

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



| Name | : E.MAHESWARI |
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Designation : ASSOCIATE PROFESSOR

Email :maheswari.eee@sairamit.edu.in

Qualification : M.E (Ph.D)

Specialization : Power Electronics and Drives

Research Interest : Power Electronics

Experience in years : Teaching UG | 19 | PG | Industry

No. of Workshop/Conferences/

FDP attended : Workshop 5 Conferences 5 FDP 15

No. of Workshop/Conferences/

FDP Organized : Workshop 3 Conferences 0 FDP 0

| Professional Membership | IEEE,ISTE,IAENG |
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| Publications | National : JOURNAL-1,CONFERENCE-2 |
| | International:JOURNAL-13,CONFERENCE-8 |
| | Book :-2 DESIGN OF ELECTRICAL MACHINES-SAMS PUBLICATIONS 2011 MEASUREMENT AND INSTRUMENTATION-SAMS PUBLICATIONS 2011 |
| Research Funded Projects | - |

| Patents | 2 |
|-----------------------|--|
| Achievements | 1.Received the Certificate of Appreciation for mentoring the IEEE International Project Expo conducted in SCSVMV University, Kancheepuram on 20.02.2019. |
| | 2. Received "Dr.APJ Abdul Kalam Award for teaching Excellence" in the year 2015 from MARINA LABS R&D Chennai. |
| | 3.Received Rs. 2,000 Cash Award from Sri Sairam Institute of technology for Producing 100% in "Measurement & Instrumentation" Subject in the Year 2010. |
| | 4. Received Rs. 2,000 Cash Award from Sri Sairam Institute of technology for Producing 100% in "SOLID STATE DRIVES" Subject in the Year 2017. |
| | 5. Received Rs. 2,000 Cash Award from Sri Sairam Institute of technology for Producing 100% in "POWER ELECTRONICS" Subject in the Year 2018. |
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| Any Other Information | |

List of Publications:-

Journals

Papers published in SCI Journals:

E.Maheswari, Dr.A.Kavitha, "Comparative Analysis of ACM and GPWM controllers in Continuous input and output power Boost Converter", Journal of Control Engineering and Applied Informatics 22 (4), 61-70.2020.

Papers published in International Journals:

1. E.Maheswari,Dr.V.Balaji,Dr.T.Muthamizhan, "Solar Energy Based Laptop Charger Using Quadratic Boost Converter", International Journal of Advanced Science and Technology Vol. 29, No. 6s, pp. 1731-1741, April 2020.

- **2.** Dr.T. Muthamizhan, N. Logeshwari, **E. Maheswari**, "Investigations on On-Board Charger with Simultaneous Charging of Low Voltage Battery for Electrical Vehicles", International Journal of Advanced Science and Technology Vol. 29, No. 6s, (2020), pp. 1721-1730.
- **3.** Mohd Abdul Kareem, **Maheswari.E**, Pavani Parachuri, Durgam Srinivas, "Design of a Simplified 7 Level Inverter", International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-12S2, October 2019.
- **4. E.Maheswari,**Dr.V.Balaji, "Speed control of DC series motor using continuous input output power buck converter", IJEECS, ISSN 2348-117X,Volume 6, Issue 11. November 2017.
- **5.E.Maheswari,** Dr.V.Balaji, "Solar energy based smart room using Double boost Converter", International journal of mechanical engineering and technology, Volume 8, Issue 6, June 2017.
- **6. E.Maheswari,** Dr.V.Balaji, "Harmonic reduction in 3 phase voltage source inverter by 150 degree conduction", International Journal of Applied Theoretical Science and Technology, Volume 2, Issue 1, pp 1001-1006, January 2016.
- 7. Dr. V.Balaji, E.Maheswari, "Labview Based PID Design Method For DC Motor Position", International Journal of Applied Theoretical Science and Technology, Volume 2, Issue 6, pp1103-1106, March 2016.
- **8.** P.Karthika, N.Shanthi, **E.Maheswari**, "Design of improved solar energy harvested hybrid active power filter for harmonic reduction, power factor correction and current compensation", IJSTE, Volume 2, Issue 07, January 2017.
- **9.**Dr. V.Balaji, **E.Maheswari** "Model Predictive Control Techniques for CSTR Using MATLAB "International Journal of Electrical Engineering and Technology" Vol -3, No 3, pp. 121 129 Oct-Dec 2012.
- **10.** V.Balaji, **E.Maheswari** "Performance Investigation of Self-Lift and Re-Lift Luo Converter Topologies.", Pacific Journal of Science and Technology, Vol 12, pp. 17 24 May 2011(Spring).

- **11.** V.Balaji, Dr. N.Vasudevan and **E.Maheswari**, "MATLAB Simulation for Continuous-Stirred Tank Reactor", Pacific Journal of Science and Technology, Vol 9, pp 127 –131 June 2008(Spring).
- **12.**V.Balaji, Dr. N.Vasudevan and **E.Maheswari**, "Model Based Predictive Control Using Fuzzy and Neural Network", International Journal of Applied Engineering and Research, Vol 3, pp 279 286, March 2008.
- **13.**V.Balaji, Dr. N.Vasudevan and **E.Maheswari**, "Model Based Predictive Control Using Fuzzy and Comparison with other Nonlinear MBPC Algorithms", International Journal of Industrial Electronics and Control, March 2008.

National Journal:

1.Dr. V.Balaji, **E.Maheswari** "Model Predictive Control Strategy for Industrial Process" Bulletin of Electrical Engineering and Informatics, **Vol -1**, **No 3**, **pp. 191 – 198 Sep 2012.**

Books Published:

- 1. Text book "**Design of Electrical Machines**" by Dr. V.Balaji and Mrs.E.Maheswari, Sams Publishers, Chennai, 2011.
- 2. Text book "Measurement and Instrumentation" by Dr. V.Balaji, Mrs.E.Maheswari and Ms.Gurvu, Sams Publishers, Chennai, 2011.

Conferences

Papers published in International Conferences:

- 1. Dr.Anathi Christy, R.G.Nirmala, **E.Maheswari,** K.PM.Y.V.Dathu, "3-Phase power quality improvement using ZETA converter", ICSSIT-2022, Francis Xavier Engineering College.
- 2. S.Jadisha Rajesh, Dr.Anathi Christy, **E.Maheswari**, R.Brinda, "EV charging station using renewable system's", ICSSIT-2022. Francis Xavier Engineering College.

- 3.A Christy, DC Priscilla, E Maheswari, SS Dash, "Performance of Photovoltaic-Based ZETA Converter Water Pumping Application", Sixth International Conference on Intelligent Computing and Applications, 21-26, Part of the <u>Advances in Intelligent Systems and Computing</u> book series (AISC, volume 1369), Springer, july 2021.
- 4. Abirami Anandasabesan, Soundarya Mahamani, Haritha Sree Soundararajan, Shanthi Natarajan, Maheswari Ellapan, Revanya Devi Myla, "Simulation Modelling of Semi-automation Transport Vehicle" International Conference on Smart Technologies in Computing, Electrical and Electronics (ICSTCEE), 08 December 2020, Bengaluru.
- 5. **E.Maheswari**, Dr.A.Kavitha, "Bifurcation analysis in continuous input output Buck Boost converter",IEEE Conference, 2016 International Conference on Computation of Power, Energy Information and Communication (ICCPEIC) Pg.No 490-498,978-1-5090- 0901-5/16 ©2016 IEEE,AdhiParasakthi College of Engineering.
- 6. V.Balaji, Dr. N.Vasudevan and **E.Maheswari**, "Multivariable Laguerre Based Indirect Adaptive predictive Control a Reliable Practical Solution for Process Control," Proceedings of the International Conference on Trends in Intelligent Electronic Systems pp.396-400,SathyaBama University,Chennai,India, Nov12th 14th 2007.
- 7. V.Balaji, Dr. N.Vasudevan and **E.Maheswari**, "Multivariable Model Predictive Control for Process Control," Proceedings of the International Conference on Sensors And Related Networks, pp. 320- 326, VIT University, Vellore, India, Dec 12th -14th 2007.
- 8. V.Balaji, Dr. N.Vasudevan and **E.Maheswari,** "Neural Network Based on Model Control Strategy for the pH Process," Proceedings of the International Conference on Digital Factory,pp. 274 277, CIT Coimbatore, India, Aug 11th -13th 2008.

Papers published in National Conferences:

- 1. **E.Maheswari**, A.Kavitha and G.Uma, "Hopf Bifurcation and chaos analysis in negative output luo converter" Proceedings of the National Conference RITEE'07, pp.152-157, Sri Sai Ram Engineering College Chennai, India, March 13th 2007.
- 2.**E.Maheswari** and A.Kavitha and G.Uma"Bifurcation analysis in negative output luo Converter" Proceedings of the National Conference NACPED'07,pp-30-35,Government College of Engineering,Thirunelveli,India,4th April 2007.

List of Patent:

- 1.Patent Application no.202041047228,title "AN INTELLIGENT SMART STREET LIGHT SYSTEM WITH SAFETY TECHNOLOGY AND ENVIRONMENT MONITORING" Published on 29/10/2020.
- 2.Patent Application no 202141002310, title "Design and Development of High Efficient LUO Converter with Fuzzy Logic Controller For DC Micro Grid" published on 18.01.21.

Workshop / Conferences / FDP Attended:-

- 1. Participated in IEEE Sponsored 3 days National level workshop on "Design, Optimization and Analysis of Electrical Machines" from 8th may to 10th may 2019 at St.Joseph's Institute of Technology, Chennai.
- 2. Attended the online workshop on "Design of Experiments" from 22nd april 2020to24th april 2020 conducted by JAER & HEXACUBE.
- 3. Two days International Workshop On "Power System Studies Using ETAP & Digsilent" in S.A. Engg College, Chennai,4th and 5th May 2017
- 4. Renewable Energy and Applications", Agni college of technology, Chennai, 19th August 2016.
- 5.One Day workshop on "Spectral analysis using MSO430 for power electronics applications", VIT,20th feb 2016
- 6. Attended a workshop on "High Impact Teaching Skills" attested by Dale Carnegie Training & Associates, Inc Trainer and Wipro at Easwari Engineering College from 7th &8th Dec 2009.
- 7. Attended DRDO sponsored two day national workshop on "MATLAB and Labview For Electrical & Process Control Applications" organized by the Easwari Engg College from 17th to 18th Dec 2009.
- 8. Attended the Tutorial on "Control Systems Study through Matlab" at Vellore Institute of Vellore on $21 22^{nd}$ Jan 2006.

FDP ATTENDED

- 1. 3 Days FDP on "Power Converters for DC microgrid" from 4.6.2020 to 6.6.2020,SSN COLLEGE OF ENGINEERING.
- 2. 5 Days ATAL FDP on "Artificial Intelligence from 21.9.2020 to 25.9.2020, Vellore Institute of Technology.
- 3. 5 Days ATAL FDP on ""Sensors Technology" from 17.8.2020
- 4. Attended the NPTEL 8 weeks FDP course on "DC Microgrid" from July to September 2019 and successfully completed the course with Silver & Elite.
- 5. Attended the NPTEL 8 weeks FDP course on "Advance Power Electronics and Control" from Jan to Mar 2019 and successfully completed the course.
- 6. Attended the NPTEL 8 weeks FDP course on "Advanced Linear Continuous Control Systems: Applications with MATLAB Programming and Simulink" from Aug 2018-Oct 2018 and successfully completed the course with ELITE.
- 7. Three days FDP on "Power electronics for renewable energy systems", Tagore Engineering College, 27th to 29th Dec 2018.
- 8. Attended the NPTEL 12 week's course on "Control System" from Jan to Apr 2018 and successfully completed the course
- 9. Three days FDP on "Power electronics for renewable energy systems", Tagore Engineering College,18th to 20th Jan 2018.
- 10. Seven Days FDP On "EE6007 Micro Electro Mechanical System Design" in Sriram Engineering College, Perumalpattu, From 08.05.2017 To 14.05.2017.
- 11. Three Days FDP On Electromagnetic Theory And Control Systems, Sree Sastha Institute Of Engineering And Technology from 19.6.17 to 21.6.17.
- 12. Participated in AICTE sponsored SDP on "Intelligent control in electrical appliances" conducted by Easwari Engineering College from 26th May to 9th June 2009.
- 13. Attended the Training programme on "Quality Management System and Audit training" at Creative Management Consultant, Chennai. On 3rd 4th Nov 2007.
- 14. Attended the "Induction Training Programme for Engineering College Teachers" at NITTTR, Chennai on 19th Nov 1st Dec 2007.

Workshop / Conferences / FDP Organized:-

- 1. Organized the Guest Lecture on "Applications of Renewable Energy Systems" on 15.09.2021 in Dept of EEE,Sri Sairam Institute of Technology.
- 2. Organized the webinar on "Sustainability in Energy" on 05.06.2021 in Dept of EEE,Sri Sairam Institute of Technology.
- 3. Organized Workshop on "IoT application on smart grid" for III Yr EEE students in Sri Sairam Institute of Technology from 5.3.2019 to 6.3.2019
- Organized the 10th national level technical symposium WARROS'2018 in Sri Sairam Institute of Technology on 11th September 2018.
- 5. Organized Entrepreneurship Awareness Camp (EAC) sponsored by DST in Sri Sairam Institute of Technology from 9.3.2016 to 11.3.2016.

