

Dr.R.MANIVASAGAM

ASSOCIATE PROFESSOR / EEE

Mobile : 8870741983

Email : manivasagam@krce.ac.in

I. Particulars of Educational Qualification :

1. Studied B.E. in Electrical & Electronics Engineering at Bharathidasan University, 2003.
2. Studied M.E. in Power Electronics & Drives at Anna University, 2010.
3. Awarded Ph.D. in Electrical Engineering at Anna University, 2018 .

II. Title of Ph.D. Thesis

Various Control Strategies for UPQC Enhancement to Mitigate PQ Issues.

III. List of Publications :

INTERNATIONAL JOURNALS PUBLISHED: 27

1. **Manivasagam. R** , Prabakaran, R. (2020) ‘Power quality improvement by UPQC using ANFIS-based hysteresis controller’, Int. J. Operational Research, Vol. 37, No. 2, pp.174–197. DOI: 10.1504/IJOR.2020.105368. Publisher- Inderscience Publishers, ISSN online: 1745-7653 ISSN print: 1745-7645.
2. **Rajendran Manivasagam, S.P.Richard**, (2021), ‘Instant ash monitoring using a load cell in the boiler’, Materials Today: Proceedings 39 (2021) 1754–1761, <https://doi.org/10.1016/j.matpr.2020.06.496>.
3. **Manivasagam, R.** Genetic algorithm for minimizing the fuel consumption. OPSEARCH (2021). <https://doi.org/10.1007/s12597-021-00544-2>

4. S.P.Richard, **R.Manivasagam** and P.Vigneshwaran (2020), 'Three-Level Topology for Shunt Active Power Filters', IOP Conference Series: Materials Science and Engineering, Volume 937, Recent Trends on Renewable Energy Smart Grid and Electric Vehicle Technologies (RESGEVT 2020) 9 July 2020, Vellore, India, pp.1–16. DOI: 10.1088/1757-899X/937/1/012002. Publisher-IOP Publishers.
5. **Manivasagam Rajendran**, "Comparison of Various Control Strategies for UPQC to Mitigate PQ Issues", Journal of The Institution of Engineers (India): Series B, 2020. <https://doi.org/10.1007/s40031-020-00502-4>.
6. **Manivasagam Rajendran**, Saranraj Rajendran, Wind Turbine Manufacturing Supply Chain, International Journal Of Scientific & Technology Research ,Volume 9, Issue 03, March 2020, pp. 1278- 1281. ISSN 2277-8616.
7. **R.Manivasagam**, Kalpana.K, Speed Intensity of BLDC Motor with Fuzzy Base Peak Current Detection, International Journal Of Scientific & Technology Research, Volume 9, Issue 03, March 2020, pp. 6021- 6027. ISSN 2277-8616.
8. R.Sushmitha, R.Nithya, T. Santhosh kumar, S. Sathiesh kumar, **Dr. R.Manivasagam**, Real Time Based Power Fluctuation Recorder Using Printer Interface ,International Journal Of Scientific & Technology Research Volume 9, Issue 04, April 2020,pp. 84- 87. ISSN 2277-8616.
9. **Manivasagam Rajendran** , Vigneshwaran Perumal (2020), 'Renal Transplantation Survival Using ANN', Advances in Parallel Computing, Volume 37: Intelligent Systems and Computer Technology, pp.72–77. doi:10.3233/APC200121. Publisher- IOS Press .
- 10.**Manivasagam Rajendran** , 'Various Control Strategies for UPQC Enhancement to Mitigate PQ Issues', Journal of Electrical Engineering ,Volume 20, Edition 4, June 2020, pp. 254-259 . ISSN 1582 - 4594.
- 11.**Manivasagam Rajendran**, S.P. Richard. Electric Power Generation from Heat Energy Using Thermo Electric Generator and Single Ended Primary Induction Converter. Research J. Engineering and Tech. 2020;11(1):01-09. doi: 10.5958/2321-581X.2020.00001.X

- 12. Manivasagam Rajendran, Gabriel Santhosh Kumar G, (2018) ‘ Comparative Analysis of PI / PID Controller for A Thermal Process Using PLC’, IEEE Int. Conference on Recent Innovations in Electrical, Electronics & Communication Engineering - (ICRIEECE), pp.2839–2841. DOI: 10.1109/ICRIEECE44171.2018.9008671.**
- 13. Rajendran Manivasagam, “Protection Scheme for Photovoltaic Interface in DC Distribution Systems”, International Journal of Advances in Computer and Electronics Engineering (IJACEE), Vol. 4, No.9, pp.7-11, Sep 2019, ISSN 2456-3935.**
- 14. Manivasagam Rajendran, “Intensive Patient Monitoring using LABVIEW”, Review of Computer Engineering Research (RCER), Vol. 6, No. 2, pp.92-96, Dec 2019, ISSN (Online) 2410-9142, ISSN (Print) 2412-4281. Publisher Name Conscientia Beam. Available at: DOI: 10.18488/journal.76.2019.62.92.96.**
- 15. Manivasagam Rajendran, Prabhu, A “Stability Analysis of Type-2 Fuzzy Process Control Using LMI”, Review of Computer Engineering Research (RCER), Vol. 6, No. 2, pp.57-63, Sep 2019, ISSN (Online) 2410-9142, ISSN (Print) 2412-4281. Publisher Name Conscientia Beam. Available at: DOI: 10.18488/journal.76.2019.62.57.63.**
- 16. Manivasagam, R, P. Parthasarathy, and R. Anbumozhi, "Robust analysis of T-S fuzzy controller for nonlinear system using H-infinity," Advances in Intelligent Systems and Computing(AISC), vol. 949, pp. 643-651, July 2019. Online ISBN 978-981-13-8196-6, Print ISBN 978-981-13-8195-9, Publisher Name Springer, Singapore. Available at: https://doi.org/10.1007/978-981-13-8196-6_56.**
- 17. Manivasagam, R, Gabriel Santhosh Kumar G “Determination of Adulteration and Quantity of Petrol using pH Meter and Microcontroller”, International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering (IJIREEICE), Vol. 7, Issue 5, May 2019, ISSN (Online) 2321-2004, ISSN (Print) 2321-5526.**

- 18. Manivasagam, R, Hemila Haland** “Design of Electric Power System Studies Using Mipower”, International Journal of Research and Innovation in Applied Science (IJRIAS), Volume IV, Issue V, pp - 100-106 , May 2019, ISSN 2454-6194.
- 19. Manivasagam, R, Hemila Haland** “Performance Comparison of Power Flow Studies Using Mipower”, International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS), Volume VIII, Issue V, pp - 57-62 ,May 2019, ISSN 2278-2540.
- 20. Manivasagam, R, Vigneshwaran,P,** “Saturation Analysis on Current Transformer”, International Journal Of Pure and Applied Mathematics, Volume 118, No 18, pp - 2169-2176, 2018, Special Issues, Publisher- Academic Publications Ltd., Print ISSN: 1311-8080, Online ISSN: 1314-3395.
- 21. Aarthi,D, Manivasagam, R,** “Design and Implementation of UPFC Using Ten Switch Converter With Switch Reduction”, International Journal Of Engineering And Computer Science, Volume 6, Issue 6, pp - 21861-21869, 2017, Publisher- Index Copernicus value, ISSN: 2319-7242.
- 22. Aarthi,D, Manivasagam, R,** “Design of UPFC using Ten Switch Converter with Switch Reduction”, International Journal for Scientific Research & Development, Volume 5, Issue 4, pp - 490-493, 2017, Publisher- I.J.S.R.D. , INDIA, ISSN: 2321-0613.
- 23. Manivasagam, R, Raghavi, R ,** “Modeling of a Grid Connected Electric Vehicle Charging Station with FOH approximation”, International Open Journal for Engineering research (IOJER), Volume 1, Issue 3, pp - 19-25, 2015.
- 24. Manivasagam, R, Raghavi, R ,** “Modeling of a Grid Connected New Energy Vehicle Charging Station”, International Journal of Applied Engineering Research (IJAER), Volume 10, Number 20, Special Issues , pp - 15870-15875, 2015, Publisher-RI Publication , Print ISSN: 0973-4562, Online ISSN: 0973-9769.
- 25. Manivasagam, R, Dharmalingam,V,** “Power Quality Problem Mitigation by Unified Power Quality Conditioner: An Adaptive Hysteresis Control Technique”, International Journal of Power Electronics, Volume 6, Issue 4, pp

- 403-425, 2014, Publisher-Inderscience Publishers, ISSN online: 1756-6398
ISSN print: 1756-638X.

26. Manivasagam, R, “Super Capacitors Energy Storage System for Power Quality Improvement”, International Journal Of Communications and Engineering, Volume 6, Issue 4, pp - 42-51, 2012, ISSN:0988-0382E.

27. Manivasagam, R, Muralidharan, S, “Developments in Pulsed High Power Systems”, International Journal of Advanced Research in Technology, Volume 2, Issue 2, pp - 60-65, 2012, ISSN: 6602 3127.

INTERNATIONAL CONFERENCES ATTENDED: 30

- 1. Manivasagam.R,** “Child Abuse Prediction and Women Safety Using Image Processing”, International conference on power initiatives (ICPI 2021), K.Ramakrishnan college of Engineering-Trichy, 29 & 30 March 2021.
- 2. Manivasagam.R,** “Auto light intensity control of street lights using IoT”, International conference on power initiatives (ICPI 2021), K.Ramakrishnan college of Engineering-Trichy, 29 & 30 March 2021.
- 3. Manivasagam.R,** Richard S.P and Vigneshwaran.P, “Three-Level Topology for Shunt Active Power Filters”, Recent Trends on Renewable Energy Smart Grid and Electric Vehicle Technologies (RESGEVT 2020) 9 July 2020, Organized by School of Electrical Engineering, Vellore Institute of Technology(VIT), Vellore, India.
- 4. Manivasagam.R,** Richard S.P, “ Instant Ash Monitoring Using A Load Cell In The Boiler”, 2nd International Conference On Recent Trends In Metallurgy, Materials Science And Manufacturing (IMME 19), National Institute of Technology, Tiruchirappalli, 27 & 28, December, 2019.
- 5. Manivasagam.R,** Vigneshwaran.P, “ Renal Transplantation Survival Using ANN”, 3rd International Conference for Phoenixes on Emerging Current Trends in Engineering and Management (PECTEAM2K20), Panimalar Engineering College, Chennai- 600123, 6&7 March, 2020.

6. **Manivasagam.R,** Vinothini.N,“Mac Signage Board Using IoT”, International conference on discrete mathematics and data sciences, Sastra university, Thanjavur, Sep 28&29,2018.
7. **Manivasagam.R,** Prabhu.A, “Stability Analysis Of Type-2 Fuzzy Process Control Using LMI”, International symposium on artificial intelligence and computer vision, Anna University , Chennai, Sep 26 -28,2018.
8. **Manivasagam.R,** Anbumozhi.R, “Instant Ash Monitoring Using A Load Cell In The Boiler”, International conference on new trends in engineering and technology, GRT, Tiruvallur, Sep 7& 8,2018.
9. **Manivasagam.R,**Parthasarathy.P, “Robust Analysis Of T-S Fuzzy Controller For Nonlinear System Using H-Infinity”, International Conference on Advanced Engineering Optimization through Intelligent techniques, SVNIT, SURAT, August 3 - 5,2018.
- 10.**Manivasagam.R,** Gabriel santhosh kumar .G, “Comparative Analysis Of PI / PID Controller For A Thermal Process Using PLC”, International Conference on Recent innovation in Electrical Electronics & Communication Engineering (ICRIEECE-2018), KIIT, Bhubaneswar, July 27&28,2018.
- 11.**Manivasagam.R,** “Comparative Analysis Of Power Flow In Ieee 30 Bus System Using Mi Power And Matlab”, Third international conference on innovations in engineering, technology and science (ICIETS2019) , K.Ramakrishnan College of Engineering, Tiruchirappalli, March 21 & 22 , 2019.
- 12.**Manivasagam.R,** “Self Powered Hybrid Electric Vehicles”, Third international conference on innovations in engineering, technology and science (ICIETS2019) , K.Ramakrishnan College of Engineering, Tiruchirappalli, March 21 & 22 , 2019.
- 13.**Manivasagam.R,** “Crack Detection With IoT Based Robot Control System”, Third international conference on innovations in engineering, technology and science (ICIETS2019) , K.Ramakrishnan College of Engineering, Tiruchirappalli, March 21 & 22 , 2019.
- 14.**Manivasagam.R,** Karthikeyan.P “Dominant Pole Based Cdpa Algorithm For Reduced Order Modelling Of A Binary Distillation Column Process”,

International conference on energy efficient technologies for sustainability, St.Xavier's Catholic College of Engineering, Nagercoil, April 5 – 7, 2018.

15.Manivasagam.R, Anbumozhi.R, “Saturation Analysis On Current Transformer”, Second International Conference on power electronics and renewable energy systems, Rajalakshmi Engineering College, Chennai, April 4&5, 2018.

16.Manivasagam.R, “Wireless Sensor Based Patient Monitoring Using RFID Technology”, Second International Conference on Innovations in Engineering, Technology and Science (ICIETS'2018), K.Ramakrishnan College of Engineering, Tiruchirappalli, March 13 &14, 2018.

17.Manivasagam.R, “Electric Power Generation From Heat Energy Using Teg With Sepic High Gain Dc-Dc Converter”, Second International Conference on Innovations in Engineering, Technology and Science (ICIETS'2018), K.Ramakrishnan College of Engineering, Tiruchirappalli, March 13 &14, 2018.

18.Manivasagam.R, “Online Monitoring Of Power Factor Using IoT & Automatic Improvement By Modified APFC”, Second International Conference on Innovations in Engineering, Technology and Science (ICIETS'2018), K.Ramakrishnan College of Engineering, Tiruchirappalli, March 13 &14, 2018.

19.Manivasagam.R, Gabriel santhosh kumar .G, “Determination Of Adulteration And Quantity Of Petrol Using PH Meter And Microcontroller”, Third International conference on innovative design, analysis, and development practices in aerospace and automotive engineering, Vel Tech Deemed To Be University, Chennai, Feb 22-24, 2018.

20.Manivasagam.R, Karthikayini.A “Voltage Regulation Using Series Voltage Injection”, International conference on electrical, electronics, computers, communication, mechanical and computing, Priyadarshi Engineering College, Vaniyambadi, Jan 28 &29, 2018.

21.Manivasagam.R, Vigneshwaran.P , “Saturation Analysis On Current Transformer”, International Conference on Systems Design and Engineering (ICSDE-2017), Sastra Deemed To Be University, Thanjavur, Dec 11 &12, 2017.

- 22.Manivasagam.R,** “Hybrid Wind Driven PMSG-PV System Connected To Grid Using Single Dc-Dc Sepic Converter”, International conference on engineering, energy and environment, TRP Engineering College, Tiruchirappalli, March 31- April 2, 2017.
- 23.Manivasagam.R,** “Design Of UPFC Using Ten Switch Converter With Switch Reduction”, International Conference on Innovations in Engineering, Technology and Science (ICIETS’2017), K.Ramakrishnan College of Engineering, Tiruchirappalli, Feb 24 &25, 2017.
- 24.Manivasagam.R,** “Particle Swarm Optimization Based Low Voltage Ride Through Control Strategy For Grid Connected Doubly Fed Induction Wind Generator”, International conference on recent advances and innovations in engineering and technology, Ranganathan Engineering college,Coimbatore, March 20 &21, 2015.
- 25.Manivasagam.R,** “Power Quality Problem Mitigation By Unified Power Quality Conditioner”, Second international conference on advances in industrial engineering applications, Anna university, Chennai, Jan 6-8, 2014.
- 26.Manivasagam.R,** “Fuzzy Logic Technique Applied To The Control Of A Three Phase Induction Motor”, International conference on computing and control engineering, Dr.M.G.R.Educational&Research Institute University-Chennai, April 12&13, 2012.
- 27.Manivasagam.R,** “Super Capacitors Energy Storage System For Power Quality Improvement ”, International conference on advanced computing technology, JKK Nattraja college of Engineering and Technology-Namakkal, March 9&10 ,2012.
- 28.Manivasagam.R,** “Developments In Pulsed High Power Systems”, International conference on advanced computing technology, JKK Nattraja college of Engineering and Technology-Namakkal, March 9&10 ,2012.
- 29.Manivasagam.R,** “Advances In Power Electronics Technology For Industrial And Traction Machine Drives”, International conference on futuristic trends in electronics engineering, Thiruvalluvar college of Engineering and Technology-Vandavasi, Jan 28&29, 2012.

30. Manivasagam.R, “Application Of Neural Networks For Power System Security Evaluation ”, Second international conference on intelligent information systems and management , RVS Group of Engineering and Management Institutions-Coimbatore, July 14-16 ,2011.

NATIONAL CONFERENCES ATTENDED : 13

- 1. Manivasagam.R,** Parthasarathy.P,“ Genetic Algorithm Based Economic Dispatch Of Renewable Distribution Generation ”, National conference on power engineering, Anna university Regional Campus, Madurai, March 27 & 28, 2018.
- 2. Manivasagam.R,** Gabriel santhosh kumar .G ,“ Design And Simulation Of PWM Based Ac Voltage Controller Using Microcontroller”, National conference on power engineering, Anna university Regional Campus, Madurai, March 27 & 28, 2018.
- 3. Manivasagam.R,** “DQ Modeling Of A Grid Connected, Electric Vehicle Charging Station In Active Power Filter Model”, National conference on power electronics applications in renewable energy, Vivekanandha college of Engineering for women, Namakkal, October 16 & 17, 2014.
- 4. Manivasagam.R,** “Advanced And More Flexible Air Force Using GPS And Swarm Technology”, First National conference on power systems engineering, Jayaram college of Engineering and Technology-Trichy, March 29&30, 2012.
- 5. Manivasagam.R,** “Moon - A Future Renewable Energy Resource”, First National conference on power systems engineering, Jayaram college of Engineering and Technology-Trichy, March 29&30, 2012.
- 6. Manivasagam.R,** “Fuzzy Coordination Of Facts Controllers For Damping Power System Oscillations”, National conference on control, communication and computational engineering, Karpagam Institute of Technology-Coimbatore, March 12,2012.
- 7. Manivasagam.R,** “Intelligent Energy Source Using Solar Energy”, National conference, K.Ramakrishnan college of Engineering-Trichy, March 9,2012.

8. **Manivasagam.R,** “Hybrid Renewable Energy Systems For The Supply Of Services In Rural Settlements Of Mediterranean Partner Countries”, National conference on emerging technologies, Mount Zion college of Engineering and Technology-Pudukkottai, March 1,2012.
9. **Manivasagam.R,** “Hybrid Renewable Energy Systems For The Supply Of Services In Rural Settlements Of Mediterranean Partner Countries”, National conference, K.Ramakrishnan college of Technology-Trichy, Feb 14 , 2012.
- 10.**Manivasagam.R,** “Fuzzy Coordination Of Facts Controllers For Damping Power System Oscillations”, National conference on control, communication and computational engineering, Vivekanandha Institute of Engineering and Technology for women-Tiruchengode, Feb 3&4 ,2012.
- 11.**Manivasagam.R,** “Dynamic Voltage Restorer For Power Quality Improvement”, Fifth National conference on intellectual perspectives on intelligent control, Annai Mathammal Sheela Engineering college,Namakkal, March 25, 2010.
- 12.**Manivasagam.R,** “Dynamic Voltage Restorer Using Wavelet For Power Quality Improvement”, National conference on innovative technologies in electrical and electronics systems, Muthayammal Engineering college, Rasipuram, Feb 24&25 , 2010.
- 13.**Manivasagam.R,** “Adaptive Control”, Fourth National conference on intellectual perspectives on intelligent control, Annai Mathammal Sheela Engineering college-Namakkal, March 20, 2009.

Professional Association:

Life Member, The Institution of Engineers (India), (IEI) [M 1628135]

Life Member, Indian Society for Technical Education, (ISTE) [LM 111596]

Life Member, International Association of Engineers , (IAENG) [168888]

Life Member, International Society for Research and Development, (ISRD)
[M 4150903058]

Associate Member (UACEE), Institute of Research Engineers and Doctors,
(IRED) [AM10100058668]

Life Member, International Association of Online Engineering, (IAOE)
[10296]

Life Member, Science and Engineering Institute, (SCIEI) [20190626004]