### Dr. RamaKoteswara Rao Alla

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## **Career Objective**

To be valued individual among group, to utilize knowledge and skills so as to synergize working institute and in particular to motivate students through academic teaching along with personal growth and care.

## **Educational Qualification**

S. No.	Qualification	Branch/Subject	Year of Passing (Division)	Institute/University
1	Ph.D.	Electrical Engineering Department (Control Systems, Reliability Analysis of Power Systems)	2017	NIT Kurukshetra
2	M. Tech.	Electrical Engineering Department (Control Systems)	2010 (First Class)	NIT Kurukshetra
3	B. Tech.	Electrical and Electronics Engineering	2008 (First Class)	JNTU Hyderabad
4	12 <sup>th</sup>	Mathematics, Physics, Chemistry	2004 (First Class)	Vijayawada Nalanda Junior College, Guntur
5	10 <sup>th</sup>	English, Mathematics, General Science, Social Studies, Hindi, Sanskrit	2002 (First Class)	Siddhartha High School, Amaravathi

## **Teaching Experience**

- ➤ Working as an Associate Professor in Electrical and Electronics Engineering Department, RVR&JC College of Engineering, Guntur, Andhra Pradesh from March-2018 to till date.
- ➤ Worked as an Assistant Professor in Electrical and Electronics Engineering Department, RVR&JC College of Engineering, Guntur, Andhra Pradesh from August-2016 to February-2018.
- March-2012 to July-2016: Teaching Assistant, Electrical Engineering Department, National Institute of Technology Kurukshetra, Haryana, India.

➤ July-2010 to March-2012: Assistant Professor, Electrical Engineering Department, National Institute of Technology Kurukshetra, Haryana, India.

#### **Academic/Administrative Duties**

- ➤ In-charge Time-Tables, EEE Department, RVR&JC College of Engineering from 01/05/2017.
- ➤ Member Board of Studies, EEE Department, RVR&JC College of Engineering from 16/04/2018.
- ➤ NSS Programme Officer (Unit-III), RVR&JC College of Engineering from 14/06/2018 to 31/12/2023.
- ➤ In-charge Control Systems lab, EEE Department, RVR&JC College of Engineering from 21/11/2018.
- ➤ Member in Institution's Innovation Council (IIC), RVR&JC College of Engineering.
- Member in Internal Quality Assurance Cell (IQAC), RVR&JC College of Engineering.
- ➤ Member in Information Technology Business Incubator (ITBI), RVR&JC College of Engineering.
- ➤ Co-Convener, Institute Time-Table Committee, RVR&JC College of Engineering.

## **Memberships in Professional Societies:**

- ➤ Member in International association of engineers (IAENG) & Member in IRED
- ➤ Editorial Board Member in VIT Press International Journal of Intelligent Control and Automation (VITP-IJICA) and VIT Press International Journal of Industrial Electronics (VITP-IJINE).

### **Research Publications: 61**

#### ISI/SCI/Web of Science/Scopus listed International Journals

- 1. **RamaKoteswaraRao A.**, Lather J.S., Pahuja G.L., "New delay dependent stability criterion for linear systems with time varying delay", Journal of Engineering Research, Academic Publication Council, vol.4, no. 2, pp.103-116, June 2016. (SCI, Web of Science, ISI, Springer's GSJ and Scopus indexed) https://doi.org/10.7603/s40632-016-0016-0
- 2. **RamaKoteswaraRao A.**, Lather J.S., Pahuja G.L., "New delay dependent stability criterion for singular systems with time varying delay in a range", The Arabian Journal for

- Science and Engineering, vol.42, pp.2751–2757, July 2017, Springer. (SCI, Web of Science & Scopus Indexed) https://doi.org/10.1007/s13369-016-2395-9
- 3. **RamaKoteswaraRao A.**, Lather J.S., Pahuja G.L., "Comparison of PI controller performance for first order systems with time delay", Journal of Engineering Science and Technology, vol.12, no.4, pp.1081-1091, April 2017. (Web of Science & Scopus indexed)
- 4. Thakral B., Vaish A., **RamaKoteswara Rao A.**, "Design of Low Voltage Low Power OTA based CCII+", Pertanika Journal of Science and Technology, vol.25, no.4, pp.1307 1316, September 2017. (Web of Science & Scopus Indexed)
- 5. Thakral B., Vaish A., **RamaKoteswara Rao A.**, "Design of Squarer Circuit in Subthreshold Mode", International Journal of Engineering & Technology, vol.7, no.2, pp.38-40, April 2018. (Scopus Indexed) <a href="https://doi.org/10.14419/ijet.v7i2.11.11004">https://doi.org/10.14419/ijet.v7i2.11.11004</a>
- G. Sambasivarao and Ramakoteswararao A., "Compensation of Utility Current Using Active Power Filter for PV-Grid Tied System with Non-Linear Load", Journal of Advanced Research in Dynamical and Control Systems, vol. 12, no.7, pp. 721-729, July 2020. (Scopus Indexed) <a href="https://doi.org/10.5373/JARDCS/V12I7/20202055">https://doi.org/10.5373/JARDCS/V12I7/20202055</a>
- 7. Sarayu Vunnam, M. VanithaSri, **A. RamaKoteswaraRao**, "Performance analysis of mono crystalline, poly crystalline and thin film material based 6 × 6 T-C-T PV array under different partial shading situations", Optik, Vol. 248, pp. 1-14, December 2021, Elsevier. (SCI, Web of Science & Scopus Indexed) https://doi.org/10.1016/j.ijleo.2021.168055
- 8. Ravindranath Tagore Yadlapalli, **RamaKoteswara Rao Alla**, Rajani Kandipati, Anuradha Kotapati, "Super capacitors for energy storage: Progress, applications and challenges", Journal of Energy Storage, Vol. 49, May 2022, 104194, Elsevier. (SCI, Web of Science & Scopus Indexed) <a href="https://doi.org/10.1016/j.est.2022.104194">https://doi.org/10.1016/j.est.2022.104194</a>
- Chegudi RangaRao, R.Balamurugan, RamaKoteswaraRao Alla, "Simulation and Stability Analysis of Three-Phase Shunt Active Filter Based on Internal Model Controller (IMC)", Journal of Engineering Science and Technology Review, Vol. 14, No.6, PP 154-161, December 2021. (Scopus Indexed) <a href="https://doi.org/10.25103/jestr.146.18">https://doi.org/10.25103/jestr.146.18</a>
- 10. P.Venkata Mahesh, S.Meyyappan, RamaKoteswaraRao Alla, "Multivariate Linear Regression MPPT Algorithm for Solar PV Systems with Boost Converter", ECTI Transactions on Electrical Engineering, Electronics, and Communications Vol. 20 No. 2,

- PP 269-281, June 2022. (Scopus Indexed) <a href="https://doi.org/10.37936/ecti-eec.2022202.246909">https://doi.org/10.37936/ecti-eec.2022202.246909</a>
- 11. P.Venkata Mahesh, S.Meyyappan, RamaKoteswaraRao Alla, "Maximum Power Point Tracking with Regression Machine Learning Algorithms for Solar PV Systems", International Journal of Renewable Energy Research (IJRER), Vol. 12, No.3, PP. 1327-1338, September 2022. (Scopus, Web of Science, ESCI Indexed) <a href="https://doi.org/10.20508/ijrer.v12i3.13249.g8517">https://doi.org/10.20508/ijrer.v12i3.13249.g8517</a>
- 12. N.Dharani Kumar, T.A. Ramesh Kumar, **RamaKoteswaraRao** Alla, "Effect of Partial Shading on the Performance of Various 4x4 PV Array Configurations", ECTI Transactions on Electrical Engineering, Electronics, and Communications. Vol. 20, No. 3, PP 427–437, October 2022. (Scopus Indexed). https://doi.org/10.37936/ecti-eec.2022203.247518
- 13. P.Venkata Mahesh, S.Meyyappan, **RamaKoteswaraRao Alla**, "Maximum Power Point Tracking Using Decision Tree Machine Learning Algorithm for Photovoltaic Systems", Clean Energy Journal, OXFORD Academic Publisher, Vol 6, No 5, PP. 762-775, October 2022. (Scopus, Web of Science, ESCI Indexed). <a href="https://doi.org/10.1093/ce/zkac057">https://doi.org/10.1093/ce/zkac057</a>
- 14. N.Dharani Kumar, T.A. Ramesh Kumar, RamaKoteswaraRao Alla, "A Novel PV Array Configuration for Enhancing Maximum Power from PV Array", Clean Energy Journal, OXFORD Academic Publisher, Vol 6, No 6, PP. 817–826, December 2022. (Scopus, Web of Science, ESCI Indexed). <a href="https://doi.org/10.1093/ce/zkac054">https://doi.org/10.1093/ce/zkac054</a>
- 15. Chegudi RangaRao, R.Balamurugan, RamaKoteswaraRao Alla, "Analysis of Three-Phase Shunt Active Filter under Wide Range of Load Conditions", International Journal of Renewable Energy Research (IJRER), Vol. 12, No 4, PP.1920-1931, December 2022. (Scopus and web of science, ESCI Indexed). <a href="https://doi.org/10.20508/ijrer.v12i4.13393.g8615">https://doi.org/10.20508/ijrer.v12i4.13393.g8615</a>
- 16. Chegudi RangaRao, R.Balamurugan, RamaKoteswaraRao Alla, "Synchronization Control Techniques for Shunt Active Power Filter: An Overview", Bulletin of Electrical Engineering and Informatics (BEEI), Vol 12, No 1, PP. 1-9, February 2023, (Scopus Indexed). <a href="https://doi.org/10.11591/eei.v12i1.4300">https://doi.org/10.11591/eei.v12i1.4300</a>
- 17. P.Venkata Mahesh, S.Meyyappan, RamaKoteswaraRao Alla, "Support Vector Regression Machine Learning based Maximum Power Point Tracking for Solar Photovoltaic systems", International Journal of Electrical and Computer Engineering

- Systems, Vol 14, No 1, PP. 100-108, January 2023. (Scopus, Web of Science Indexed). https://doi.org/10.32985/ijeces.14.1.11
- 18. Chegudi RangaRao, R.Balamurugan, **RamaKoteswaraRao Alla**, "Artificial Rabbits Optimization Based Optimal Allocation of Solar Photovoltaic Systems and Passive Power Filters in Radial Distribution Network for Power Quality Improvement", International Journal of Intelligent Engineering and Systems (IJIES), Vol.16, No.1, PP. 100-109, February 2023. (Scopus Indexed). https://doi.org/10.22266/ijies2023.0228.09.
- 19. N.Dharani Kumar, T.A. Ramesh Kumar, **RamaKoteswaraRao Alla**, "Traditional and hybrid solar photovoltaic array configurations for partial shading conditions: perspectives and challenges", Bulletin of Electrical Engineering and Informatics (BEEI), Vol. 12, No. 2, PP. 642-649, April 2023. (Scopus Indexed). https://doi.org/10.11591/eei.v12i2.4520
- 20. N.Dharani Kumar, T.A. Ramesh Kumar, RamaKoteswaraRao Alla, "Evaluation of series-parallel-cross-tied PV array configuration performance with maximum power point tracking techniques under partial shading conditions", Clean Energy Journal, OXFORD Academic Publisher, Vol. 7, No. 3, PP. 620–634, June 2023. (Scopus, Web of Science, ESCI Indexed). <a href="https://doi.org/10.1093/ce/zkad013">https://doi.org/10.1093/ce/zkad013</a>
- 21. Sarayu Vunnam, M. VanithaSri, **RamaKoteswaraRao Alla**, "An Optimal Triple-Series Parallel-Ladder Topology for Maximum Power Harvesting under Partial Shading Conditions", International Journal of Renewable Energy Research (IJRER), Vol. 13, No. 2, PP. 888-898, June 2023. (Scopus, Web of Science, EBSCO & ESCI Indexed). https://doi.org/10.20508/ijrer.v13i2.13885.g8762
- 22. Ravindranath Tagore Yadlapalli, Rajani Kandipati, **RamaKoteswara Rao Alla**, "Performance Analysis of a Two-Stage Converter for solar PV Systems", Journal of Engineering Science and Technology Review, Vol.16, No. 3, PP 52-60, July 2023. (Scopus Indexed) https://doi.org/10.25103/jestr.163.07
- 23. Chegudi RangaRao, R.Balamurugan, **RamaKoteswaraRao Alla**, "Simultaneous Allocation of Renewable Energy Sources and Custom Power Quality Devices in Electrical Distribution Networks Using Artificial Rabbits Optimization", Clean Energy Journal, OXFORD Academic Publisher, Vol. 7, No. 4, PP. 795–807, August 2023. (Scopus, Web of Science, ESCI Indexed). <a href="https://doi.org/10.1093/ce/zkad019">https://doi.org/10.1093/ce/zkad019</a>

- 24. Sarayu Vunnam, M. VanithaSri, **RamaKoteswaraRao Alla**, "A Novel Monocrystalline PV Array Configuration for Enhancing the Maximum Power under Partial Shading Conditions", Clean Energy Journal, Vol. 7, No. 4, PP. 783–794, August 2023, (Scopus, Web of Science, & ESCI Indexed). <a href="https://doi.org/10.1093/ce/zkad036">https://doi.org/10.1093/ce/zkad036</a>
- 25. Sarayu Vunnam, M. VanithaSri, **RamaKoteswaraRao Alla**, "An Outline of Solar Photovoltaic Systems Impact on Environment", Bulletin of Electrical Engineering and Informatics (BEEI), Vol 12, No 5, PP. 2635-2642, October 2023, (Scopus Indexed). https://doi.org/10.11591/eei.v12i5.5584
- 26. RamaKoteswaraRao Alla, Rajani Kandipati, Ravindranath Tagore Yadlapalli, "Design of FOPID controller for higher order MIMO systems using model order reduction", International Journal of Systems Assurance Engineering and Management, Vol 14, PP. 1660–1670, October 2023, Springer. (Scopus Indexed). <a href="https://doi.org/10.1007/s13198-023-01971-8">https://doi.org/10.1007/s13198-023-01971-8</a>
- 27. J.N.Namrata, P.V.Subramanian, RamaKoteswaraRao Alla, "Dynamical Model-Based Load Frequency Control of a Modern Power System Integrated With Delays, EV & RES", Proceedings on Engineering Sciences Journal, Vol.6, No.1, PP.383-396, March 2024. (Scopus Indexed). <a href="https://doi.org/10.24874/PES.SI.24.02.021">https://doi.org/10.24874/PES.SI.24.02.021</a>
- 28. **RamaKoteswaraRao Alla**, Rajani Kandipati, Ravindranath Tagore Yadlapalli, Sarayu Vunnam, "Monocrystalline photovoltaic material based symmetrical and unsymmetrical Triple-Series Parallel-Ladder configuration for harvesting maximum power under partial shading conditions", Results in Optics, Elsevier, Vol.16, 100682, July 2024. (Scopus Indexed). <a href="https://doi.org/10.1016/j.rio.2024.100682">https://doi.org/10.1016/j.rio.2024.100682</a>

#### **Peer reviewed International Journals**

- 29. **RamaKoteswaraRao A.**, PahujaG.L., Lather J.S., "Risk Based Ranking Using Component Cost Importance Measure", International Journal of Engineering and Manufacturing, vol.5,no.1,pp.26-32, March 2015.
- 30. **RamaKoteswaraRao A.**, Pahuja G.L., Lather J.S., "Risk and Reliability analysis of SAS using cost importance measures", Electrical and Electronics Engineering: An International Journal, Wirella Scientific publications, vol.5, no.1, pp. 53-59, February 2016.
- 31. RamaKoteswaraRao A., Lather J.S., Pahuja G.L., "PI Controller Performance Analysis Using Lambert W Function Approach for First Order Systems with Time Delay",

- International Journal of Advanced Science and Technology, SERSC, Korea, vol. 86, pp. 1-8, January 2016.
- 32. **RamaKoteswara Rao A.**, "Analysis of Multi-Storey Structures using MATLAB", DJ Journal of Advances in Electronics and Communication Engineering, Vol. 5(1), pp. 10-20, October 2018.
- 33. **RamaKoteswara Rao A.**, N.Lekya Sri "Intelligent Control Design For Load Frequency Control of Multi Area Interconnected Hybrid Power System", International Journal of Management, Technology And Engineering, Vol. 9, No.6 pp. 591-600, June 2019 (UGC Listed).
- 34. **RamaKoteswara Rao A.**, Lekyasri N., Rajani K., "PID Control Design for Second Order Systems", International Journal of Engineering and Manufacturing(IJEM), Vol.9, No.4, pp.45-56, July 2019.
- 35. A.V. Sravanthi, K. Rajani, **RamaKoteswaraRao A.** "Global Maximum Power Tracking of PV System under Partial Shading", International Journal of Engineering, Science and Technology, Vol. 14, No. 3, pp. 10-20, August 2022.

### **International/National Conferences**

- 36. **RamaKoteswaraRao. A**, Choudhary .N, Lather J.S, Pahuja G.L, "PIV and lead compensator design using Lambert W function for rotary motions of SRV02 plant", Proc.10<sup>th</sup>**IEEE** International Colloquium on Signal Processing &its Applications (CSPA), Kula Lumpur, Malaysia, March 07-09, pp.266-270, 2014.
- 37. **RamaKoteswaraRao. A**, Pahuja G.L, Lather J.S, "Importance Measures Based Risk and Reliability Analysis of Substation Automation Systems", 11<sup>th</sup> **IEEE** India Conference (INDICON-2014), Pune, India, 11-13 December, pp.1-5, 2014.
- 38. **RamaKoteswaraRao. A**, Pahuja G.L, Lather J.S," Reliability Analysis with Parametric and Non- Parametric Ranking of Buck Converter Components" **IEEE** Sixth India International Conference on Power Electronics (IICPE-2014), NIT Kurukshetra, India, 8-10 December,pp.1-5, 2014.
- 39. **RamaKoteswaraRao. A**, Pahuja G.L, Lather J.S, "Risk and Reliability Analysis of Substation Automation Systems using Importance Measures", 18<sup>th</sup>National Power Systems Conference (NPSC2014), **IEEE**, IIT Guwahati, India, 18-20 December, pp.1-5, 2014.

- 40. **RamaKoteswaraRao A.**, Pahuja G.L., "Optimum deployment of WSN", International conference on Biomedical Engineering and Assistive Technologies(BEATS-2010), National Institute of Technology Jalandhar, India, 17-19 December, 2010.
- 41. **RamaKoteswaraRao A.**, Pahuja G.L., "Optimum deployment and performance evaluation of wireless sensing nodes", International conference on Biomedical Engineering and Assistive Technologies, National Institute of Technology Jalandhar, India,17-19 December, 2010.
- 42. Ramakoteswara Rao A., Pahuja G.L., Dheeraj Joshi, Geeta Yadav, "Optimum Deployment using Genetic Algorithm for performance evaluation of wireless sensing nodes", National conference on power and energy systems (NCPES-2011), University College of Engineering, Rajasthan Technical University, Kota (Rajasthan), Apr 23-24, 2011.
- 43. **Ramakoteswara Rao A.**, V.Sarayu "Blockchain Technology: A Smart Technology for Demand Response in Smart Grids (Paper ID-180)" 2<sup>nd</sup> Electric Power and Renewable Energy Conference (EPREC-2021), organized by Department of Electrical Engineering, NIT Jamshedpur, Jharkhand during 28<sup>th</sup> -30<sup>th</sup> May 2021.
- 44. N.Dharani Kumar, T.A.Ramesh Kumar, **RamaKoteswaraRao A.** "A Brief Review on Conventional and Renewable Power Generation Scenario in India" 2<sup>nd</sup> Electric Power and Renewable Energy Conference (EPREC-2021), organized by Department of Electrical Engineering, NIT Jamshedpur, Jharkhand during 28<sup>th</sup> -30<sup>th</sup> May 2021.
- 45. N.Dharani Kumar, **Dr.A.RamaKoteswaraRao** "Fuzzy Control Design for A Stand-Alone Wind Energy Conversion System", Virtual International Conference on Recent Trends in Power Systems and Power Electronics-2K21 (NEC-VICPSPE-2K21), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, July 28<sup>th</sup> -29<sup>th</sup>, 2021.
- 46. V.Sarayu, **Dr.A.RamaKoteswaraRao** "PSO-RNN based MPPT of wind energy conversion system", Virtual International Conference on Recent Trends in Power Systems and Power Electronics-2K21 (NEC-VICPSPE-2K21), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, July 28<sup>th</sup> -29<sup>th</sup>, 2021.
- 47. Ch.RangaRao, **Dr.A.RamaKoteswaraRao** "Loop Power Controller for Power Control in Distribution Feeders", Virtual International Conference on Recent Trends in Power

- Systems and Power Electronics-2K21 (NEC-VICPSPE-2K21), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, July 28<sup>th</sup> -29<sup>th</sup>, 2021.
- 48. A.V. Sravanthi, K. Rajani, **Dr.A.RamaKoteswaraRao** "Global Maximum Power Tracking of PV System under Partial Shading", 1<sup>st</sup> International Online Conference on Sustainable Development in Civil and Electrical Engineering (SDCEE-2021), National Institute of Technology Kurukshetra, Haryana, India, 17<sup>th</sup> -19<sup>th</sup> December 2021.
- 49. N.Dharani Kumar, T.A. Ramesh Kumar, **Dr.A.RamaKoteswaraRao** "An Overview on Various PV Array Configurations for Extracting Optimal Power", DST-SERB, Govt. of India Sponsored 1<sup>st</sup> International Conference on Emerging Trends in Electric Vehicles and Smart Technologies (ICETEVST-22) in association with SRMTRPEC IEEE Student branch, SRM TRP Engineering College (SRM Group), Tiruchirappalli, Tamilnadu, India, during April 21<sup>st</sup> & 22<sup>nd</sup>, 2022.
- 50. V.Sarayu, M.VanithaSri, **Dr.A.RamaKoteswaraRao** "Material Selection for Enhancing PV Array Performance: A Brief Review", DST-SERB, Govt. of India Sponsored 1<sup>st</sup> International Conference on Emerging Trends in Electric Vehicles and Smart Technologies (ICETEVST-22) in association with SRMTRPEC IEEE Student branch, SRM TRP Engineering College (SRM Group), Tiruchirappalli, Tamilnadu, India, during April 21<sup>st</sup> & 22<sup>nd</sup>, 2022.
- 51. Ch.RangaRao, R.Balamurugan, **Dr.A.RamaKoteswaraRao** "Improvement of Power Quality Using Various Control Approaches in Shunt Active Power Filter", DST-SERB, Govt. of India Sponsored 1<sup>st</sup> International Conference on Emerging Trends in Electric Vehicles and Smart Technologies (ICETEVST-22) in association with SRMTRPEC IEEE Student branch, SRM TRP Engineering College (SRM Group), Tiruchirappalli, Tamilnadu, India, during April 21<sup>st</sup> & 22<sup>nd</sup> 2022.
- 52. **Dr.A.RamaKoteswaraRao**, Ganjerupalli Sai Sumanth, Kandipati Rajani "Position Control of DC Servo System Using Fractional Order PID Controller Based on Particle Swarm Optimization" 3<sup>rd</sup> Electric Power and Renewable Energy Conference (EPREC-2022) organized by Department of Electrical Engineering, NIT Jamshedpur, Jharkhand during 27<sup>th</sup> -29<sup>th</sup> May 2022.
- 53. **Dr. A.RamaKoteswaraRao**, Sai Teja Chattala, Kandipati Rajani "Solar PV System Performance Analysis Using Various MPPT Techniques", 2<sup>nd</sup> International Conference

- on Recent Trends in Power Systems and Power Electronics-2K22 (NEC-ICPSPE-2K22), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, July 22<sup>nd</sup> -23<sup>rd</sup> 2022.
- 54. N.Dharani Kumar, T.A. Ramesh Kumar, **Dr. A.RamaKoteswaraRao**, "A Comprehensive Review of Solar PV Array Configurations", 2<sup>nd</sup> International Conference on Recent Trends in Power Systems and Power Electronics-2K22 (NEC-ICPSPE-2K22), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, July 22<sup>nd</sup> -23<sup>rd</sup> 2022.
- 55. V.Sarayu, M.VanithaSri, **Dr.A.RamaKoteswaraRao**, "Traditional and Advanced Materials for Solar PV Systems", 2<sup>nd</sup> International Conference on Recent Trends in Power Systems and Power Electronics-2K22 (NEC-ICPSPE-2K22), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, July 22<sup>nd</sup> -23<sup>rd</sup> 2022.
- 56. P.Venkata Mahesh, S.Meyyappan, **Dr.A.RamaKoteswaraRao**, "Machine Learning Algorithms for Solar PV Systems: An Overview", 2<sup>nd</sup> International Conference on Recent Trends in Power Systems and Power Electronics-2K22 (NEC-ICPSPE-2K22), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, July 22<sup>nd</sup> -23<sup>rd</sup> 2022.
- 57. Ch.RangaRao, R.Balamurugan, **Dr.A.RamaKoteswaraRao**, "An Overview of Various Control Strategies for Power Quality Improvement Using DSTATCOM", 2<sup>nd</sup> International Conference on Recent Trends in Power Systems and Power Electronics-2K22 (NEC-ICPSPE-2K22), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, July 22<sup>nd</sup> -23<sup>rd</sup> 2022.
- 58. V.Sarayu, M.VanithaSri, **Dr.A.RamaKoteswaraRao**, "An Overview on Role of Solar Photovoltaic Technologies for Environmental Protection", International Conference on Environmental Pollution and Control Technologies(EPACT-2022), Annamalai University, Annamalai Nagar, TamilNadu, India, August 26<sup>th</sup> -27<sup>th</sup> 2022.
- 59. J.N.Namrata, P.V.Subramanian, Dr.A.RamaKoteswaraRao, "Load Frequency Control of Two Area Power System using Fractional Order PID Controller with Artificial Bee Colony Algorithm", International Conference on Systems Control and Automation (ICSCA-2023), organized by Department of Electrical Engineering, NIT Kurukshetra, Haryana during 12<sup>th</sup> -13<sup>th</sup> May 2023.

- 60. Dr.A.RamaKoteswaraRao, Manogna Devarapu, Kandipati Rajani, "PID Controller Design for Speed and position control of DC Servo Motor Using Genetic Algorithm", 4<sup>th</sup> International Conference on Recent Trends in Power Systems and Power Electronics (NEC-ICPSPE-2K24), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, April 05<sup>th</sup> -06<sup>th</sup> 2024.
- 61. **Dr.A.RamaKoteswaraRao**, Yogesh Pamula, Jayanth Poka, Kandipati Rajani, "Conventional and Advanced Maximum Power Point Tracking Methods for Solar Photovoltaic Systems", 4<sup>th</sup> International Conference on Recent Trends in Power Systems and Power Electronics (NEC-ICPSPE-2K24), Narasaraopeta Engineering College, Narasaraopet, Andhra Pradesh, India, April 05<sup>th</sup> -06<sup>th</sup> 2024.

## **Book-Chapters Published**

- N.Dharani Kumar, T.A.Ramesh Kumar, RamaKoteswaraRao Alla "A Brief Review on Conventional and Renewable Power Generation Scenario in India", Recent Advances in Power Systems. Lecture Notes in Electrical Engineering, Vol. 812, pp 649–657, February-2022, Springer, Singapore. <a href="https://doi.org/10.1007/978-981-16-6970-5\_47">https://doi.org/10.1007/978-981-16-6970-5\_47</a> (Scopus Indexed).
- RamaKoteswaraRao Alla, Sarayu Vunnam "Blockchain Technology: A Smart Technology for Demand Response in Smart Grids", Control Applications in Modern Power Systems. Lecture Notes in Electrical Engineering, Vol. 870, pp 283–291, May-2022, Springer, Singapore. <a href="https://doi.org/10.1007/978-981-19-0193-5">https://doi.org/10.1007/978-981-19-0193-5</a> 24 (Scopus Indexed).
- RamaKoteswaraRao Alla, Ganjerupalli Sai Sumanth, Kandipati Rajani "Position Control
  of DC Servo System Using Fractional Order PID Controller Based on Particle Swarm
  Optimization Control Applications in Modern Power Systems", Control Applications in
  Modern Power Systems. Lecture Notes in Electrical Engineering, Vol. 974, pp. 267–276,
  February 2023, Springer, Singapore. <a href="https://doi.org/10.1007/978-981-19-7788-6">https://doi.org/10.1007/978-981-19-7788-6</a> 18
  (Scopus Indexed).

## **Patent Published:**

1. Dr.Korrapati Radha Rani, Dr.Nimmagadda Chaitanya, Dr.Yadlapalli Ravindranath Tagore, Dr.Nelluri China Kotaiah, **Dr.Rama Koteswara Rao Alla**, Mr.Yaramasu Suri

- Babu, Mr.Chegudi Ranga Rao, Mr.Dharani Kumar Narne, Mr.Gopu Veeranjaneyulu, Mr.Puvvadi Venkata Mahesh. "Bidirectional DC-DC Power Converter Circuit to Reduce Current Ripples." Application No.202041052197 A, Date of filing of Application: 01/12/2020, Publication Date: 11/12/2020.
- Dr.Korrapati Radha Rani, Dr.Nimmagadda Chaitanya, Dr.Rama Koteswara Rao Alla, Dr.G.V.P.Anjaneyulu. "Artificial Intelligence (AI) Based High-Efficiency DC-DC Converter for Dynamically Charging Electric Vehicles" Application No. 202341080263 A, Date of filing of Application: 25/11/2023, Publication Date: 22/12/2023.

## **Research Project:**

➤ Industrial Research Project worth Rs.4,00,000 entitled "Application of Machine Learning for Non-Conventional Energy Sources (Solar PV Systems)" sanctioned by ILIOS Power Private Limited, Hyderabad on 23/03/2020.

## **NPTEL Online Certification Courses**

- Successfully completed 12 Week NPTEL Online certification course with Elite Grade on "Fundamentals of Artificial Intelligence" offered by IIT Guwahati during July-October 2021.
- Successfully completed 12 Week NPTEL Online certification course with Elite Silver Grade on "The Joy of Computing using Python" offered by IIT Ropar during Jan-April 2022.
- Successfully completed 12 Week NPTEL Online certification course with Elite Grade on "Introduction to Internet of Things" offered by IIT Kharagpur during Jan-April 2022.
- Successfully completed 8 Week NPTEL Online certification course with Elite Grade on "Machine Learning, ML" offered by KTH Royal Institute of Technology, Sweden during Feb-April 2022.

## Workshops/STTP attended/participated

- 1. Participated in a Two-week Workshop on "Introduction to Research Methodologies" conducted by Indian Institute of Technology Bombay from 25<sup>th</sup> June to 04<sup>th</sup>July 2012.
- Attended Short Term Course on "Wind Energy Conversion Systems" conducted by School
  of Renewable Energy & Efficiency, National Institute of Technology Kurukshetra during
  07-09, September, 2012.
- 3. Participated in a "Two-day ISTE Workshop on Aakash for Education" conducted by Indian Institute of Technology Bombay on 10<sup>th</sup>&11<sup>th</sup>November, 2012.
- 4. Participated in the "Advanced Workshop on Mathematical Theory of Control and Numerics (MTCN)" organized jointly by Department of Mathematics, IIT Bombay and Department of Mathematics, Indian Institute of Space Science and Technology (IIST) under the DST funded National Programme on Differential Equations: Theory, Computation & Applications (NPDE: TCA) during 21-30, November, 2012 at IIST Thiruvananthapuram.
- 5. Attended the "Short term course on Control System Design" held by Department of Avionics, Indian Institute of Space Science and Technology(IIST), Thiruvananthapuram during 04-08, December, 2012.
- 6. Attended National Workshop on "Predictive Mathematical Models in Science and Engineering (PMMSE-2013)", during May24-25, 2013 organized by Department of Mathematics, NIT Kurukshetra.
- 7. Attended one week Short Term Training Program on "Advanced Engineering Optimization Through Intelligent Techniques (AEOTIT)" held by the Department of Mechanical Engineering, Sardar Vallabhbhai National Institute of Technology, Surat, India during 22-26, September 2014.
- 8. Participated in One Week Short Term Course on "Economic Operation of Power Systems with MATLAB and GAMS" during 06-10 July 2015organized by the Department of Electrical Engineering, National Institute of technology, Kurukshetra.
- Participated in the workshop titled "TEQIP School on System and Control" during 04-09
   August, 2015 organized by Knowledge Incubation for TEQIP at Indian Institute of Technology Kanpur.

- 10. Participated in one week short term training program on "Nonlinear Systems and Control" during May16-20, 2016 organized by Department of Electrical Engineering, National Institute of Technology Kurukshetra.
- 11. Attended two week ISTE STTP on "CMOS, Mixed Signal and Radio Frequency VLSI Design", during 30<sup>th</sup> January 4<sup>th</sup>February, 2017 organized by IIT Kharagpur.
- 12. Attended Short Term Course on "Artificial Neural networks and Fuzzy Logic", during 24<sup>th</sup> -28<sup>th</sup>April, 2017 organized by NITTTR Chandigarh.
- 13. Attended two week ISTE STTP on "Electric Power System", during 10 15July, 2017 organized by IIT Kharagpur (Grade-Excellent).
- 14. Attended workshop on "Foundation Program in ICT for Education" from 3<sup>rd</sup>August, 2017 to 13<sup>th</sup>Sep, 2017 organized by IIT Bombay.
- 15. Attended workshop on "Pedagogy for Online and Blended Teaching-Learning Process" from 14<sup>th</sup> Sep, 2017 to 16<sup>th</sup>Nov, 2017 organized by IIT Bombay.
- 16. Attended two day National Workshop on "Industry Practices in Power System Engineering" from 30<sup>th</sup> November to 1<sup>st</sup> December, 2018 organized by Department of Electrical and Electronics Engineering, R.V.R &J.C College of Engineering, Guntur.
- 17. Attended Faculty Development Workshop on "Rural Community Engagement/Rural Immersion Camp" jointly organized by Department of Social Work and Mahatma Gandhi National Council of Rural Education, Hyderabad, Ministry of Human Resource Development, GOI at NSS Bhavan, ANU on 26<sup>th</sup> March 2019.
- 18. Attended AICTE sponsored STTP on "Energy management of smart grids and Microgrids with IOT" from 29<sup>th</sup> July to 3<sup>rd</sup> August 2019 at RVR&JC College of Engineering, Guntur.
- 19. Attended Two-Day FDP on Virtual Teaching conducted by Coimbatore Institute of Technology (CIT) Teaching Learning Centre (TLC) by MHRD under the Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT) scheme, Coimbatore on April 20 & 21, 2020 through online mode.
- 20. Attended AICTE Training and Learning (ATAL) Academy Online FDP on "Artificial Intelligence" from 04-05-2020 to 08-05-2020 at Motilal Nehru National Institute of Technology, Allahabad.

- 21. Completed "NAAC Awareness Programme for Faculty" organized by Marathwada Mitra Mandal Institute of Technology (MMIT), Lohgaon, Pune 47 conducted online during the period 08/05/2020 to 14/05/2020.
- 22. Attended online Faculty Development Program on "Outcome Based Education Software" organized by vmedulife software services on 14<sup>th</sup> May 2020.
- 23. Attended one week online Faculty Development Program on Nanomaterials for Energy Harvesting and Biomedical Applications during 18 May 2020 to 22 May 2020 organized by Godavari Institute of Engineering and Technology, Rajamahendravaram, Andhra Pradesh, India.
- 24. Participated in the one day virtual Faculty Development Programme on "Robotic Process Automation and its allied Machine Learning Techniques" organized by the Department of Electronics and Communication Engineering, Vels Institute of Science Technology and Advanced Studies (VISTAS) Chennai in association with Elektroniklab India Pvt Ltd on 23<sup>rd</sup> May 2020.
- 25. Attended 5 days online Faculty Development Programme on "Role of IOT, Embedded, Electric vehicle and Power Electronics converters for the smart world" organized by St.Joseph's College of Engineering in association with IEEE student branch chapter during 18<sup>th</sup> May to 22<sup>nd</sup> May 2020.
- 26. Attended webinar on "Smart Grid Fault Detection by AI/ML Based system" organized by the Department of Electrical Engineering, Priyadarshini Indira Gandhi College of Engineering, Nagpur on 06<sup>th</sup> June 2020.
- 27. Participated in webinar on "Intellectual Property Rights and Its Importance in Academia" organized by Department of EEE, MVGR College of Engineering held on 13<sup>th</sup> June 2020.
- 28. Participated in webinar on "Publishing Research Articles in Scopus Indexed Journals" conducted by CBIT School of Management Studies on 24<sup>th</sup> June 2020.
- 29. Participated in Webinar on "Recent trends in Power Management Strategies for Optimal Operation of Distributed Energy Resources in Microgrids" held on 28-07-2020 organized by Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Hyderabad.

- 30. Participated in the International Webinar series "ERUDITE Season 3" on "Cyber Security Challenges and Opportunities for Autonomous Vehicle" organized under IEEE Robotics and Automation Society of St.Joseph's College of Engineering on 06<sup>th</sup> August 2020.
- 31. Participated in the International Webinar series "ERUDITE Season 3" on "Robotics and Artificial Intelligence: Challenges and Perspectives" organized under IEEE Robotics and Automation Society of St.Joseph's College of Engineering on 07<sup>th</sup> August 2020.
- 32. Actively participated in One day National level Webinar on "Solutions to the Challenges in Electric Vehicles" on 14.08.2020 organized by Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Hyderabad, Telangana in collaboration with Entuple Technologies.
- 33. Participated in the International Webinar series "ERUDITE Season 3" on "A Gentle Introduction Reinforcement Learning and Its Applications" organized under IEEE Robotics and Automation Society of St.Joseph's College of Engineering on 17<sup>th</sup> August 2020.
- 34. Participated in one day webinar on "Challenges in Integration of Large-Scale Renewables in Indian Power System" (A Sustainable Solution using Artificial Intelligence) conducted by Department of Electrical Engineering, BIT Sindri, Dhanbad, Jharkhand on 27<sup>th</sup> August 2020.
- 35. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Energy Storage" from 07-09-2020 to 11-09-2020 at Kallam Haranadhareddy Institute of Technology, Guntur, Andhra Pradesh.
- 36. Participated in AICTE sponsored One Week Online STTP on "Cyber Security in IoT Enabled Smart Grid" organized by Department of Electrical and Electronics Engineering, Thiagarajar College of Engineering, Madurai during 16-21 November 2020.
- 37. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Advances in Power Electronics for Hybrid Electric Vehicle-2020" from 2020-12-11 to 2020-12-15 at National Institute of Technology Andhra Pradesh.
- 38. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Control Systems & Sensors Technology" from 2021-2-1 to 2021-2-5 at National Institute of Technology Calicut.

- 39. Participated in a Five-Day Short-Term Course (STC) on "Microgrid Issues, Challenges and Solutions in Smart Grid" sponsored by TEQIP-III and organized by Department of Electrical Engineering, NIT, Uttarakhand during 8<sup>th</sup> -12<sup>th</sup> March, 2021.
- 40. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)" from 2021-03-15 to 2021-03-19 at Government College of Engineering, Dharmapuri.
- 41. Actively participated and successfully completed APSSDC online Faculty Development Program on "Systems Engineering" organised by Andhra Pradesh State Skill Development Corporation (APSSDC) in association with Dassault Systems from 17-05-2021 to 22-05-2021.
- 42. Participated in the Live Webinar on "Electrification of Cars" held on 21<sup>st</sup> May 2021 organized by the Department of Electrical and Electronics Engineering, Dr.N.G.P. Institute of Technology, Coimbatore.
- 43. Participated in One-Day National Online Workshop on "Psychosocial Counselling Support and Covid-19 Volunteer Skills" organised by Mahatma Gandhi National Council of Rural Education, Department of Higher Education, Ministry of Education, Government of India in collaboration with National Service Scheme, Andhra Pradesh on 24<sup>th</sup> May 2021.
- 44. Participated in one day webinar on "The Future of Education Employment on Optimization Techniques in 5G Technology" organized by Sri Indu Institute of Engineering & Technology, Ibrahimpatnam on 7<sup>th</sup> June 2021.
- 45. Participated in one day webinar on "Meeting the new challenges in Advanced Digital Signal Processing & Applications" organized by Sri Indu Institute of Engineering & Technology, Ibrahimpatnam on 10<sup>th</sup> June 2021.
- 46. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Power Electronics Applications in Smart Grids and Electric Vehicles (PEASE 2021)" from 2021-06-25 to 2021-06-29 at National Institute of Technology Andhra Pradesh.
- 47. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Introduction to the Mathematical Modelling of Smart Materials and their applications to Sensors and Actuators" from 2021-7-12 to 2021-7-16 at IIT Jammu.

- 48. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Research Confront and Document Preparation using LaTeX (RCDPL-2021)" from 02/08/2021 to 06/08/2021, at NIT Kurukshetra, Haryana, India.
- 49. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Challenges and Opportunities in Integration of Electric Vehicles with Smart Electric Grids" from 16/08/2021 to 20/08/2021 at National Institute of Technology Goa, India.
- 50. Participated & completed successfully an International workshop on "Networks and Dynamical Systems", Organized by the Complex Systems and Dynamics group, Indian Institute of Technology Madras from August 25-28, 2021.
- 51. Successfully completed 12 Weeks (=1.5 Week Regular FDP) NPTEL-AICTE Faculty Development Programme on "Fundamentals of Artificial Intelligence" offered by IIT Guwahati during July-October 2021.
- 52. Participated & completed successfully One week National level Intercollegiate Online Faculty Development Program on "Outcome Based Education & Bloom's Taxonomy", organized by the Internal Quality Assurance Cell of Ramakrishna Mission Vivekananda Centenary College (Autonomous), Kolkata in association with IPSR solutions limited from 08<sup>th</sup> November 2021 to 15<sup>th</sup> November 2021.
- 53. Participated & completed successfully two days online course on "Marine Robotics" organized by the Indian Institute of Technology-Palakkad (IIT Palakkad) held on 22-23 January 2022.
- 54. Successfully completed 12 Weeks (=1.5 Week Regular FDP) NPTEL-AICTE Faculty Development Programme on "Introduction to Internet of Things" offered by IIT Kharagpur during Jan-April 2022.
- 55. Successfully completed 12 Weeks (=1.5 Week Regular FDP) NPTEL-AICTE Faculty Development Programme on "The Joy of Computing using Python" offered by IIT Ropar during Jan-April 2022.
- 56. Successfully completed 8 Week (=1 Week Regular FDP) NPTEL-AICTE Faculty Development Programme on "Machine Learning, ML" offered by KTH Royal Institute of Technology, Sweden during Feb-April 2022.
- 57. Participated in a workshop on "Intellectual Property Rights (IPRs) and IP

- management for startups" on 28<sup>th</sup> June 2022 organized by Institutions Innovation Council, NIT Andhra Pradesh.
- 58. Participated in a workshop on "How to plan for startup and legal & Ethical steps" on 29<sup>th</sup> June 2022 organized by Institutions Innovation Council, NIT Andhra Pradesh.
- 59. Participated in SEBI (Securities and Exchange Board of India) & NISM (National Institute of Securities Markets) sponsored Investor Awareness Program Financial Literacy for You (FLY) from 7<sup>th</sup> October 2021 to 7<sup>th</sup> July, 2022 (Equivalent to one week Faculty Development Programme) Organized by Department of Mechanical Engineering, R.V.R. & J.C. College of Engineering (Autonomous), Guntur, A.P.
- 60. Participated in a workshop on "Simulation of Power Converters using Matlab Simulink" on 1<sup>st</sup> & 2<sup>nd</sup>, August, 2022 organized by Sri Sivasubramaniya Nadar College of Engineering in association with Indian Society for Technical Education (ISTE) Faculty Chapter, Kalavakkam, Chennai, Tamil Nadu.
- 61. Participated in "IP Awareness / Training program under National Intellectual Property Awareness Mission" on 11<sup>th</sup> August, 2022 Jointly Organized by Intellectual Property Office and MoE's Innovation Cell, India.
- 62. Participated in one week workshop on "Electric Vehicle Challenges and Opportunities" from 22<sup>nd</sup> 26<sup>th</sup> August, 2022 organized by Department of Electrical Engineering, BIT Sindri in collaboration with ACDOS (An Indian NMO of International Federation of Automatic Control (IFAC)) and IEEE Kolkata Section, Dhanbad, Jharkhand.
- 63. Participated in AICTE Recognized Faculty Development Programme on "Tools for Engineering Research" during 19<sup>th</sup> to 23<sup>rd</sup> September 2022 organized by NIT Kurukshetra in association with NITTTR Chandigarh.
- 64. Participated in the Ministry of Education supported Online Workshop on "Entrepreneurship and Innovation" as Career Opportunity organized by the IIC Cell, NIT Andhra Pradesh, Tadepalligudem on November 10, 2022.
- 65. Participated in the AICTE Recognized Faculty Development Programme on "System Designing with controllers" from 14/11/2022 to 18/11/2022 organized by NIT Kurukshetra in association with NITTTR Chandigarh.
- 66. Participated in 5 Days Short Term Training Program on "Intelligent Solutions to

- Renewable Energy System and High Voltage Engineering" conducted by the Department of Electrical Engineering, NIT Warangal from 19-Dec-2022 to 23-Dec-2022.
- 67. Participated in Two Day National Workshop on "Emerging Trends in Power Engineering" conducted by the Department of Electrical Engineering, NIT Warangal from 30-Jan-2023 to 31-Jan-2023.
- 68. Participated in the AICTE Recognized Faculty Development Programme on "Big Data Applications in Electrical Engineering" from 20/02/2023 to 24/02/2023 organized by NIT Kurukshetra in association with NITTTR Chandigarh.
- 69. Participated in one day workshop on "ASPIRE A Self Programming Into Redefining Efficacy" on 10/03/2023 organized by RVR&JC College of Engineering, Guntur.
- 70. Participated in the Webinar on "Getting Started with Internet of Things" conducted by Mr. Pranav Pai Vernekar, Co-Founder and CEO of the award-winning Internet of Things and Machine Learning Platform - Bolt IoT a part of the academia connect program on 11/04/2023.
- 71. Participated in a session about "Converting Innovation into Value Proposition & Business Fit" on 24-07-2023 organized by Institutions Innovation Council, NIT Andhra Pradesh.
- 72. Successfully participated & completed AICTE Training and Learning (ATAL) Academy Faculty Development Program on "Certain Aspects of Electric Vehicles to achieve Sustainable Energy" at Vignan's Lara Institute of Technology & Science from 11/12/2023 to 16/12/2023.
- 73. Successfully participated & completed Faculty Development Program on "Viksit Bharat 2047- Role of Engineering Faculty" from 29-01-2024 to 02-02-2024 jointly organized by RGUKT (IIIT-RK Valley), Kadapa and Anantha Lakshmi Institute of Technology and Sciences, Ananthapuramu.
- 74. Successfully participated & completed Faculty Development Program on "Emerging Trends and Challenges in Renewable Energy Systems" organized by GATES Institute of Technology, Ananthapuramu from 05/02/2024 to 09/02/2024.

## Webinar/STTP/Workshops Organized

➤ Organized a webinar, "Awareness on Alcoholic Addiction and Drug Abuse among Youth" on 02<sup>nd</sup> January 2022. Shri. Kaushal Kishore, Honorable Minister for Housing and Urban Affairs, Government of India addressed the participants.

## **National Level Exam Qualified:**

➤ Graduate Aptitude Test in Engineering (2008): A prestigious National level test of India, Electrical Engineering with 90.58 percentile, 1430 All India rank and score-361.

## **National & International Recognition:**

- ➤ MHRD scholarship for M.Tech., India (2008-2010)
- MHRD scholarship for Ph.D., India (2012-2016)
- ➤ Best poster award for a research paper in a reputed IEEE conference, 18<sup>th</sup>National Power Systems Conference organized by the department of Electrical Engineering, Indian Institute of Technology, Guwahati, India.

## **Honors:**

- Attended as Session Chair for "International Conference on Technological Emerging Challenges (ICTEC-19)" organized on 15<sup>th</sup> 16<sup>th</sup> March, 2019 at Tirumala Engineering College, Jonnalagadda, Narasaraopet, Guntur, Andhra Pradesh.
- ➤ Acted as Judge for EEE Department Technical Events in National Level Tech Fest Jubilation 2K20 on 14<sup>th</sup> February 2020, organized by Narasraopeta Engineering College, Narasaraopet, Guntur, Andhra Pradesh.
- Acted as Judge for "InfoQuest a Virtual paper presentation" organized on 27<sup>th</sup> May 2020 by IEEE Student Branch, RVR&JC college of Engineering, Guntur.
- ➤ Delivered an Expert Lecture on 25.09.2020 from 02:00 PM to 04:00 PM in the Online Short Term Course on "Advanced Embedded Control Systems & Applications (AECSA-2020)" sponsored by TEQIP-III and organized by NIT Kurukshetra during 21-26 September 2020.

- ➤ Served as a reviewer for "2<sup>nd</sup> Electric Power and Renewable Energy Conference (EPREC-2021)" organized by Department of Electrical Engineering, NIT Jamshedpur, Jharkhand during 28<sup>th</sup> -30<sup>th</sup> May 2021.
- Acted as a Session Chair in the "2<sup>nd</sup> Electric Power and Renewable Energy Conference (EPREC-2021)" organized by Department of Electrical Engineering, NIT Jamshedpur, Jharkhand during 28<sup>th</sup> -30<sup>th</sup> May 2021.
- ➤ Acted as a Session Chair in the "Virtual International Conference on Recent Trends in Power Systems and Power Electronics-2K21 (NEC-VICPSPE-2K21), held at Narasaraopeta Engineering College, Narasaraopeta, Andhra Pradesh, India, July 28<sup>th</sup> 29<sup>th</sup>, 2021.
- Acted as a Session Chair in the "1<sup>st</sup> International Conference on Smart Energy and Advancement in Power Technologies (ICSEAPT-2021)", organized by the Department of Electrical Engineering, National Institute of Technology Jamshedpur, Jharkhand, India during  $06^{th} 08^{th}$  September 2021.
- Appointed as one of the Editorial Board Members in VIT Press International Journal of Intelligent Control and Automation (VITP-IJICA) and VIT Press International Journal of Industrial Electronics (VITP-IJINE) on 24<sup>th</sup> November 2021.
- Acted as a Session Chair in the "International Conference on Recent Trends in Power Systems and Power Electronics-2K22 (NEC-ICPSPE-2K22), held at Narasaraopeta Engineering College, Narasaraopeta, Andhra Pradesh, India, July 22<sup>nd</sup> -23<sup>rd</sup> 2022.
- ➤ Delivered an Expert Lecture on "Role of Positive Attitude in Effective Communication" on 28.06.2023 in the Short Term Course on "Effective Communication Skills and Leadership Qualities (ECSLQ 2023)" organized by Training and Placement Cell, NIT Kurukshetra during June 26-30, 2023.
- ➤ Delivered an Expert Lecture on "Artificial Intelligence for Cyber Physical Systems" on 22.07.2023 in the Short Term Course on "Cyber-Physical Systems & Industrial Automation (CPSIA-2023)" organized by Electrical Engineering Department, NIT Kurukshetra during July 17-22, 2023.
- ➤ Completed Innovation Ambassador (IA) training programme "Foundation Level" conducted in online mode by MoE's Innovation Cell and AICTE.

Acted as a Session Chair in the "International Conference on Recent Trends in Power Systems and Power Electronics (NEC-ICPSPE-2K24), held at Narasaraopeta Engineering College, Narasaraopeta, Andhra Pradesh, India, April 05<sup>th</sup> -06<sup>th</sup> 2024.

## **Attended Conferences for Presenting Papers:**

- ➤ The 11<sup>th</sup> IEEE India Conference INDICON 2014, 11-13 December 2015, Yashwantrao Chavan Academy of Development Administration (YASHADA), Pune, Maharashtra, India.
- ➤ IEEE Sixth India International Conference on Power Electronics (IICPE-2014), 08-10 December 2014, National Institute of Technology Kurukshetra, India.
- ➤ 10<sup>th</sup>IEEE International Colloquium on Signal Processing & its Applications (CSPA), 07 09 March 2014, Kula Lumpur, Malaysia.
- ➤ International conference on Biomedical Engineering and Assistive Technologies (BEATS-2010), 17-19 December 2010, National Institute of Technology Jalandhar, India.
- ➤ Participated and presented research paper titled "Blockchain Technology: A Smart Technology for Demand Response in Smart Grids (Paper ID-180)" in the 2<sup>nd</sup> Electric Power and Renewable Energy Conference (EPREC-2021), organized by Department of Electrical Engineering, NIT Jamshedpur, Jharkhand during 28<sup>th</sup> -30<sup>th</sup> May 2021.
- ➤ Participated and presented research paper titled "Blockchain Technology: A Smart Technology for Demand Response in Smart Grids (Paper ID-180)" in 2<sup>nd</sup> Electric Power and Renewable Energy Conference (EPREC-2021), organized by Department of Electrical Engineering, NIT Jamshedpur, Jharkhand during 28<sup>th</sup> -30<sup>th</sup> May 2021.
- ➤ Participated and presented research paper titled "Position Control of DC Servo System Using Fractional Order PID Controller Based on Particle Swarm Optimization (Paper ID-197)" in 3<sup>rd</sup> Electric Power and Renewable Energy Conference (EPREC-2022) organized by Department of Electrical Engineering, NIT Jamshedpur, Jharkhand during 27<sup>th</sup> -29<sup>th</sup> May 2022.

# **PHD Students Guiding:**

S.No.	Name of Student	Area of Research	Status
1	Mr.P.V.Mahesh	Maximum Power Point Tracking of Solar PV Systems through Regression based Machine Learning Algorithms	Thesis Submitted
2	Mr.Ch.RangaRao	Power Quality Improvement in Microgrid through Optimal Control of Renewable Energy Sources	Awarded
3	Mr.N.Dharani Kumar	Performance Analysis of Solar PV Systems under Partial Shading Conditions	Thesis Submitted (External Viva Scheduled on 26 <sup>th</sup> April 2024)
4	Mrs.V.Sarayu	Investigations on Photovoltaic Materials for Maximum Power Enhancement from Photovoltaic Array Under Partial Shading Situations	Thesis Submitted
5	Mrs.J.N.Namratha	Advanced Control Strategies for Load Frequency Control	Pursuing
6	Mr. K.Narendra Babu	Analysis of Optimal Power Flow with Renewable Energy Systems	Pursuing

# **PG Dissertations Guided:**

S.No.	Name of Student & Roll Number	Title of Project	Year
1	Pedapudi Sushma	Islanding Detection in a Hybrid	2018
1	(Y16MTPS811)	System with Wind Power Generation	2016
	Nagaboyina Lekyasri	Intelligent Control Design for Load	
2	(Y17MPS10)	Frequency Control of Multi Area	2019
	(11/MFS10)	Interconnected Hybrid Power System	
	G. Sambasiyarao	Compensation of Utility Current using	
3	(Y18MPS03)	Active Power Filter for PV-Grid Tied	2020
	(110MF303)	system with Non-Linear Load	

# **UG Projects Guided:**

S.No.	Name of Student & Roll Number	Title of Project	Year	
1	M. Bhanu Keerthi (Y13EE902)	Design and Simulation of Speed Control of		
	K. Dheeraj Krishna (Y13EE872)	DC Motor by Fuzzy Logic Technique with	2017	
	M.Dakshin Manaswin (Y13EE896) Matlab/Simulink			
2	V.Sai Jyothi (Y13EE967)			
	R.VenkataReddy (L14EE1008)	Auto Selection of any available Phase from	2017	
2	R.Venkatesh (Y13EE936)	Three Phase Supply System	2017	
	V.Sai Sasank (Y13EE972)			
2	S. Mani Shankar (Y14EE950)	Control of Time Delay Systems	2018	
3	Sk. Nihaz Afrin (Y14EE947)	Control of Time Delay Systems	2018	

	V Fewer Dec (V14EE066)		
	V. Eswar Rao (Y14EE966)		
	S. Sainadh (L15EE1011)		
	A.Sai krishna (L15EE981)	D C ( C(1)); F1 (D	
4	B.Venkatesh (Y14EE806)		2018
	G.Akash (Y14EE836)	Using Static Synchronous Compensator	
	Ch.Devendra (Y14EE823)		
	B. Mamatha (Y15EE829)  Control Design for Speed Control	Control Design for Speed Control of AC	
5	G. Hemanth (Y15EE848)		2019
	Varun Chintha (Y15EE834)		2019
	K. Gopi (L16EE998)	recimique	
	M.Siri Chandana (Y15EE886)	Design and Simulation of Speed Control of	
6	N.Ranga Reddy (Y15EE904)		2019
	N.Sasi Mohan (L16EE1013)		
	Ch. Navya (Y16EE829)		
	Ch. Gowtham (Y16EE831)	Design and Simulation of Speed Control of DC Motor by PID Controller with Matlab/Simulink  MPPT Control of Grid Connected PV Inverter	
7	B.Vijayadhitya (Y15EE828)	MPPT Control of Grid Connected PV Inverter	2020
, ,	B. Karun Kumar (Y16EE819)	Control of Grid Connected 1 v involter	2020
	K. Venkateswarlu (L17EE990)		
	N.VSM Chakravarthy (Y16EE921)		
	• ` ` ` ` `		
8	T.Supriya(Y16EE965) V.Srinu (Y16EE970)	Solar Power Generation System with a	2020
	` ,		2020
	S.Sai Varma (Y16EE953)	25.5h 25.6h m.v.t.	
	S.V Naik (L17EE1009)		
	A. Pavan Kalyan (L18EE183)	Doufoumonoo Anolysis of Color Dhotocy 101	
9	A. Yamini (Y17EE004)		2021
9	B. Yaswanth (Y17EE013) Ch. Dushyanth (Y17EE016)		2021
	M. Manjula Samba (L16EE1003)		
	L.Sandesh kumar (Y17EE093)		
4.0	G.Govind (L18ee193)	Single Stage Solar PV Fed Brushless Dc Motor	2021
10	J.Anusha (Y17EE064)		2021
	K.Mahesh (Y17EE073)	F	
	G. Sai Sumanth (L19EE192)		
	G. Sai Subhash (Y18EE043)	Desition Control of DC Comes Contains	
11	B. Happy (Y18EE011)		2022
	E. Bharath Reddy (Y18EE031)	Using FSO Dased FOPID Controller	
	I. Sandeep (Y18EE047)		
	Ch. Sai Teja (Y18EE128)	DC Motor by PID Controller with Matlab/Simulink  MPPT Control of Grid Connected PV Inverter  Solar Power Generation System with a Seven-Level Inverter  Performance Analysis of Solar Photovoltaic Panel Using Maximum Power Point Tracking Techniques  Single Stage Solar PV Fed Brushless Dc Motor Drive Water Pump  Position Control of DC Servo System Using PSO Based FOPID Controller  Performance analysis of Solar MPPT Techniques under Partial Shading condition  Speed Control of DC Motor Using PID With Artificial Intelligence Techniques	
12	R. Srinivasa Rao (Y18EE121)		2022
	Sk. Aasiya (Y18EE129)		<b></b>
	R. Dharani (Y18EE119)	6	
	Neeli Manoj Venkata Sai (L20EE199)		
	Yarasani Rajesh Babu (Y19EE146) S.Udaya Bhaskar Rao (Y19EE117)	Speed Control of DC Motor Using DID With	
13	Sirivella Sai Naveen (Y19EE117)		2023
	Ramavathu Bhaskar Naik (Y19EE108)	Artificial intenigence recliniques	
	Ramavadia Bhaskai Ivaik (117EE100)		
	G.ChinnaRayudu (Y19EE044)	High Voltage Gain Interleaved Boost	
14	A.Sasidhar Reddy (L20EE182)		2022
	G.Pavan Kalyan (Y19EE041)		2023
	A.Abhiram (Y19EE007)		
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#### **DECLARATION**

I hereby declare that the above mentioned details are true up to the best of my knowledge.

Place: Guntur

Date: (Dr.A.RamaKoteswara Rao)