**Department of Electrical and Electronics Engineering** 

Personal Details		
Name:	Dr. S. SENTHIL KUMAR., Ph.D.	
Designation:	Professor	
Educational Qualification:	M.E., PhD.	
Experience:	17 years (Teaching),8 Years(Industry)	
Area of Specialization:	High Voltage Engineering, Insulating Medium, Power systems, Renewable Energy Systems	

Educational Details				
S.No.	Degree	Branch/Specialization	Institute/University	Year
1	B.E	EEE	National Engg College,	April 1999
1			MS University. Tirunelveli.	
2	PG Diploma	Industrial Safety	Annamalai University.	April 2005
3	M.E	High Voltage Engineering	National Engg College, Anna University Tirunelveli.	April 2009
4	Ph. D	High Voltage Engineering	Anna University, Chennai.	June 2014-May 2018

#### **Publication Details**

- .1. "Investigations on Suitability of Rice Bran Oil and Corn Oil as Alternative Insulating Liquid for Transformers' IEEJ Transactions on Electrical and Electronic Engineering (TEEE) Vol. 11, No. 1, pp. 10-14., (Thomson Reuters, SCI) (Annexure-I) John Wiley publishers, Impact factor:0.623, Jan, 2016.
- 2. "Effect of Antioxidants on Critical Properties of Natural Esters for Liquid Insulations' IEEE Transactions on Dielectric and Electrical Insulation (2016) Vol. 23, No. 4, pp.2068-2078, (Thomson Reuters, SCI) (Annexure-I), IEEE, impact factor: 2.554, Sep 2016.
- **3.** "Performance of Activated Bentonite and Carbon In Reclaiming the Properties of Used Mineral Oil" Journal of Electrical Engineering, (Annexure-I), Volume 17, No:3 ,pp.407-415 University Of "POLITEHNICA" Timisoara, Romania, Faculty of Electrical and Power Engineering, (**Scopus**) Aug ,2017.
- **4.** "Investigation of Various Natural Esters Insulating Medium for the Applications in High Voltage Machinery" International Journal of Advanced Research in Basic Engineering Sciences and Technology, ISSN (ONLINE):, Vol.4, Issue.5,pp: 2456-5717,IJARBEST(Non-Scopus)May 2018.
- **5.** "A comparative investigation on effects of nanoparticles on characteristics of natural esters-based nanofluids', Colloids and Surfaces, Elsevier, No:556, pp:30–36. **Elsevier, (SCI)Impact Factor=2.99** August, 2018.
- **6.** "Wastage Pay Smart Bin"International Journal of Engineering & Technology, United Arab Emirates (UAE), Vol 7, No: 4.6, pp:193-197, IJET, (**SCOPUS**), Oct 2018.
- **7.** "Examining the Properties of Neem Oil, Sunflower Oil and Mahua Oil with Antioxidants and Nano Powders for Power Transformer "American Journal of Electrical and Computer Engineering, Vol. 3, No. 1, 2019, pp. 20-29. AJECE, (**SCOPUS**), June, 2019.
- **8.** "Optimization of Various Natural Ester Oils Impregnated Nomex Paper Performance in Power Transformer Applications under Different Ageing Conditions", International Journal of Recent Technology and Engineering, ISSN: 2277-3878, Volume-8 Issue-3.IJRTE, (Scopus) September 2019.
- **9.** "Stability Analysis of Solar Assisted Dc-Dc Y-Source Boosting Topology Using State Space Model" SYLWAN Journal, Poland, PP:158-168.SYLWAN, Publication, (**SCI**) **Impact Factor=0.693**, December, 2019.
- **10.** Multi-Response Optimization of the Properties of Mineral Oil Blended with Natural Ester Oil Using desirability- Based Methodology, International Journal of Scientific & Technology Research, Volume 9 issue 2. IJSTR, (**Scopus**) Feb 2020.
- 11. Experimental Investigation on Room Temperature Vulcanised Silicone rubber and Epoxy resin coated porcelain outdoor insulators located at highly polluted environment, Journal of Ceramic Processing, Volume 21-Issue 1, pp. 14-20. Publisher Anyang University, 222, Wangsimni-ro, Seongdong-gu, Seoul,

04763, Korea, ISSN: 1229-9162 (Print)2672-152X (Online)(SCI)Impact Factor:0.594,Feb 28, 2020.

- 12. "Examining the Properties of Natural Ester Oils with Antioxidants and Nano Powders for Power Applications", 'International Journal of Recent Technology and Engineering, ISSN: 2277-3878 (Online), Volume-8 Issue-6,. Page No.: 605-610Publisher by, 'Blue Eyes Intelligence Engineering and Sciences Publication', (Scopus), March 2020.
- **13**. "Power Quality Improvement in Solar Fed Cascaded Multilevel Inverter with Output Voltage Regulation Techniques", "**IEEE ACCESS**", Volume 8, pp- 178360-178371.IEEE Publisher. (**SCI**) **Impact Factor 3.74**, Sep,2020.
- **14.** "Evaluating critical characteristics of vegetable oil as a biodegradable insulating oil for transformer", Int. J. Emerge. Electr. Power Syst. 2020; 21(5): 20200128.https://doi.org/10.1515/ijeeps-2020-0128,DE -GRUYTER, Impact Factor =0.846 (2019) (**Scopus**), OCT 2020.
- **15.** "Optimization of transformer oil blended with natural ester oils using Taguchi-based grey relational analysis. Fuel, pp-119629, **Elsevier**, (SCI) **Impact Factor**: 6.584, March, 2021.
- **16.**" Reclamation of natural esters using nanocarriers as the biodegradable choice for the transformer insulation", Environmental Technology & Innovation (**Elsevier**) (**SCI**) **Impact Factor:3.784**, vol23,2021, pp.101634, May-21.
- 17. "Fuzzy Logic Control for Solar PV Fed Modular Multilevel Inverter Towards Marine Water Pumping Applications", **IEEE ACCESS**, (**SCI**) **Impact Factor-3.74**, Volume9, 2021, Pp.88524. Jun-21.
- **18.** "Deep optimal VGG16 based COVID-19 diagnosis model", **Computers, Materials and Continua** (**SCI**), 70(1),43-58, Nov,2021.
- 19." Gaussian PI Controller Network Classifier for Grid-Connected Renewable Energy System Intelligent Automation & Soft Computing, Tech Science Press, Impact Factor: 1.647, Jan 2023
- 20. "Effects of long-term exercise training on physiological signals and personality traits in women in law enforcement, Journal of Intelligent & Fuzzy Systems, IOS press, Impact Factor: 1.737, Jan 2023
- **21.** "Investigation on the Impact of Zinc Oxide Nanoparticles with Varied Surface Modifications in Soybean Oil on Tribological Properties", Nano World Journal, United Scientific Group, Volume-9,Issue-3,Pages-S699-S706, dec-2023.

#### **National Conference:**

**1.** Analysis of Pollution Performance of Insulator Under Artificial Polluted., Government College of Engineering, Tirunelveli, 2nd April 2009.

#### **International Conference:**

- 1. "Comparative Analysis of Dielectric and Thermal Properties of Mineral oil and Vegetable oil", IIST 2013, Sun College of Engineering and Technology, 2013.
- 2. "Analysis of vegetable liquid insulating medium for application in high voltage transformers", ICSEMR 2014, Vel Tech MultiTech Engineering college, Nov 27-29, 2014.

- **3.** "Analysis of critical parameter of vegetable oil as an alternate dielectric fluid to mineral oil" IEEE International Conf. on intelligent systems and control, Karpagam college of engineering, Coimbatore.7th -8th Jan 2016.
- **4.** "Investigation on the properties of natural esters blended with mineral oil and pyrolysis oil as liquid insulation for high voltage transformers", International Conference on Artificial Intelligence, Smart Grid and Smart City Applications, PSG College of Technology. BEST PAPER AWARD,2016.
- **5.** "Investigation Of Various Natural Esters Insulating Medium for Application In High Voltage Machinery", "International conference on Contemporary Engineering and Technology "Prince shri venkateshwara padmavathy Engineering and Technology, March 10th, 2018.
- **6.** "Investigation of the properties of Natural Antioxidants and Synthetic Antioxidants",4th International Conference on Computing Communication and Automation (ICCCA),Galgotias University,Noida,Delhi,Dec,14-15,2018.
- **7.** "Investigation of the Properties of Sunflower Oil with Antioxidants and Nano powder "International Conference on Artificial Intelligence, Smart Grid and Smart City Applications(AISGSC 2019)Department ,PSG College of Technology,Coimbatore,3-5 January, 2019.
- **8.** "Simulation of Impulse Overvoltage"7th"International conference on Contemporary Engineering and Technology, Prince shri venkateshwara padmavathy Engineering and Technology, chennai, March 10th, 2019.
- **9.** "A Comparative Study of Field Distribution Properties of Different Types of Oils Using COMSOL", in Proceedings of International Conference on Power Electronics and Renewable Energy Systems. Lecture Notes in Electrical Engineering, vol-795. Springer, Singapore, SRM University, Chennai, April 2021.
- **10.** "Smart Intelligent Walking Stick for Physically challenged Blind People Using Arduino and IOT", International Virtual Conference on Global Advanced Trends in Applied Mathematics, Physical Sciences and Humanities (ICGAMPH 2021)Sri Ramakrishna Institute of Technology, Pachapalayam, Coimbatore, 2021/10/21.
- 11. Design and Development of Novel Security Approach designed for Cloud Computing with Load Balancing, 3rd INTERNATIONAL CONFERENCE ON ENGINEERING FACILITIES MAINTENANCE AND MANAGEMENT TECHNOLOGIES (EFM2T'21),Botswana International University of Science and Technology,Botswana.south Africa, 2021/10/28
- **12.** Smart Event Management System Using Pega, 3rd INTERNATIONAL CONFERENCE ON ENGINEERING FACILITIES MAINTENANCE AND MANAGEMENT TECHNOLOGIES (EFM2T'21),Botswana International University of Science and Technology,Botswana,south Africa, 2021/10/28.

- **13.** Study of Support Vector Machines for Classification of Brain Tumours, IEEE International E-Conference on "Emerging Technologies and Applications for a Smart and Sustainable World" (ICEmTASS'2 1), 2021/12/16.
- **14.** Currency Identification For Blind People Using Image Processing, IEEE International E-Conference on "Emerging Technologies and Applications for a Smart and Sustainable World" (ICEmTASS'2 1), 2021/12/16
- **15.** "A Review of Renewable Energy Resources. Its Potentials, Benefits, and Challenges in South Sudan", IEEE International Conference on Advancements in Electrical, Electronics, communication, Computing and Automation (ICAECA), 2022/1/19.
- **16.** "Predicting home applications electricity usage in low energy consumption houses", IEEE International Conference challenges in information and Communication, Ksr college pf engineering and technology, erode Apiril, 2024
- **17.** "Improvements in DC-DC Converters Using PID and Neural Network-Based Control Systems", International Conference on Power Generation and Renewable Energy Sources (ICPGRES-2024), E3S Web Conf-Volume 564, 06 September-2024.

# **Professional Society Membership**

- 1. IAENG (International Association of Engineers) IAENG Member: 241967
- 2. The Society of Digital Information and Wireless Communications(SDIWC), Membership Certification ID: 34136.

## **Program Organised**

- 1. Organized A Webinar Program on The Topic "Virtual research awareness program". 11th Jan 2022@ 02.00 pm.
- 2. Organized A Webinar Program on The Topic "Fostering An Entrepreneurial Mindset Using Design Thinking" (A Part of National Innovation & Start-up Policy Implementation)".24th August 2021@12.00 pm
- 3. Organized as SPOC, Nodal Centre, , New Prince Shri Bhavani College Of Engineering & Technology, Vengaivasal Main Road, Valli Nagar, Gowriwakkam, Sembakkam, Chennai, Tamil Nadu 600073, organized the TOYCATHON 2021 DIGITAL EDITION 22nd, 23rd, 24th June 2021
- 4. Organized A Webinar Program on The Topic "Idea to Product: An Entrepreneurial Perspective" (A Part of National Innovation & Start-up Policy Implementation)".19th March 2021@10.30 am.
- 5. Organized A Webinar Program on The Topic "Industry Expectations from Academia". On 12.06.2020(Fri), June 2020, @ 10.30.- 12.00. Pm.
- 6. Organized A Webinar Program on The Topic "Carrier Opportunities in Advanced Driver Assistance Systems (ADAS) And Autonomous Vehicles" On 9.06.2020(Tuesday), June 2020, @ 10.30.- 12.00. Pm.
- 7. Organized A Webinar Program on The Topic "Digital Substation and Carrier Opportunities in

- Substation Automation", 29.05.2020(Fri), May 2020, @ 10.30.- 12.00. Pm.
- 8. Organized A Webinar On "Opportunities and Challenges in Power Electronics For Electric and Hybrid Vehicles", Date: 23.05. 2020.Time: 12.00 Pm To 01.00 Pm.
- 9. Organized A Webinar On "Opportunities and Challenges in Elevators and Escalators", 13.05.2020 (Wednesday), May 2020, @ 5.00.- 6.00. Pm.
- 10. Two Day's Workshop "Electrical AutoCAD Design" 'Organized by Department of Electrical and Electronics Engineering, National Engg College From 27/2/2017 To 28/2/17(2 Days)
- 11. Anna University Sponsored Seven Days FDTP ON "EE2353- HIGH VOLTAGE ENGINEERING" Organized by Department of Electrical and Electronics Engineering, National Engineering College From 08.12.2014 To 14.12.2014(7 Days).
- 12. MNRE Sponsored One Day National Level Conference "ELCON'13, RESEARCH ISSUES IN RENEWABLE ENERGY & CONSERVATION" Organized by Department of Electrical and Electronics Engineering, National Engineering College From 20.03.2013 (1 Day)
- 13. CSIR Sponsored One Day National Level Seminar" RHVTT'13, Recent Advancements in The Field of High Voltage Testing Techniques ", Organized by Department of Electrical and Electronics Engineering, National Engineering College From 27.12.2013 (1 Day)
- 14. CSIR Sponsored One Day National Level Seminar" RHVTT'12, Recent Advancements In The Field of High Voltage Testing Techniques" Organized by Department of Electrical and Electronics Engineering, National Engineering College From 23.11.2012 (1 Day)

# **Program Attended**

- 1. "Soft Computing Techniques", National Engineering College, Kovilpatti, 12.10.2007,
- 2. "Recent Trends in High Voltage Engineering and Technology", National Engineering College, Kovilpatti,3.10.2008.
- 3. "Wind Energy Systems", 29th & 30th 2008, National Engineering College, Kovilpatti
- 4. "Artificial Intelligence based Electrical Machines and Drives" 19th & 20th 2009, National Engineering College, Kovilpatti
- 5. "Train the Trainers" (Empowering the faculty),20, to 23 Dec 2011, National Engineering College, Kovilpatti.
- 6. "Evolutionary Algorithms and its Applications",18.08.2012, Sardar Raja College of Engineering, Alangulam.
- 7. "Energy Efficient Artificial Intelligence Drives Recent Trends and Perspective",14th &15th September 2012, National Engineering College, Kovilpatti
- 8. "Research Methods for Academicians, Research Scholars and Practitioners",17th November 2012, National Engineering College, Kovilpatti
- 9. Dst sponsored two days national level technical seminars "AITRES" '12 "20th and 21 st, January 2012. National Engineering College, Kovilpatti.
- 10. "Introduction of Nanotechnology",8th & 9th March 2013,Regional Centre of Anna University Tirunelveli.
- 11 "A Hands-on Seminar on LATEX essentials for beginners",14/06/2013 and 15/06/2013/two National Engineering College, Kovilpatti.

- 12. Workshop on "High voltage Insulation Testing, Measurement and Simulation Techniques".28th September 2013, Sastra University, Thanjavur.
- 13. AICTE Sponsored short term courses on "Recent Trends in Condition Monitoring Of Power Apparatus and systems" Organized by the department of electrical engineering,14 -18 october,2013,IIT Madras, Chennai.
- 14. CSIR Sponsored One day National level Technical Seminar on "Recent Advancements in the field of High Voltage,27th December 2013, National Engineering College, Kovilpatti.
- 15. "Introduction of Nanotechnology",8th & 9th March 2013,Regional Centre of Anna University Tirunelveli.
- 16. AICTE sponsored on day CD-Cell workshop on "Research Themes on High Voltage Technology"8th February 2014,Indian Institute of Technology, Madras
- 17. UGC sponsored National Workshop on "Emerging Trends in Nano materials for Engineering Applications" [ETNEA 2014],21- 22 Feb 2014,Madras Institute of Technology Campus.
- 18. Centre for Faculty Development Anna University Chennai Sponsored FDP on EE6302-EMT.16-22 June 2014,MNM Jain Engineering College.
- 19. Anna University-Tirunelveli Sponsored Technical Seminar on "High impact Journal Writing and Publishing"25- Sep-2014,Regional office: Anna University-Tirunelveli
- 20. ISTE TN & DST sponsored "Empowering Indian Engineering for Global Expectations" 07 08-Nov-2014, National Engineering College, Kovilpatti.
- 21. Centre for Faculty Development, Anna University Chennai Sponsored FDTP on "EE2353-High Voltage Engineering" delivered guest lecture,08-14-Dec-2014,National Engineering College, Kovilpatti
- 22. Centre for Faculty Development, Anna University Chennai Sponsored One day workshop on "Research Methodology",15-12-2014,Anna University Chennai
- 23. National Programme on Technology Enhanced Learning Sponsored by IITM -NPTEL Workshop,13-Mar-2015,National Engineering College, Kovilpatti
- 24. Centre for Research, Centre for international Affair and crystal Growth Centre, Anna University Chennai organized a short course on"How to do a good Research Thesis",03-05 Aug 2015,Anna University Chennai.
- 25. National level workshop on "smart grid and integration of renewable sources",16-18, Feb. 2016,SRM University, Chennai.
- 26. An Anna University Chennai Sponsored seven days FDTP on EE6701 HIGH VOLTAGE ENGINEERING, 1 8 Jun 2016, St Joseph's Institute of Technology, Chennai
- 27. National institute of Technical teachers Training & Research-Government of India conduct training Programme on "TECHNOLOGY ENABLED LEARNING PROCESS",27 29 May 2017, National Engineering College.
- 28. National institute of Technical teachers Training & Research-Government of India conduct training Programme on "INSTRUCTIONAL DESIGN AND DELIVERY SYSTEMS",22 -27 May 2017, National Engineering College.
- 29 Training on "Protection Relay- P14D" by GE T&D India Ltd, Chennai,24-10-2017 & 25-10-2017,National Engineering College, Kovilpatti.

- An AICTE –Sponsored Two weeks FDTP on "recent Trends and Applications of High voltage Engineering", Nov, 06-19, 2017, National Engineering College, Kovilpatti.
- 31. AICTE Sponsored short term courses on "Recent Trends In Condition Monitoring Of Power Apparatus and systems" Organized by the department of electrical engineering,14 -18 Feb,2018,IIT Madras, Chennai.
- 32. Three days training program on the Topics" Hands on training on Power Transformer"30/05/2018 to 01/06/2018, Shri Abirami Engineering works company, SAEW, Chennai.
- 33. Five days One Week Self-Sponsored Program on "Energy Management and Energy Audit" organized by Department of Energy and Environment, 20.08.2018 to 24.08.2018, National Institute of Technology, Tiruchirappalli.
- 34. Seven days one week –TEQIP Sponsored program on "Applied soft computing-Theory and Practice, 22.04.2019-28.04.2019, PSG Tech, Coimbatore.
- 35. Two days online FDP on "Intelligent Controller for Renewable Energy Systems" 02.06.2020 and 03.06.2020," Organized by Electrical and Electronics Engineering Department of P.S.R Engineering College, Sivakasi.
- 36. .One-week FDP "Research Opportunities on Electrical Engineering and its Applications" 18.05.2020 to 23.05.2020." Organized by Electrical and Electronics Engineering Department of P.S.R Engineering College, Sivakasi.
- 37. Attended the webinar on "Writing an Effective Research Paper Means and Methods,08.06.2020.,RVS COLLEGE OF ENGINEERING AND TECHNOLOGY.
- 38. WEBINAR on "Opportunities inspiring Stories about Programming in Software Companies by Future Electric Grid",08.06.2020,Chennai Institute of Technology Kundrathur, Tamil Nadu,
- 39. One-week Faculty Development Program on "Challenges and Innovations in Electrical Engineering Systems", 09 13 June 2020. Department of EEE, Karpagam College of Engineering, Coimbatore.
- 40. Webinar on "Recent advances in on-line condition monitoring of transformers" 19.06.2020, P.S.R Engineering College (Autonomous) Sivakasi.
- 41. Webinar on "Art of Writing a Survey paper for Research",26th June 2020 from 10-11 am.Department of Electrical and Electronics Engineering, Amal Jyothi College of Engineering.
- 42. International Webinar in "AI Applications in Industrial Evolution" 4.0,13.07.2020-17.07.2020, Bangalore Institute of Technology, Bengaluru.
- 43. Six-day AICTE sponsored Short Term Training Program (STTP) on "Modeling and Simulation of Renewable Energy Systems using MATLAB",03.08.2020 to 08.08.2020, Department of Electrical and Electronics Engineering, Misrimal Navajee Munoth Jain Engineering College, Chennai, Tamil Nadu.
- 44. "Online Teaching Learning, Online Exam Assessment & Other ERP Modules" 24th, September 2020. Master Soft ERP Solutions Pvt. Ltd, Chennai.
- 45. Six days One Week AICTE -ISTE Sponsored Six days Induction/Refresher Programme "Recent advancements in High Voltage Engineering" From 02.11.2020 to 07.11.2020, Organized by Department of Electrical and Electronics Engineering, SRM Valliammai Engineering College, Chennai.
- 46. Two Week -AICTE -ISTE Sponsored fifteen days Induction/Refresher Programme "Application of

- ML and AL in Electrical Engineering", on 24.05.2021 to 05.06.2021, Organized by Department of Electrical and Electronics Engineering, Kamaraj Engineering College, Viruthunagar.
- 47. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Soft Computing Techniques and their Applications in Electrical Engineering" from 2021-6-28 to 2021-7-2 at National Institute of Technology Patna. Attended ISTE Sponsored Five Days Virtual Faculty Development (FDP)on "Bio-Inspired learning" held from 20-12-2021 to 24-12-2021 organized by Sairam college of Engineering and Technology, Chennai.
- 48. Attended a NAAC Sponsored One Day Online Seminar on "NAAC Revised Assessment and Accreditation Framework An Approach" organized by the Internal Quality Assurance Cell (IQAC) of NPSBCET on 05th February 2022.
- 49. Attended a 6-Days Online FDP on "Artificial Intelligence's Impact on Transforming Software, Robotics, Electrical, Electronics & Mechanical Fields " from 5/8/2024 to 10/8/2024, organized by Dhaanish Ahmed College of Engineering, Chennai.

## **Other Details**

### CERTIFICATE OF ACHIEVEMENT

Received "BEST ACADEMICIAN AWARD", from INTERNATIONAL IONIC AWARD, on 25th August, 2024, Cordelia cruises, organized by saveetha college of arts and science, Chennai.

#### **Research Achievements:**

Anna University, Chennai : Guide ship Reg no: 3230001

DC Member panel : Ms.Christal Saji K(Procs. No.21243697182/Ph.D.JAR11)&( Ref: This

office Lr.No.CR/ Ph.D. / Admn /JUL/2021/ dated: 16.09.2021.

: Mr.Raymon A , 22143691115/Ph.D./AR11, Lr . CR/CR/Ph.D /Admin/JAN/2022,dated:07.02.2022.

### **Book Chapter Published:**

❖ Bakrutheen M., Willjuice Iruthayarajan M., Senthil Kumar S. (2018), "Investigation on the Properties of Natural Esters Blended with Mineral Oil and Pyrolysis Oil as Liquid Insulation for High Voltage Transformers". In: Bhuvaneswari M., Saxena J. (eds) Intelligent and Efficient Electrical Systems. Lecture Notes in Electrical Engineering, vol 446. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-10-4852-4">https://doi.org/10.1007/978-981-10-4852-4</a> 17

# Product Patent publication: (Application No.202041006564 A) - product patent Granted

❖ Title of the invention: "AUTOMATIC WASTE SEGREGATING BIN", Name of Inventor's: Dr.S. Senthil Kumar.B. Venkatasamy. Logeswarabalan, M.Mafin Rijoe, V.Nalla Selva Prakash, A.

Ravikumar, Funding Agencies: EDC NEWGEN(DST), Amount (Rs)-2.5 Lakhs, Publication Date: 21/02/2020.

# Patent publication: (Application No. 202041046487 A)

❖ Title of the invention: "CONCRETE CRACK DETECTION AND QUALITY MONITORING SYSTEM ON GSM-IOT SENSORS WITH RASPBERRY PI", Name of Inventor: Dr.S.Senthil Kumar, Publication Date: 06/11/2020.

## Patent publication: (Application No. 202141009515 A)

❖ Title of the invention: "DESIGN OF SECURED SMART MOBILE REAL-TIME HEALTH MONITORING SYSTEM USING IOT FOG COMPUTING", Name of Inventor: Dr.S.Senthil Kumar, Publication Date: 12/03/2021.

# Patent publication: (Application No. 202441004209)

❖ Title of the invention: AN ADVANCED NEURAL NETWORK-BASED PREDICTIVE MAINTENANCE SYSTEM FOR AUTONOMOUS SYSTEMS WITH ADAPTIVE LEARNING AND REAL-TIME ANALYTICS Publication Date: 2024/9/2

# Patent publication: (Application No. 2024426007-001)-Design Granted

❖ Title of the invention: "PNEUMATIC-BASED POWER TRACKING DEVICE FOR PV PANEL" Publication Date: 2024/8/6

# Patent publication: (Application No. 6342191)

❖ Title of the invention: "SENSOR BASED SMART CURRENCY COUNTER DEVICE" Publication Date: 2024/2/6.

## **Project Fund Received:**

Title of the Project: "Wastage Pay Smart Bin"
Funding Agencies: EDC NEWGEN(DST)

Amount (Rs):2.5 Lakhs Year: Oct 2018-Dec 2019.

## **Journal Reviewer:**

- ❖ Journal of Electrical and Electronics Engineering (Springer).
- ❖ IET Science and Measurement Technology.
- ❖ IET Generation Transmission Distribution.
- ❖ Asian Journal of Agricultural Extension, Economics & Sociology
- ❖ Journal of Emerging Technologies and Innovative Research

#### **Resource Person:**

\* "Recent Trends in Eco-Friendly Alternative Insulating Liquids for High Voltage Equipments", AICTE-ISTE Sponsored Six Days Induction/Refresher Programme on "Recent advancements in High Voltage Engineering" -RHVE 2K21, 08.02.2021 (Monday)Time: 11.00 AM to 12.00 PM

#### **NPTEL Online certification:**

- Topics on "Introduction to research", Apiril, 2017.
- ❖ Topics on "Effective Teaching and Learning", April 2018.
- Topics on "Advanced trends in Transmission and Distribution" Apiril,2019.
- Topics on "Introduction on soft computing", June ,2020
- Topics on "python on data science", September ,2024

#### **Coursera Online Courses certification:**

- ❖ Completed the course on" Safety in the Utility Industry "an online on credit course authorized by University at Buffalo and The State University of New York and offered through Coursera, June, 2020.
- ❖ Completed the course on" Introduction to Power Electronics" "an online on credit course authorized by University at Buffalo and The State University of New York and offered through Coursera, Apiril,2019.

### **Udemy Online Courses Certification:**

Completed the course on" AUTOCAD-Electrical Desigin, 2020" "an online oncredit course authorized by UDEMY, May, 2020.

# **Industrial Training Attended:**

- ❖ Faculty Internship Training on "High voltage Testing Equipment's" under the scheme "INDUSTRIAL KNOW-HOW", 05<sup>th</sup> − 09<sup>th</sup> Jun 2017, Global Power Research Institute, Cuddalore.
- ❖ Faculty Internship Training on "INDUSTRIAL KNOW-HOW", 30<sup>th</sup> − 04<sup>th</sup> Dec 2018, OPG Power Generation Pvt Ltd. Chennai.