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|----|--|--|-------------------------------|---|
| 1  | Name of Faculty  | N.SANTOSH KUMAR  |                               |  |
| 2  | Designation  | Assistant Professor  |                               |   |
| 3  | Nature of Job/Appointment  | Regular  |                               |   |
| 4  | Date of Joining  | 18 - 06 - 2018   |                               |   |
| 5  | E-mail   | santoshkumar_eee@cbit.ac.in  |                               |   |
| 6  | Education Qualifications   | Name of the Degree   | Class                         |   |
|    | Ph. D  | Pursuing   | --                            |   |
|    | PG   | M. Tech. (EPS)   | First                         |   |
|    | UG   | B. E. (EEE)  | First                         |   |
| 7  | Work Experience  |  |                               |   |
|    | Teaching   | 16 Years   |                               |   |
|    | Research   | --   |                               |   |
|    | Industry   | --   |                               |   |
|    | Others   | --   |                               |   |
| 8  | Area of Specialization   | Renewable energy system, Hybrid Microgrid.   |                               |   |
| 9  | Professional Memberships   | Indian Society For Technical Education (ISTE) - LM137787   |                               |   |
| 10 | Responsibilities held at Institution Level   | --   |                               |   |
|    |  | <ol style="list-style-type: none"> <li>1. In-Charge: Time table</li> <li>2. In-Charge: Equivalent Subjects</li> <li>3. In-Charge: MoUs</li> <li>4. In-Charge: Industrial Visits.</li> </ol>  |                               |   |
| 11 | Responsibilities held at Department Level  | <ol style="list-style-type: none"> <li>5. Member: MODROBS_Electrical Machines Lab</li> <li>6. In-Charge: Setting up of Basic Electrical Engineering Laboratory</li> <li>7. Member: NBA Criteria-4.0 &amp; 2.0</li> <li>8. Member: Course Expert Group</li> <li>9. Member: NAAC Criteria- (2.3 &amp;1)</li> </ol> |                               |   |
| 12 | Research Guidance  | --   |                               |   |
| 13 | Awards Received  | --   |                               |   |
| 14 | Courses Handled at Under Graduate Level.   | Electrical Machines-II, Electrical Machines-III, Power Systems-I, Power Systems-II, Electrical Technology, Electrical Circuits and Machines.   |                               |   |
| 15 | No. of Papers Published  | National Journals – --   | International Journals – 08   |   |
|    |  | National Conference – --   | International Conference – 03 |   |
| 16 | Projects Carried out   | MODROBS - Special Electrical Machines  |                               |   |
| 17 | Patents  | 01   |                               |   |
| 18 | Technology Transfer  | --   |                               |   |
| 19 | Invited Speaker  | --   |                               |   |
| 20 | No. of Books/Chapter Published with details  | <ol style="list-style-type: none"> <li>1. Analysis of Single-Phase H6-Clamping Transformer less Inverter Topology for Constant Common Mode Voltage Book Chapter Emerging Technologies &amp; Applications in Electrical Engineering eBook ISBN 9781003505181, eBook Published 8 July 2024.</li> </ol>             |                               |   |
| 21 | Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Trainings | <ol style="list-style-type: none"> <li>1. Sponsored FDP-Participated in a One-week MHRD-Sponsored INDO-US International Workshop on "IOT AND ML BASED MICROGRID &amp; ENERGY MANAGEMENT" Organized by Department of Electrical and Electronics</li> </ol>  |                               |   |
|    | <b>(Attended and/ or Organized).</b>   |  |                               |   |

- Engineering during 19th – 23rd February 2024.
2. One Guest Lecture delivered to the Diploma students of RIT-COP (Ratnapuri Institute of Technology –College of Polytechnic organized by the ACIC-CBIT GRIP in collaboration with Dept. of EEE ,CBIT on 17<sup>th</sup> February 2024).
  3. Participated in One week online FDP on “Quality Education through OBE” organized by Chaitanya Bharathi Institute of Technology (Autonomous), Gandipet, Hyderabad- 500 075, Telangana, India., in association with IEEE Education Society Student Branch Chapter CBIT during 22nd - 27th January 2024
  4. One-Week Online Short Term Course (STC) on “Smart Grid and Integration of Distributed Generation” held from 28th August to 1st September-2023, In Association with NITTR Chandigarh.
  5. Webinar on “Microgrid and EV Charging” on 19th July 2023, Organized by Tata Power Delhi Distribution Limited, New Delhi.
  6. One-Week Short Term Training Program on “Electrical CAD Design” held from 26th June-01<sup>st</sup> July 2023, Organized by the Department of Electrical and Electronics Engineering, Bapatla Engineering College, Bapatla, AP
  7. One-week faculty development programme on “Recent advances in the Power Sector, Challenges, Solutions and Opportunities” held from 31<sup>st</sup> July – 05<sup>th</sup> August-2023, Organized by Department of Electrical and Electronics Engineering, Vidya Jyothi Institute of Technology, Hyderabad, TS.
  8. One-week National Level Online Faculty Development Programme on “Recent Trends in Green Energy Initiatives and Soft Computing Techniques” from 11<sup>th</sup> July- 15<sup>th</sup> July- 2023 Organized by Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Gandipet, Hyderabad, TS.
  9. Participated in National Level One Week Faculty Development Programme on “Recent Trends in Data Science for Engineering” organized by Department of Information Technology, Chaitanya Bharathi Institute of Technology, Hyderabad, Telangana in association with CBIT IEEE-RAS student branch chapter from 26<sup>th</sup> June 2023 to 30<sup>th</sup> June 2023.
  10. Organized: A Two Day Online Work Shop On Emerging Novel Technologies Related To Advanced Machines “ENTRAM-2022” 29<sup>th</sup> - 30<sup>th</sup> March-2022
  11. Participated in one day online webinar on “Harmonic analysis using ETAP” Organized by HIEE EMPOWERING ENGINEERS PVT LTD held on 30<sup>th</sup> Jan 2022.
  12. Attended “A National Level Webinar on Adaptive Control Schemes for Grid-Tied Inverters to Improve Power Quality of Micro-Grid Systems” conducted by the Department of Electrical and Electronics Engineering, in Association with IEEE Student Branch & Tesla Club at SRM TRP Engineering college, Trichy on 17.08.2022.
  13. Participated in A One-week National Level Online Faculty Development Programme on “Smart Grids and Micro Grids in Indian Context” from 20-06-2022 to 24-06-2022 organized by the Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Gandipet, Hyderabad.
  14. Attended One-week National Level Online Faculty

Development Programme on “Challenges and Measures in Evolving Power Systems” from 06-06-2022 to 11-06-2022 organized by the Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Gandipet, Hyderabad.

15. Attended a three day online faculty development programme on “Real-Time Hardware-In-The-Loop Simulation Of Advanced Power Electronics For Electric Transportation And Renewable Energy Applications” during 1st june -3rd june 2022 Organized by Anurag University, Department of Electrical Engineering, Hyderabad in Association with Quartz info Systems, Kanpur, UP.
16. Attended Workshop on “Standardization of Sensors, Devices and Their Application” held on February 22-23, 2022, at Thapar Institute of Engineering and Technology, Patiala under the aegis of Metrology Society of India.
17. Attended one day workshop on Design Thinking, Critical Thinking and Innovation Design” Organized by department of Basic Science and Humanities held on 21st Feb 2022 at BVRIT-IIC.
18. Participated in One Week Virtual Faculty Development Program (FDP) on “Research Challenges, Opportunities in Smart Grid with Integration of Electrical Vehicles” (RCOSGIEV-2021)” During 08-10-2021 to 12-10-2021, Organized by the Department of Electrical & Electronics Engineering, VEMU Institute of Technology, P. Kothakota, Chittoor(Dt), A.P.
19. Participated in online webinar on “Power Electronics – A Driving force for Electric Vehicle” Conducted by Vignan Institute of Technology and Science held on 29th July 2021.
20. A Three-day faculty development programme on “IPR & Fundamentals of Patent Filing - Prosecution” conducted by Dept. of IT, BVRIT, Narsapur, Medak, during 08-06-2021 to 10-06-2021.
21. A One-week STTP on “Recent Advances in EV Technologies, Series-A” conducted by Dept. of EEE, Matrusri Engineering College, Saidabad, Bandlaguda, HYD., during 26-04-2021 to 01-05-2021.
22. A Five-day faculty development programme on “Design and Development of control strategies on Electrical Power Applications-An Industrial Perspective” conducted by Dept. of EEE,PVPSIT(A), Vijayawada during 07-12-2020 to 12-12-2020.
23. A Two-week faculty development programme on “Advanced Power Electronic Applications in Power Systems” conducted by Dept. of EEE, SASI(A), Tadepalligudem during 23-11-2020 to 05-12-2020.
24. A Webinar on “Fractional Order Controller-Design and Implementation-2021” organized by Organized by Sree Venkateswara College of Engineering, Northrajupalem, Nellore, Andhra Pradesh on 20th June, 2021.
25. A Webinar on “Styling, Formatting and Referencing Research Paper” organized by Organized by Matterhere on 17th June, 2021.
26. A Webinar on “ISSUES IN GRID INTEGRATION OF RENEWABLE ENERGY” organized by Vignans Institute of Science, Guntur on 06th June, 2021.
27. A Webinar on “The Future is AI” organized by Dept. of IT, BVRIT, Narsapur, Medak on 05th June, 2021.
28. A Webinar on “Advanced power converters for future power grids” organized by IEEE - PES Chapter, CBIT, Hyderabad

on 10th March, 2021.

29. Completed online course on “Wind Energy” offered by Technical University of Denmark., 01st June 2020 to 01st July 2020.
30. Attended Short Term Course “Soft Computing Techniques Renewable and Electrical Systems” HRDC, JNTU, Hyderabad (Online), 1st - 6th June 2020.
31. A Faculty Development Program on “Outcome Based Education and NBA Accreditation Process-(UG)”, Chaitanya Bharathi Institute of Technology (A), Hyd. (Online). 28th May - 01st June 2020.
32. Attended FDP “Design and Development of Photovoltaic modules for PV Generation” Organized by Lendi Institute of Engineering and Technology, 25th - 30th May 2020.
33. Attended STTP “MATLAB based Teaching-Learning in Mathematics, Science & Engineering” Organized by Ramrao adik Institute of Technology, Navi Mumbai in collaboration with Design Tech Systems Pvt. Ltd, 18th – 22nd May 2020.
34. Participated in one day webinar on “Microgrid Technology” Organized by Chennai Institute of Technology, 16th May 2020.
35. Participated in one day webinar on “Microgrid Technology” Organized by Chennai Institute of Technology, 16th May 2020.
34. Participated in 3-day webinar series on “Design of Power Switched converters for Renewable Energy Applications” Organized by KL University, 9th May to 11th May 2020.
35. Attended Online workshop “Electromagnetic and Thermal Simulation of PMSM motor” organized by ALTAIR (ANZ ASEAN India) on 7th May 2020.
36. Co-ordinator for “Energy Conservation week celebrations December-2019”, 14th-20th Dec 2019
37. A Continuing Professional Development Programme on “Rooftop Solar Grid Engineer (Design, Erection, Commissioning & Maintenance)”, Engineering Staff College of India, Hyderabad. 10th - 14th June 2019.
38. The Exhibition-Events “The Smarter E India (India’s Innovation Hub for The New Energy World)” Bangalore International Exhibition Centre, Karnataka. 27th – 28th Nov 2019.
39. Organized a Three day Workshop “Simulation of Power Electronic Converters –SPEC-18” In Association with IEEE-PES Student Chapter 26th-28th February 2018.
40. A two-day work shop on “Practical Aspects of Renewable Energy Sources” EEE Dept., CBIT (A). 27th – 28th March, 2017.

#### International Journal

1. **Sri N. Santosh Kumar**, published a paper in “Journal of Engineering Sciences” IMPLEMENTATION OF FUZZY-LOGIC MPPT CONTROLLER FOR GRID CONNECTED PV SYSTEMS” ISSN:0377-9254, Vol 15 Issue 04, 2024.
2. K. Yamini, V.Nuthan, M. Rishi Praneeth **Sri N. Santosh Kumar**, “charging of battery from solar and wind energy sources by using MPPT and fuzzy logic controllers Implementation of Renewable energy in EV charging stations”. The International journal of analytical and experimental modal analysis. ISSN NO: 0886-9367, Volume XV, Issue IV, April/2023.
3. Y.Praneeth, P.Harish, R.Shruthi, **Sri N. Santosh Kumar**, “Implementation of Renewable energy in EV charging stations”. The International journal of analytical

- and experimental modal analysis. ISSN NO: 0886-9367, Volume XV, Issue IV, April/2023.
4. P. Hemeshwar Chary, **N. Santosh Kumar**,” Microgrid Control Schemes And Current Trends For Sustainable Energy Management”, PENSEE International Journal, Vol. 51, No. 4, pp. 1436-1444, April-2021, ISSN 0031-4773 , Impact factor: 6 (**Scopus Indexed**).
  5. **N. Santosh Kumar**, P. Hemeshwar Chary, “Machine Learning Based Adaptive Protection of Microgrid for Optimized Power System Management”, International Journal of Advanced Science and Technology, Vol. 30, No. 1, pp. 22-30, April-2021, ISSN 22-30, Impact factor: 0.48 (**Scopus Indexed**).
  6. **N. Santosh Kumar**, P. Hemeshwar Chary, ”Cooperative Optimal Control Strategy for Microgrid under Grid-Connected Mode, Open Access International Journal of Science& Engineering”, Vol. 6, No. 6, pp. 50-54, June-2021, ISSN 2456-3293, Impact factor: 5.856doi: 10.51397/OAIJSE06.2021.0009 (UGC Approved).
  7. P. Hemeshwar Chary, **N. Santosh Kumar**, ”Islanded Mode Based Efficient Control and Management Strategy for a Grid Connected PV System”, Journal of Interdisciplinary Cycle Research, Vol. VIII, No. VI, pp. 860-867, June-2021, ISSN 0022-1945, Impact factor: 6.2,DOI:18.0002.JICR.2021.V13I6.008301.3171229060 (UGC Care).
  8. P. Hemeshwar Chary, **N. Santosh Kumar**, ”Adaptive Smart Centralized Substation Protection System through Self-Healing”, Journal of Critical Reviews, Vol. 8, No. 2, pp. 1527-1534, June-2021, ISSN- 2394-5125, DOI: 10.31838/jcr.08.02.152 (Google Scholar).
  9. Dr. T. Murali Krishna, **N. Santosh Kumar**, D.Akhila, D. Balaji (2018) “Comparison of Performance of Seven Level Neutral Point Clamped and Multi Source Topologies”. International Journal Of Engineering Research And Development, Vol. no: 14, pp 43-48, April-2018.

#### International /National Conferences

1. Presented Paper “Analysis of Single-Phase H6-Clamping Transformer less Inverter topology for Constant Common mode voltage” The First international Conference on Emerging Technologies and Applications in Electrical Engineering (ETAEE-2023).
2. Presented paper “Voltage sag and swell mitigation in a transmission line using Dynamic Voltage Restorer” in the 2<sup>nd</sup> International conference on Engineering and Advancement in Technology-2021. Held on 16<sup>th</sup> and 17<sup>th</sup> July 2021. Organized by LORDS Institute of Engineering and Technology.