

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



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

#### Work Experience

Teaching 20 Years  
 Research 14 years  
 Industry --  
 Others --

Area of Specialization Power systems, Power Electronics, Soft computing Techniques

#### 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. Member, IAENG Number: 148199
5. Fellow Member, ISRD Number: F3140900251
6. Fellow Member, IRED Number: SNM10100057613
7. Member, Society for Engineering Education Enrichment, SEEE Number: IND TN 9999 9999 7667 (2020)
1. Member, College Academic Committee in CBIT from 17-07-2023 to till date
2. Member, Anti Ragging Committee in CBIT from 31-07-2023 to till date
3. Member, Intellectual Property Right (IPR) Cell in CBIT from 31-07-2023 to till date
4. Member, Exams & Results Committee in CBIT from 31-07-2023 to till date
5. Member, Library Committee in CBIT from 31-07-2023 to till date
6. Member, Planning & Evaluation Committee in CBIT from 31-07-2023 to till date
7. Convener, Ethics Committee in CBIT from 27-11-2021 to 30-07-2023
8. Worked as R&D Coordinator in CBIT from 17-01-2019 to till date
9. Member, Program Content Committee, from 31-01-2020 to 11-04-2021
10. Member, Disciplinary Committee, from 25-02-2020 to 11-04-2021
11. Member, Institute Innovation Cell, from 25-02-2020 to 11-04-2021
12. Member, NBA Accreditation Committee, from 08-06-2021 to date
13. Member, Institute Industry Cell, from 12-04-2021 to date
14. Member, Innovation-Teaching, Learning & Evaluation Committee, from 12-04-2021 to till date
15. Member, Patenting Committee, from 12-04-2021 to date
1. Member Board of Studies
2. Convener, Departmental Research Committee
3. Member, Course Expert Group
4. In-charge, Honours degree

#### Responsibilities held at Institution Level

#### Responsibilities held at Department Level

#### Research Guidance

#### Awards Received

- 04 (In Progress)
1. Best Researcher of the year 2009 award from JNT University, Kakinada, 01-11-2009
  2. National Award for Teaching Excellence - 2013 from Indus Foundation at Hyderabad, 11-11-2013
  3. Research Excellence -2016 from Indus Foundation at Bangalore, 23-09-2016
  4. Educational Leadership-2017 from Indo-Global Education Summit and Expo 2017 at Hyderabad, 19-07-2017

5. Adarsh Vidya Saraswati Rashtriya Puraskar (National Award of Excellence 2018) from Global Management Council, Ahmedabad, 02-10-2018
6. Best Faculty from EET CRS Academic Brilliance Awards-19, Noid, 27-01-2019
7. Honorable Jury mention (Scientist category) from EET CRS 4th South Asian Education Awards-19, Hyderabad, 10-03-2019
8. Excellence in Research from EET CRS 8th Academic Brilliance Awards-2020, 08-03-2020
9. Dr. Radhakrishna Award for Engineering College Teacher Award-2020, from Society for Engineering Education Enrichment SEE Awards 2020, 20-12-2020
10. Best Teacher of the year 2021 from Chaitanya Bharathi Institute of Technology, Hyderabad, 06-03-2021
11. Global eminent scientist award 2021 from Vij Trust Thirunindravur, TN, 29-03-2021
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
13. Award of Excellence in Research 2022, IJMTST Excellence awards 2022 from Vijayawada, 25-09-2022
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
15. Received Best Paper Award during 5th Research Day 2023, on 18th November 2023, at Chaitanya Bharathi Institute of Technology, Hyderabad

Courses Handled at Under Graduate / Post Graduate Level.

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.

No. of Papers Published

National Journals – 01                      International Journals – 77  
 National Conference – 02                      International Conference – 22

**Completed Projects: 01**

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 Efficient Low Cost Flexible Quality Conditioner to mitigate Power Quality Issue

**Ongoing Projects: 02**

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

Projects Carried out

**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

Patents

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)"

4. M Balasubbareddy, Divyanshi Dwivedi, P. Venkata Prasad, filed 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"

#### 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

#### Technology Transfer

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1. 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
2. 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
3. Resource person for the invited talk on "Machine Learning for Engineering Applications", EEE Dept. Ramireddy Subbarami Reddy Engineering College, Kavali, 06-01-2023
4. Resource person for the invited talk on "Introduction to Arduino Programming", EEE Dept. Ramireddy Subbarami Reddy Engineering College, Kavali, 20-03-2023
5. Resource person for the invited talk on "Hands-on MATLAB Programming", EEE Dept. Newton's Institute of Engineering, Macherla, 16-05-2022
6. 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
7. 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

#### Invited Speaker

8. 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
9. 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
10. 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
11. Resource person for the Webinar on "Implementation of Teaching Learning Based Optimization (TLBO) in MATLAB", EEE Dept. SVCET, Chittoor, 15-06-2020
12. 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
13. Resource person for the Webinar on "Machine learning for Engineering Applications", EEE & ECE Dept. SV College of Engineering, Kadapa, 14-05-2020
14. 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.
15. Resource person for the three-day workshop on "Simulation of

- Power Electronic Converters-2018", EEE Dept. CBIT, 28-02-2018
16. Resource person for the one day guest lecture on "Power Electronic", EEE Dept. Avanthi Institute of Engineering and Technology, 28-10-2017
  17. 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
  18. 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
  19. 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

No. of Books/Chapter Published with details

1. Design analysis of support Insulators for HVDC Gas Insulated Switchgear, Integrated Publications, New Delhi, edition-1(2023), ISBN: 978-93-5834-003-7
2. Efficient Estimation of Dilution of Precision (DoP) for GPS AND IRNSS Systems, AkiNik Publications, New Delhi, ISBN: 978-93-5570-749-9
3. 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
4. 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
5. 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
6. Generation and Utilization of electrical energy" Pearson publications, Delhi, ISBN: 9789332515673, June 2010
7. Electric Energy: Generation, Utilization and Conservation -Pearson publications, ISBN: 978813167740, e-ISBN: 9788131798775, 2011, Delhi
8. Power semiconductor drives", PHI learning private limited, ISBN-978-81-203-3658-2, 2009, New Delhi
9. Power electronics", PHI learning private limited, ISBN-978-81-203-3840-1, 2010, New Delhi
10. HVDC Transmission", Ridged Publications, Hyderabad

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

1. 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
2. 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
3. One Week AICTE Recognized Faculty Development Programme on "IoT and its Applications" at NITTTR, Chandigarh, during 06-11-2023 to 10-11-2023
4. One Week AICTE Recognized Faculty Development Programme on "IoT's and Sensor Networks" at NITTTR, Chandigarh, during 09-10-2023 to 13-10-2023
5. 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
6. 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
7. One Week AICTE Recognized Faculty Development Programme on "OBE and NBA Accreditation" at CBIT, Hyderabad, during 07-08-2023 to 11-08-2023

8. 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
9. One Week online short-term training program on “Energy Efficient and Decarbonisation Technologies” at CBIT, Hyderabad, during 05-06-2023 to 09-06-2023
10. One Week online short-term training program on “Raspberry Pi and its Interfacing” at CBIT, Hyderabad, during 27-02-2023 to 03-03-2023
11. 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
12. One Week online short-term training program on “Power Quality Problems and solutions” at NITTTR, Chandigarh, during 30-01-2023 to 03-02-2023
13. 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
14. One Week online short-term training program on “LabVIEW Programming” at NITTTR, Chandigarh, during 08-08-2022 to 12-08-2022
15. 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
16. One Week online short-term training program on “Smart Materials Processing and Applications” at NITTTR, Chandigarh, during 25-07-2022 to 29-07-2022
17. 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
18. 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
19. A one week AICTE Recognized Faculty Development Programme on “Smart Grid Technologies”, organized by NITTTR, Chandigarh, during 04-04-2022 to 08-04-2022
20. 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
21. 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
22. A five day Online AICTE Recognized Faculty Development Programme on “IoT's and Sensor Networks”, at NITTTR, Chandigarh, during 20-09-2021 to 24-09-2021
23. 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
24. 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
25. 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
26. 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
27. 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
28. 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
29. 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

30. One Week online National Faculty Development Program on "Computational Intelligence Techniques for Machine Learning" Jaypee University of Information Technology, Waknaghat, during 31-08-2020 to 05-09-2020
31. 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
32. A Webinar on "Island Innovation in India" at Island Innovation & Renewable Energy Society of India (RESI), on 05-09-2020
33. 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
34. 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
35. 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
36. A Webinar on "Use of LMS, virtual teaching and OBE software for Engineering College" at Vmedulife software services, Pune, on 20-08-2020
37. 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
38. One Week online National Faculty Development Program on "Unlockdown 3.0: A period of Reorienting the Teaching & Learning" at GITAM School of Science, Bengaluru, during 17-08-2020 to 23-08-2020
39. A Webinar on "Transforming Youth into Responsible Citizens and Engage them in developing the Nation" at Lead India Foundation, Hyderabad, on 15-08-2020
40. One Week online National Faculty Development Program on "Current Research Trends in Power Systems and Power Electronics" at Vignan's Nirula Institute of Technology and Science for women, Guntur, during 20-07-2020 to 25-07-2020
41. 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
42. A Webinar on "Online Teaching" at VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, during 13-07-2020 to 14-07-2020
43. A Webinar on "Research Opportunities in Electrical Drives" at Sharnbasva University on 10-07-2020
44. A Webinar on "Employability post COVID Era: Expectation of Industry Vs Education System's Preparedness" at Assocham India on 10-07-2020
45. A Webinar on "Applied Artificial Intelligence" at PSG Institute of Technology and Applied Research on 08-07-2020
46. A five day online Faculty Development Program on "AI Techniques to Electrical Engineering" at JNTU, Hyderabad, during 06-07-2020 to 10-07-2020
47. 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
48. One Week online National Faculty Development Program on "Arduino" at S.V Engineering College, Tirupati, during 29-06-2020 to 03-07-2020
49. 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

50. 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
51. A Webinar on "Tools for Documentation: Conference, Journal and Thesis Writing" at Vaagdevi College of Engineering, Hyderabad, on 13-06-2020
52. A Webinar on "CO-PO attainment computation and outcomes analysis" at inpods-Ed tech on 13-06-2020
53. 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
54. 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
55. 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
56. 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
57. A Webinar on "Recent Trends In Electrical Engineering" at MLR Institute of Technology, Hyderabad, on 30-05-2020
58. 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
59. 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
60. 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
61. 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
62. 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
63. 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
64. A online seminar on "Quality Assurance in Online Teaching – Learning & Evaluation" at Vellore Institute of Technology, Vellore, India, on 19-05-2020
65. A two day online workshop on "Power Train and Electromagnetic Transients" at PWSIM solutions for Electrification, during 18-05-2020 to 19-05-2020
66. 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
67. 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
68. A one day online workshop on "Electromagnetic and Thermal simulation of PMSM (IPM) Motor" at Altair Webinar (ANZ ASEAN India), on 07-05-2020
69. 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
70. A online Training on "Internet of Things" at MSME-Technology Development Centre (PPDC), Government of India, during 27-04-2020 to 01-05-2020

71. A Webinar on "Employability Skills In Curriculum Design" at Audisankara College Of Engineering & Technology, on 26-04-2020
72. A Webinar on "Online Teaching Learning and online Assessment Demo" at inpods-Ed tech on 24-04-2020
73. A Webinar on "NAAC accreditation Management System demo" at inpods-Ed tech on 17-04-2020
74. A Webinar on "Identifying weaker students and remedial action" at inpods-Ed tech on 04-04-2020
75. 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
76. A one day workshop on "Smart Research publications in Referred Journals" at SV College of Engineering, Tirupati, on 17-06-2017

#### **NPTEL-AICTE FDP**

77. A Twelve Week Faculty Development Program on "Software Testing", at NPTEL-AICTE during Jul-Oct 2023
78. A twelve Week Faculty Development Program on " Machine Learning and Deep Learning-Fundamentals and Applications ", at NPTEL-AICTE during Jul-Oct 2023
79. A eight Week Faculty Development Program on "Introduction to Machine Learning", at NPTEL-AICTE during Jul-Sep 2023
80. A eight Week Faculty Development Program on " Cloud Computing", at NPTEL-AICTE during Jan-April 2023
81. A eight Week Faculty Development Program on " Data Analytics with Python", at NPTEL-AICTE during Jan-April 2023
82. A eight Week Faculty Development Program on " Data Mining", at NPTEL-AICTE during Jan-Mar 2023
83. A eight Week Faculty Development Program on "Cloud Computing and Distributed Systems", at NPTEL-AICTE during Jan-Mar 2023
84. A eight Week Faculty Development Program on " Digital protection of Power system", at NPTEL-AICTE during Jan-Mar 2022
85. A eight Week Faculty Development Program on " Big data computing", at NPTEL-AICTE during Aug-Oct 2021
86. A eight Week Faculty Development Program on " Big data computing", at NPTEL-AICTE during Aug-Sep 2021
87. A four Week Faculty Development Program on " Innovation by Design", at NPTEL-AICTE during July-Sep 2021
88. A eight Week Faculty Development Program on " Entrepreneurship and IP strategy", at NPTEL-AICTE during July-Sep 2021
89. A eight Week Faculty Development Program on " DC Microgrid and Control System", at NPTEL-AICTE during Sep-Nov 2020
90. A four Week Faculty Development Program on " Python for data science", at NPTEL-AICTE during Sep-Oct 2020
91. A eight Week Faculty Development Program on "Advances in UHV Transmission and Distribution ", at NPTEL-AICTE during Jan-Mar 2019
92. A eight Week Faculty Development Program on " Advance power electronics and Control ", at NPTEL-AICTE during Jan-Mar 2019
93. A eight Week Faculty Development Program on " Enhancing Soft Skills and Personality ", at NPTEL-AICTE during Feb-Apr 2019
94. A twelve Week Faculty Development Program on "Joy of computing using Python ", at NPTEL-AICTE during Jan-Apr 2019
95. A eight Week Faculty Development Program on "Introduction to smart grid", at NPTEL-AICTE during Aug-Sep 2018
96. A eight Week Faculty Development Program on "Electrical distribution system analysis", at NPTEL-AICTE during Aug-Sep 2018
97. 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**

98. Successfully Completed "Software Testing" an online 3-credit



- course authorized by IIIT Bangalore, and offered through NPTEL during Jul-Oct 2023
99. 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
  100. Successfully Completed "Introduction to Machine Learning" an online 2-credit course authorized by IIT Kharagpur and offered through NPTEL during Jul-Sep 2023
  101. Successfully Completed " Cloud Computing" an online 3-credit course authorized by IIT Kharagpur and offered through NPTEL during Jan-April 2023
  102. Successfully Completed " Data Analytics with Python " an online 3-credit course authorized by IIT Roorkee and offered through NPTEL during Jan-April 2023
  103. Successfully Completed "Data Mining" an online 2-credit course authorized by IIT Kharagpur and offered through NPTEL during Jan-March 2023
  104. Successfully Completed "Cloud Computing and Distributed Systems" an online 2-credit course authorized by IIT Kanpur and offered through NPTEL during Jan-March 2023
  105. 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
  106. 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
  107. Successfully Completed "Innovation by design" an online 1-credit course authorized by IIT Bombay and offered through NPTEL/SWAYAM during Aug-Sep 2021
  108. Successfully Completed " Entrepreneurship and IP Strategy " an online 2-credit course authorized by IIT Kharagpur and offered through NPTEL/SWAYAM during July-Sep 2021
  109. Successfully Completed " Big data computing " an online 2-credit course authorized by IIT Kanpur and offered through NPTEL/SWAYAM during Aug-Oct 2021
  110. 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
  111. 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
  112. Successfully Completed " Deep learning- Primitive Neurons" an online non-credit course authorized GUVI Geek Network Pvt Ltd, Chennai on 24-08-2020
  113. Successfully Completed " Deep learning- Getting started" an online non-credit course authorized GUVI Geek Network Pvt Ltd, Chennai on 20-07-2020
  114. 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
  115. 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
  116. Successfully Completed "Build a Full Website using WordPress" an online non-credit course authorized by Rhyme and offered through Coursera on 16-05-2020
  117. 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
  118. 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
  119. 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
  120. Successfully Completed "Python Classes and Inheritance" an online non-credit course authorized by University of Michigan and offered through Coursera on 12-05-2020

121. 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
122. Successfully Completed "Python Basics" an online non-credit course authorized by University of Michigan and offered through Coursera on 06-05-2020
123. 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
124. 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
125. 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
126. 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
127. Successfully Completed "Create Your First Python Program" an online non-credit course authorized by Rhyme and offered through Coursera on 24-04-2020
128. Successfully Completed "AI For Everyone" an online non-credit course authorized by deeplearning.ai and offered through Coursera on 24-04-2020
129. 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
130. 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
131. Successfully Completed "Python Data Structures" an online non-credit course authorized by University of Michigan and offered through Coursera on 17-04-2020
132. 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
133. Successfully Completed "Introduction to Programming with MATLAB" an online non-credit course authorized by Vanderbilt University and offered through Coursera on 09-04-2020
134. Successfully Completed "Photovoltaic solar energy" an online non-credit course authorized by École Polytechnique and offered through Coursera on 31-03-2020
135. 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
136. Successfully Completed "DC Microgrid and Control System" an online 2-credit course authorized by IIT Roorkee and offered through NPTEL during Sep-Nov 2020
137. Successfully Completed "Power Electronics" an online 3-credit course authorized by IIT Madras and offered through NPTEL during Sep-Dec 2020
138. Successfully Completed "Python for data science" an online 1-credit course authorized by IIT Madras and offered through NPTEL during Sep-Oct 2020
139. 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
140. Successfully Completed "Deep Learning - Part 1" an online 3-credit course authorized by IIT Madras and offered through NPTEL during Jan-April 2020
141. 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
142. Successfully Completed "DC Power Transmission Systems" an online 3-credit course authorized by IIT Madras and offered through NPTEL during Jan-April 2020
143. 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
144. 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
  145. Successfully Completed "Enhancing Soft Skills and Personality " an online 2-credit course authorized by IIT Madras and offered through NPTEL during Feb-Apr 2019
  146. Successfully Completed "Joy of computing using Python " an online 3-credit course authorized by IIT Madras and offered through NPTEL during Jan-Apr 2019
  147. Successfully Completed "Power System Engineering" an online 3-credit course authorized by IIT Kharagpur and offered through NPTEL during Jan-Apr 2019
  148. Successfully Completed "Advance power electronics and Control" an online 2-credit course authorized by IIT Roorkee and offered through NPTEL during Jan-Mar 2019
  149. 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
  150. 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
  151. Successfully Completed "Electrical distribution system analysis " an online 2-credit course authorized IIT Roorkee and offered through NPTEL during Aug-Sep 2018
  152. Successfully Completed "Introduction to smart grid " an online 2-credit course authorized IIT Roorkee and offered through NPTEL during Aug-Sep 2018
  153. Successfully Completed "Fundamentals of Electrical Engineering " an online 3-credit course authorized IIT Kharagpur and offered through NPTEL during Jul-Oct 2018
  154. Successfully Completed "Education Leadership" an online 2-credit course authorized IIT Kharagpur and offered through NPTEL during Feb-Mar 2018
  155. Successfully Completed "MATLAB Programming for Numerical computation " an online 2-credit course authorized IIT Madras and offered through NPTEL during Feb-Mar 2018
  156. Successfully Completed "Effective Engineering Teaching in Practice " an online 1-credit course authorized IIT Madras and offered through NPTEL during Feb-Mar 2018
  157. Successfully Completed "Introduction to Internet of Things " an online 3-credit course authorized IIT Kharagpur and offered through NPTEL during Jan-Apr 2018
  158. Successfully Completed "Electrical Machines-I" an online 3-credit course authorized IIT Kharagpur and offered through NPTEL during Jul-Oct 2017
  159. Successfully Completed "Design of Photovoltaic systems " an online 3-credit course authorized IISc Bangalore and offered through NPTEL during Jul-Oct 2017
  160. Organized one week short term course on " Big data applications in Electrical Engineering", during 20-02-2023 to 24-02-2023
  161. Organized a webinar on "EV Drive-train Sizing", during 16-04-2022.
  162. Organized Lecture on "IPR-Innovating for better future", during 26-04-2022
  163. Organized A Webinar on "Building product portfolios through innovation" New Product Creation & Commercialization, during 30-01-2021
  164. Organized webinar on "Building product portfolios through innovation" product lifecycles & portfolio management, during 06-02-2021
  165. Organized a Webinar on "Smart Grid for a Green Future", during 23-10-2021
  166. Organized a AICTE-STTP on " Introduction to Research Methodologies and MATLAB Programming for Optimization Techniques", during 25-11-2019 to 30-11-2020

## International Journals

1. Balasubbarreddy Mallala (2023), MATLAB software/code for optimal placement of GIPFC device in power networks using AALO algorithm, *Software Impacts*, Volume 17, September 2023, 100550, <https://doi.org/10.1016/j.simpa.2023.100550>
2. Srimatha, S., Mallala, B. & Upendar, J. A (2023), 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>
3. Rajeesh Kumar, N.V., Jaya Lakshmi, N., Mallala, B. et al.(2023), Secure trust-aware multi-objective routing protocol based on battle competitive swarm optimization in IoT. *Artif Intell Rev* 56 (Suppl 2), 1685–1709 (2023). <https://doi.org/10.1007/s10462-023-10560-x>
4. K.Vinod Kumar, M.Balasubbarreddy (2023), "Controlling of Solar Based Electric Vehicle Charging Station Through Intelligent Controller for G2v And V2g Modes", *International Journal of Emerging Technologies and Innovative Research* (www.jetir.org), ISSN:2349-5162, Vol.10, Issue 10, page no.f444-f451, October-2023, Available: <https://www.jetir.org/papers/JETIR2310453.pdf>
5. Mallala Balasubbarreddy, 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>
6. M. Balasubbarreddy, 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>
7. Balasubbarreddy Mallala, Venkata Prasad Pavana, Kowstubha Palle (2023), "Multi-Objective Optimization in the Presence of OGIPFC using NSMMP Algorithm", *Recent Advances in Electrical & Electronic Engineering*, <https://doi.org/10.2174/2352096516666230504105054>
8. M Balasubbarreddy (2022), "Optimal Power Flow Solution Using Ameliorated Ant Lion Optimization Algorithm", *International Journal of Mechanical Engineering*, Vol.7, Issue.01, January 2022, pp. 2407-2414, [https://www.kalaharijournals.com/resources/281-300/IJME\\_Vol7.1\\_289.pdf](https://www.kalaharijournals.com/resources/281-300/IJME_Vol7.1_289.pdf)
9. Balasubbarreddy Mallala, Venkata Prasad Pavana, Ravindra Sangu, Kowstubha Palle and Venkata Krishna Reddy Chinthalacheruvu (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>
10. Balasubbarreddy 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>
11. M. Balasubbarreddy, Divyanshi Dwivedi, GVK Murthy, K Sowjan kumar (2022), "Optimal Power Flow Solution with Current Injection model of GIPFC using AALOA", *International Journal of Electrical and Computer Engineering*, Vol. 13, No. 1, February 2023: 1060-1077, <http://doi.org/10.11591/ijece.v13i1.pp1060-1077>
12. M Balasubbarreddy (2022), "Optimal Power Flow Solution Using Ameliorated Ant Lion Optimization Algorithm", *International Journal of Mechanical Engineering*, Vol.7, Issue.01, January 2022, [https://kalaharijournals.com/resources/281-300/IJME\\_Vol7.1\\_289.pdf](https://kalaharijournals.com/resources/281-300/IJME_Vol7.1_289.pdf)
13. M Balasubbarreddy, P Venkata Prasad, Saini Varshini (2021), "A Novel Power Quality Conditioner with UPQC", *GIS Science journal*, Vol.8, Issue 3, pp. 1171-1179, March 2021 DOI:20.18001.GSJ.2021.V8I3.21.36786
14. Saini Varshini and M Balasubbarreddy (2021), "Power Quality Improvement using Fuzzy Logic Controller Based UPQC", *PROTEUS JOURNAL*, Vol.12, Issue 6 pp.1-9, June 2021 <https://doi.org/10.37896/PJ12.06/0351>
15. M. Balasubbarreddy (2021), "Single Objective Power Flow Problem Analysis Using HCSA with IPFC", *Aegaeum Journal*, Volume 9, Issue 1, pp.30-37
16. M. Balasubbarreddy (2021), "Deep Learning Based Optimal Dc Microgrid System with IRNSS synchronization", *Aegaeum Journal*, Volume 9, Issue 1, pp.38-42
17. M. Balasubbarreddy (2021), "Multi-objective optimal power flow using NSGSA with IPFC", *Aegaeum Journal*, Volume 9, Issue 1, pp.43-51
18. M. Balasubbarreddy, 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>
19. M Harika, M Balasubbarreddy (2020), "A Novel Squirrel Search Optimization Algorithm for Solving Optimal Power Flow Problem with TCSC Device", *Journal of Interdisciplinary Cycle Research*, Vol.12, Issue 7, July 2020, pp. 1304-1310 DOI:18.0002.JICR.2020.V12I7.008301.3171300
20. Dhiraj Kumar Singh, Subodh Srivastava, R.K.Khanna, M. Balasubbarreddy (2020), "Optimal placement of IPFC for solving optimal power flow problems using Hybrid Sine-Cosine Algorithm", *Elementary Education Online*, Vol 19, Issue 4, pp.3064-3080, September 2020, doi: 10.17051/ilkonline.2020.04.764681
21. M. Balasubbarreddy (2020) "Performance and cost analysis for 400kWp Grid Connected PV system in Tirupati using PVsyst software", *International Journal of Advanced Science and Technology*, Volume 29, Issue 12s pp. 2402-2401
22. M. Balasubbarreddy (2020), "Design and Development of a Hybrid Micro Grid System using State of Art Multi-Objective Optimization Technique", *Journal of Interdisciplinary Cycle Research*, Volume 12, Issue 6, pp. 1404-1410
23. M. Balasubbarreddy, Divyanshi Dwivedi (2020) "Squirrel Search Algorithm for Solving Optimal Reactive

- Power Dispatch Problem with FACTS Device”, International Journal of Innovative Technology and Exploring Engineering, Volume 9, Issue 3 pp. 854-858, <https://www.ijitee.org/wp-content/uploads/papers/v9i3/C8577019320.pdf>
24. M Balasubbarreddy (2020) “Security Constrained Optimal Power Flow Problem Solution with Practical Constraints using HALOA”, International Journal of Innovative Technology and Exploring Engineering, Volume 9, Issue 3 pp.689-695, <https://www.ijitee.org/wp-content/uploads/papers/v9i3/C8376019320.pdf>
  25. P V Prasad, M Balasubbarreddy (2019) “Distribution Network Reconfiguration using Ga & BPSO”, i-manager’s Journal on Power Systems Engineering, Volume 6, Issue 4 pp. 37-44, <https://www.imanagerpublications.com/article/15802>
  26. M Balasubbarreddy, Divyanshi Dwivedi (2019) “Hybrid Emperor Penguin Optimization algorithm for solving Optimal Power Flow Problems”, Pramana Research Journal, Volume 9, Issue 4 pp. 279-289, <https://www.pramanaresearch.org/gallery/prj-p685.pdf>
  27. M Balasubbarreddy, Divyanshi Dwivedi (2019) “Optimal Power Flow Solution for multi-fuel system using Tree Growth Algorithm”, Pramana Research Journal, Volume 9, Issue 4, pp. 186-196, <https://www.pramanaresearch.org/gallery/prj-p673.pdf>
  28. M Balasubbarreddy, Divyanshi Dwivedi (2019) “Emperor Penguin Optimization Algorithm for solving Multi-Fuel Non-Convex Economic Load Dispatch Problems”, Pramana Research Journal, Volume 9, Issue 4, pp.330-340, <https://www.pramanaresearch.org/gallery/prj-p661.pdf>
  29. M Balasubbarreddy, Divyanshi Dwivedi and D Sathish (2019) “Optimal Power Flow solution using Spotted Hyena Optimization Algorithm”, Pramana Research Journal, Volume 9, Issue 3 pp. 147-158, <https://www.pramanaresearch.org/gallery/prj-p553.pdf>
  30. Divyanshi Dwivedi, M Balasubbarreddy (2019) “Optimal Power Flow using Hybrid Ant Lion Optimization Algorithm”, Pramana Research Journal, Volume 9, Issue 2 pp. 368-380, <https://www.pramanaresearch.org/gallery/prj-p534.pdf>
  31. K. Sri KavyaDurga, M. Balasubbarreddy (2018) “Design and Simulation of Three Level Neutral Point Clamped Inverter Fed Induction Motor Drive”, EJECE, European Journal of Electrical and Computer Engineering, Volume 2, Issue 5 pp. 22-30, <https://doi.org/10.24018/ejece.2018.2.5.34>
  32. M Balasubbarreddy, Prasad P V and Bhanu Chandar A (2017) “Simplified Technique for Newton-Raphson power flow solution in polar form using hybrid bus”, Power Research - A Journal of CPRI, Volume 13, Issue 3 pp. 395-404, <https://www.cprijournal.in/index.php/pr/article/view/93>
  33. M Balasubbarreddy, 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>
  34. M Balasubbarreddy (2017) “Multi-Objective Optimization incorporating TCSC with ramp-rate limits and prohibited operating zones using NSHCSA”, Power Research - A Journal of CPRI, Volume 13, Issue 2 pp. 203-216, <https://www.cprijournal.in/index.php/pr/article/view/108>
  35. Podapati Chowdary, P Yedukondalu, M Balasubbarreddy (2016) “A New Proposal for Standalone Applications in DG”, International journal of research in technological studies, volume 3, Issue 3, pp. 13-17
  36. M Balasubbarreddy, M Sireesha (2016) “A Novel Soft Communicating Full Bridge Bidirectional Isolated Dc-Dc Converter for an Energy Storage System with Galvanic Isolation Using Electric Double Layer Capacitor”, International Journal of Research in Computer and Communication Technology, Volume 5, Issue 2 pp. 59-65
  37. M Balasubbarreddy (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>
  38. Kaluri Ramanaih, M Balasubbarreddy (2016), “PWM Current-Source Inverter Fed Induction Motor Drive with a New Stator Current Control Method”, International Journal of Scientific Research in Science, Engineering and Technology, Volume 2, Issue 3 pp.872-880
  39. Manohar Vadlamudi, M Balasubbarreddy (2015) “A Fuzzy Controlled TCR for Compensation of Oscillations in Power System Network”, International journal of Scientific Engineering and Technology Research, Volume 4, Issue 43 pp. 9438-9442
  40. G Siva naga Malleswara Rao, V Hari Babu, M Balasubbarreddy (2015) “Space Vector PWM Based Power Quality Compensation of Multi- Functional Grid-Tied Inverters and Its Application in Micro-Grids”, International Journal of Science Engineering and Advance Technology, Volume 3, Issue 11 pp. 1060-1072
  41. Mahaboob Peera Shaik, M Balasubbarreddy (2015) “A Three Phase Four Wire Network Based Interleaved High-Frequency Inverter with Single-Reference Eight-Pulse-Modulation Technique for Fuel Cell Vehicle Applications”, International Journal of Science Engineering and Advance Technology, Volume 3, Issue 11 pp. 829-839
  42. M. Siva Reddy, V Hari babu, M Balasubbarreddy (2015) “Fuzzy logic controller based DC-Link Voltage Self-Balance Method for Multilevel Converter with less Number of Voltage Sensors”, International Journal of Science Engineering and Advance Technology, Volume 3, Issue 11 pp. 840-856
  43. Shaik Roshna, Sk Meera Shareef, M Balasubbarreddy (2015) “A Novel Grid Current Compensator for Grid-Connected Distributed Generation under Nonlinear Loads with Fuzzy Logic Controller”, International Journal of Science Engineering and Advance Technology, Volume 3, Issue 12 pp. 1325-1334
  44. P Muni Sravani, D Srilatha, M Balasubbarreddy (2015) “Controller Implementation for PV Interconnection Based Three-Phase UPS Systems Operating Under Highly Nonlinear Loads”, International Journal of Science Engineering and Advance Technology, Volume 3, Issue 11 pp. 1081-1092
  45. G Malleswari, D. Srilatha, M Balasubbarreddy (2015) “Speed Controller of Induction Motor by using Sliding Mode Controller”, International Journal of Scientific Engineering and Technology Research, Volume 4, Issue 53 pp. 11462-11465
  46. D Raj Kumar Reddy, Sk. Meera Shareef, M Balasubbarreddy (2015), “Filter based Seven-Level Inverter using

- Solar Power Generation System”, International Journal of Research, Volume 2, Issue 12 pp: 324-327
47. S Anil, D Srilatha, M Balasubbareddy (2015) “A New Single Phase Single Stage Three-Level Power Factor Corrector”, International Journal for Research in Technological Studies, Volume 2, Issue 10 pp. 13-17
  48. SK Praveen, V Hari Babu, M Balasubbareddy (2015) “Simulation studies on integration of Voltage Source Converters (VSCS) in weak grids” International Journal of Global Innovations, Volume 3, Issue 2 pp. 107-113
  49. K Prabhavathi, M Balasubbareddy, Sk. Meera Shareef (2015) “Enhancements of Power Quality with Hybrid Fuzzy Logic Controlled Single-Phase PV Based Active Power Filter for Industrial Applications”, International Journal of Scientific Engineering and Technology Research, Volume 4, Issue 38 pp. 8237-8243
  50. A Veera Maheswara Rao, M Balasubbareddy, Sk. Meera Shareef (2015) “A Bess STATCOM Based Control Scheme for Grid Connected Wind Energy System for Power Quality Improvement”, International Journal of Engineering Associates, Volume 4, Issue 9 pp. 57-60
  51. M Malleswararao, M.Balasubba Reddy, SK Meera Shareef (2015) “Reactive Power Compensation and Harmonics Mitigation using Multi Level Inverter Based D-STATCOM with FLC Controller”, International Journal of Advanced Scientific Technologies in Engineering and Management Sciences, Volume 1, Issue 3 pp. 07-14
  52. 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>
  53. 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.jestch.2015.04.005>
  54. P. Siva Jyothi, Meera Shareef, M Balasubbareddy (2014) “STATCOM based reduction of PQ issues in micro grid application systems”, International Journal of Engineering Science & Advanced Technology , Volume 4, Issue 6 pp. 445-452
  55. A Rajesh, K Sudheer, M Balasubbareddy (2014) “Optimum AC-DC Interconnected Grid Control”, International Journal & Magazine of Engineering, Technology, Management and Research, Volume 1, Issue 11 pp. 258-263
  56. K Janamma, K Sudheer, M Balasubbareddy (2014) “Pi Based Power Quality Enhancement of Grid Connected Wind Energy System for Dc – Link Energy Storage System”, International Journal of Science Engineering and Advance Technology, Volume 2, Issue 10 pp. 614-620
  57. A Bhanu Chandar, M Balasubbareddy (2014) “Simulation of Current Source Driver Circuit with PFC for Induction Motor Applications”, International Journal & Magazine of Engineering, Technology, Management and Research, Volume 1, Issue 11 pp. 85-92
  58. M.Balasubbareddy, YP Obulesh, S Sivanaga Raju, Ch Venkata Suresh (2014) “Optimal Power Flow Analysis by using Hybrid Cuckoo Search Algorithm”, International Journal of Engineering Research & Technology, Volume 3, Issue 5 pp. 1514-1519
  59. M.Balasubbareddy, YP Obulesh, S Sivanaga Raju (2014) “Optimal Power Flow in the Presence of Generalized Interline Power Flow Controller”, International Journal of Recent Technology and Engineering, Volume 3, Issue 2 pp. 37-42, <https://www.ijrte.org/wp-content/uploads/papers/v3i2/B1088053214.pdf>
  60. P Yedukondalu, M Balasubbareddy, Meera Shareef Shaik (2013) “Mitigation of Power Quality Disturbances in Wind Turbine Integrated Power Grid by STATCOM”, International Journal of Engineering Science & Advanced Technology, Volume 3, Issue 4, pp. 140-147
  61. Y Peraiah, M Balaubbareddy, T. Madhu (2013) “Flexible D-STATCOM Performance as a Flexible Distributed Generation in Mitigating Faults”, International Journal of Engineering Research & Technology, Volume 2, Issue 10 pp.3953-3958
  62. Lakku Mastanamma, Kasa Sudheer, M Balasubbareddy (2013) “A novel loaded-resonant converter for the application of solar (dc) -to-dc energy conversions”, International Journal of Advances in Science and Technology, Volume 7, Issue 4 pp. 122-137
  63. Lenin Kumar, M Balasubbareddy, T Madhu (2013) “Ziegler-Nichols PID Controller for Effective Pay-Load Torque Responses and Tip-Vibrations of Double Link Manipulator”, International Journal of Research in Engineering and Technology, Volume 2, Issue 10 pp. 421-426
  64. Imran Syed, m Balasubbareddy, K Haribabu (2013) “Unity Power Factor Control by PWM Rectifier”, International Journal of Research in Engineering and Technology, Volume 2, Issue 10 pp. 61-65
  65. R Harendra, D. Srilatha, M Balasubbareddy (2013) “Analysis of Wind Farm Connection Based on Unified Power Quality Compensator (UPQC)”, International Journal of Engineering & Science Research, Volume 3, Issue 10 pp. 4840-4847
  66. M Pradeep Kumar, M.Balasubbareddy (2013) “Renewable Power Generation Units through Micro Grid System”, International Journal of Engineering Research and Applications, Volume 3, Issue 5 pp. 1559-1563
  67. Ch Madhavi, M.Balasubbareddy, D Srilatha (2013) “Transmission Line Protection Using Wavelet Transform”, International Journal of Engineering Research & Technology, Volume 2, Issue 11 pp. 2168-2176
  68. Sk Baji Babu, M.Balasubbareddy, T Madhu (2013) “Analysis of power quality improvement in grid connected wind driven induction generator at various load conditions”, International Journal of Reach in Engineering and Technology, Volume 2, Issue 10 pp. 106-112
  69. Kesana Gopikrishna, M.Balasubbareddy, Kasa Sudheer (2013) “A Cascaded H-Bridge and Novel Multilevel Inverter Topology for Induction Motor Drive”, International Journal of Advanced and Innovative Research, Volume 2, Issue, pp. 372-379
  70. M.Balasubbareddy, YP Obulesh, S Sivanaga Raju (2012) “Analysis and simulation of series FACTS devices to minimize transmission loss and generation cost”, International Journal of Advances in Engineering &

Technology, Volume 2, Issue 1 pp. 463-473

71. M.Balasubbareddy, YP Obulesh, S Sivanaga Raju (2012) "PSO variants based optimal power flow for multiple objective minimizations", International Journal of Advances in Engineering Research, Volume 3, Issue 1 pp.1-13
72. M.Balasubbareddy, YP Obulesh, S Sivanaga Raju (2012) "An IPM-EPSO based hybrid method for multiple objective minimizations using TCPS", International journal of Electrical Engineering, and Technology, Volume 3, Issue 2 pp. 294-305
73. M.Balasubbareddy, YP Obulesh, S Sivanaga Raju (2012) "An IPM-CFAPSO based hybrid method for multiple objective minimizations using TCPS", International Journal of Computer Applications, Volume 52, Issue 5 pp. 4-11
74. M.Balasubbareddy, YP Obulesh, S Sivanaga Raju (2012) "An IPM-APSO based hybrid method for multiple objective minimizations using TCPS", International Journal of Recent Technology and Engineering, Volume 1, Issue 3 pp. 37-43
75. M.Balasubbareddy, YP Obulesh, S Sivanaga Raju (2012) "Particle swarm optimization based optimal power flow for volt-var control", ARPN Journal of Engineering and Applied Sciences, Vol. 7, Issue 1 pp. 20-25, [https://www.arpnjournals.com/jeas/research\\_papers/rp\\_2012/jeas\\_0112\\_617.pdf](https://www.arpnjournals.com/jeas/research_papers/rp_2012/jeas_0112_617.pdf)
76. M.Balasubbareddy, YP Obulesh, S Sivanaga Raju (2011) "A SOL algorithm and simulation of TCPST for optimal power flow solution using NR method", International Journal of Modern Engineering Research, Volume 1, Issue 2 pp.407-412
77. M.Balasubbareddy, YP Obulesh, S Sivanaga Raju (2011) "Modelling and simulation of TCSC for optimal power flow solution using NR", International Journal of Emerging Technologies in Sciences and Engineering, Volume 5, Issue 2, pp. 16-19

#### International /National Conferences

1. Balasubbareddy Mallala, Venkata Prasad Papana, Kowstubha Palle (2023), Power Quality Conditioner with Hybrid Ant Colony Optimization, International Conference on Evolutionary Artificial Intelligence (ICEAI 2023), at RVS College of Engineering & Technology, Coimbatore, India, 13-14, September 2023
2. Balasubbareddy Mallala, Azka Ihtesham Uddin Ahmed, P. Venkata Prasad, P. Kowstubha (2023), Development of Renewable Energy System for Enhancing Reliability of Power, 3rd International Conference on Evolutionary Computing and Networks (ICECMSN 2023), Procedia Computer Science , Volume 230, 2023, Pages 1-10, <https://doi.org/10.1016/j.procs.2023.12.055>
3. 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](https://doi.org/10.1007/978-981-99-3758-5_16)
4. Balasubbareddy, M., Venkata Prasad, P., Palle, K. (2023). Power Quality Conditioner with Fuzzy Logic Controller. In: Kaiser, M.S., Xie, J., Rathore, V.S. (eds) Information and Communication Technology for Competitive Strategies (ICTCS 2022). Lecture Notes in Networks and Systems, vol 615. Springer, Singapore. [https://doi.org/10.1007/978-981-19-9304-6\\_56](https://doi.org/10.1007/978-981-19-9304-6_56)
5. Balasubbareddy Mallalaa, Kondapalli Venkata Sri Ramb, P. Venkata Prasad, Kowstubha Palle (2023), "Design and implementation of a three-phase power quality analyzer for live data tracking using a Field Programmable Gate Array", 2023 International Conference on Advanced Technologies in Chemical, Construction and Mechanical Sciences (ICATCHCOME 2023) held at KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India during 09 - 10, February 2023
6. Mallala, B., Prasad, P.V., Palle, K. (2023). Analysis of Power Quality Issues and Mitigation Techniques Using HACO Algorithm. In: Raj, J.S., Perikos, I., Balas, V.E. (eds) Intelligent Sustainable Systems. ICoISS 2023. Lecture Notes in Networks and Systems, vol 665. Springer, Singapore. [https://doi.org/10.1007/978-981-99-1726-6\\_65](https://doi.org/10.1007/978-981-99-1726-6_65)
7. M. Balasubbareddy, P. Venkata Prasad, Ch. Venkata Krishnan Reddy (2022), "Simulation of Power Quality Conditioner with Fuzzy Logic Controller", International Conference on Advances in Communications, Computer Vision and Electrical System Technologies (ICACCVEST-2022) on 4th -5th March 2022 at VVIT, Guntur
8. Balasubbareddy, M., Sri Ram, K.V., Sangu, R. (2023). Modeling and Design of FPGA-Based Power Quality Analyzer. In: Biswas, A., Islam, A., Chaujar, R., Jaksic, O. (eds) Microelectronics, Circuits and Systems. Lecture Notes in Electrical Engineering, vol 976. Springer, Singapore. [https://doi.org/10.1007/978-981-99-0412-9\\_39](https://doi.org/10.1007/978-981-99-0412-9_39)
9. Balasubbareddy, M., Sangu, R. (2023). Design of Hardware Unified Power Quality Conditioner to Mitigate Sag and Swell. In: Biswas, A., Islam, A., Chaujar, R., Jaksic, O. (eds) Microelectronics, Circuits and Systems. Lecture Notes in Electrical Engineering, vol 976. Springer, Singapore. [https://doi.org/10.1007/978-981-99-0412-9\\_40](https://doi.org/10.1007/978-981-99-0412-9_40)
10. P. Venkata Prasad, M. Balasubbareddy (2022), "Combined Optimization in Radial Distribution System using CPSO", International Conference Advances in Communications, Computing & Electronic Systems (ACCES-2022), on 6th -7th May 2022 at AVANTHI Institute of Engineering and Technology, Vizianagaram, India
11. M. Balasubbareddy, P. Venkata Prasad (2021), "Optimization of Multi-fuel Non-convex Economic-Emission Dispatch in the Presence of GUPFC", International Conference in Emerging Trends in Electrical, Electronics and Computer Technology-ICETEEC'21, on 30 June 2021, at Karpaga Vinayaga College of Engineering and Technology, padalam, Tamil Nadu
12. P. Venkata Prasad, M. Balasubbareddy (2021), "Service Restoration in Radial Distribution Systems using Network Reconfiguration", International Conference in Emerging Trends in Electrical, Electronics and Computer Technology-ICETEEC'21, on 30 June 2021, at Karpaga Vinayaga College of Engineering and Technology, padalam, Tamil Nadu

13. M Balasubbareddy, P Venkata Prasad, S Varshini, A D Sarma (2021), "AI based Cyber-attack Resistant Microgrid System with IRNSS Synchronization", Emerging Trends in Circuit branch Technologies and Applications (ETCTA-2021) on 3rd -4th April 2021 at CBIT, Hyderabad
14. M Balasubbareddy, S Varshini (2021), "Power quality conditioning by UPQC using DQ theory", Emerging Trends in Circuit branch Technologies and Applications (ETCTA-2021) on 3rd -4th April 2021 at CBIT, Hyderabad
15. M Balasubbareddy, Divyanshi Dwivedi (2020) "Hybrid flying squirrel search algorithm for solving the single objectives optimal power flow problem in power system", 8th International Conference on Contemporary Engineering and Technology, pp.1-11
16. M Balasubbareddy, Divyanshi Dwivedi (2019) "Incorporation of Current Injection Modelling of UPFC and Analyzing Power Flow Solution using Criss Cross Optimization Algorithm", 2019 Third International Conference on Electrical, Computer and Communication Technologies (IEEE ICECCT 2019), pp. 1-6
17. M Balasubbareddy, P Venkata Prasad (2018) "Multi-objective optimal power flow with Generalized Interline power flow controller using NSHCSA", International conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing (EECCMC), pp. 221-229
18. M Balasubbareddy (2017) "A solution to the Multi-objective Optimization problem with FACTS devices using NSHCSA Including practical constraints", IEEE International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI-2017), pp. 2615-2624
19. M Balasubbareddy (2017), "Multi-objective OPF problem analysis with Practical constraints in in the presence of FACTS devices using NSHCSA", 2017 international conference on Computational Intelligence: Theories Applications and future Directions (ICCI-2017), pp: 423-434
20. M Balasubbareddy, G.Malathi, G. Pavitha (2016) "Single-objective Optimization incorporating TCSC with ramp rate limits and prohibited operating zones using HCSA", 1st International Conference on Green Power Technology in Power Grid (ICGPTPG-2016), pp. 174-181
21. M Balasubbareddy, D Srilatha, S. Sivanaga Raju (2016) "Analysis of Optimal Power Flow using Hybrid Fruitfly Algorithm", Proceedings of National Conference on Innovative Technologies in Power, Control, Drives and Automation (ITPCDA-2016), pp. 47-51
22. M Balasubbareddy, K Sai Swetha, V. Bhavya Teja (2016) "Analysis of Practical Constraints using Hybrid Cuckoo Search Algorithm", Proceedings of National Conference on Innovative Technologies in Power, Control, Drives and Automation (ITPCDA-2016), pp. 52-58

