1	Name of Faculty	Dr. B. Suresh Kumar		
2	Designation	Associate Professor		
3	Nature of Job/Appointment	Regular		
4	Date of Joining	12-07-2004		
5	E-mail	bsureshkumar_eee@cbit.ac.in		
6	Education Qualifications	Name of the Degree Class		
	Ph. D	Doctor of Philosophy (EEE) Awarded		
	PG	M. Tech. (Information Technology in Power Engineering) 1 <sup>st</sup> class with distinction		
	UG	B. Tech. (EEE) 1 <sup>st</sup> class		
7	Work Experience			
	Teaching	22 Years		
	Research	08 years		
	Industry			
	Others			
8 9 10 11 12	Area of Specialization Professional Memberships Responsibilities held at Institution Level Responsibilities held at Department Level Research Guidance	Power Systems, Power Quality i. LM 40026 (MISTE) - ii. LM202199500 iii. 100006451 (IEEE) 1. ELECTRICAL- In-charge CBIT Electrical Maintains in CBIT from 17-07-2017 to Till date. 2. Feed Back committee member 1. Member BoS, 2. Member PAC, 3. PG Coordinator (PS&PE) 4. UG & PG NBA Coordinator 5. In charge for Computer Simulation Lab 6. AICTE-MC Syllabus Updating Team 7. Member, Course Expert Group 08 (Progress) 1. Academic Excellence Award by Novel Research Academy Pondicherry, on 5 <sup>th</sup> sep 2022 2. Distinguished PROFESSOR AWARD BY Novel Research Academy Pondicherry, on 20 <sup>th</sup> march 2021		
14	Courses Handled at Under Graduate / Post Graduate Level.	<ul> <li>3. Adarsh Vidya Saraswati Rashtriya Puraskar Glacier Journal Research Foundation, Global management Council, Ahmedabad &amp; 17th, March,2020(Received by post -Due to COVID-19)</li> <li>UG: <ol> <li>Lelements of Electrical Engineering,</li> <li>Electrical Circuits</li> <li>Power Systems-1</li> <li>Power Systems-1I</li> <li>Main and MINI Projects</li> <li>Computer Simulation Lab</li> </ol> </li> <li>PG: <ol> <li>Power Systems lab Hard Ware Lab</li> <li>Power Systems Simulation Lab</li> <li>ACMPS</li> <li>Power System Stability</li> </ol> </li> </ul>		

	No. of Papers	National Journals – 00	International Journals – 50
15	Published	National Conference – 10	International Conference – 20
16	Projects Carried out		
17	Patents	<ol> <li>The Patent Office Journal No. 35/2023 Dated 01/09/2023, DEEP LEARNING- BASED APPROACHES FOR SUSPICIOUS ACTIVITY RECOGNITION BY PATTERNS OF WALKING BEHAVIOR, Date of filing of Application :04/08/2023, Publication Date : 01/09/2023</li> <li>Title of the invention : INTEGRATION OF IOT AND ARTIFICIAL INTELLIGENCE FOR SMART AUTOMATION IN INDUSTRY 4.0 USING SENSORS, Date of filing of Application :19/10/2023,Publication Date : 01/12/2023.</li> <li>Application No.202341086430A- Date of filing of Application: 18/12/2023 Publication Date: 12/01/2024, Title of the invention : DETECTING CYBER-ATTACKS IN THE INTERNET OF MEI</li> </ol>	
4.0		LOGICAND LSTM NETWORKS.	
18	Technology Transfer		
19	Invited Speaker (Few Important/ Prominent)	<ul> <li>"Electrical Safety &amp; Hazard Awareness as a week celebrations (26th June to 2nd July 2022). Delivered a Guest lecture at Sic Technology on 03/02/2024. titled on "Power 3. Power Systems Automation at Ram 02/03/2020 during 1pm-3pm.</li> </ul>	023 Idhartha Institute of Engineering and <b>Quality and Harmonic Issues</b> " nananda Thirtha Engineering college on ents Ramananda Thirtha Engineering
	INSTI	<ol> <li>Delivered lectures on "ELECTICAL trainees Recruited by Dr. Reddy's laboratory</li> <li>Delivered the guest lecturer at CBIT staff development program "VISRUTHA-20" MATLAB"</li> <li>B.Suresh Kumar et al published Measuremts"by RK publisher 1st edition 202</li> <li>Published on title" A novel blo application for healthcare automation " Fro Intelligence Pramendra Kumar , Gunawan W Kumar https://doi.org/10.1515/978311132374</li> <li>B. Suresh Kumar, "Renewable Poo International Publications, 2022, ISBN No: 97</li> </ol>	A) Engineering College for the technical (A) Engineering College for technical (A) Engineering College for the tec
20	No. of Books/Chapter Published with details	on Overhead Transmission Lineusing M Publisher LAP LAMBERT Academic Publishi 5. K. Tarun S. K. Saide Baji B. Suresh Power Quality Conditioner" July- 2020, Publishing Mauritius, ISBN: 978-620-0-67834 6. Published One Chapter Book T the response of antennas positioners using F Pvt Ltd 2020, lecture notes in Networks and	agneto Resistive Sensor July-2020, ng Mauritius, ISBN: 978-620-0-46556-6. Kumar "PQ Improvement Using Unified Publisher LAP LAMBERT Academic 4-6 itiled "performance of BLDC Motor for PI controller". springer nature Singapore systems ed "Control Strategies of Different loads

21 Details of Short-Term Training Programs/Faculty Development Programs/Seminars/ Workshops. Other Trainings (Attended and/or organized). 1. Participated in One week online FDP on Enhancing Faculty Expertise : Communication and signal /Image processing Organized by Dept of ECE Adithya college of Engg & tech during 10-15th july 2023

2. Attended one week Online FDP on "Recent Trends in Green Energy Initiatives and Soft computing techniques" from 11/7/2023- 15/07/2023 org by MGIT,hyd

3. successfully participated & completed AICTE Training And Learning (ATAL)Academy Faculty Development Program on AI & Smart technology applications to Solar energy and Electrical vehicles Technology -Challenges, Issues and Handson at B V RAJU INSTITUTE OFTECHNOLOGY from20/11/2023 to 25/11/2023.

4. Successfully completed 21 day master class on Python Programming during 25/10/2023-14/11/2023 by Pantech E learning

5. B. Suresh Kumar, "Tools for Engineering Research," AICTE Recognized Faculty Development Program, National Institute of Technical Teachers Training and Research, Organized by NIT Kurukshetra, Haryana, 19 – 23 Sept 2022.

6. B. Suresh Kumar, "The Role of Artificial Intelligence in Renewable Energy Applications," International Faculty Development Program, Organized by KPR Institute of Engineering and Technology, Coimbatore, 1 – 5 Aug 2022.

7. B. Suresh Kumar, "2D Nanomaterials: Potential and Applications through ICT," AICTE recognized Short Term Course, National Institute of Technical Teachers Training and Research, Organized by CBIT Hyderabad, 17 – 21 Oct 2022.

8. B. Suresh Kumar, "30 Days Master Class on Electric Vehicle Design," APSSDC, Pantech eLearning Pvt Ltd, Chennai, 20 June – 19 July 2022.

9. B. Suresh Kumar, "30 Days JAVA FULL Stack Program," APSSDC, Pantech eLearning Pvt Ltd, Chennai, 1 Sept – 30 Sept 2022.

10. B. Suresh Kumar, "30 Days MATLAB Master Class," APSSDC, Pantech eLearning Pvt Ltd, Chennai, 1 – 30 Aug 2022.

11. Dr. B. Suresh Kumar Successful participation: 14th to 19th December 2020|"Application of AI & IoT to Power Systems including Smart Grid", Phase I

12. Dr. B. Suresh Kumar Successful participation in the AICTE sponsored STTP on "Application of AI and IoT to Power Systems including Smart Grid, organized by Electrical & Electronics Department, Sridevi Women's Engineering College, from 9th November to 14th November, 2020.

13. B. Suresh Kumar from CBIT has successfully completed Online Six- Day Short Term Training Programme (STTP) on "Smart Grid and Big Data Analysis", sponsored by AICTE & organized by the Department of Electrical & Electronics Engineering, IPS Academy, Institute of Engineering & Science, Indore, during 02-11-2020 to 07-11-2020.

14. Dr. B. Suresh Kumar, Department of EEE, Anurag University, Hyderabad (Formerly Anurag Group of Institutions) organized A one-week AICTE-STTP (Short Term Training Programme) Phase-II on "Advances in Power Electronics to Renewable Energy Systems and E-mobility Applications", from 16-11-2020 to 21-11-2020.

15. Dr. B. Suresh Kumar, participated in the one-week online FDP on "BLOCKCHAIN TECHNOLOGY IN ELECTRICAL POWER SYSTEMS APPLICATIONS" ORGANISED BY SREENIDHI EDUCATIONAL GROUP DURING 31ST AUG – 4TH SEP 2020-09-24

16. B. Suresh Kumar participated in AICTE sponsored STTP (series-IV) title "Recent Advancements in Integration of Distributed Energy Resources for Electrical Vehicle Charging Stations and Energy Management using Internet of Energy" organized by kpr institute of Tech Coimbatore during 24th-29th August 2020.

17. B. Suresh Kumar participated in AICTE sponsored STTP on "Automotive Technology for a suitable future" organized by GRITE Hyderabad, during 7-12th September 2020

18. B. Suresh Kumar Participated in International live webinar titled "PI CONTROLLED DC TO DC BUCK CONVERTER" organized by NRR creative works on 17th sep 2020.

19. Dr. B. SURESH KUMAR, has participated in the Seven Days Online Faculty Development Programme on "Research Challenges in Renewable Energy Technologies "Organized by the Department of Electrical and Electronics Engineering, New Horizon College of Engineering, Bengaluru in association with IEEE NHCE Student Branch Chapter from 14.09.2020 to 20.09.2020. 20. Dr. B. Suresh Kumar CBIT for successful participation of Two-day National Level Webinar on "SMART GRIDS IN ELECTRICAL ENGINEERING" (SGEE-2020) organized by the Department of Electrical Engineering, AUC under TEQIP-III during 25th – 26th September,2020.

21. Dr. B. SURESH KUMAR, has participated in live webinar on title "PI CONTROLLED DC TO DC BUCK CONVERTER" conducted during 17th by NRR creative works in you tube channel.

22. Participated STTP (AICTE series-1) on the title "Trends and Challenges of Hybrid Electric Drive Utilities in Transport Sector" organized by Department of Electrical and Electronics Engineering, Chaitanya Bharathi Institute of Technology (Autonomous) during 03rd-08th August 2020

23. Participated in Online FDP on "AI Techniques to Electrical Engineering" held from 06/07/2020 to 10/07/2020 organized by UGC-Human Resource Development Centre, Jawaharlal Nehru Technological University Hyderabad, Kukatpally, Hyderabad, T.S., India

24. Participated Webinar on the title "Al and Virtual Robotics" on 15.7.2020 organized by Gananamani College of Technology, Namakkal, Tamilanadu.

25. Participated in the One-Day National Webinar on ONLINE TOOLS FOR BUILDING COMMUNICATION SKILLS organized by the Department of English, Government Degree College for Women, Srikalahasti, Chittoor District, Andhra Pradesh, on 28th JULY, 2020.

26. A Five-day online international FDP on "Renewable Energy Application in Smart Grid, Micro Grid and EVs (REASGMGEV-2020)" during 13-07-2020 to 17-07-2020 Organized by GMRIT, Kakinada

27. A Three-day online FDP on "Out Come Based Education (OBE)" during 08-07-2020 to 10-07-2020 organized by Dept of CS&E. IQAC,ACM &CSI chapters of KITS Guntur in association with IIT Nagpur

28. A One-week online Refresher Course on "Bharateeya Chaitanyam" organized by CBIT, during 29-06-2020 to 05-07-2020.

29. A One-day International Webinar on "Laughter Yoga International" Organized by SSJ college of Arts and Commerce on 16-07-2020.

30. A One-day Webinar on "Evaluation of Modern Power Systems and its Challenges" Organized by St. Mother Theresa Engineering college on 15-07-2020

31. A One-day Webinar on "Smart Meter Technology" Organized by St. Mother Theresa Engineering college on 11-07-2020

32. A One-day Webinar on "Indian Power Grid & Market" Organized by St. Mother Theresa Engineering college on 04-07-2020.

33. A One-day Webinar on "Energy Conservation and Auditing" Organized by MGIT(A) on 02-07-2020.

34. A One-day Webinar on "Magnetic Levitation and High-speed Trains" Organized by MGIT(A) on 01-07-2020

35. Participation in One Week (AICTE) Online Short-Term Training Program on Optimal Operation of Power System incorporating Renewable Energy Source Organized by Dept of EEE Sage Institute of Research and Technology, Bhopal. 27th July -1st Aug 2020.

36. Participated Webinar on the title APPLICATION CHALLENGES IN BUS BAR IMPLEMENTATION organized by Megger India July 31st 2020.

37. Participated in AICTE Sponsored STTP (Series - III) on the title "Recent Advancements in Integration of Distributed Energy Resources for Electric Vehicle Charging Stations and Energy Management using Internet of Energy" organized by Department of Electrical and Electronics Engineering from 17-08-20 to 22-08-20.

38. Successfully completed Digital Transformation in Teaching Learning Process from NPIU Feb 14th to March 6th -2020

39. Participated and Successfully completed IIC online sessions conducted by MHRD, during 28th April to 22nd May, 2020

40. Successfully completed ATAL FDP on (IoT) Online 20th apr-24th Apr 2020 conducted BY NITTTR, GHANDHINAGAR

41. Successfully completed ATAL FDP (Block Chain) Online 25th May -29th May 2020 conducted by NIT WARANGAL

42. Attended FDP Research Opportunities in Electrical Engineering Online 7th May -16th May 2020 organized by GCE, KARAD

43. Attended STTP MATLAB based teaching learning in Mathematics, Science and Engineering Online (STTP) during 18th May -22nd May 2020,organizrd by Design Tech Private sys Itd ,Mumbai

44. Attended FDP outcome based education: A step towards Excellence Online 11-15<sup>th</sup> May 2020 , organized by GCE,KARAD

45. Attended FDP research Opportunities in Electrical Engineering and its applications Online, Sivakasi,18<sup>th</sup> May – 23rd May 2020, online,

46. Attended FDP on AI Online, Organized By CR REDDY ENGG 22-26<sup>th</sup> May 2020, West Godavari Dist, Eluru, Andhra Pradesh

47. Attended FDP Recent Trends in Electrical Engineering Online Organized By Vishnu College 8-12th June 2020, West Godavari District, Bhimavaram, Andhra Pradesh

48. Attended FDP DESIGN OF Solar PV System Using PVsyst Software Online Organized By, Vaagdevi College of Engineering is an engineering college in Bollikunta, Warangal, Telangana, 9-13TH June 2020

49. Attended FDP Recent Strategies on Micro and Smart Grid Technologies (RSMSGT - 2020) Department of EEE, organized by GMR Institute of Technology, Rajam, AP 15-19<sup>th</sup> June 2020

50. Attended IoT for Emerging Applications an Initiative of Ministry of Electronics & Information Technology (MeitY), Government of India Electronics & ICT Academy IIT Guwahati, Assam (04-08<sup>th</sup> Feb, 2020).

51. Attended ICT online course on-NBA Accreditation NITTTRK one week ICT 35 HOURS 22/4/19 to 26/04/19

52. Attended ICT online course on -Development of Laboratory Instruction and Manual, NITTTRK One week ICT 35 hours 4/2/19 to 8/2/19

53. Attended Two-day Workshop on "Accreditation Quality Enhancement through Outcome based Engineering Education& quot; at Gurunanak Engineering College during 6-7 Nov2015.

54. worked as Department Coordinator for ISTE Sponsored National level Technical Symposium "TechnISTEa" during 20-21 Oct 2014.

55. As a staff coordinator organized the two-day workshop for "PCB Design" for the 2/4 EEE students during 5-6 Nov 2014

56. Organized National Conference (RTPSD-2013 & RTPSD -2016) CBIT Jan 2016201 & Dec 2013

57. Attended Refresher Course Applications of Power Electronics in Power System APEPS-2013 (2 weeks ISTE SOPNSORED STTP) CBIT  $25^{TH}$  NOV –  $06^{TH}$  DEC 2013

58. Attended Two-day Training program on Maintenance of 33/11 KV Substation, PTR's, DTR's, distribution Network and SCADA at CPTI Hyderabad on 4<sup>th</sup> and 5<sup>th</sup> Dec-2013

59. Attended UGC Sponsored Orientation course on At MANUU from 9<sup>th</sup> May to 5<sup>th</sup> June 2013 at Hyderabad

60. Organized national level student's symposium ELECTRECT-2K12

61. Attended AICTE sponsored one-week National level Workshop on "Power Quality (PQ-09)" from 4<sup>th</sup> to 9<sup>th</sup> May 2009 Organized by GNITS, Shaikpet, Hyderabad.

62. Attended TEQIP sponsored work shop at NIT Warangal on "Power Quality Issues-Analysis and Mitigation" from 27<sup>th</sup> to 29<sup>th</sup> NOV 2008.

63. Attended AICTE Sponsored Staff Development Programme on "Inculcating Research Aptitude in Engineering Faculty" from 3<sup>rd</sup> May to 16<sup>th</sup> May 2008 at PSG College of Technology, Coimbatore.

64. Attended AICTE Sponsored Staff Development Programme on "Power System Automation Through Scada& Gis" From 4<sup>th</sup> To 16<sup>th</sup> June 2007. Aurora Engineering College Attended TEQIP sponsored work shop at OU on "Power Quality" During 28<sup>th</sup> -29<sup>th</sup> Sep 2007.

65. Attended One week in House Training programme" on effective Teaching Methodology from 3<sup>rd</sup> to 8<sup>th</sup> July 2006 at CBIT.

66. Attended "Personality Development & Effective Teaching Methodology" at CBIT during 8<sup>th</sup> to 16<sup>th</sup> NOV 2004.

Details of Journal Publications/

Conferences (National

and International) International Journal:

1. B.Suresh Kumar et al "Smart Performance Evolution of a Solar Water Heating System with PCM by Using Deep Learning Approach", Electric Power Components and Systems, 0(0): 1–10, 2023 # 2023 Taylor & Francis Group, LLC ISSN: 1532-5008 print / 1532-5016 online DOI: 10.1080/15325008.2023.2243458

2. VINAY KUMAR MADISHETTI, Dr. B. SURESH KUMAR MODELLING AND CONTROL OF DOUBLY FED INDUCTION GENERATOR (DFIG) FOR WIND POWER © 2023 JETIR October 2023, Volume 10, Issue 10 www.jetir.org (ISSN-2349-5162) Journal of Emerging Technologies and Innovative Research (JETIR) www.jetir.org ,PG;g799 to g807

3. M.Serabanda (Research Scholar), B. Suresh Kumar (Associate Professor), G. Mallesham (Professor) Title" Mitigation of harmonics in a grid system with sliding mode fractional order controller integrated UPQC" Dizhen Dizhi Journal (ISSN:0253-4967), Volume 15, Issue 11,NOVEMBER/2023,pg 1-10

4. B Ravindhar1\* B Suresh Kumar2 ,B Mangu3 titled"White Shark Optimization for Efficient Conservation Voltage Reduction in Photovoltaic-Enriched Distribution Grids with Smart Inverters and Network" International Journal of Intelligent Engineering and Systems, Vol.17, No.1, 2024 DOI:10.22266/ijies2024.0229.37, Received: October 5, 2023. Revised: November 9, 2023. Pg:418-427

22

5. M. Serabanda1, B. Suresh Kumar2, G. Mallesham3 TITLED" Performance Improvement of UPQC with Sliding Mode Fractional Order Proportional Integral Control with Enhancement of Harmonics Mitigation" International Journal of Engineering Trends and Technology Volume 72 Issue1, 184-192, January 2024,ISSN: 2231–5381 / https://doi.org/10.14445/22315381/IJETT-V72I1P118 © 2024 Seventh Sense Research Group®

 B. Suresh Kumar, "Utilizing a Fast Reconfiguration Algorithm to Increase the Efficiency of PV Systems," An Interdisciplinary Journal of Neuroscience and Quantum Physics, Volume 20, Number 15, 2022.
 B. Suresh Kumar, "Kidney Stone Detection from CT Scan Using CNN," International Journal of Innovative Research in Science, Engineering and Technology, Volume 11, Issue 6, June 2022.

8. B. Suresh Kumar, "Design Optimization and Development of Energy Efficient Induction Motor for Industrial Applications," International Journal of Advanced Research, Ideas and Innovations in Technology, Volume 7, Issue 6, 2021.

9. B. Suresh Kumar, "IoT Based Mobile Application Development for Power Management and Monitoring in Commercial Buildings," Natural Volatiles and Essential Oils Journal, 2021.

10. B. Suresh Kumar, "Wireless Battery Charger for Electric Vehicles with Bidirectional Power Flow based Converter," Journal of Information and Computational Science, Volume 11, Issue 7, 2021.

11. B. Suresh Kumar, "Machine Learning Mechanism for Segmentation, Progressive Assessment and Prediction of Brain Tumor Growth," International Journal of Health Sciences, Volume 6, Issue 2, Page no 7696 – 7709, 2022.

12. B. Suresh Kumar, "Prediction of Photovoltaic Power by ANN Based on Various Environmental Factors in India," International Journal of Photoenergy, 2022

13. B. Suresh Kumar S.Praveena published a paper on "Lithium-Ion Battery: Charging & Discharging Modes" GRADIVA REVIEW JOURNAL VOLUME 7 ISSUE 6 2021 ISSN NO : 0363-8057 pg:188-193, DOI:10.37897.GRJ.2021.V8I6.21.198 June 2021

14. B. Harika, B. Suresh Kumar and J. Upendar published at international journal IJAEMA its UGC care group-II title "Emergency System Based Smart Grid" ISSN:0886-9367 vol XII, Issue VIII, Aug 2020 page no:2222-2225.

15. B. Suresh Kumar et al "Power Quality Enhancement using Unified Power Quality Conditioner "JAC : A Journal Of Composition Theory Volume XIII Issue III MARCH 2020,ISSN:0731-6755, Page No:1463-1472

16. B. Suresh Kumar et al Finding of Fault Location on Overhead Transmission line using Magneto Resistive Sensor, Page No: 562-573, Volume IX Issue III MARCH 2020 ISSN : 0950-0707,DOI:20.18001.STD.2020.V9I3.20.33569

17. B. Suresh Kumar et al Reduction Of Negative Sequence Correction In Grid Interfacing Inverter With Integrated Voltage Unbalance Correction, AEGAEUM JOURNAL Volume 8, Issue 4, 2020 ISSN NO: 0776-3808, Dr. Page No: 209-220,multi disciplinary DOI:16.10089.AJ.2020.V8I4.285311.3126

18. B. Suresh Kumar et al "Modeling and Simulation of Linear Electro Mechanical actuator for Missile Application with high redundancy" Mukt Shabd Journal Volume IX, Issue IV, APRIL/2020 ISSN NO : 2347-3150 pg: Page No : 1678-1684 ,,impact factor:4.6

 B. Suresh Kumar et al "MPPT Scheme Intended For Photovoltaic Arrays In Partial Shading Situations Based Fuzzy Logic Controller " Journal of Interdisciplinary Cycle Research Volume XII, Issue VI, June/2020 ISSN NO: 0022-1945 : Page No:116-123,impact factor:.6.2, DOI:18.0002.JICR.2020. V12I6.008301.3170993.
 B. Suresh Kumar, BV Ravi Kumar, K Sindhu Priya Application, Innovations in Electronics and Communication Engineering, 167-174, 2019, Publisher: Springer, Singapore

21. Dr. B. Suresh Kumar, D. Varun "Damping oscillation in power system using power system stabilizer" International Journal of Research Volume VIII, Issue V, MAY/2019 ISSN NO:2236-6124, Pg:1272-1277.

22. B. Suresh Kumar1, D. Varun Raj1 and D. Venkateshwara Rao2" Speed Control of BLDC Motor with PI Controller and PWM Technique for Antenna's Positioner" Springer Nature Switzerland AG 2020, D. J. Hemanth et al. (Eds.): COMET 2019, LNDECT 35, pp. 1–14, 2020.https://doi.org/10.1007/978-3-030-32150-5\_43.

23. B. Suresh Kumar1, D. Varun Raj2 S. Praveena "Performance of BLDC motor for enhancing the response of Antenna's positioner using PI controller" 2020/3, springer Nature Singapore Itd 2020,Book Networks and systems, Pages: 171-183.

24. Dr. B. Suresh Kumar, S. Swathi "A particle swarm optimization technique for economic load dispatch problem" ijamtes.org/VOL-9-ISSUE-01-2019-3/ page: 2249-7455.

25. Dr. B. SURESH KUMAR1 "Power Eminence Enhancement With Hybrid Power Filter Along With Thyristor Controlled Reactor " ICTEMPS-2018, on 21st April 2018 Geethanjali College of Engineering and Technology, Hyderabad, published as special issue in Journal of Advanced Research in Dynamical and Control Systems -1943-023X. Pg: 76-82,2018/June, issue 8

26. Dr. B. SURESH KUMAR "Finding Of Various Faults By Using Phasor Measurement Units "RAPIDEET-2018, 2nd Annual National conference which is organizing by B. V. Raju Institute of Technology, Narsapur, Medak, Telangana, during 20th and 21st April 2018 and it will be published as special issue In International Journal Of Pure And Applied Mathematics (Ijpam) vol 118, issue(24), Pg:1-10

27. Dr. B. SURESH KUMAR2 "Comparative Analysis of Interline Power Flow Controller with Pi &Fuzzy Logic Controller" International Journal of Electrical and Electronics Engineers (ISSN: 2321-2055) Volume 08, Issue 02, July-Dec 2016. Pg:475-489.

28. Dr. B. SURESH KUMAR1, S. SREE RAGHU RAM2 "Hybrid Active Filter with Variable Conductance For Harmonic Resonance Suppression Using Ann" International Journal Of Professional Engineering Studies (IJPES) Volume VI /Issue 4 / JULY 2016 Page 26-53. 29. Dr. B. Suresh Kumar1 B. Shravanya "Enhancement of Power Quality in Distribution System Using D-Statcom for Different Faults" International Journal of Science and Research (IJSR) Index Copernicus Value (2013): 6.14 | Impact Factor (2013): 4.438 ISSN (Online): 2319-7064.- Volume 4 Issue 9, September 2015.

30. B. Suresh Kumar "Harmonic Mitigation using Hybrid Filters" International Journal Of Innovative Research In Electrical, Electronics, Instrumentation And Control Engineering ISSN (Online) 2321 – 2004 ISSN (Print) 2321 – 5526-Vol. 3, Issue 7, July 2015, PP:135-137 Impact factor-3.885.

31. B. Suresh Kumar Analysis and Control for "Selective Compensation of Power Quality Problems through Three Phase Four Wire UPQC "International Journal of Engineering Research and Development e-ISSN: 2278-067X, p-ISSN: 2278-800X, www.ijerd.com Volume 10, Issue 10 (October 2014), PP.14-23.

32. B. Suresh Kumar "A Versatile Control Scheme for UPQC for Power Quality Improvement using fuzzy controller" IOSR Journal of Engineering (IOSRJEN) ISSN (e): 2250-3021, ISSN (p): 2278-8719 Vol. 04, Issue 09 (September. 2014), ||V3|| PP 11-20

33. B. Suresh Kumar" Practical Approach for Detection of Failure of Distribution Transformers And their Remedies "IOSR Journal of Engineering (IOSRJEN) ISSN (e): 2250-3021, ISSN (p): 2278-8719 Vol. 04, Issue 07 (July. 2014), ||V1|| PP 42-45.

34. B. Suresh Kumar "Determination of Optimal Account and Location of Series Compensation and SVS for an AC Transmission System" ISSN (e): 2250 – 3005 || Vol, 04 || Issue, 5, May – 2014, PP-50-57.

35. B. Suresh Kumar "Compensation of Voltage Sags and Swells during Abnormal Conditions in Distribution Systems by Dynamic Voltage Restorer (DVR)" Int. Journal of Engineering Research and Applications ISSN: 2248-9622, Vol. 4, Issue 4 (Version 1), April 2014, pp-62-68.

36. B. Suresh Kumar "Voltage Sags and Harmonics Compensation by Using Dvr Under Distorted Supply Voltage & Sags" Journal of International Academic Research for Multidisciplinary Impact Factor 1.393, ISSN: 2320-5083, Volume 2, Issue 2, March 2014.

37. B. Suresh Kumar "Short Term Load Forecasting Using Artificial Neural Networks" International Journal of Research in Computer and Communication Technology, Vol 3, Issue 2, February- 2014 ISRA Journal.

38. B. Suresh Kumar "Power Quality Improvement by Using Multi pulse AC-DC Converters for Varying Loads" International Journal of Scientific Engineering and Technology ISSN: 2277-1581) Volume No.3 Issue No.2, pp : 78 - 84 1 Feb 2014.

39. B. Suresh Kumar" Hybrid Active Power Filter Design for 3-Phase, 4-wire System for Different Loads to Enhance Power Quality Using PSO" i-manager's Journal on Power Systems Engineering, Vol. 1 | No. 1 | February - April 2013, PP-36-44.

40. B.Suresh Kumar "Sag/Swell and Load Reactive Power Compensation Using UPQC\_S" i-manager's Journal on Power Systems Engineering, Vol. 1 I No. 1 I February - April 2013 PP-09-16.

41. B. Suresh Kumar "Voltage Stability Improvement Using Static Synchronous Series Compensator (SSSC) Using PI Controller" International Journal of Electrical Engineering & Technology (IJEET) ISSN 0976 – 6545(Print), ISSN 0976 – 6553(Online) Volume 4, Issue 5, September – October (2013)

42. B. Suresh Kumar "Enhancement of Voltage Stability Using Static Synchronous Series Compensator (SSSC) with PI Controller-LLLG Fault" International Journal of Advanced Research in Engineering and Technology (IJARET), Volume 4, Issue 5, July-August 2013, ISSN Online: 0976-6499.

43. B. Suresh Kumar Dr. K. Ramesh Reddy "The Application of PSO to Hybrid Active Power Filter Design for 3phase 4-Wire System with Variable Load" International Journal of Engineering Inventions ISSN: 2278-7461, www.ijeijournal.com Volume 1, Issue 4 (Septenber2012) PP: 39-46.

44. B. Suresh Kumar Dr. K. Ramesh Reddy "The Application of Particle Swarm Optimization to Passive Power Filter Design For 3phase 4-Wire System With Balance And Unbalance Load" Int. J. Elec & Electrical. Eng & Telecoms. 2012, ISSN 2319 – 2518 Vol. 1, No. 1, October 2012.

45. B. Suresh Kumar Dr. K. Ramesh Reddy S. Archana "The Application of Particle Swarm Optimization to Passive Power Filter Design For 3phase 4-Wire System with Balanced & Unbalanced Loads" International Journal of Advances in Engineering & Technology (IJAET)2012 ISSN:2231-1963 Vol.2, Issue1, pp.32-42.

46. B. Suresh Kumar Dr. K. Ramesh Reddy S. Archana" The Application of Particle Swarm Optimization to Passive Power Filter Design For 3phase 4-Wire System with Variable Load" International Journal of Advances in Engineering, Science and Technology (IJAEST) ISSN: 2249-913X Vol. 1 No. 2 Dec 2011-Feb 2012 pp:330-340.

47. B. Suresh Kumar, Dr. K. Ramesh Reddy "A Comparative Study of Neuro Controller and Wavelet Transform for Shunt Active Filter in Reducing THD of a 3-Phase 4 wire System" International Journal of computer and electrical engineering. IJCEE- ISSN: 1793-8163 Vol.3, No.4, pp.483-488, ISSN: 1793-8163 August 2011-Singapore.

48. B. Suresh Kumar, Dr. K. Ramesh Reddy "PI, Fuzzy Logic Controlled Shunt Active Power Filter for Threephase Four-wire Systems with Balanced, Unbalanced and Variable Loads" Journal of Theoretical and Applied Information Technology Islamabad (JATIT)- ISSN 1992-8645-January 2011 | Vol. 23. No.2 pp:122-130, Paper ID: 1466 – JATIT.

49. B. Suresh Kumar, Dr. K. Ramesh Reddy "Adaptability of Neuro Controller over Fuzzy Controller for a Shunt Active Filter in case of Three Phase Four Wire System with Wide Spectrum of Loads" International Journal of Applied Engineering Research IJAER-ISSN 0973-4562 Volume 5 Number 20 (2010) pp. 3429-3439.
50. B. Suresh Kumar, Dr. K. Ramesh Reddy "PI, Fuzzy And Neuro Controlled Shunt Active Power Filters For Three Phase Four Wire System With Balanced, Unbalanced And Variable Loads" International J. of Engineering. Research & Indu. Appls. (IJERIA). ISSN 0974-1518, Vol.4, No. I (February 2011), pp 1-19

## International Conferences:

51. Dr. E.Manigandan, 2. Mr.P.Anispremkoilraj, 3. B. Suresh Kumar, Dept of EEE, 4. Prof. Shilpa M.Satre,, 5. Dr Amit Chauhan, C. Jeyaganthan, Research Scholar,, " An Effective BiLSTM-CRF Based

Approach to Predict Student Achievement: An Experimental Evaluation, Proceedings of the 2nd International Conference on Intelligent Data Communication Technologies and Internet of Things (IDCIoT) 52. DVD Part Number: CFP24CV1-DVD; ISBN: 979-8-3503-2752-6 IEEE, Scopus Indexed. 979-8-3503-2753-3/24/\$31.00 ©2024 IEEE PG:781-786

53. Dr.b.Suresh Kumar presented the title" Predection of injuries and Fatalities n Aircraft accidents through ensemble hybrid C-seresnet Approach by ICCCI held from 29th-31st Jan 2024 by sri shakthi institute of engg and Tech Coimbatore.

54. Dr.b.Suresh Kumar presented the title "Enhancing Assessment in Distance education :open Ended questions and innovative measurement Technique with SVM-WoA approach –in the 14th Int conf ICCCI " held from 29th-31st march jan 2024. by sri shakthi institute of engg and Tech Coimbatore

55. B. Suresh Kumar, "Sparrow Search Optimization with Deep Belief Network based Wind Power Prediction Model," Intelligent Data Communication Technologies and Internet of Things, 5 – 7 Jan 2023.
56. B. Suresh Kumar, "Generation of Electric Energy using Thermoelectric effect in Thick Forest,"

International Conference on Innovations in Engineering and Technology, 15 – 17 Sept 2022.

57. B. Suresh Kumar, "Novel Controller for Grid Connected Fuel Cell System," Springer Conference on Electrical Engineering and Intelligent Systems, 2022.

58. B. Suresh Kumar, "Sliding Mode Controller Based Direct Torque Control of SRM for Electric Vehicles," Springer Conference on Electrical Engineering and Intelligent Systems, 2022.

59. This is to certify that Mr. / Ms. / Dr. S. Swathi, B. Suresh Kumar, J. Upendar have received Session (Electrical Power Engineering) Best Paper award for the paper titled Power Quality Concerns in Implementing Smart Distribution Grid Applications<sup>777</sup> in the International Conference on Emerging Trends in Circuit branch Technologies and Applications virtually on 3<sup>rd</sup>-4th April 2021 at Chaitanya Bharathi Institute of Technology (A), Hyderabad – 500 075, Telangana, India.

60. K. Sindhu Priya, Dr. B. Suresh Kumar, and S. Praveena presented a paper "modelling simulation of feedback based linear Electromechanical Actuator "International conf is organized by Malla Reddy college of Engineering and Tech (ICETEE-2020) during 21ST-22 Aug 2020.

61. Dr. B. Suresh Kumar presented paper in International conference "21 level Inverter Topologies" organized by the Department of Electrical, Electronics and Communication Engineering, Invertis University, Bareilly, U.P., India. During 11-12 sep 2020

62. Presented a paper titled "Power inverter configuration for dual redundancy technique with fault diagnosis and fault tolerance, in the event "Virtual International Conference on POWER INITIATIVES (ICPI-2020)" organized by Department of EEE & IEEE Student Branch (STB-64616) of K. Ramakrishnan. College of Engineering on 22nd & 23rd of JULY 2020.

63. Mr. Tipirisetti Rakesh, Dr. B. Suresh Kumar & Dr. J. Upendar, presented a paper entitled "Present Day Lithium Ion Battery" in the International Web Conference on "Innovative Engineering Technologies - 2020" jointly organized by the Department of EEE and ECE, Sri Ramakrishna Institute of Technology, Coimbatore - 10 on August 5th 2020.

64. B. Suresh Kumar et al "Speed Control of BLDC Motor with PI Controller and PWM Technique for Antenna's Positioner", International Conference on Emerging Current Trends in Computing and Expert Technology COMET 2019, Panimalar Engineering College, Chennai, India, March 22nd &23rd 2019.

65. B. Suresh Kumar "A Particle Swarm Optimization Technique for Economic Load Dispatch "International Conference on Management, Sciences, Engineering and Applications (ICMSEA - 2018), at bits Visakhapatnam, Andhra Pradesh, India which is being organized from December 20 - 22, 2018.

66. B. Suresh Kumar "Simulation of Electro-Mechanical Actuator for Missile Application by Dual Redundancy Technique" International Conference on Management, Sciences, Engineering and Applications (ICMSEA - 2018), at bits Visakhapatnam, Andhra Pradesh, India which is being organized from December 20 - 22, 2018.

67. B. Suresh Kumar "Power Quality Improvement using Custom Power Devices (AVC, DVR, APC) in IEEE ICCTCT 2018. during March 1st to 3rd, 2018 SVS College of Engineering, Coimbatore.

68. B. Suresh Kumar "Performance of Custom Power Devices for Power Quality Improvement" ICPCSI-0290 saveetha engineering college Chennai during 21st and 22nd sep 2017.

69. B. Suresh Kumar "A Method for Capacitor Placement in Radial Distribution Systems" Presented a paper at MANIPAL(ICSDC2010-MIT) during 19th – 22nd August

70. B. Suresh Kumar, Dr. K. Ramesh Reddy "Wavelet and Neuro-Fuzzy Controlled Shunt Active Power Filter for 3-Phase, 4-Wire Systems in Reducing %THD and Improvement of Power Factor" MIPSCCON-2011-IEEE Sponsored International Conference, GMRIT, Rajam-A. P during 7th-9th, April 2011, PP:82-88

## National Conferences:

71. Presented a paper titled." Hardware Implementation and MATLAB Simulation of Automatic power factor correction" in A Two-Day National Level e-Conference on "Recent Advances in Technology & Engineering (CRATE-2020)" organized by the Dept. of Electrical & Electronics Engineering from 20th to 21st August 2020.

72. B. Suresh Kumar et al "Energy Storage Management Using Lithium-Ion Batteries" Research Day 2019, August 23<sup>rd</sup> 2020. CBIT

73. B. Suresh Kumar et al "Reliability modeling and Evaluation of distributed energy resources in smart power distribution systems" Research Day 2019, August 23rd 2020.CBIT

74. B. Suresh Kumar et al "Sensitivity Assessment of Micro Grid Investment Options to Guarantee Reliability of Power Supply in Rural Areas" Research Day 2019, August 23rd 2020.CBIT

75. B. Suresh Kumar et al "Development and Testing of Non-Isolated Fly Back Converter" Research Day 2019, August 23rd 2020.CBIT

76. Dr. B. Suresh Kumar, "An Improved IUPQC WITH fuzzy controller providing voltage regulation as a STATCOM" CBIT 28th -29th October 2016 RTPSD-2016 SUPPORTED BY CPRI & i-MANAGER Pg no:11-19. 77. Dr. B. Suresh Kumar, Dr. K Ramesh Reddy" Power System Fault Classification Using ANN" Role Of Engineers In The Development Of New State Of Telangana (NC-REDNeST), CBIT, 23rd - 24th January, 2015.Page-58.

78. Dr. B. Suresh Kumar, Dr. K Ramesh Reddy" Analysis of Three Phase Shunt Active Filters" Role of Engineers in The Development Of New State Of Telangana (NC- REDNeST), CBIT, 23rd - 24th January, 2015.Page-57.

B. Suresh Kumar," An Aerial Image Processing for urban area segmentation and evaluation on satellite Images" at BIDAR (RTCSIT-09) Gurunanak Dev Engineering college, Karnataka, May 8'th-9'th 2009.
B. Suresh Kumar, Dr. K. Ramesh Reddy Lalitha "A Comparative Study of PI and Fuzzy Logic Shunt Active Power Filter in Reducing % THD of a Three Phase Four Wire System" At NPSC, December 15<sup>th</sup>-17<sup>th</sup>, Hyderabad-2010-pp.301-306

