Profile of Dr. K. Asokan

Dr. K. Asokan, M.E, Ph.D.,

Associate Professor, Department of Electrical and Electronics Engineering, Government College of Engineering, Bargur, Krishnagiri – 635 104.

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1. Name

: Dr. K. Asokan

: Indian

: Hindu

: 3rd May 1980, Chidambaram, Tamilnadu, India.

- 2. Date and place of Birth
- 3. Nationality
- 4. Religion
- 5. Educational Qualifications:

Degree/ Class	Year	Specialization	University/ Board	Institute	Grade/ Class
Ph.D	2015	Electrical Engineering	Annamalai University, Chaidambar am	Annamalai University, Chidambaram	NA
M.E	2008	Power system	Annamalai University, Chaidambar am	Annamalai University, Chidambaram	86.67 % I Class with Distinction
B.E	2001	Electrical and Electronics Engg.	Annamalai University, Chaidambar am	Annamalai University, Chidambaram	65.89 % I Class
HSC	1997	NA	State Board Tamil Nadu	R S A Hr. Sec School Chidambaram	67.50 % I Class
SSLC	1994	NA	State Board Tamil Nadu	R S A Hr. Sec School Chidambaram	67.80 % I Class

6. Professional Experience:

College /Institution/	Designation	From	То	Experience	
Company			20	Years	Months
Government College of Engineering, Bargur.	Assistant Professor	16.05.2017	Till Date	03	09
Department of electrical engineering, Annamalai university	Annamalai university	03.04.2003	15.05.2017	14	11

Teaching Experience : 17 Years & 10 Months (as on March 2021)

Total Experience : 17 Years & 10 Months

- 7. Research Publications:
 - ✤ International Journals : 28
 - ✤ National Conferences : 04
 - ✤ International Conferences : 08

LIST OF PUBLICATIONS

International Journals

- 1. **K. Asokan** and R. Ashok Kumar, "An Innovative approach for self Scheduling of Generation companies to maximize the Profit by considering Reserve generation". *Australian Journal of Basic and Applied sciences*, Vol. 8, No. 6, pp. 179-195, April 2014.
- K. Asokan and R. Ashok Kumar, "Firefly algorithm based optimization of Strategic bidding to maximize Profit and Benefit of Competitive Electricity market". *International Review on Modeling and Simulations (I.RE.MO.S.)*, Vol. 7, No. 1, pp. 175-184 Feb, 2014.
- K. Asokan and R. Ashok Kumar, "Emission controlled Profit based Unit commitment for GENCOs using MPPD Table with ABC algorithm under Competitive Environment". WSEAS Transaction on Systems, Accepted for publications.

- K. Asokan and R. Ashok Kumar, "A simple Approach for Optimal Generation Scheduling to Maximize GENCOs Profit using PPD table and ABC algorithm Under Deregulated environment". *International Journal of Applied Power Engineering*, Vol. 2, No. 3, pp. 125-140, Dec 2013.
- K. Asokan and R. Ashok Kumar, "Application of Firefly algorithm for solving Strategic bidding to maximize the Profit of IPPs in Electricity Market with Risk constraints". *International Journal of Current Engineering and Technology*, Vol. 4, No. 1, pp. 37-44, Feb 2014.
- K. Asokan and R. Ashok Kumar, "An Effective methodology for Profit and Benefit maximization of Market Participants by Trading of Electric Energy under Competitive Environment". *International Journal of Development Research*, Vol. 4, No. 3, pp. 525-534, March 2014.
- K. Asokan and R. Ashok Kumar, "A Novel LR-QPSO Algorithm for Profit Maximization of GENCOs in Deregulated Power System" *International Journal of Computer Applications*, Vol. 63, No. 1, pp. 20-31, Feb 2013.
- K. Asokan and R. Ashok Kumar, "Modeling of bidding Strategies for Power Suppliers and Large Consumers in Electricity Market with Risk Analysis", *International Journal of Soft Computing and Engineering*, Vol. 3, No. 2, pp. 271-276, May 2013.
- K. Asokan and R. Ashok Kumar, "Optimal Generation Scheduling Strategy for Profit Maximization of GENCO in Deregulated Power system", *IOSR Journal of Electrical and Electronics Engineering*, Vol. 2, No. 3, pp. 13-20, Sep 2012.
- 10. Vidhya P., Ashok Kumar, R., **Asokan, K.**, (2016a), Wheeling Charges Reduction Strategy in Restructured Power System by Implementation of FACTS Devices, *International Journal of Advanced Engineering Technology (IJAET)*, Vol. 7, Issue 2, pp. 813-816.
- 11. Vidhya P., Ashok Kumar, R., Asokan, K., (2016b), Evaluation of Transmission Pricing Strategy in Restructured Power System by Implementation of Statcom Devices, *International Journal of Research and Reviews in Applied Sciences, and Engineering* (*IJRRASE*), Vol. 8, Issue 1, pp. 105-116.
- 12. Vidhya P., Ashok Kumar, R., **Asokan, K.,** (2016c), A Novel MVA Mile Method Based Cost Allocation Scheme for Competitive Power System by Employing SSSC Controller, *Middle-East Journal of Scientific Research*, 24 (10): 3230-3242.
- 13. Vidhya P., Ashok Kumar, R., **Asokan, K.**, (2017a), An Effective Methodology with UPFC Controller for Locational Marginal Pricing in Competitive Energy Markets, *International Journal of Engineering and Applied Sciences (IJEAS)*, Vol. 4, Issue-3.
- 14. Vidhya P., Ashok Kumar, R., **Asokan, K.**, (2017b), A New Approach for Determination of Real and Reactive Power Pricing Using UPFC in Indian Electricity Market, *International*

Journal of Emerging Technology in Computer Science & Electronics (IJETCSE) Vol. - 24, Issue-7, pp.25-39.

- 15. Baburao Pasupulati., Ashok Kumar, R., and Asokan, K., (2018a), An Intelligent Soft Computing Technique for Optimal Power Dispatch of Hydrothermal Systems, *International Journal of Applied Engineering Research (IJAER)*, Vol. 13(12), pp. 10939-10947. [Scopus andUGC Journal No. 64529]
- 16. Baburao Pasupulati., Ashok Kumar, R., Balamurugan, G., and Asokan, K., (2018b), A Nondominated Sorting TLBO Algorithm for Multi-objective Short-term Hydrothermal Self Scheduling of GENCOs in a Competitive Electricity Market, *International Journal of* Computer Sciences and Engineering (*IJCSE*), Vol. 6(8), pp. 191-203. [UGC Journal No. 63193]
- Baburao Pasupulati., Ashok Kumar, R., and Asokan, K., (2018c), Optimal Scheduling of Hydrothermal System Considering Different Environmental Emissions Using NSTLBO Approach, *International Journal of Renewable Energy Research (IJRER)*. Vol. 8(4), pp. 1913-1925. - (Scopus, EBSCO, Web of Science (Clarivate Analytics) [UGC Journal No. 23461]
- Rajalakshmi, G., Ashok Kumar, R., and Asokan, K., (2018d), Sigma-Delta Controller for Speed Regulation of Interleaved Converter Fed PMDC Motor Drive, *International Journal* of Computer Sciences and Engineering, Vol. 6(6), pp. 137-140.[UGC Journal No. 63193].
- Rajalakshmi, G., Ashok Kumar, R., and Asokan, K., (2018e), Design and Implementation of DSP based Interleaved Buck Converter fed PMBLDC motor Drive, *International Journal* of Applied Engineering Research, Vol. 13(20), pp. 14614-14621.[Scopus and UGC Journal No. 64529].
- Rajalakshmi, G., Ashok Kumar, R., and Asokan, K., (2018f), Power Factor Improvement of Buck-Boost AC-DC Converter using Pulse Width Modulation Strategy, *International Journal of Computer Sciences and Engineering*, Vol. 6(11), pp. 151-156. [UGC Journal No. 63193].
- 21. Baburao Pasupulati., Ashok Kumar, R., and Asokan, K., (2018g), An Improved Teaching Learning Based Optimization Algorithm for Optimal Scheduling of Short-Term Hydrothermal System Considering Valve-Point Loading Effect, *Journal of Electrical Engineering (JEE)*.Vol. 18(4), pp. - (ANNEXURE-1).
- 22. Senthilvadivu, A., Gayathri, K., and Asokan, K., (2018a), Exchange Market Algorithm based Profit Based Unit Commitment for GENCOs Considering Environmental Emissions, *International Journal of Applied Engineering Research (IJAER)*, Vol.13 (21), pp. 14997-15010. [Scopus and UGC Journal No. 64529].

- 23. Senthilvadivu, A., Gayathri, K., and **Asokan, K., (2018b),** An Intelligent Computational Algorithm for Optimal Self Scheduling of GENCOs to Improve the Profit in a Day-ahead Energy and Reserve Market, *International Journal of Computer Sciences and Engineering* (*IJCSE*), Vol. 6(8), pp. 251-265. [UGC Journal No. 63193].
- 24. Senthilvadivu, A., Gayathri, K., and Asokan, K., (2019), Modelling of Bidding Strategies in a Competitive Electricity Market: A Hybrid Approach, *International Journal of Numerical Modelling Electronic Networks, Devices and Fields.* (Accepted and Article in Press) - (Web of Science / Annexure-1)
- 25. Anbazhagi, T., Asokan, K., and Ashok Kumar, R., (2020a), Computational Intelligent Algorithm for Optimal Generation Scheduling of Thermal Units with Renewable Energy Source, *Journal of Advanced Research in Dynamical & Control Systems*, Vol. 12(3), pp. 07-21. [Scopus Indexed Journal].
- 26. Anbazhagi, T., Asokan, K., and Ashok Kumar, R., (2020b), Hydro-Thermal-Wind Integrated Optimal Generation Scheduling of GENCOs in a Competitive joint Energy and Reserve Market, *GEDRAG & ORGANISATIE REVIEW*, Vol. 33(2), pp. 942- 962. [Web of Science Indexed Journal].
- Anbazhagi, T., Asokan, K., and Ashok Kumar, R., (2020c), Short-term Optimal Generation Scheduling of Hydro-Thermal-Wind Integrated Power System, *Journal of Critical Reviews*, Vol. 7(19), pp. 2965- 2976. [Scopus Indexed Journal].
- 28. Anbazhagi, T., Asokan, K., and Ashok Kumar, R., (2020d), A Mutual Approach for Profit based Unit Commitment in Deregulated Power System Integrated with Renewable Energy Sources, *Transactions of the Institute of Measurement and Control (SAGE Journals Publication Ltd)*, DOI: 10.1177/014233122096631. pp 1-15. [SCI, Annexure-1, Web of Science, Scopus Indexed Journal].

International Conferences

- R. Ashok Kumar, K. Asokan and S. Ranjith Kumar, "Optimal Scheduling of Generators to Maximize GENCOs profit using LR combined with ABC Algorithm in Deregulated Power System" *IEEE Conference Preceding on Computation of Power, Energy, Information and Communication (ICCPEIC)*, Adhiparasakthi Engineering College, Melmaruvathur, pp. 75-83, April 2013.
- 2. K. Asokan and R. Ashok Kumar, "Profit based Optimal Generation scheduling of Generation Company in Competitive Electricity Markets" *International Conference on Marketing Information and Strategies: Core for Development,* Annamalai University Annamalai Nagar, pp. 324-330, Aug 2012.
- **3. K. Asokan** and R. Ashok Kumar, "Optimal bidding strategy to improve the profit and benefit of Electricity producers and large consumers using Quantum inspired PSO" *IEEE*

Conference Preceding on Computation of Power, Energy, Information and Communication (ICCPEIC), Adhiparasakthi Engineering College, Melmaruvathur, pp. 1-7, April 2013.

- Baburao Pasupulati., Ashok Kumar, R., and Asokan, K., (2018a), An Improved TLBO Approach for Short-Term Hydrothermal Self Scheduling in a Competitive Energy and Reserve Market, *IEEE Conference Proceedings on Intelligent Computing and Sustainable Systems (ICICSS)*, Akshaya College of Engineering and Technology, Coimbatore, pp. 473-481.
- Baburao Pasupulati., Ashok Kumar, R., and Asokan, K., (2018b), A Novel Approach of Non-dominated Sorting TLBO for Multi Objective Short-term Generation Scheduling of Hydrothermal-Wind Integrated system, Springer *Conference Proceedings on Electrical, Communication and Information Technologies (ICECIT)*, Srinivasa Ramanujan Institute of Technology, Anantapur. (Accepted for Presentation) – Conference Proceedings to be published by Springer Nature in its Lecture Notes in Electrical Engineering (ISI Proceedings, EI-Compendex, Scopus, Meta Press, Springer Link and UGC Indexed Journal)
- 6. **K. Asokan** and R. Ashok Kumar, "Profit maximization of power Generation Companies in Competitive Electricity Market" *International Conference on Contemporary Management, University of Jaffna, Sri Lanka, ISSN* 2362 0536, Vol. 1, pp. 981-992, March 2014.
- Senthilvadivu, A., Gayathri, K., and Asokan, K., (2018), An Innovative Approach for Spinning Reserve Constrained Profit Based Unit Commitment for GENCOs in Deregulated Power System, *IEEE Conference Proceedings on Intelligent Computing and Sustainable Systems (ICICSS)*, Akshaya College of Engineering and Technology, Coimbatore, pp. 633-640.
- Senthilvadivu, A., Gayathri, K., and Asokan, K., (2019), Optimal Bidding Strategy Based Profit Maximization of Power Suppliers in a Day A-Head Energy Market, 4th International Conference on recent trends in engineering and technology (ICRTET-2019), St. Joseph's institute of technology, Chennai, pp. 79-85.

National Conferences

- 1. Baburao Pasupulati., Ashok Kumar, R., and Asokan, K., (2018a), Computational Intelligent Approach For Short-Term hydrothermal Generation Scheduling in Power System, *National Conference on Nature Inspired Computing Applied to Electrical Engineering (NICAEE)*, Annamalai University, Annamalai Nagar, pp. 1-8.
- K.Asokan, V.Adhimoorthy, (2018b), "An intelligent soft computing technique for unit commitment problem to minimize the fuel cost of termal power plants" TEQIP-III Sponsored 1st National confidence on Recent advances in mechanical sciences & technology(RAMSAT-2018), GEC, Bargur.

- 3. **K.Asokan**, K.sugunesh, (2019a), "MPPT Based solar photo voltage fed BLDC motor driven at single stage using incremental conductance algorithm" TEQIP-III Sponsored 5th national conference on emerging trends in advanced computing and communication GEC, Bargur.
- 4. Senthilvadivu, A., Gayathri, K., and **Asokan, K.**, (2018), Optimal Scheduling of Thermal Units and Maximize the Profit of GENCOs using Exchange Market Algorithm, *National Conference on Nature Inspired Computing Applied to Electrical Engineering (NICAEE)*, Annamalai University, Annamalai Nagar, pp. 9-16.