# Sri Sai Ram Engineering College

# **Department of Electrical and Electronics Engineering**

1. Name :	Dr.B.MEENAKSHI			
2. Designation:	Professor			
3. Qualification :	M.E, Ph.D			
4. Area of Specialization:	Information and Communication Engineering			
5. Experience :	Teaching:  UG: 27  PG: 7  Industry: 1			
6. Publication :				
Journal	National: 16			
	International: 13			
Conference	National: 03			
	International: 25			
7. FDP	Attended: 32			
	Organized:4			
8. Workshops	Attended: 7			
9. Webinars	Attended: 6			
10. Online courses	Attended: 24			
11. Research Guidance:	NIL			
12. Staff Achievements:	Achieved 100% result in the following			
	Subjects:			
	Electronics Devices & Circuits.			

Internetworkin
g Technology
Neural Networks & Applications to Power
Systems
Electronics Devices
Internetworking Technology
Bio medical Instrumentation
Electrical energy generation,
Utilization and conservation
Measurements
and Instrumentation
Electrical energy generation,
Utilization and conservation

# **EXPERIENCE**

Name of the Employer	Position Held	Period	
		From	То
Tuticorin Thermal Power	Graduate	15.04.91	14.04.92
Station, Tuticorin	Apprentic e		
SeethaiAmmal	Lecturer, EEE	30.6.93	01.03.95
Polytechnic,			
Sivaganga			
Alagappa Polytechnic, Karaikudi	Lecturer, EEE	19.06.95	01.10.96
K.L.N. College of Engg. & Tech.,	Lecturer, EEE	24.10.96	01.06.99
Madurai			
EaswariEngg. College, Chennai	Lecturer,EEE	19.07.99	30.05.2001
Hindustan College of	Lecturer, EEE	10.06.2002	16.03.2006
Engineering, Padur			
Sri SairamEngg. College,	Senior Lecturer	17.03.2006	31.07.2008
Chennai.			
Sri SairamEngg. College,	Assistant Prof	01.08.2008	31.07.2013
Chennai.			
Sri SairamEngg. College,	Associate	01.08.2013	30.11.2013
Chennai.	Professor		
Sri SairamEngg. College,	Professor, EEE	01.12.2013	Till Date
Chennai.			

**Ph D THESIS TITLE:** Energy Efficient Traffic Free Routing On Double Cluster Head Wireless Sensor Network Architecture.

**BOOKS PUBLISHED: 1.** Published a book "Transmission lines and networks", AL. Vallikannu, B. Meenakshi, Charulatha Publications, 2003

### **CHAPTER CONTRIBUTION:**

- 1. Dr. Roopa M Dr. B. Meenakshi Dr. D. Karunkuzhali S. Hemavathi, contributed a chapter titled "Artificial Intelligence and Network Security", for the book named "Emerging Technologies in Engineering Research", ISBN: 978-93-5419-211-1(Online)., Ch 21; page: 277-288;Dec 2020.
- 2. T Kalaiselvi, G Valarmathi, V Subashini and Dr B Meenakshi, contributed a chapter titled "Neural Networks", for the book named "Emerging Technologies in Engineering Research", ISBN: 978-93-5419-211-1(Online)., Ch 21; page: 346-354;Dec 2020.
- 3. Arun Kumar Pallekonda, S Muthukrishnan, B Meenakshi, R Saravanan, contributed chapter titled "Creating Cost effective Network of operational resources for Wireless Networks" for the book named, "Cloud Computing with wireless Network and Pattern Recognition" ISBN: 978-81-952585-3-6, Ch 16; pg 85-89;June 2021.

**FUNDED PROJECT**: 1. Received fund of Rs. 100,000/- from DST-IEDC & SAIRAM IEDC for project titled "CAPACITIVE DEIONIZATION BASED WATER DESALINATION SYSTEM USING AN MPPT BASED SOLAR CHARGE CONTROLLER" for 2014-15 academic year.

2. Received fund of Rs. 10000/- from Tamilnadu State Council For Science and Technology (TNSCST) for the project titled "Solid and liquid waste disposal management using MANET powered GIS" for 2017-18 academic year.

#### **CONSULTANCY:**

1. Completed consultancy work titled "Power quality Improvement using PWM Active filters" for NIN energy India pvt limited, Chennai, and received consultancy amount Rs 20,000/-. Project duration Sept 1st, 2021 to 31.01.2022.

#### **PATENTS:**

- 1. Published a patent on **Design, Development and Fabrication of Semi-Automatic Hydraulic Emergency Braking System** on 6.12.2019. [201941048055]
- 2. Published a patent on Secured Intelligent Vehicular Systems Using Wireless Sensor Networks on 4.09.2020.[ 202041034715]
- 3. Patent grant received for Cooperative Sensing, Communication and Control of IoT Network using Machine Learning Algorithms on 23.12.2020. [2020102663]
- 4. Published patent on **Rainfall tracking device using IoT** on 09.04.2021.[ 202131010625]
- 5. Published patent on **Design of Pulse Oxygen Meter Using IoT** on 28.01.2022 [202141060100]
- 6. Published patent on **Automatic Retrieval Of Electronic Products Using Artificial**Intelligence System on 11.02.2022 [202241005975]
- 7. Published patent titled," Automatic Traffic Clearance System For Ambulance & Fire

**Service Vehicle Using Iot Techniques**", Application number: 202241019232 A, date of publication: 15/04/2022.

**INDUSTRIAL TRAINING:** Completed industrial training in IPL, Thirumudivakkam from 6/6/2022 to 11/6/2022.

#### MEMBERSHIP IN PROFESSIONAL BODY:

- 1. Associate member in Institution of Engineers. (AM084688-3)
- 2. Life member in The Institution of Electronics and Telecommunication Engineers.(M-228060)
- **3.** Member of IACSIT(International Association of Computer Science and Information Technology) Member No. **80344629**
- 4. Member In IEEE society. Member of IEEE- WIE affinity group, EDS, PELS, Photonics, IEEE Nano Technology council, IEEE Sensors council, IEEE Systems council, IEEE Tech ethics community, IEEE Biological, Artificial and Hybrid Intelligence, IEEE Computer Society Task force, IEEE Bio inspired Computing IEEE computer society special Technical Community, IEEE Bionanotechnology & BioMEMS, IEEE computational life sciences and IEEE SIGHT. Adviser for IEEE, WIE affinity group for Sri Sairam Engineering College. Member no. 94327133.
- 5. Member in ISTE, **LM-131478**
- 6. Senior Fellow Member in **SIESRP** (The Society of Innovative Educationalist and Scientific Research Professional), Chennai, Regd. No. **LMSF220610295**

#### **GLOBAL RECOGNITION:**

- Received **Dr APJ Abdul Kalam Award** for Scientific Excellence, 2019 from Marina Labs research and development.
- 2. Received "DISTINGUISHED PROFESSOR AWARD", from SEEE (Society for Engineering Education Enrichment) Awards 2020.
- 3. Received "Academic Excellence award" for the year 2020-2021 from Technical research publications in the year 2021.
- 4. Received "Innovative Research and Excellent Professional Achievement Award" for the year 2022 from The Society of Innovative Educationalist and Scientific Researchers Professional, Chennai.
- 5. Received Best Innovator- Student Project award for the year 2022 from Sri Sairam Engineering College, Chennai.
- 6. Received Certificate of Appreciation from Sharda University for mentoring a team in 5th Technovation Hackathon themed on Smart Health, Agriculture and Hygiene from 30th Jan to 5th Feb 2023.

## **RESOURCE PERSON:**

- 1. Resource person for Seminar on "Journal and project proposal writing", conducted by AIDS department, Sri Sairam Engineering college, on 19th Aug 2022.
- 2. Editorial board member in The Society of Innovative Educationalist and Scientific Researchers Professional, Chennai.
- **3.** Delivered lecture on Analog Electronics in the FDP conducted by Valliammai Engineering College on 27th June 2022.
- **4.** Judge for speech competition Eloquent Expressions opportunities for Girls/ Women in Education conducted by Sri Sairam Institute of technology, IEEE-WIE affinity group on 8th March 2022.
- **5.** Reviewer and Session chair for IEEE International conference (IC3IoT2022) conducted by ECE department, Sri Sairam Engineering College on 11th March 2022.
- **6.** Received "Most Consistent mentor" of ATAL Tinkerpreneur in the year 2021.
- 7. Delivered lecture about **NBA-** Criterion 2 under Margadharshan scheme to New Prince Bhavani College of Engineering, Chennai on 2<sup>nd</sup> April 2021.
- **8.** Served as Session chair for **NCSICC21** conducted by department of Computer Science, Sri Sairam Engineering College, Chennai.
- 9. Delivered lecture on "Transmission Layer Protocols and congestion control algorithms" to the students of Panimalar Engineering College, dated .01.10.2020.
- **10.** Delivered lecture on "**Underground cables**" in the FDP on "Transmission and distribution" held at Valliammai Engineering College, dated 11.1.19 to16.11.19.
- 11. Delivered lecture on "Geo thermal power" in the ISTE sponsored FDP on "Renewable Energy Systems" held at Sri Sairam Engineering college, dated 22.07.19 to 26.07.19.
- **12.** Delivered lecture on "**Underground cables**" in the Anna University sponsored FDP on "Transmission and distribution" held at Sri Sairam Engineering College, dated 3.12.18 to 15.12.18.
- **13.** Delivered a Guest Lecture on "**Transducers & Its Application**" on 23.03.2017 at Velammal Engineering college.
- **14.** Delivered lecture on "**Performance analysis using MAGNET software**" in the FDP on "Electrical Simulation Software", held at Sri Sairam Engineering college, dated 6.11.17 to

- **15.** Delivered lecture on "**Energy Efficiency in Wireless Network**" in the "ISTE sponsored Short Term Training programme on Recent trends and Research issues in Wireless Communication" conducted by ECE department in Sri Sairam Engineering College dated 3<sup>rd</sup> August to 8<sup>th</sup> August2015.
- **16.** Served as session chair in ICoAC-13 International conference conducted by Computer Science department, Madras Institute of Technology, Chennai.
- 17. Served as session chair in ICCCT-15 International conference conducted by IT department at Sri Sairam Engineering College, Chennai.
- **18.** Served as judge for Techxibit-15 mini project exhibition conducted by ECE department at Sri Sairam Engineering College, Chennai.
- 19. Served as reviewer for IATMSI-2022, IEEE conference conducted by IIITM, Gwalior.
- **20.** Served as research advisory committee member for research scholar in St peter's Institute of higher education and research.

# **RESEARCH PUBLICATIONS:**

#### INTERNATIONAL JOURNAL

- 1. **B Meenakshi**, P Anandhakumar, "Fuzzy Based Energy Efficient Clustering Technique for ZigBee(802.15.4) Sensor Networks, EJSR, Vol80, No.1,pp93-108,2012
- 2. **B.** Meenakshi and P. Anandhakumar, "Cluster Based Time Division Multiple Access Scheduling Scheme for Zigbee Wireless Sensor Networks", Journal of computer science, Science publication Australia, Vol.8, No. 12, pp. 1979-1986,2012.
- 3. **B. Meenakshi** and Anandhakumar, P. "Traffic Free Routing Using Path Load Factor in Wireless Sensor Networks", Information Technology Journal, Science Alert publication, Vol. 12, No. 5, pp. 1050-1054.
- 4. **B Meenakshi** and D Karunkuzhali, "Cluster Based Routing Architecture Using PSO for Zigbee Mobile Wireless Sensor Networks", Asian Journal of Information Technology, Vol. 15, no. 22, pp. 4489-4499, ISSN:1682-3915, Medwell Journals, 2016.
- 5. **B Meenakshi,** Ashwin.R, Harikrishnan.P.M and Manikandan.R, "Design And Implementation For Efficient Power Distribution Using Feeder Automation", Solid State Technology, Vol 63, No.6, 2020.
- 6. Bhuvana Suganthi D, R. Jaichandran, P. Shyamala Bharathi , **B. Meenakshi** , A. Anushya and V. Brindha Devi, "The Defense Against Jamming Attack in Cognitive Radio Networks: Energy

- Efficiency Management Perspective", Microprocessors and Microsystems; Eleseveir ; https://doi.org/10.1016/j.micpro.2020.103816., Vol 82, Apr 2021.
- 7. Dr.D.Karunkuzhali, **Dr B Meenakshi**, Keerthi Lingam, "OQR-SC: An optimal QoS aware routing technique for smart cities using IoT enabled wireless sensor networks", Wireless personal communications; Springer; https://doi.org/10.1007/s11277-022-09725-8, June 2022.
- 8. S Muthukrishnan, Arun Kumar Pallekonda, R Saravanan, B Meenakshi, "Fault Detection in the Wind Farm Turbine Using Machine Learning Based On SVM Algorithm ", Journal of Physics: Conference Series, 1964 (2021) 052015, doi:10.1088/1742-6596/1964/5/052015.
- 9. Arun Kumar Pallekonda, S. Muthukrishnan, B. Meenakshi, R. Saravanan, "Intelligent MPPT Control for Wind Energy Conversion Systems Based on Reinforcement Learning", Journal of Physics: Conference Series 1964 (2021) 042076 IOP Publishing doi:10.1088/1742-6596/1964/4/042076.
- 10. Dr.D.Karunkuzhali, **Dr B Meenakshi**, Keerthi Lingam, "An Adaptive Fuzzy C Means With Seagull Optimization Algorithm for Analysis of WSNs in Agricultural Field With IoT", Wireless personal communications; Springer, https://doi.org/10.1007/s11277-022-09801-z,June, 2022.
- 11. V. Subedha, **B. Meenakshi**, B.R.Shyamala Devi,R. Vallikannu," Enhanced Adaptive Geographics Positioning system for MANET Optimization", Neuroquantology, DOI Number: 10.14704/nq.2022.20.10.NQ55494, Vol.20, No.10, pp. 5160-5171, Aug 2022.
- 12. B. Meenakshi, Murugananth Gopal Raj, C. Pradipand N Saju., "Improvement of Power Quality in Grid System Based on Zeta Converter Integrated with PV Supply", AIP Conference Proceedings, <a href="https://doi.org/10.1063/5.0110684">https://doi.org/10.1063/5.0110684</a>, Oct 2022.
- 13. B. Meenakshi and D.Karunkuzhali, "Enhanced Elman spike neural network for cluster head based energy aware routing in WSN", <a href="https://doi.org/10.1002/ett.4708">https://doi.org/10.1002/ett.4708</a>, Transactions on Emerging Telecommunications Technologies, Wiley Online Library.

#### National Journal

- 1. **B Meenakshi**, P Anandhakumar, "A Novel Energy Efficient Surface water Wireless Sensor Network Algorithm" IndJCSE, vol.3,Issue 3, pp 494-505,2012.
- 2. **B Meenakshi**, P Anandhakumar, "Optimization of Energy Consumption by Fuzzy Based Routing In Wireless Sensor Network", IOSRJECE, ISSN: 2278-2834 Volume 2, Issue 1 (July-Aug 2012), PP31-35.
- 3. Anjana, V., Amodini, A.T., Sowmiya, S. and **Meenakshi, B.** "Brain Wave Based Authentication System Using Self Powered Sensors", Proc. Of 6th International Academy Conference on Electrical, Electronics and Computer Engineering, (IACEEC-2013), pp. 43-47.

ISBN:978-93-82702-31-3.

- 4. **Meenakshi, B.** and Anandhakumar, P."An Overview of Energy Efficiency in Wireless Sensor Network for Surface Water Applications", SSEC-Tech Journal, ISSN 0975- 2846,Vol.10, pp. 26- 32,2012.
- 5. P.NagalakshmiKanna, **Dr.B.Meenakshi**, "Design and Implementation of DC- DC/AC Non-Inverting Cuk Converter using Sliding Mode Control", International Journal of Scientific & Engineering Research, Vol. 5, No. 12, pp. 65-71, ISSN 2229-5518, December- 2014
- 6. **Dr. B Meenakshi**, C AnuPriya and P Anusundari, "A Novel Energy Management System In An Electric -Electric Hybrid Vehicle By Utilisation Of Back Emf Of Dc Motor", IJISET International Journal of Innovative Science, Engineering & Technology, Vol. 2 Issue 7, July2015.
- 7. **Dr. B Meenakshi,** Rahul Kumar and R.Ramprakash, "Twenty Five Level Inverter by Cascading Of Two Transformers for AC Drives", IOSR Journal of Electrical and Electronics Engineering (IOSR-JEEE), Volume 11, Issue 4, PP 44-49,2016.
- 8. N. Pranau, T. Raghuraman, S. V. Vishnuguhan and **Dr. B. Meenakshi**, "Load Monitoring and Detection of Tampering in Power Lines Using Internet of Things (Iot) ", IOSRJournalofElectricalandElectronicsEngineering(IOSR-JEEE)e-ISSN:2278-1676,p-ISSN: 2320-3331, Volume 12, Issue 2 Ver. II (Mar. Apr. 2017), PP 42-45.
- 9. Dr.B.Meenakshi, Pavithraa.R, RengaPreethi.N.S ,Afreen.S and Nivetha.C, "Microcontroller Based Automatic Control Of Generating Transformer 250 Mva Cooling System", ISSN (PRINT): 2393-8374, (ONLINE): 2394-0697, VOLUME-5, ISSUE-4,2018.
- 10. T Porselvi, **B Meenakshi**and S Sairam,"Comparison of THD values of seven level CHB invertor with single DC sourcefor various multi carrier PWM techiniques", JETIR, ISSN-2349-5162, Vol.6, No.5, pp. 509- 515, May2019.
- 11. **Dr B Meenakshi**, Dr T Porselvi, C R RajaVignesh, S Venkataraju and S Swaminathan, "Artificial Intelligence- Smart Energy Distribution and Management system for small autonomous photo voltaic systems", IJERCSE, Vol.6,No. 7, ISSN(online)-2394-2320, pp.162-170,2019.
- 12. **B Meenakshi**, R Sivaprasad, R Sowndarya, R Srinithi and K Thejeswini, "Tetrapod Automaton in the shamble's Management with the Fish Eye Lens Pi Cam", IJRTE, Vol. 8, No.5, pp. 3461- 3464, Jan 2020.
- 13. **B Meenakshi**, S Shrividhyaa, R Vallikannu and Anukumari, "Design of Safety Control for Gas Turbine Using PLC and SCADA", Test Engineering & Management, ISSN 0193-4120,

Vol.83, pp, 12653-12662, Mar-Apr2020.

- 14. Dr. T. Porselvi, K. Shivani Gopika, R. Oviya, **Dr. B. Meenakshi**, K. Priyadarshini, "Analysis and Simulation of Four Quadrant Chopper Fed DC Motor Drive", Studies in Indian Place Names, ISSN: 2394-3114 Vol 40 issue 3 (s1) February 2020.
- 15. **Dr B Meenakshi**, Dr T Porselvi, R Sivaprasad and Vaishnavi.J, "Design Of Fully Autonomous Energy Harvesting System For Treadmill Application", ISSN: 2394-3114, Vol 40 issue 40 (s1) March 2020.
- 16. R. Sivaprasad, **Dr. B. Meenakshi**, S. Sai Ganesh Ram, S. Sivachidambaram and S. Veeramani, "Automated Hand Sanitizer Dispenser Integrated with Contactless Temperature Gun and Pulse Oximeter", Turkish Journal of Computer and Mathematics Education, Vol.12, no. 11(2021), pp. 3306-3316

#### **International Conference**

- **1. B Meenakshi**, P Anandhakumar, "Lifetime extension of Wireless Sensor Network by selecting two Cluster Heads and hierarchical routing", Proceedings of the International Conference on Advances in Computing, Communications and Informatics (ICACCI'2012), ACM Digital Library, ISBN:978-1-4503-1196-0, doi:10.1145/2345396.2345598, Aug 2012.
- **2. B Meenakshi**, P Anandhakumar, "Double Cluster Head analogy for wireless sensor network", proceedings of International conference organized by Prathyusha Institute Technology and Management, Date: 24th, 25th Jan2012.
- **3.** KannaP.Nagalakshmi, **B.Meenakshi**, "Analysis and design of DC-DC/AC non isolated cuk converter using sliding mode controller", International Conference on Circuit, Power and Computing Technologies, vol., no., pp.1,8, 19-20 March 2015, doi: 10.1109/ICCPCT.2015.7159294.
- **4. Dr. B Meenakshi**and M Yamuna, "Design And Analysis Of Standard Structure Converter For Solar Photovoltaic Applications", presented paper in IEEE sponsored FIFTH International Conference on Computing of Power ,Energy & Communication, ICCPEIC -2016, on April 20<sup>th</sup> and 21<sup>th</sup> 2016 Organized by Adhiparasakthi Engineering College, Melmaruvathur,kanchipuramdistrict.(<a href="http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumb">http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumb</a>

er=7557265&isnumber=7 557193)

- **5.** Reni Clenitiaa.F, Preetha.G.S ,Ilakya.E and **Dr.B.Meenakshi**," Enhanced Digital Energy Meter" , International Conference on Computation of Power,Energy, Information and Communication (ICCPEIC), 978-1-5090-4324-8/17/\$31.00 ©2017 IEEE,2017.
- **6.** K.Keerthana and **Dr.B.Meenakshi**," A Novel Technique Of Buck And Boost Operation Combined Grid-Tied Inverter With Pi Controller", International Conference on Computation of Power, Energy, Information and Communication (ICCPEIC) , 978-1-5090-4324-8/17/\$31.00 ©2017 IEEE,2017.
- **7. Dr B Meenakshi**, C.Singaravel and E.Vignesh, "Development Of Prototype Spectacles For The Blind With Digital To Voice Conversion Device", International Conference On Power, Energy, Control And Transmisson Systems 2018 (ICPECTS). 978-1-5386-3817-0/18/\$31.00 ©2018IEEE
- **8. Dr B Meenakshi**, RengaPreethi.N.S, Pavithraa.R, Nivetha.C and Afreen.S, "Solid And Liquid Waste Management Using Solar Powered MANET And GIS", International Conference On Power, Energy, Control And Transmisson Systems 2018(ICPECTS).
- **9. Dr B Meenakshi**, Afreen.S, Nivetha.C, Pavithraa.R, and RengaPreethi.N.S, "Solar Charging For Inverter By Tracking And Monitoring The Solar Cell Parameters" International Conference On Power, Energy, Control And Transmisson Systems 2018 (ICPECTS).
- **10.** A.Mohamed Abbas, S. Vimal, U. Maheswaran, T. Porselvi, **B. Meenakshi**, "Application of IoT for Counterfeit Prevention in Fast Moving Consumer Goods", I3CAC 2021, June 07-08, Chennai, India Copyright © 2021 EAI DOI 10.4108/eai.7-6-2021.2308794.
- 11. K Sureshkumar, Murugananth Gopal Raj, M Selvi, D Karunkuzhali, **B Meenakshi**, "Storage Capabilities in Underwater Wireless Sensor Networks for Energy Balancing and Channel Alignment", I3CAC 2021, June 07-08, Bharath University, Chennai, India, DOI 10.4108/eai.7-6-2021.2308763
  - **12. Dr B Meenakshi**, G Jayaprakash, N Logeswari, "PV System based Zeta Converter with Three-Phase Inverter For High-Speed BLDC Motor Applications", I3CAC 2021, June 07-08, Bharath University, Chennai, India, DOI 10.4108/eai.7-6-2021.2308856
  - **13.** R Vallikannu, **B Meenakshi**, Venkata Subash, Basha and Chandrakiran Kumar, "Automated Rocker Rover for Terrain Surface Surveillance", MicroElectronics and Telecommunication

- Engineering, Proceedings of 4<sup>th</sup> ICMETE 2020, Springer conference, https://doi.org/10.1007/978-981-33-4687-1 22, Jan 2021.
- **14. Dr B Meenakshi**, Balaganesh .S.G., Naveeth Suraj Ahammed.A, Sunandhaa V, Sathish Kumar.P presented paper , "Designing And Commissioning Of Heat Pumps For Hybrid Heating And Cleaning Of Coaching Equipments Using Solar Panels", in the International conference conducted by SRM Institute of Science and Technology, ITDECC-21 from 17 to 18 May, 2021.
- 15. Dr T Porselvi, J Shalinipriya, Jeyshree and **Dr B Meenakshi,** "PV based Multilevel Inverter with 15 Levels using Pod Control Method", International Conference on Communication, Computing & Internet of Things (IC3 IoT 2022) held on 10 & 11 of March 2022.
- 16. **Dr B Meenakshi,** R Sivaprasad, Dr T Porselvi, V Sunandha and T Janani, "Designing And Commisioning Of Heat Pumps For Hybrid Heating And Cleaning Of Coaching Equipments Using Solar Panels", International Conference on Communication, Computing & Internet of Things (IC3 IoT 2022) held on 10 & 11 of March 2022.
- **17. B.Meenakshi**, Deepa M, L.Kurinjimalar, T.Porselvi, R.SivaPrasad, and Selvapriya V, "Grid connected single-stage multiport inverter with two independent source", ICPECTS Conference Proceedings, Dec, 2022.
- **18. B Meenakshi**, Aouthithiye Barathwaj SR Y, Haariharan N C, Krishnakanth L and Abishek J, "Animal Intrusion Detection and Ranging system using YOLOv4 and LoRa", ICPECTS Conference Proceedings, Dec, 2022.
- 19. L.Kurinjimalar, S.Pooja, R.Sivaprasad, **B.Meenakshi** J.Shalini Priya and T.Porselvi, "Design and Analysis of Fifteen Level Inverter for Renewable Applications", ICPECTS Conference Proceedings, Dec, 2022.
- 20. J.Shalini Priya, M.Karthikeyan, S. Thennarasu, **B.Meenakshi**, M.Hemalatha and R.Sivaprasad, "Voice Based Motile Video Surveillance System With Violence Detection", ICPECTS Conference Proceedings, Dec, 2022.
- 21. R.Sivaprasad, T.Mahalakshmi, **B.Meenakshi,** T.Porselvi, L Kurinjimalar and J.R Manasa, "Modified Bridgeless Landsman Converter Fed EV Battery Charger Power Factor Improvement", ICPECTS Conference Proceedings, Dec, 2022.
- 22. Sivaprasad R, K Prathiba Nandhi, Shriranjani. J, **B.Meenakshi**, Abinaya. R and Shalinipriya J, "Aegis Surtout", ICPECTS Conference Proceedings, Dec, 2022.
- **23. B** Meenakshi, R Sivaprasad, Abishek J, Soumya M, Eniyan S, Harish M," Automatic Object And Crack Detecting System Using IoT", ICPECTS Conference Proceedings, Dec, 2022
- 24. T.Porselvi, Srividhya S, Kurinjimalar L, **Meenakshi B**, Sivaprasad R and Sai Ganesh CS, "Intelligent Wireless Charging Station for EVs with Integrated PV Power Grid System", ICPECTS Conference Proceedings, Dec, 2022
  - 25. K.Prathibanandhi, B.Meenakshi , T.Porselvi, R.Azhagumurugan , V.Chithra and V.Malini, "Design and Development of PV Powered Integrated DC DC Converter Fed Multilevel Inverter for

Standalone Application ", International Conference on Future Trends in Smart Communities (ICFTSC2022), ESTCON 2022, Dec 1-2, Held at Universiti teknologi, Petronas.

#### **National Conference:**

- 1.**B. Meenakshi**, "Blood Chemistry Analysis Automated with microcontroller", Proc. Of National conference organized by Department of ECE, ArulmiguKalasalingam College of Engineering, Krishnan Koil 626 190, dated 12,13th May 2005.
- 2. Paper presented in the National conference on Signal Processing and Communications organized by St. Peter's College of Engineering and Technology, Avadi– 600054. Paper Title: Optimal Design of Brushless Permanent Magnet motor for Automotive Application. Date: 01st,02nd Mar2012.
- 3. Paper presented in the National conference on "Innovative technologies on Electrical and Electronics Engineering" Conducted by EEE department, Sri Sairam Engineering College—600044. Paper Title: Analysis of Permanent Magnet Brushless DC motor with effect of skewing. Date: 06th Mar 2012.

#### FACULTY DEVELOPMENT PROGRAM ATTENDED

- 1. Completed FDP on "Power flow solutions &demo on CYME power engineering software" held at Sri Sai Ram Engineering College on 27th Jan2011.
- 2. Completed FDP on "Recent trends in Wireless Information Networks and Systems" conducted by Sriram Engineering college, dated 07.07.2010.
- 3. Completed FDP on "VHDL Programming" held at Sri Sairam Engineering college, dated 06.03.2010.
- 4. Completed Faculty Enablement Program on "A Step to Outcome Based Accreditation" conducted by Sri Sai Ram Institute of Technology on April 4,2015.
- 5. Completed FDP on "Electrical Simulation Software", held at Sri Sairam Engineering college, dated 6.11.17 to 10.11.17.
- 6. Completed Two days FDP on creative thinking conducted by ICT Academy from 27.03.2019 to 28.03.2019.
- 7. Completed Internal Auditor ISO 9001-2015 training held on 8.6.2018.
- 8. Completed One day workshop on Intellectual property rights and Innovations

conducted by SriSairam engineering college in association with centre of IPR, Anna university on 20 July2019.

- 9. Completed One day faculty orientation program on "study abroad opportunities" conducted by education matters on 26.08.2019.
- 10. Completed Six days FDP on Analog IC design organized by ECE department, Sri Sai RamEngineering College sponsored by Anna university on 25.11.2019 to 30.11.2019.
- 11. Completed One week FDP on IoT organized by NITTTR, Chandigarh from 15.4.2020 to19.04.2020.
- 12. Completed Two days FDP on Effective project proposal writing organized by CSE department in association with Computer Society of India, Velammal Engineering College on 08.05.2020and 09.05.2020.
- 13. Completed One Week FDP on ANN and Fuzzy logic organized by NITTTR, Chandigarh from 22.6.2020 to 26.6.2020.
- 14. Completed days National FDP on Emerging Technologies for sustainable Universe organized by SEEK, from 27.7.2020 to 31.7.2020.
- 15. Completed One week FDP on 8051 and its applications organized by NITTTR, Chandigarh from 18.5.2020 to 22.05.2020.
- 16. Completed ATAL Online FDP on "Emotional Intelligence" conducted by Indian Institute of Information Technology, Allahabad, from 13.09.2020 to 17.09.2020.
- 17. Completed ATAL Online FDP on "Artificial Intelligence" conducted by Indian Institute of Information Technology, Sricity, Chithoor from 01.11.2020 to 06.11.2020.
- 18. Completed 5 days online FDP on "Universal Human Values" conducted by National Institute of Technology, Patna, from 23.11.2020 to 27.11.2020.
- 19. Completed ATAL Online FDP on "Human Centre Computing" conducted by CMR Institute of Technology, from 01.02.2021 to 05.02.2021.
- 20. Completed ATAL Online FDP on "Learning Management System" conducted by National Technical Teachers Training Institute, Chennai, from 15.03.2021 to 19.03.2021.
- 21. Completed FDP on "Interactive Approaches in handling Renewable Energy Systems Laboratory for the New Normal " from June 29 to July 2, 2021 conducted by SSN college of Engineering, Chennai.
- 22. Completed ATAL Online FDP on "Sensor Technology on Lifestyle Enrichment" conducted by Easwari Engineering College, Chennai, from 02.08.2021 to 06.08.2021.
- 23. Completed FDP on "Circuit Design using AutoCAD Electrical (Online Live FDP)" from

- 16/08/2021 to 20/08/2021, conducted by ICT academy.
- 24. Completed ATAL Online FDP on "Design and Optimization of EV Charging Technology in smart grid platform" conducted by Puducherry Technological University, from 13.09.2021 to 17.09.2021.
- 25. Completed ATAL Online FDP on "Augmented Reality/ Virtual Reality and its Applications "conducted by Sri Sairam Engineering College, from 04.10.2021 to 08.10.2021.
- 26. Completed FDP on VIRTUAL LABS held from 6th to 9th Sept 2021 conducted as a part of PALS, by NITK, Surathkal.
- 27. Completed FDP on "MATLAB and SIMULINK basics for Hardware Projects", held from Aug 1st to Aug 5th, 2022 by NITTTR, Chandigarh.
- 28. Completed Faculty Development workshop on "Product Engineering for Real Life Problems", conducted by LEAP, at IIT Madras research Park, Chennai from 28.09.2022 to 30.09.2022.
- 29. Participated in Naan Mudhalvan Train the trainers program for Augmented Reality, Virtual Reality & Metaverse Development held between 19-22 of Sept, 2022.
- 30. Completed Short term course on Energy Harvesting and Storage materials and devices conducted by NITTTR, Chandigarh, from 12.09.2022 to 16.09.2022.
- 31. Completed Two Weeks ATAL FDP on "Power Electronics Applications to Renewable Energy Systems, Electric Vehicles, and Intelligent Control" from 10th Oct 2022 to 15th Oct 2022 (Online) and 17th Oct 2022 to 21st Oct 2022(Offline) conducted by Sri Sai Ram Institute of Technology, Chennai.
- 32. Completed FDP in NPTEL course "physics of renewable energy Systems" during July-Oct-2022.

#### **WORKSHOP ATTENDED**

- 1. Two days Workshop on "Sensor networks and wireless security" conducted by Department of ECE, Saveetha School of Engineering, Saveetha University Dated 6th and 7th of Sep2012.
- 2. One day Workshop on "Art of Journal and Thesis writing" conducted by Department of Research & Development, Sri Sairam Engineering College, Dated 19.01.2012
- 3. National workshop on "Wireless sensor networks- Applications & Challenges" conducted by

IETE, Chennai at Prathyusha Institute of Technology and Management on 11th and 12th November 2011

- 4. National workshop on "wireless communication and radiating systems" held at Sri Sairam Engineering college on 21st and 22nd March2011
- 5. BRNS sponsored workshop on "Embedded secured wireless Sensor Networks" conducted

at Sriram Engineering college on 22nd and 23rd Feb2011

- 6. "Two days workshop on Networking Simulator Tools" conducted by Anna University, Thiruchirapalli, dated 17th and 18th of July2010.
- 7. Completed Online Orientation training program for Mentors from 5th to 9th July 2021 conducted by NITTTR, Chennai.

#### PROGRAM ORGANIZED:

- 1. Organized ISTE sponsored FDP on "Renewable Energy Systems" from 22.07.2019 to 26.07.2019.
- 2. Organized ISTE sponsored five days FDP on "Artificial Intelligence" from 05.12.2019 to 11.12.2019.
- 3. Organized MHRD sponsored Two Weeks refresher course on "Electrical, Electronics, Instrumentation, Automation and Teaching Pedagogy" from 18.05.2020 to 30.05.2020.
- 4. Organized ISTE sponsored five days FDP on "Renewable energy System" from 08.02.2021 to 12.02.2021.
- 5. Coordinated NAAC sponsored Two days National Level Seminar on "Revised Accreditation Framework for Quality Enhancement in Higher Educational Institutes" from 14.07.2021 to 15.07.2021.
- 6. Coordinated Accelerator Program on "Are you innovating or InnoWaiting?" Program under Sairam research Group, Student project team on 10. 08.2021.
- 7. Coordinated Solveathon 1.0 conducted for sairam institutions, second year students, 20, 21 Apr, 2022.
- 8. Coordinated Ideathon 2.0 conducted for sairam institutions , first year students, 12&13 May, 2022.
- 9. Organized Innovathon 1.0 conducted for third year students of Sairam Group of Institutions on 10th Aug 2022.

#### **Society Activities:**

1.

- **1.** Advisor for IEEE, WIE affinity group.
- 2. Organized Hands on training on Deep learning for IEEE, WIE affinity group, Sri SAiram Engineering College on 7/08/2021.
- 3. Conducted "Quiz on The Great Indian Women Leaders" program under IEEE, WIE affinity group, on 26th Jan 2022.
- 4. Conducted "Women of Royal and Noble status Part-1" program under IEEE- WIE affinity group on 9th March 2022.
- 5. Conducted a seminar on "IPR in focus with patent drafting and filing tips" on 27th April, 2022 under the IEEE, WIE Affinity Group banner.
- 6. Conducted "Women of Royal and Noble status Part-2" program under IEEE- WIE affinity group on 25th May 2022.
- 7. Conducted a webinar on "IoT" on 4th June, 2022 under the IEEE, WIE Affinity Group along with IEEE PELS.
- 8. Conducted Webinar on "Benefits of IEEE" on 7/7/2022 under IEEE, WIE affinity group along with PELS, EDS and PES societies.

- 9. Worked as Technical committee member for IEI sponsored seminar on "Application of Artificial Intelligence and Machine Learning in Electrical Engineering" from 27.07.2022 to 28.07.2022 conducted by department of EEE, Sri Sairam engineering college.
- 10. Conducted and was the resource person for a brainstorming session on Technical paper writing on behalf of IEEE-WIE affinity group, Sri Sairam engineering college on 10th Aug, 2022.
- 11. Attended International Leadership summit at Hyderabad from 26-27 Aug 2022.
- 12. Received certificate of appreciation from IEEE, for proctoring in the IEEE Xtreme coding competition held on 22nd Oct 2022.
- 13. Conducted Hands on training in Origin on behalf of IEEE-WIE affinity group, Sri Sairam engineering College on 14th Feb, 2023
- 14. Conducted Hands on Training in AI and IoT workshop on 20th Feb 2023 as a part of venue partner program Engineers week celebration for IEEE-WIE affinity group Madras section.

#### **ONLINE COURSES ATTENDED:**

- 1. Received **Elite certificate** in NPTEL online certification course for Digital circuits-12 week course, Jul-Oct-2018.
- 2. Received **Elite certificate** in NPTEL online certification course for Effective Engineering Teaching in practice-4 week course, Feb-Mar-2018.
- 3. Completed Python for Data science and Machine Learning Bootcamp on line course, in Udemy, duration 22.5 hrs on Nov 5,2019.
- 4. Completed Machine Learning A-Z: Hands on Python & R in Data science course, in Udemy, duration 41.5 hrs on Mar 30,2020.
- 5. Completed SQL and Relational Databases 101 course, in Future Skills Cognitive Class, powered by IBM developer skills network on Mar 08,2020.
- 6. Completed Introduction to Artificial Intelligence, in Simplilearn, on Apr 13,2020.
- 7. Completed Introduction to IoT, in Simplilearn, on Apr 28,2020.
- 8. Completed e learning course on Transformers conducted by Tata Steel on 1.5.2020.
- 9. Completed on line non credit course on Introduction to Google docs in Coursera on 6.5.2020.
- 10. Completed e learning course on Power system Protection conducted by Tata Steel on 7.5.2020.
- 11. Completed e learning course on Natural gas conducted by coursera in association with Buffalo University and the University of New York on 22.05.2020.
- 12. Completed e learning course on Electric Power system conducted by coursera in association with Buffalo University and the University of New York on 20.05.2020.
- 13. Completed e learning course on Safety in the Utility Industry conducted by coursera in association with Buffalo University and the University of New York on 24.05.2020.
- 14. Completed e learning course on Energy the Enterprise conducted by coursera in association with Buffalo University and the University of New York on 23.05.2020.
- 15. Energy Production, Distribution & Safety by The State University of New York &

University at Buffalo on Coursera. Certificate earned at 24/05/2020

- 16. Completed e learning course on Introduction to Big Data conducted by coursera in association with Buffalo University and the University of New York on 22.05.2020.
- 17. Completed e learning course on Getting Started with Google sheet conducted by coursera in association with Google Cloud on 08.06.2020.
- 18. Completed e learning course on Introduction to Psychology conducted by coursera in association with Yale University on 03.07.2020.
- 19. Completed e learning course on Beyond the Sustainable Development Goals (SDG): Addressing sustainability and development conducted by coursera in association with Michigan University on 03.07.2020.
- 20. Completed SWAYAM online course " Accreditation for undergraduate Engineering Programmes" 3 credit courses on Aug-2021.
- 21. Completed SWAYAM online course on "Electricity and Safety Measures" conducted by Indira Gandhi open university on Aug 2021.
- 22. Completed Module 7 creative problem solving, Innovation and meaningful R&D conducted by NITTT on Dec 2021.
- 23. Completed Module 1- Orientation towards Technical education and curriculum Aspects, Module 3- Communication Skills, Modes and Knowledge dissemination & Module 5- Technology enabled learning & Life Long Self learning conducted by NITTT on July 2022.
- 24. Received **Elite certificate & Top 5%** in NPTEL online certification course for Physics of renewable energy-12 week course, Nov-Dec-2022.

## WEBINARS ATTENDED:

24.

- 1. Attended webinar from 11.05.2020 to 15.05.2020 conducted by ICT academy on the Future of the skills –Education, Employment & Entrepreneurship.
- 2. Attended webinar on "R&D Proposal writing for faculties" on 12.06.2020 conducted by Mechanical Department, Sri Sairam Engineering College in association with Research and Development.
- 3. Attended webinar on "Beat the stress" on 27.06.2020 conducted by St Peters Institute of Higher Education in association with Centre for Human values.
- 4. Attended webinar on NAAC sponsored two days National level Webinar on "Quality Sustenance through online mode on education" conducted by Hindustan College of Engineering and Technology, Coimbatore from 8.4.2021 to 9.04.2021.
- 5. Attended NAAC sponsored webinar "Understanding of PO, PSO and CO" conducted by

S.T Co. Op Education Society's Ltd Science Senior College, Nadurbar on 9.06.2021.

6.

6. Attended NAAC sponsored Two days National Level Seminar on "Revised Accreditation Framework for Quality Enhancement in Higher Educational Institutes" from 14.07.2021 to 15.07.2021.