

Dr.K.K.SARAVANAN
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Department of EEE
Anna University College of Engineering Thirukkuvalai
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➤ **Educational Qualifications:**

Qualification	Department	Year(From-To)	Class
Diploma	Electrical&Electronics Engg.	1992-1995	First
B.E.	Electrical&Electronics Engg.	1998-2002	First
M.E.	Power Electronics and Industrial Drives	2003-2005	First
Ph.D.	Electrical Engg.	2011-2018	Commanded

➤ **Additional/Academic Responsibilities:**

1. Class In charge at Department Level from 2009-2019.
2. YRC Program officer from 2012-14.
3. Residential Tutor from 2010-14.
4. Internal quality Assurance cell and student Grievance Cell member 2018-2019.
5. Exam Cell Co-Ordinator from 2021-22.
6. Anti-ragging Committee member from 2019 to till date.

➤ **Programme Organized:**

- A one day **National Technical Symposium (ELECSTROMZ 2K14)** conducted by Department of EEE, UCE, Thirukkuvalai and it was Inaugurated by Dr.Inian, Professor, Anna University Chennai on 21th march 2014.
- A one day **National Technical Symposium(GEMOTRANZ'16)** conducted by Department of EEE, UCE,Panruti and it was Inaugurated by Dr.Sudha, Associate Professor, UCE-Dindugal on 29thSeptember2016.

- A one day **National level Workshop** on PLC Designing and Industrial Automation conducted by Department of EEE, UCE,Panruti on 28thSeptember2016.
- **Anna University-CFD sponsored** two week Faculty development program on Electricalmachines-II conducted by Department of EEE, UCE,Panruti and it was Inaugurated by Dr.Sudha, Associate Professor, UCE-Dindugal from 28.11.2018 to 11.12.2018.
- **Anna University-CFD sponsored** one week Faculty development program on Solid state Drives conducted by Department of EEE, UCE-Thirukkuvalai from 31.01.2022 to 05.02.2022.

➤ **Membership of Scientific and Professional Societies:**

- Life member of the Indian society for Technical Education.(MISTE)
- Associate Member of the Institute of Research Engineers and doctors(MIRED)
- Member of International Association of Engineers

➤ **Completed B.E/M.E Projects:**

- a. Number of ME Projects Completed: 1 No
- b. Number of BE Project Completed: 40 Nos
- c. Ph.D Guidance: 5 candidates on going

➤ **List of Seminar/Short Term Course/FDP/Workshop attended:**

- ☐ AICTE sponsored staff development program on Emerging Trends in Embedded & wireless technology held during 19th-23rd March 2007 organized by Mailam Engineering College, Mailam.
- ☐ Anna University sponsored faculty development program on power electronics held during 7th-18thMay2007 organized by Mailam Engg. College,Mailam.
- ☐ AICTE sponsored staff development program on Research challenges and trends inModern Communication Systems and Networking held during 30thJan to 9thFeb 2008 organized by Sri Manakula Vinayagar Engg. College, Madagadipet.
- ☐ AICTE sponsored national seminar on Energy Management and Energy conservation Techniques held during 14thFeb to 16thFeb2008 organized by Sri Manakula Vinayagar Engineering College, Madagadipet.
- ☐ One day workshop on Control Techniques for power converters held during 20thMarch-2008 organized by Mailam Engineering College,Mailam.

- ☒ AICTE sponsored staff development program on advance in Fuzzylogic and its application in mathematics held during 26rd-30th May2008 organized by Mailam Engineering College, Mailam.
- ☒ One day national seminar on Renewable Energy-Today and Tomorrow held during20thAug2008 organized by RenewableClub,Mailam Engg.College,Mailam.
- ☒ CFFD-AU sponsored faculty development program on Advanced Control System held during 8-14 June-2009 organized by College of Engineering,Guindy.
- ☒ TEQIP sponsored faculty development program on Recent Trends in Renewable and Non-Renewable Energy Sources held during 26.08.2013 to 01.09.2013 organized by Anna University, BIT Campus, Tiruchirappalli.
- ☒ CFFD-AU sponsored faculty development program on EE6503-Power Electronics held during 04.06.2015 to 10.06.2015 organized by College of Engineering,Guindy.
- ☒ CFFD-AU sponsored faculty development program on EE6351-Electrical Drives and Controls held during 02.06.2014 to 08.06.2014 organized by A.V.C.College of Engineering, Mayiladuthurai.
- ☒ CFFD-AU sponsored faculty development program on EE2401-Power System Operation and Control held during 16.06.2014 to 23.06.2014 organized by IFET College of Engineering, Gangarampalayam.
- ☒ TEQIP sponsored faculty development program on Advanced Technologies for Societal Applications (ATSA'16) held during 06.06.2016 TO 19.06.2016 organized by Anna University, BIT Campus, Tiruchirappalli.
- ☒ Completed an online course on “ET701x: Elements of Leaner-Centric MOOCs” Offered by IIT-BOMBAY, an online learning initiative of Indian Institute of Technology, Bombay during 03rd to 23rd May 2018.
- ☒ Completed an online course on “ET702x: Designing Learner-Centric Microfarad by IIT-BOMBAY, an online learning initiative of Indian Institute of Technology, Bombay during 02.08.2018 to 06.09.2018.
- ☒ AICTE sponsored faculty development program on Nano Technology for Energy and Agricultural Sectors held during 13.11.2017 to 26.11.2017 organized by IFET College of Engineering, Gangarampalayam.
- ☒ MHRD sponsored Faculty Development Training program on Life Skill Development held from 24.09.2018 to 06.10.2018 organized by NITTTR,Chennai.
- ☒ MHRD sponsored Faculty Development Training program on E-Content Development& LMS held from 15.07.2019 to 26.07.2019 organized by NITTTR,Chennai.

➤ **International Conferences Participated:**

1. **K.K.Saravanan**, Dr.N.Stalin, Dr.T.SreeRengaRaja and G.GiftsonSamuel, "Power Quality and EMC in Smart Grid", ISBN978-1-4507-6433-9©2011 Published by the Coimbatore Institute of Information Technology(ICAET-2011)May27-28,2011.
2. **K.K.Saravanan**, Dr.T.SreeRenga Raja, Dr.N.Stalin and R.Anandaraj,"Moon A Future Renewable Energy Source", ISBN978-1-4507-6433 9©2011 Published bythe Coimbatore Institute of Information Technology(ICAET-2011)May27-28,2011.
3. **K.K.Saravanan**, Dr.N.Stalin, Ms.S.Rajalakshmi, Dr.S.Titus, "NewzerocurrenttransitionPwmcdc/dccconverterwithoutcurrentstress", IEEEInternationalConferenceonAdvancesinEngineering, ScienceandManagement(ICAESM-2012)March30-31,2012, pp.566-570.
4. **K.K.Saravanan**, Dr.N.Stalin, Ms.S.Rajalakshmi and G.Giftson Samuel, "Recent trends in renewable energy resources-HydrogenfuelCell", IEEE International Conferenceon Advances in Engineering, Science and Management(ICAESM-2012)March30-31,2012, pp.586-589.
5. **K.K.Saravanan**, Dr.N.Stalin, G.GiftsonSamuel, "Power Electronics Genesis, trends and Improvement", IEEE International Conference on Advances in Engineering, Science and Management (ICAESM- 2012) March30-31,2012, pp.595-599.
6. **K.K.Saravanan**, Dr.N.Stalin, "HVDC in transmission lines", National Conference on PowerSystemEngineering(PSEC'12)March29-30,2012, pp.9
7. **K.K.Saravanan**, Dr.N.Stalin, "Renewable Energy Resources", National Conference on Power System Engineering(PSEC'12)March29-30,2012, pp.8
8. **K.K.Saravanan**, Dr.N.Stalin, "ModernTrendsinHVDCLight", NationalConferenceonElectrical EngineeringTrends(NCEET2K12)7thApril2012, pp.18.
9. **K.K.Saravanan**, Dr.N.Stalin, "Suntrackingsolarpanel", InternationalConferenceonEnergyand EnvironmentalEngineering(ICEEE'14), 6th&7thNovember2014.
10. **K.K.Saravanan**, Dr.N.Stalin, "Awaterqualitymonitoringsystembasedonwirelessornetwork&solarpowersupply", InternationalConferenceonEnergyandEnvironmentalEngineering (ICEEE'14), 6th&7thNovember2014.
11. **K.K.Saravanan**, Dr.N.Stalin, S.Satthiyaraj, "Analysis of Fault-Current Limiting Scheme fortheMicrogrid", InterdisciplinaryNationalConferenceonSoftComputinganditsApplications, Volume1, 29th&30thApril-2015, pp.331-341.
12. **K.K.Saravanan**, Dr.N.Stalin, "DesignofthreePhaseFifteenlevelcascadedMultilevelInverterUsingEmbeddedController", InterdisciplinaryNationalConferenceonSoftComputingandits Applications, Volume1, 29th&30thApril-2015, pp.594-603.
13. **K.K.Saravanan**, Dr.N.Stalin, R.Annandharaj, "Design and Analysis of Bi directional Isolated LLC Resonant Converter", InternationalConferenceonInnovativeResearchinElectricalSciences (ICIRES'15), May8th&9th, 2015.
14. S.Satthiyaraj, **K.K.Saravanan**, Dr.S.Sankar, Anandhi, "Simulation of Unified Power Quality Conditioner for Power Quality Improvementin DistributionSystem Using Matlab",

International Conference on Advances in Mechanical Engineering (ICAME-2015), 15th & 16th of October 2015, pp.1261-1264.

15. **K.K.Saravanan**, N.Stalin, T.SreeRengaRaja, "Modelling and simulation of single phase pv-dvr for sensitive load", National Workshop on Engineering Materials and chemical Sciences (NWRAEMCS2016), 26th February 2016.

16. **K.K.Saravanan**, N.Stalin, T.SreeRengaRaja, B.Soundarapandiyan, "Modelling and simulation of Direct power control strategy for DFIG using vienna rectifier", International Conference on Emerging Trends in Engineering, Technology and Science (ICETETS-2016), 24-26th February 2016, ISBN:978-1-4673-6725-7, pp.648-654.

17. **K.K.Saravanan**, Dr.N.Stalin, Dr.T.SreeRengaRaja, "Design of Single-Phase Seven-Level Grid-Connected Inverter using Solar System", International conference on Electrical, Electronics & Computer Engineering (ICEECE'16), March-2016, ISBN:9789381830956, pp.116-124.

18. **K.K.Saravanan**, R.RenugaDevi, R.Surya, R.Vijayan, "Implementation of 11 Level Cascaded Inverter Using Level Shifting Pulse Width Modulation Technique with Different Loads", 3rd National Conference on Drastic Innovation in Energy Thrive (DIET'16), 24 March 2016, pp.1-15.

19. **K.K.Saravanan**, Dr.N.Stalin, T.SreeRengaRaja, "Simulation of New Multi-input Three Level DC-DC Converter", International Conference on Innovative Research in Electrical Sciences, June 2016.

20. **K.K.Saravanan** et al Modelling and Simulation analysis of Power Cables for a Matrix Converter Fed Induction Motor Drive", International Conference on Emerging Trends in Electrical, Electronics and Communication Systems (ICEECS-2016), 24-26th September 2016.

21. **K.K.Saravanan**, Dr.N.Stalin, "Analysis of Cascaded Eleven Level Inverter using PWM Technique", International Conference on Communication and control Engineering (ICCCE-16), Dec. 2016.

22. Analysis and Investigation on Photo Voltaic System Stability for Grid Connected Load, 4th International conference of Engineering Technology and Science, March-2017.

23. Modelling and Simulation of Solar PV Array with Grid Connected Power Systems", International Conference on Recent Trends in Science, Engineering & Technology, 9th March 2019.

24. International Conference on Recent Trends in Nanomaterials for Energy, Environmental and Engineering Applications (ICONEEEE-2K19), 14 and 15 of March 2019.

➤ **Publications :**

Books:

1. Published a E-book on Analysis of inverter topologies published by LAP LAMBERT Academic Publishing Company, ISBN number **978-3-659-695681**, 2018.
2. Published a text book on Environmental Science and Engineering published by Charulatha Publications, ISBN number **978-93-5577-110-0**, 2022.

International Journals:

1. **K.K.Saravanan** and P. SivaKarthik," Ru-Dye Grafted CuS and Reduced Graphene Oxide(CuS/rGO)Composite:AnEfficientandPhotoTunableElectrodeforDyeSensitizedSolarCells", JournalofClusterScience,ISSN1040-7278,Vol.31,Issue.2,August2019,pp.401-407.
2. **K.K.Saravanan**, P.SivaKarthik, P.RamnivasMirtha, J.Balaji & B.Rajeshkanna," A one-pot hydro thermal induced PANI/SnO₂ and PANI/SnO₂/rGO ternary composites for high-performance chemiresistive-based H₂S and H₃ gas sensors', Journal of Materials Science:Materials in Electronics, ISSN0957-4522,April 2020.
3. **K.K.Saravanan**,N.Shanmugasundaram,"ExperimentalVerification of High Frequency Power CableModelingandanalysisforinvertermotorDriveSystem',GEDRAG&ORGANISATIHEREVIEW,ISSN:0921-5077,Vol.33,March2020,pp.176-184.
4. **K.K.Saravanan**, S.Mahendran, "Aluminium 6082 boron carbide composite materials preparation and investigate mechanical-electrical properties with CNC turning", MaterialsToday:Proceedings,ISSNNO:2214-7853,Jan.2020,pp.93-97.
5. Aartheeswari V, AgilanV, MohanRajK, Vinayagan,**K.K.Saravanan**,Modeling and Simulation of Solar Pv Array With Grid Connected Power Systems, Journal of Applied Science and Computations, VolumeVI,IssueIII,March2019,pp.967-972.
- 6.**K.K.Saravanan**, S.A. Elankurisil, Analysis and Investigation on Photo Voltaic SystemStability for Grid Connected Load, Journal of Electrical Engineering, Volume 17, no. 4,2017,pp.47-54.
7. **K.K.Saravanan**,N.Shanmugasundaram,N.Stalin, Design of Cascaded Multi Level Inverter by Pulse Width Modulation Method , Taga Journal of Graphic Technology , Volume 14, no1, 2018, pp.3490-3497.
8. **K.K.Saravanan**,Dr.N.Stalin,"Modelling and Analysis on Photo Voltaic System stability for Grid Connected Load",Advances in Natural and applied sciences,April2017,pp.370-376.
- 9.**K.K.Saravanan**, Dr.N.Stalin, T.SreeRenga Raja, "Design of Single-Phase Seven Level Grid-Connected Inverter Using SolarSystem ", Asian Journal ofResearch in Social Sciences andHumanities,October2016,pp.868-880.
10. **K.K.Saravanan**,Dr.N.Stalin,T.SreeRengaRaja,"Design and Investigation of Grid Connected Current Source Inverter for Photo voltaic System", International Journal of Advanced EngineeringTechnology,ISSN0976-3945Vol.7No.2,2016,pp.280-284.
11. **K.K.Saravanan**, Dr. N. Stalin, S.Satthiyaraj,"Analysis of Fault-Current Limiting Schemefor the Micro grid", International Journal of Applied Engineering Research, ISSN 0973-4562Vol.10No.72,2015,pp.269-274.
12. **K.K.Saravanan**, Dr. N. Stalin," Design of three Phase Fifteen level Cascaded MultilevelInverter Using Embedded Controller", International Journal of Applied Engineering

Research,ISSN0973-4562Vol.10No.72,2015,pp.437-443.

13.**K.K.Saravanan**,Dr.N.Stalin,R.Annandharaj,"DesignandAnalysisofBidirectionalIsolated LLC Resonant Converter", International Journal of Applied Engineering Research,ISSN0973-4562Vol.10No.51,2015,pp.330-335.

14. S.A.Elankurusil,**K.K.Saravanan**,Dr.N.Stalin,P.MahendraPeruman,"Investigation on Full Bridge and Coupled Inductor ZVS DC-DC Converter Fed PMDC Motor", International Journal of Applied EngineeringResearch,ISSN0973-4562,Volume10,Number 9,2015,pp.24407-24422.

15. Ramprakash S, Vijayanathan R, **K.K.Saravanan**. "Minimizing overhead and Improving Energy Level for Android Mobile Devices", International Journal of Engineering DevelopmentandResearch(IJEDR),ISSN:2321-9939,Vol.1,Issue3,Dec.2013,pp.149–152.

16. **K.K.Saravanan**,Dr.N.Stalin,S.T.Jayasuthahar,"Review of Renewable Energy Resources in Clean Green Environment", International Journal of Emerging Trends in Electrical andElectronics(IJETEE)Vol.1,Issue.1,March2013,pp.54-58.

17. M.Durairasan, **K.K.Saravanan**, P.SivaKarthik,"Enhanced performance of dye sensitized solar cell-based gC 3 N4/Ag 3PO 4 hybrid composites as novel electrodes fabricated by facial hydrothermal approach",Doi-10.1007/s10854-021-05263-4, February 2021,pp. 5404–5414.