

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



Name	: Dr. M.JAGADEESH KUMAR
Name	. DI. NI.JAGADEESH KUNIAI

Designation : PROFESSOR

Email :jagadeeshkumar.eee@sairamit.edu.in

Qualification : B.E., M.E., Ph.D.,

Specialization : Power Systems Engineering

Research Interest : Power Electronics, Renewable Energy, Drives and Control.

Experience in years : Teaching UG 23 P 8 Indus

No. of Workshop/Conferences/

FDP attended : Workshop 10 Conferences 15 FDP 10

No. of Workshop/Conferences/

FDP Organized : Workshop 03 Conferences 03 FDP

Professional Membership	Member – IEEE, Member – IEI, Member – ISTE
Publications	National:JOURNAL-0,CONFERENCE-2
	International: JOURNAL 15-,CONFERENCE- 24
	Books – 0
Research Funded Projects	Applied -1

Patents	Published – 2, Granted –Nil
Achievements	Received a cash award of Rs.2000/- from the management of Sri Sai Ram Institute of Technology, for Producing 100% results in Professional Ethics in Engineering in End Semester Examinations/ Anna University April / May 2017. Received a cash award of Rs.2000/- from the management of Sri Sai Ram Institute of Technology, for Producing 100% results in Electric Circuit Analysis in End Semester Examinations/ Anna University April / May 2017.
Any Other Information	 Department Level Criterion Coordinator, NAAC/NBA. Department Level Alumni Coordinator Coordinator /FDP. Video Class, IIT Spoken tutorial and CII In-charge, Consultancy and R&D in-charge.

List of Publications:-

Papers published in International Journals and Conferences:

- 1. T. Muthamizhan, M.Jagadeesh Kumar, P. Rathnavel, M. Aijaz and A. Sivakumar, "A Photovoltaic fed High Gain Bidirectional DC/DC Converter on EV Charging stations Applications," 2021 2nd Global Conference for Advancement in Technology (GCAT), 2021, pp. 1-6, doi: 10.1109/GCAT52182.2021.9587699.(Scopus)
- 2. Premkumar, N., Subhashini, K., Valarmathi, G., Kumar, J., Meganathan, S. "Numerical analysis of hip bone replacement design parameters" Materials Today: Proceedings, 2020, 46, pp. 4271–4277
- 3. C Vimala, T Thenmozhi, **M Jagadeesh Kumar**, C Subramani. "Convolutional Neural Network-Based Automatic Object Detection on Aerial ImagesSixth International Conference on Intelligent Computing and Applications
- 4. M. Jagadeesh Kumar, T. Muthamizhan, P. Rathnavel, G. Ezhilarasan, T. Eswaran, "Performance and Analysis of Voltage Compensation in Transmission Line Using SMES-Based IDVR", Proceedings of International Conference on Power Electronics and Renewable Energy Systems, pp. 613-623, Nov 2021. (Scopus)
- M.Arun, M.Jagadeesh Kumar, T. Tamizhazhagan, N.Thanigai Arasu "A Novel Approach in Offshore Wind Generation Scheme and Implementation of MEPT and MMPT Methods" International Journal of Applied Engineering Research ISSN 0973-4562 Volume 13, Number 6 (2018) pp. 4555-4560

- 6. M.Jagadeesh kumar, Jayanthi.G, Priyadharshini, Subikshaa.S Sivaranjani.K "Optimization of energy from photovoltaic cell using three port converter for home appliances" International journal of Engineering and Technology, 7 (2.12) 2018 365-369
- 7. National Conference on Advanced Power System Engineering Applications (APSEA 2015), "Supervisory Control of PV System Using Single Stage Inversion Mode With Battery Back-up Unit", Saveetha School of Engineering, Saveetha University, March 2015.
- 8. Recent Trends in Efficiency Management in Industries-2015 (RTEMI-2K15). "SVPWM Controlled Induction Machine for Electrical Vehicles", Saveetha School of Engineering, Saveetha University, APRIL 2015.
- M.Jagadeeshkumar , G.Ezhilarasan, D.Dilipkumar, K.Saikiran" Power system stability enhancement using STATCOM and UPFC for two bus system" International Journal of Applied Engineering Research (IJAER) Vol. 10 No.4 March 2015, ISSN 0973-4562 Research India Publications
- 10. M.Jagadeeshkumar, G. Ezhilarasan, V.Arundhilipan, A.Aravindakumar "Power Factor Enhancement in PMBLDC Motor Using Bridgeless Buck-Boost Converter" International Journal of Applied Engineering Research (IJAER) Vol. 10 No.4 March 2015, ISSN 0973-4562 Research India Publications
- 11. Jagadeesh Kumar M, Ezhilarasan G, Balamurugan P, Prakash K, SagarNavin "Identification of Weak Bus Using Soft Computing Techniques" International Journal of Applied Engineering Research (IJAER) Vol. 10 No.4 March 2015, ISSN 0973-4562 Research India Publications
- 12. M.JagadeeshKumar,G.Ezhilarasan, M.Sivaranjani , A.Ramya,S.AbdulAmjath "PWM Control of seven level Cascaded H-bridge Inverter" International Journal of Applied Engineering Research, ISSN 0973-4562 Vol. 10 No.33 (2015)Research India Publications
- 13. Sushilkumar G. Ezhilarasan M.Jagadeesh Kumar S. Tamilselvi "A Combined Power Quality Conditioner for a Dynamic Voltage Restorer Using a Novel Reference Signal Generation Method" International Journal of Scientific Engineering Research, 2014
- 14. G.Ezhilarasan, M.Jagadeeshkumar, Rajveer Singh Shekhawat, GikdhalWangchukBhutia, Tamil selvi, "Improved Battery Charger Using Zero Voltage Switched Dc-Dc Converter" International Journal of Applied Engineering Research (IJAER) Vol. 10 No.4 March 2015, ISSN 0973-4562 Research India Publications
- 15. P.Balamurugan , G.Ezhilarasan, M.Jagadeesh Kumar, V.DeepakRaghavan, T. Mohammad HaroonAlim "Supervisory Control of PV System Using Single Stage Inversion Mode With Battery Back-up Unit" International Journal of Applied Engineering Research (IJAER) Vol. 10 No.4 March 2015, ISSN 0973-4562 Research India Publications
- 16. Muquassir Rahman, Sowmiya N, Hariprasad S. Md. Haroon Alim, G. Ezhilarasan, M. Jagadeesh kumar "capacitor based energy storage system as a replacement for automobile batteries" International Journal of Applied Engineering Research (IJAER) Vol.10 No.33April 2015, ISSN 0973-4562 Research India Publications
- 17. Sushil Kumar, MritunjayPrakash Ravi, Ezhilarasan G, M.Jagadeeshkumar "SVPWM Controlled Induction Machine for Electrical Vehicles" International Journal of

- Applied Engineering Research (IJAER) Vol.10 No.33April 2015, ISSN 0973-4562 Research India Publications
- 18. M.Jagadeesh Kunar, S.S. Dash, C.Subramani, M.ArunBhaskar&Akila R.G 'Transient Stability Enhancement of a Multi machine System using BFOA", Advances in intelligent systems and computing'-Springer vol 259 2014.
- 19. M.Jagadeeshkumar, SubhransuSekhar Dash, SubramaniChinnamuthu "Sensitive Area Clustering based on Voltage Stability and Contingency Analyses with Impact of Line Stability Indices" ", International Review on Modelling and Simulation , Vol.6, No.5, Part-B, October 2013,
- 20. Jagadeesh Kumar Muthukrishnan, SubhransuSekhar Dash, Harish KiranSelvakumar and SubramaniChinnamuthu "Comparison Of Optimization Technique To Find The Optimal Location Of Facts Controllers For Transmission Line" "American journal of applied sciences 11 (2): 280-290, 2014
- 21. Jagadeesh Kumar.M, Jameenabegam.S, "Enhancement of transient stability in multimachine power system using FACTS devices" in the International Conference on Innovations in Intelligent Instrumentation, Optimization & Signal Processing held at Karunya University, 2013.
- 22. M.Jagadeesh kumar, S.S. Dash, M.ArunBhaskar, C.Subramani and Vivek, 'Comparison of PSO Tuned Feedback Linearisation Controller (FBLC) and PI Controller for UPFC to Enhance Transient Stability', LNCS –Springer pp-135-142,2011.
- 23. Jagadeesh Kumar.M, Dash.S.S, Pilot Immanuvel.A.S., Prasanna.R, "Comparison of FBLC (Feed-Back Linearisation) and PI-Controller for UPFC to enhance Transient Stability", presented in International Conference on Computer, Communication and Electrical Technology (ICCCET) at National College of Engineering, Tirunelveli on 19thMarch-2011 and published in the proceeding pp 377-382.
- 24. National conference on Power conversion systems, Drives and control Technology conference, at PSNA College of Engineering and Technology, Dindigul. Titled "SOFT COMPUTING TECHNIQUES FOR ECONOMIC LOAD DISPATCH"
- 25. Subramani.C, Dash.S.S, Jagadeesh Kumar.M, Arun Bhaskar.M, "Stabilty index based voltage collapse prediction and Contingency analysis" Journal of Electrical Engineering and Technology Vol 4 No 4 PP 438-442. 2009
- 26. International conference on Communication and Power systems at Velammal Engineering College, Titled "SIMULATION TECHNIQUE FOR CONTINGENCY ANALYSIS AND RANKING IN POWER SYSTEM" 2007
- 27. **M.Jagadeesh kumar** "OPTIMAL REACTIVE POWER PLANNING USING PSO" National conference on Recent advancements in operation and control of large scale power systems at Annamalai University, 2006

List of Patent:

1. M.Jagadeesh kumar , "Intelligent fully Autonomous quick waterless solar panel cleaning Robot , Application No. 20251007211

Workshop / Conferences / FDP Attended:-

- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)" from 07-05-2020 to 11-05-2020 at Indian Institute of Information Technology(IIIT Nagpur).
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy FDP on "Power Electronic converters and Controllers for EV and Smartgrid" from 18- 12-2019 to 22-12-2019 at IIITDM Kancheepuram.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Energy Engineering" from 2020-11-9 to 2020-11-13 at GANDHI INSTITUTE FOR EDUCATION AND TECHNOLOGY BANIATANGI.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Green Technology & Sustainability Engineering" from 2020-12-14 to 2020-12-18 at St. Joseph's Institute of Technology.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Electric Vehicles" from 2020-11-2 to 2020-11-6 at Fr.C.Rodrigues Institute of Technology, Vashi.

Workshop / Conferences / FDP Organized:-

Faculty Development Program

- 1. Coordinator, 5 days online Faculty Development Programme on "Innovation in Electric Vehicles, Energy Storage and Smart Grid Interaction" from 13thDecember 21 to 17th December 21, in Sri Sai Ram Institute of Technology, Chennai 600 044.
- 2. Coordinator, 5 days online AICTE ATAL Faculty Development Programme on "Internet of Things(IoT) for Smart Grid" "from 7th September 2020 to 11th September 2020, at Sri Sai Ram Institute of Technology, Chennai 600 044.
 - 3. Coordinator, 5 days online Faculty Development Programme on "Renewable Energy Technologies, Integration to the Power Grid and e-Vehicle" from 28th March' 20 to 1st April' 20, in Sri Sai Ram Institute of Technology, Chennai 600 044.
 - 4. Coordinator, 6 days Faculty Development Programme on "Microcontroller based system design" from 20th june'16 to 27th june' 16, at Sri Sai Ram Institute of Technology, Chennai 600 044.
 - 5. One day workshop on "AN OVERVIEW OF SUBSTATION CONTROL SYSTEM ENGINEERING" in association with IEI Kancheepuram Local Chapter. On 24.01.2018. at Sri Sai Ram Institute of Technology, Chennai 600 044.

Seminar/Guest Lecture Organized

- 1. Seminar on "Energy conservation and Auditing" on March 14, 2018 at Sri Sai Ram Institute of Technology, Chennai 600 044.
- 2. Seminar on "Past present and future of sensor Technology in Robotics and Automation" on 26.02.2021 at Sri Sai Ram Institute of Technology, Chennai 600 044.

Special Lectures Delivered

A lecture on the topic, "Role of teachers in digital age" in the six days AICTE-ISTE

Sponsored online Induction/Refresher program on Strategies in teaching Learning on 19.04.2021

A lecture on the topic, "Power system -Introduction and Analysis" in the Anna University, Chennai sponsored FDP, "Power system Analysis" held at Jerusalem college of Engineering Chennai

A lecture on the topic, "Transient Analysis and Coupled circuits" at Velammal Engineering college Chennai