

**Dr.W.Margaret Amutha M.E., Ph.D**

**Assistant Professor,**

**Dept. of EEE, SRMIST,**

**Ramapuram, Chennai**

margaretamuthaw@gmail.com



Dr.W.Margaret Amutha Working as an Assistant Professor in the Department of EEE at SRMIST, Ramapuram. She Graduated B.E. in Electrical and Electronics Engineering at Karunya Institute of Technology, Coimbatore, Tamilnadu, India. She secured Master of Engineering in Applied Electronics at Karunya Institute of Technology, Coimbatore, India. She completed Ph.D. in the field of Solar PV-Wind hybrid system powered hybrid fused converters at SSN college of Engineering, Chennai, India. She is in research for more than 10 years. She has published number of papers in reputed Journals and International Conferences.

Areas of Research:

Hybrid fused converters, Hybrid energy storage systems, Embedded controller

Selected Publications:

Papers published in Journals:

1. W.Margaret Amutha, Dr.V.Rajini, “ Stability analysis of two port renewable energy interface for telecom applications”, circuit world, 2022, <https://doi.org/10.1108/CW-12-2021-0303>.
2. W.Margaret Amutha, M.Jennifer June, H.Caleb Andrew, “Techno-Economic Renewable Power Solutions for Audio Recording Studio Laboratory in a Remote Education Institution” Indian Journal of Environmental and Protection, January 2019.
3. W.Margaret Amutha, H.Harshini, Dr.V.Rajini, “A new Renewable Energy Interface for Green Telecommunications”, International Journal of Electronics, July 2018.
4. W.Margaret Amutha, Dr.V.Rajini, “Cost benefit and technical analysis of rural electrification alternatives in Southern India using Homer” Elsevier Journal Publications, Renewable and Sustainable Energy Reviews, Impact factor 6.75, April 2016.

5. W.Margaret Amutha, Dr.V.Rajini, "Techno Economic Evaluation of Various Hybrid Power Systems for Rural Telecom" Elsevier Journal Publications, Renewable and Sustainable Energy Reviews, Impact factor 6.75, Jan 2015.
6. W.Margaret Amutha, Dr.V.Rajini, "A bidirectional isolated AC-DC converter for hybrid power system" International journal of applied Engineering Research, April 2015.
7. W.Margaret Amutha, V.Renugadevi, Dr.V.Rajini, "A novel fused converter for hybrid power systems" Advanced material research Journal, March 2014.
8. W.Margaret Amutha, V.Renugadevi, Dr.V.Rajini, "A novel parallel power conversion technique for efficiency improvement in hybrid DC/DC converter based rural telephony" International Journal Of Advanced Renewable Energy Researches March 2014.
9. V.Renugadevi, W.Margaret Amutha, Dr.V.Rajini, "A novel improved fused converter based hybrid system with MPPT control for rural telephony" International Journal of Emerging technology and advanced Engineering, May, 2014.
10. V.Renugadevi, W.Margaret Amutha, Dr.V.Rajini, "A novel grid based DC-DC converter for rural telephony" International Journal of Electrical and Electronics Engineering, April-June-2014.
11. H.Harshini, W.Margaret Amutha, Dr.V.Rajini, "A self-powered wireless sensor network", International Journal of computer networks and wireless communications, Feb 2017.

---

Papers published in Conferences:

1. W.Margaret Amutha, Georgey Kadayil Biju, Vincent Samuel.T, Jeffry Paul, Abhishek, "Review Electronic Travel aid based Intelligent Vision for visually impaired" Proceedings of the International conference on Emerging technique in Engineering Technology and Management, 2019, 23<sup>rd</sup> March 2019, Coimbatore, India, ISBN 978-93-81288-18-4.
2. Dr. W.Margaret Amutha, Dr.V.Rajini, "Real Time Energy Management System for Solar-Wind-Battery Fed Base Transceiver Station", International Conference on Artificial

Intelligence, Smart Grid and Smart City Applications, January 2019. (Best paper Award )

3. Dr.V.Rajini, W.Margaret Amutha, “ Real time implementation of a single stage converter based solar-wind hybrid system” 6th international conference on Renewable energy research and applications, San Diego, November 2017. (Best paper Award)
4. W.Margaret Amutha, Dr.V.Rajini, “Implementation of pic based hybrid converter for hybrid standalone system” in Global conference on Renewable energy, Pune March 2016.
5. W.Margaret Amutha, V.Renugadevi, Dr.V.Rajini, “Investigation of efficiency of dual input dc-dc converter” IET Chennai local network’s 4th international conference, seiskon on Dec 2013. (Best Paper Award)
6. W.Margaret Amutha, V.Renugadevi, Dr.V.Rajini, “A novel parallel power transfer technique for efficiency improvement in hybrid dc-dc converter based rural telephony” IEEE International conference on renewable energy and sustainable energy on Dec 2013.
7. W.Margaret Amutha, V.Renugadevi, Dr.V.Rajini, “A novel fused converter for hybrid power systems” IEEE conference on Advances in mechanical Engineering and Interdisciplinary Developments, March 2014.
8. V.Renugadevi, W.Margaret Amutha, Dr.V.Rajini, “A novel fused converter based hybrid system with MPPT control for rural telephony” IEEE conference on Circuit, Power and Computing Technologies, March 2014.