01.005>
21. **M Balasubbareddy**, S.Sivanaga Raju, Chintalapudi V. Suresh (2015), "Multi-objective optimization in the presence of practical constraints using non-dominated sorting hybrid cuckoo search algorithm", Engineering Science and Technology, an International Journal, Volume 18, Issue 4 pp.603-615, <https://doi.org/10.1016/j.ijestch.2015.04.005>
22. **M Balasubbareddy**, Y.P. Obulesh, S. Sivanaga Raju, Chintalapudi V. Suresh (2015) "Mathematical modelling and analysis of generalised interline power flow controller: an effect of converter location", Journal of Experimental & Theoretical Artificial Intelligence, Volume 28, Issue 4 pp: 1-17, <https://doi.org/10.1080/0952813X.2015.1042529>
23. **M Balasubbareddy**, S Sivanaga Raju, Ch Venkata Suresh, AV Naresh Babu, D Srilatha (2017) "A Non-Dominated Sorting Hybrid Cuckoo Search Algorithm for Multi-Objective Optimization in the Presence of FACTS Devices", Russian Electrical Engineering, Volume 88, Issue 1 pp. 44-53, <https://doi.org/10.3103/S1068371217010059>
24. **Balasubbareddy Mallala**, Venkata Prasad Pavana, Ravindra Sangu, Kowstubha Palle and Venkata Krishna Reddy Chinthaleruvu (2022), "Multi-Objective Optimal Power Flow Solution Using a Non-Dominated Sorting Hybrid Fruit Fly-Based Artificial Bee Colony", Energies, 2022, Volume 15, Issue 11 pp. 1-16, <https://doi.org/10.3390/en15114063>
25. **Mallala Balasubbareddy**, Divyanshi Dwivedi, Garikamukkala Venkata Krishna Murthy, Kotte Sowjan Kumar (2023), "Optimal power flow solution with current injection model of generalized interline power flow controller using ameliorated ant lion optimization", International Journal of Electrical and Computer Engineering, Vol. 13, Issue 1, February 2023, pp. 1060-1077, DOI: <http://doi.org/10.11591/ijece.v13i1.pp1060-1077>
26. **M. Balasubbareddy**, G V K Murthy, K. Sowjan Kumar (2021), "Performance evaluation of different structures of power system stabilizers", International Journal of Electrical and Computer Engineering, Volume 11, Issue 1, pp. 114-123, <http://doi.org/10.11591/ijece.v11i1.pp114-123>
27. G. Nagaraju, Rajiv Kumar Nath, P. Chinniah, K.Balasubramanian, S. Kirubakaran, **Balasubbareddy Mallala** (2024), "A Comparative analysis of Advanced Machine Learning Techniques for Enhancing Brain Tumor Detection", Journal of Electrical Systems (JES), Vol.20, Issue. 2s, pp: 901-909. DOI: <https://doi.org/10.52783/jes.1687>
28. Basavaraju Bennehalli, Lavakush Singh, Silas Stephen D, P. Venkata Prasad, **Balasubbareddy Mallala**, A Purna ChandraRao (2024), "Machine learning Approach to Battery Management and Balancing Techniques for Enhancing Electric Vehicle Battery Performance", Journal of Electrical



- Systems (JES), Vol.20, Issue. 2s, pp: 885-892. DOI: <https://doi.org/10.52783/jes.1670>
29. Varun Krishna Paravasthu, **Balasubbareddy Mallala**, B.Mangu (2024), Optimal Deployment of DGs, DSTATCOMs and EVCs in Distribution System using Multi-Objective Artificial Hummingbird Optimization, Journal of Electrical Systems (JES), Vol.20, Issue.3, pp:1709-1729, DOI: <https://doi.org/10.52783/jes.3665>
  30. Sriramula Srimatha, **Balasubbareddy Mallala**, Upendra J (2024), ABC-WOA Optimization Strategy for UPQC Fuzzy PI Tuning, Journal of Electrical Systems (JES), Vol.20, Issue.4s, pp: 2351-2363. DOI: <https://doi.org/10.52783/jes.2440>
  31. Banothu.Balasubramanyam, **Balasubbareddy Mallala**, G.Mallesham, A fuzzy integrated non-linear backstepping control of a grid connected PMSG wind farm, Journal of Electrical Systems (JES), Vol.20, Issue.3, pp: 1983-1991, DOI: <https://doi.org/10.52783/jes.3998>
  32. **M. Balasubbareddy**, D. Dwivedi, P. V. Prasad (2023), "Optimal power flow solution using HFSS Algorithm", Journal of Electrical and Electronics Engineering Research, Volume 12, Issue 1, March 2023, pp. 1-11, <http://www.academicjournals.org/JEEER>
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