

BIO-DATA

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3. **Institution** : Amrita School of Engineering, Amrita
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4. **Gender(M/F/T)** : F - Female
5. **Qualification** : Ph.D.,

6. Administration Works: 10 Nos.

- a. NAAC/IQAC/UGC Co-ordinator at the School and Department Level.
- b. PG and Ph.D., Coordinator of the Department from 2014 to till date.
- c. Member of Pre-Board of Studies of M.Tech Renewable Energy Technology 2019, 2016 and 2014.
- d. School level discipline committee member.
- e. Assistant Lab Incharge: Electric Machines and Control system Laboratory.
- f. Power Systems Lab: Developed the hardware experiments under power system laboratory.
- g. B.Tech., syllabus revision as member of Pre-Board of Studies (EEE).

7. Member in Technical Committee: 12 Nos.

1. Technical Reviewer – IEEE Transactions on Power Systems
2. Technical Reviewer – Electrical Power Components and Systems, Taylor and Francis
3. Technical Reviewer – International Journal of Artificial Intelligence and Soft Computing.
4. Technical Reviewer-Elsevier- International Journal of Electric Power and Energy Systems and Energy Conversion and Management
5. Technical Reviewer- All Journals under WSEAS.org
6. Technical Reviewer – Electrical Power Components and Systems, Taylor and Francis
7. Technical Reviewer – International Journal of Artificial Intelligence and Soft Computing.
8. Technical Reviewer- WSEAS Transactions on circuits and systems, on systems and control and on power systems
9. Technical Reviewer- Autosoft Journal T&F
10. Technical Reviewer-Springer plus
11. Editorial Board Member - **IJIDEAS - International Journal of Innovative Developments in Engineering and Applied Sciences.**
12. Technical Reviewer – Recent Advances in Electrical and Electronics Engineering

8. Professional Recognition/Award/Prize/Certificate, Fellowship received by the applicant.

S.No	Name of Award	Awarding Agency
1.	Outstanding Reviewer Award	Elsevier Group - International Journal of Electrical Power and Energy Systems
2.	Outstanding Reviewer Award	Elsevier Group- Energy Journal
3.	Outstanding Reviewer Award	Elsevier Group- Energy Conversion and Management Journal

9. Academic & Research Performance:

a. Executed project titled “Developed of power system state estimator” - Amrita Seed Funding.

b. Publication as on in International Journals and Conferences – 63 Nos.

- [1] Kiran, P., **Vijaya Chandrakala K.R.M.**, New Interactive Agent Based Reinforcement Learning Approach towards Smart Generator Bidding in Electricity Market with Micro Grid Integration”, Applied Soft Computing Journal – Elsevier, Part A, December 2020
- [2] Purushothaman, K., Chandrakala, V., “Roth-Erev Reinforcement Learning Approach for Smart Generator Bidding towards Long Term Electricity Market Operation Using Agent Based Dynamic Modeling “, Electric Power Components and Systems – T&F, 48,3, 2020
- [3] Kiran, P., **Vijaya Chandrakala K.R.M.**, “Variant Roth-Erev Reinforcement Learning Algorithm-Based Smart Generator Bidding as Agents in Electricity Market”, Advances in Intelligent Systems and Computing”, Vol.1048, pp.991-1001, 2020.
- [4] Vinayramsathish, G., **Vijaya Chandrakala K.R.M.**, Sampath Kumar S., “Standalone Solar Photovoltaic Fed Automatic Voltage Regulator for Voltage Control of Synchronous Generator”, Advances in Intelligent Systems and Computing”, Vol.1048, pp.991-1001, 2020.
- [5] Peer M.A., **Vijaya C. K.R.M.**, Dual Input Interleaved SEPIC Converter based Ripple Current Reduction in Hybrid Electric Vehicle Application”, 2019 Innovations in Power and Advanced Computing Technologies, i-PACT 2019.
- [6] Vishnu Verchas, S., Vijaya Chandrakala, K.R.M., “Predictive Control on Power Source Selection in Hybrid Vehicle System”, IOP Conference Series: Material Science and Engineering, Vol.577, December 2019.
- [7] Peer Mohamed, A., Vijaya Chandrakala, K.R.M., Saravanan S., “Comparative study of maximum power point tracking techniques for fuel cell powered electric vehicle”, IOP Conference Series: Material Science and Engineering, Vol.577, December 2019.
- [8] Adithya, K., **Vijaya Chandrakala, K.R.M.**, Nakka, S., “Advanced encryption standard crypto block verification utility”, Proceedings of the 2019 IEEE International Conference on Communication and Signal Processing, ICCSP 2019.
- [9] Abhin, A., **Vijaya Chandrakala, K.R.M.**, “Hybrid Energy Storage System for an Electric Vehicle Powered by Brushless DC Motor”, 2018 International Conference on Control, Power, Communication and Computing Technologies, ICCPCCT 2018.
- [10] **Vijaya Chandrakala, K.R.M.**, Balamurugan, S., “Adaptive neuro-fuzzy scheduled load frequency controller for multi source multi area system interconnected via parallel ac-dc links”, International Journal on Electrical Engineering and Informatics, Vol. 10(3), pp.479-490, 2018.
- [11] Arya, K., **Chandrakala, K.R.M.V.**, “Fuzzy logic controller based instantaneous p-q theory for power quality improvement “, Proceedings of 2017 IEEE International Conference on Technological Advancements in Power and Energy: Exploring Energy Solutions for an Intelligent Power Grid, TAP Energy, 2018.
- [12] Kiran, P., **Chandrakala, K.R.M.V.**, Nambiar, T.N.P., “Day ahead market operation with agent based modeling”, Proceedings of 2017 IEEE International Conference on

Technological Advancements in Power and Energy: Exploring Energy Solutions for an Intelligent Power Grid, TAP Energy, 2018.

- [1 3] Balamurugan, S., Shree, S.R., **Chandrakala, K.R.M.V.**, “Congestion management for multi area deregulated power system using price area concept”, Proceedings of 2017 IEEE International Conference on Technological Advancements in Power and Energy: Exploring Energy Solutions for an Intelligent Power Grid, TAP Energy, 2018.
- [1 4] Kiran, P., **Chandrakala, K.R.M.V.**, Nambiar, T.N.P., “Multi-agent based systems on micro grid - A review”, Proceedings of 2017 International Conference on Intelligent Computing and Control, I2C2, 2018.
- [1 5] Jenipher, R.N., **Chandrakala, K.R.M.V.**, “Magnetically controlled reactor based harmonic and voltage profile improvement in long transmission lines”, 2017 Innovations in Power and Advanced Computing Technologies, i-PACT , 2018.
- [1 6] K. Anirudh, **K.R.M. Vijaya Chandrakala**, “Dynamic contribution of DFIG based wind energy penetration in interconnected system for improved load frequency control”, International Journal of Pure and Applied Mathematics, Vol.115, No.15, pp.625-629, 2018.
- [1 7] **K.R.M. Vijaya Chandrakala**, “Voltage Source Inverter Based Static Synchronous Series Compensator for Improved Available Transmission Capability in a Transmission Line”, International Journal on Electrical Engineering and Informatics, Vol.9, No.2, pp. 407-417, June 2017.
- [1 8] **K.R.M. Vijaya Chandrakala**, K. Ravi Teja, N. Sandeep Kumar, P. Vivek Phani Raghavendra, LNV Sai Bhaskar Majji, “Fabrication of high efficient dye sensitized solar cell using eosin blue sensitizer”, International Journal on Electrical Engineering and Informatics, Vol.9, No.1, , pp. 185-194, March 2017.
- [1 9] P. Pranitha and **K.R.M. Vijaya Chandrakala**, “Optimal capacitor placement based improved reliability assessment of a distribution system”, Indian Journal of Science and Technology, Vol.9, Issue 30, pp.1-7, August 2016.
- [2 0] R.Lalitha Priya, Salim Subi, B. Vaishnu and **K.R.M. Vijaya Chandrakala**, “Study on characterization of river sand as heat storage medium”, Indian Journal of Science and Technology, Vol. 9, Issue No. 30, pp.1-5, August 2016.
- [2 1] Chaithanya K K, Vishnu Priyadharshini A and **Vijaya Chandrakala K R M,**” The impact of salt concentration on thermal energy storage in solar pond”, Australian Journal of Basic and Applied Sciences, Vol. 10, Issue No. 5, pp. 156-160, Special 2016.
- [2 2] Dileep V Raj, Arun Bhoopathi and **Vijaya Chandrakala K R M,**” Effect of salt gradient pond for Thermal Energy Storage”, Australian Journal of Basic and Applied Sciences, Vol. 10, Issue No. 5, pp. 150-155, Special 2016.
- [2 3] S. Balamurugan, N. Janarthanan and **K.R.M. Vijaya Chandrakala**, “Small and large signal modeling of heavy duty gas turbine plant for load frequency control”, International Journal of Electrical Power and Energy Systems, Vol.79, pp.84-88, July 2016.
- [2 4] **K.R.M. Vijaya Chandrakala** and S. Balamurugan, “Simulated annealing based optimal frequency and terminal voltage control of multi source multi area system”, International Journal of Electrical Power and Energy Systems, Vol.78, pp.823-829, June 2016.
- [2 5] Ms. Anju V S, **Dr. K.R.M. Vijaya Chandrakala** , Dr. S. Balamurugan and Mr. N. Janarthanan, “ Simulated Annealing Based Optimal Load Frequency Control of a Two Area Non -Linear System with Static Synchronous Series Compensator”, International Journal of Applied Engineering Research, Vol. 10 No.55, pp.3165-3170, June 2015.
- [2 6] N.Janarthanan, Dr.S.Balamurugan, N.Kirthika and **Dr.K.R.M. Vijaya Chandrakala**, “Design Aspects and Impact Analysis of TCSC”, International Journal of Applied Engineering Research, Vol. 10 No.55, pp. 3515-3518, June 2015.
- [2 7] Unnikrishnan V, N. Janarthanan,Dr. S. Balamurugan and **Dr. K.R.M Vijaya Chandrakala**, “stability enhancement of a synchronous generator connected to an infinite bus bar using sssc”, International Journal of Applied Engineering Research, Vol. 10, No.55, pp. 3590-3595, June 2015.
- [2 8] **K.R.M. Vijaya Chandrakala**, S.Balamurugan, Abhilash R., Aditya K., Krishna Kumar O. and Balaji N., “PLC-SCADA Based Supply Side Management in Deregulated Power Market”, WSEAS Transactions on Power Systems, Vol 10, pp.97-104, April 2015.
- [2 9] **K.R.M. Vijaya Chandrakala**, S.Balamurugan, N. Janarthanan and B.Anand, “Variable Structure Fuzzy Gain Schedule Based Load Frequency Control of Non-Linear Multi Source Multi Area Hydro Thermal System”, International Journal on Electrical Engineering and Informatics, Vol.6, No.4, pp. 785-794, December 2014.

- [3 0] S. Balamurugan, B.M. Shanthini, R.R. Lekshmi and **K.R.M. Vijaya Chandrakala**, “Fuzzy Based Tariff”, Journal of Electrical Systems, Vol.10, No.4, pp.465-471, December 2014.
- [3 1] **Vijaya Chandrakala**, Balamurugan Sukumar and Krishnamoorthy Sankaranarayanan, “Load Frequency Control of Multi - Source Multi- Area Hydro Thermal System using Flexible Alternating Current Transmission System Devices”, Electric Power Components and Systems – Taylor & Francis, Vol.42, No. 9, pp.927-934, 28th May 2014.
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- [3 3] **Vijaya Chandrakala, K.R.M.**, Balamurugan, S. and Sankaranarayanan, K. “Development of variable structure fuzzy gain scheduling controller for an interconnected power system”, International Review on Modelling and Simulations, Vol.5, No.5, pp.2228-2234, 2012.
- [3 4] **Vijaya Chandrakala, K.R.M.**, Balamurugan, S. and Sankaranarayanan, K. “Genetic algorithm tuned optimal variable structure system controller for enhanced load frequency control”, International Review of Electrical Engineering, Vol.7, No.2, pp.4105-4112, 2012.
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- [3 8] Balamurugan, S. and **Vijaya Chandrakala, K.R.M.** “Improvement of System Damping In Load Frequency Control of Steam Power Plant Using Fuzzy Controller”, XXXI National Systems Conference, Manipal Institute of Technology, Manipal during 13th -14th December, 2007, p89.
- [3 9] **Vijaya Chandrakala, K.R.M.**, Balamurugan, S. and Mohanapriya S. “Comparative Frequency Response of Two Area Thermal System with Sugeno and Mamdani Fuzzy Controller”, International Conference on Power System Analysis, Control and Optimisation (PSACO-2008), Andhra University, Visakhapatnam during 13-15th of March, 2008, pp-066.
- [4 0] Balamurugan S., **Vijaya Chandrakala, K.R.M.**, Avineeth Subramaniam and Kayalvizhi S. “Improvement of System Damping in Load Frequency Control of Hydrothermal Power Plant with Fuzzy Logic Controller”, International Conference on Power System Analysis, Control and Optimisation (PSACO-2008), Andhra University, Visakhapatnam during 13-15th of March, 2008, pp-067.
- [4 1] **Vijaya Chandrakala, K.R.M.**, Balamurugan, S. and Sankaranarayanan, K. “Improvement in Load Frequency Control of Multi Area Power System using Superconducting Magnetic Energy Storage”, 9th National Conference on Technological Trends (NCTT 2008), College of Engineering, Trivandrum during 21-22nd November, 2008, EE-PS-01.
- [4 2] Balamurugan S., **Vijaya Chandrakala, K.R.M.** and Sankaranarayanan K. “Effective Automatic Generation Control of Hydrothermal Plant using Superconducting Magnetic Energy Storage and Static Synchronous Series Compensator Units”, International Conference on Applied Energy (ICAE2010), Singapore during 23-24th of April, 2009, p-406.
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- Control Instrumentation System Conference (CISCON-2013), Manipal Institute of Technology, Manipal during 20-21 December, 2013, p133.
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 - [4 7] Gayathri N. and **Vijaya Chandrakala K.R.M.** “Embedded Driver Assistance System for Effective Dynamic Vehicle Routing”, IEEE- International Conference on Embedded Systems (ICES-2014), Amrita School of Engineering, Amrita Vishwa Vidyapeetham, 3-5th July, 2014.
 - [4 8] S. Balamurugan, N. Janarthanan, **K.R.M. Vijaya Chandrakala** and R.R. Lekshmi, “Laboratory Model for Teaching Real Power Flow Control in Transmission Line”, IEEE Sixth International Conference on Technology for Education, Amrita School of Engineering, Amritapuri, Kochi, Kerala 18th -21st December, 2014.
 - [4 9] S.Balamurugan, T.N.P. Nambiar, N. Janarthanan and **K.R.M. Vijaya Chandrakala**, “Laboratory Model to Teach Power System Stability”, IEEE International Conference on MOOC, Innovation and Technology in Education, Thappar University, Patiala, Punjab, 19th – 20th December, 2014.
 - [5 0] Anju V.S., **K.R.M. Vijaya Chandrakala**, S. Balamurugan and N. Janarthanan, “Simulated Annealing Based Optimal Load Frequency Controller of a Two Area Non-Linear Plant with Static Synchronous Series Compensator”, International Conference on Advances in Applied Engineering and Technology-2015 (ICAAET-2015), Syed Ammal Engineering College, Ramanathapuram, Tamil Nadu (14-16th May), 15th May, 2015.
 - [5 1] Unnikrishnan V, N. Janarthanan, Dr.S. Balamurugan and **Dr. K.R.M Vijaya Chandrakala**, “Stability Enhancement of A Synchronous Generator Connected to An Infinite Bus Bar Using SSSC”, International Conference on Advances in Applied Engineering and Technology-2015 (ICAAET-2015), Syed Ammal Engineering College, Ramanathapuram, Tamil Nadu (14-16th May), 16th May, 2015.
 - [5 2] N. Janarthanan, Dr.S. Balamurugan, N. Kirthika, **Dr. K.R.M. Vijaya Chandrakala**, “Design Aspects and Impact Analysis of TCSC”, ”, International Conference on Advances in Applied Engineering and Technology-2015 (ICAAET-2015), Syed Ammal Engineering College, Ramanathapuram, Tamil Nadu (14-16th May), 16th May, 2015.
 - [5 3] S. Balamurugan, N. Janarthanan and **K.R.M. Vijaya Chandrakala**, “Laboratory model to teach surge impedance loading”, Biennial International Conference on Power and Energy Systems: Towards Sustainable Energy -2016 (on 22nd Jan), Amrita School of Engineering, Kasavanahalli, Bengaluru, India during 21-23rd January, 2016.
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 - [5 5] Dileep V Raj, Arun Bhoopathi and **Vijaya Chandrakala K R M**,” Effect of salt gradient pond for Thermal Energy Storage”, 2nd International Conference on Intelligent Computing and Applications (ICICA 2016), KCG College of Technology, Karapakkam, Chennai during 5-6th February, 2016.
 - [5 6] Lalitha Priya R., Subi Salim, Vaishnu B. and **K.R.M. Vijaya Chandrakala**,” Study on characterization of river sand as heat storage medium, IEEE sponsored 3rd international conference on innovations in information, embedded and communication systems (ICIIECS’16), Proceedings of ICIIECS’16, Vol.5, pp. 168-170, Karpagam College of Engineering, Pollachi, Coimbatore during 17-18th March, 2016.
 - [5 7] Pranitha M.P. and **K.R.M. Vijaya Chandrakala**, “Optimal capacitor placement based reliability assessment of a distribution network”, IEEE sponsored 3rd international conference on innovations in information, embedded and communication systems (ICIIECS’16), Proceedings of ICIIECS’16, Vol.6, pp. 213-218, Karpagam College of Engineering, Pollachi, Coimbatore during 17-18th March, 2016.
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in Power and Advanced Computing Technologies (i-pact 2017), Vellore Institute of Technology, Vellore, Tamil Nadu, 2018.

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