


Sri Sai Ram Engineering College
Department of Electrical and Electronics
Engineering

<p>1.NAME: Ms.M.HEMALATHA</p>	
<p>2.DESIGNATION</p>	<p>Asst. Prof G-II</p>
<p>3.QUALIFICATION</p>	<p>M.E (Phd)</p>
<p>4.AREA OF SPECIALIZATION</p>	<p>APPLIED ELECTRONICS</p>
<p>5.EXPERIENCE:</p>	<p>Teaching Experience: 15 years 5 months</p>
<p>6.NO.OF WORKSHOP / SDP / FDP/ ITP attended:</p>	<p>No. of workshops attended:13 No of seminars attended :4 No. of FDP attended :18 No. of workshops organized :12 No. of conferences attended :7</p>
<p>7.PUBLICATIONS :</p>	<p>CONFERENCE National :3 International:13 Scopus Journal:5, SCI: UGC:1</p>
<p>8. GENERAL</p>	<p>Organized workshops on Matlab ,PLC& Scada,Tinkercad, Simulation softwares. Have organised many guest Lectures for students on various fields and recent Technologies.</p>
<p>9. STAFF ACHIEVEMENTS:</p>	<p>100% Result for the subjects handled. 1.Electronic Devices and circuits II Year (2016-2017) batch. 2. Power electronics for renewable energy resources IV Year(2016-2017) 3.Measurement & Instrumentation II Year (2016-2017).</p>

Total Teaching Experience – 15.5 yrs as of December 2022

EXPERIENCE:

Sl No.	Name of the college	Position held	Period		
			From	TO	Total
1.	Sri Saraswathi Velu College of Engineering	Lecture	14/3/2005	14/5/2006	1.2 Year
2.	Adhiparasakthi Engineering College	Lecturer	17/5/2006	15/5/2007	1 year
3.	Jaya Engineering College	Sr.Lecturer	6/6/2007	5/5/2010	2.11 years
4.	Valliammai Engineering College	Assistant Professor	28/6/2010	16/5/2011	11 Months
5.	A.C.T College of Engg& Technology	Assistant Professor	25 /7/2013	31/5/2015	1.9 Year
6.	Sri SaiRam Engineering college	Assistant Professor	8/6/2015	Till date	7.8years

ACADEMIC RESPONSIBILITIES

- Scope member as Executor- Women Empowerment cell
- Coordinator - Student Value added program.
- Department Coordinator-VLAB
- Department Coordinator- SDG
- Scope member –Executor – start-up
- NBA - criteria 3- head incharge
- NAAC - Department level- criteria 2

AWARDS and ACCOLADES:

Won the AICTE Lilavati Award 2021-2022 as first Runner-up in the subtheme Women Entrepreneurship for unique intervention carried out under the theme "WOMEN EMPOWERMENT" on 8th March 2022.

PATENT:

1. **Title:AN INTELLIGENT SMART STREET LIGHT SYSTEM WITH SAFETY TECHNOLOGY AND ENVIRONMENT MONITORING**

Application Number- 202041047228

Date of Filing-29/10/2020

Publication- 06/11/2020

2. **Title: VOICE BASED OUTDOOR NAVIGATION AND LOCATION ANNOUNCEMENT GUIDANCE SYSTEM FOR BLIND**

APPLICATION NUMBER- : 2020103056

GRANT DATE:9 th day of December 2020

- 3.**Title: MACHINE LEARNING TECHNIQUE AND SYSTEM FOR SOLVING A PREDICTION PROBLEM**

Application Number 202141047297

Date of Filing - 18/10/2021

Publication - 05/11/2021

4. **Title: Published a patent based on "AN AUTOMATIC WED GRINDING APPARATUS",**

Appln no. 202241075488, dated: 26/12/2022

WORKSHOP/STTP/ SEMINAR

1. Workshop on Embedded System Development using ARM Controllers” conducted by ISM, Bangalore on 19.11.2005
2. Workshop on Telecommunication & Information Technology on 2.12.2007 by Falconn ElectroTek Pvt.Ltd.
3. Workshop on NPTEL online certification Courses conducted at IIT Madras , Chennai on 25.2.2014.
4. National workshop on Modeling & Hardware Implementation of

Power Electronic Applications at Sankara University.

5. Seminar on Recent trends in Technology for Teaching and Research at VIT.
6. National seminar on Emerging Technology on Construction & Operation of Hybrid system at Krishna Engineering College.
7. One day training on Quality Management system and Audit training held in Sri Sairam Engineering college, Chennai on 8th June 2018.
8. Attended a one day workshop on “How to do a good Ph.D?” on 3.3.2018 held at MIT campus, Anna University.
9. Webinar on criteria-3 NBA Accreditation.
10. Attended a 6 days workshop on “Design challenges on Motors and Controllers ” From 28/2/2022 to 5/3/2022 at St. Joseph Engineering College.
11. One Week Workshop on Renewable Energy Systems Lab at SSN Engineering college.
12. Attended two days IDA Connect Workshops at Didac India 2022 in Bangalore.
13. Attended a one day training program conducted by IPR and MoE Innovation cell, India

FDTP Attended :

1. Induction Training Program for Teachers in Engineering Colleges (FDTP)” held at Pondicherry Engineering college from 5.12.2005 to 17.12.2005
2. Faculty Development Program on solar photo voltaic cells sponsored by TANGEDCO in Anna University, Guindy from 23.6.2014 to 26.6.2014.
3. FDTP on Electromagnetic fields at Indira Institute of Engineering & Technology from 3.10.2014 To 10.10.2014
4. Attended a Fdp on “ Digital simulation of Power Electronic circuits through PSPICE software ” from 15.7.2015 to 18.7.2015 held at Sri sairam Engineering college
5. Attended the National Level FDP on Electrical Simulation Software (FDP) from 6.11.2017 To 10.11.2017 held at Sri sairam Engineering college.
6. FDP on Power Electronics for Renewable Energy systems held at Tagore Engineering college from 18 to 20 January 2018.
7. Attended a 6 days FDP on Digital signal Processing sponsored by Anna university

conducted in Valliammai Engineering College ,Kanchipuram from 10 to 15 June 2019.

8.FDP on “Modeling, simulation, control and Applications of power Electronic converters” from 25th to 29th November 2019 at QIS college of Engineering&Technology,Andhra Pradesh.

9.Five days FDP on “Artificial Intelligence”from 5 to 11 December 2019 by Skill Kora Labs Pvt ltd,Chennai.

10.Attended ATAL FDPS on “ Electric vehicles”from 5.10.2020 to 9.10.2020

11. Attended ATAL FDPS on “ , Biomedical Instrumentation & IOT”.from 21.09.2020 to 29.09.2020.

12.Completed ATAL FDPs on “ Application of IoT in Agriculture” from 6-07-2021 to 10-07-2021

13.Completed ATAL FDPs on “ Electrical and Computer Engineering”from 8.2.2021 to 12.02.2021, NIT Patna.

14.Completed FDP on “ Industry oriented FDP on Artificial Intelligence”at MSME.

15.Attended a 6 days FDP on Solid State Drives from 22/11/2021 to 27/11/ 2021 at Valliammai Engineering College.

16.Completed 2 weeks ATAL FDP on “Digital Twin in Electric vehicles” at AVIT from 12.09.2022 to 23.09.2022 in the year 2022.

17.Completed NPTEL FDP on Renewable Energy Resources in Nov 2022.

18.Attended a one week FDP on “ Biioomediical sensors & Signal Processing” from 9th Jan to 13th Jan 2023 conducted by Loyola Institute of Technology.

INTERNSHIP :

1. Industry internship on ‘**Design and development of Dual Regulated smart DC power supply**’ from 25thJan 2021 to 6thFeb 2021 by Anand Techno creations ,NRIT Incubation centre,RIT ,Islampur.
2. Technical training on **DCS & PLC OVERVIEW** by Technical school of Yokogawa India Ltd , Bangalore from 14 to 15th June 2018.
3. Undergone an internship at **Kasa Anlagen** at Thirumudivakkam, for 10 days

NPTEL courses/ NITTT modules

✓ Completed 11 online certification courses through coursera , futureskills .

✓ NPTEL- completed 2 courses with Elite score

✓ Completed module 5, module 4, module 1 in NITTTR

PAPERS IN CONFERENCES:

1. Presented a paper titled “ Image Compression Through Multi wavelet Transform” in a National conference held at BIHER held on 14.03.2005
2. Presented Paper entitled ‘Sensor Surveillance Solar Synchronous System for Pedestrian Pathways’ IEEE sponsored 6th International Conference on computation on power energy, Information and communication (ICCPEIC’17)held on 22 nd& 23rd March, 2017 organized by the Department of Electrical &Electronics Engineering, Adhiparasakthi Engineering college, Melmaruvathur.
3. Presented a paper entitled ‘ solar tracking system’ in National conference on Recent Innovations in Advanced Material science held in Rajalakshmi Institute of Engineering on 13th and 14th March 2019 .
4. Presented a title “ An Intelligent Reader for stone blind people” in National conference (RTPEE-2022) on February 2022 , SSN college , Kalavakkam.
5. Presented a paper in International conference on communication computing & Internet of Things on title PV based MULTILEVEL INVERTER “ March 2022 ,in Sairam Engineering College.
6. Presented a paper “ An Intelligent Authentication System for Improved Security ” in 3rd International conference ICPECTS 2022
7. Presented a paper “ An Intelligent Reading Aid for Stone blind Individuals” in 3rd International conference ICPECTS 2022
8. Porselvi T, Shalini Priya.J, Hemalatha M, Jeeva C, Aishwarya K ,Suruthi B ,“Microcontroller Based Wet Grinder System For Domestic Applications”ICPECTS 2022
9. J.Shalini Priya ,Dr.S.Thennarasu ,M.Hemalatha , M.Karthikeyan ,“Voice Based Motile Video Surveillance System With Violence Detection” ICPECTS 2022
10. Porselvi T, Shalini Priya.J , Hemalatha M, Jeeva, Aishwarya K, Suruthi B, “Arduino Based Wet Grinder System For Domestic Applications” ICPECTS 2022
- 11.Porselvi T, ShaliniPriya.J,Hemalatha M,Jeeva C,Aishwarya K,Suruthi .B “Microcontroller Based Wet Grinder System For Domestic Applications” ICPECTS 2022.
- 12.Ms.Kurinjimalar,L,Chandhrasekara G, Jeevanandham S.PrathishKumar U,Hemalatha.M,Ranjith.M, “Analysis of Vehicle to Grid (V2G) Integration in Renewable based Micro grid ” ICPECTS 2022.

13.J.Shalini Priya , Suraj Kumar K B , T.Porselvi , S.Thennarasu , Hemalatha.M, L.Kurinjmalar “ Smart wearable for Pulmonary Fibrosis Patient Monitoring with Oxygen Saturation Prediction” ICPECTS 2022.

RESEARCH PUBLICATIONS:

- M.Hemalatha R. Arun Prasath Dr. Vijayakumar, Sensor Surveillance Solar Synchronous system for pedestrian Pathways” -published in IEEE Xplore Feb 2018
- FOPID controlled modified coupled inductor based SEPIC converter with Renewable energy system paper published in TEST Engineering & Management ,ISSN: 0193-4120 Page No. 3553 – 3563, Volume 81
- IOT based smart garbage alert system using wireless sensor network for environmental hygiene, paper indexed in International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-8, Issue-6, August 2019.
- Cloud based secured healthcare monitoring with prompt notification using connected devices, European Journal of Molecular & Clinical Medicine ISSN 2515-8260 Volume 07, Issue 06, 2020.
- 2nd International conference on Power , Energy, control and Transmission system 2020” Implementation and performance Analysis of switched capacitor converter and Zeta converter fed Multilevel Inverter Topologies with PV
- Presented a paper in International conference on communication computing & Internet of Things on title PV based MULTILEVEL INVERTER “ March 2022 ,in Sairam Engineering College .

FDP Resource Person & Session chair

- ✓ Presented a Session on Analog circuits , embedded systems, and communication in a FDP at Valliammai Engineering College on 2.12.2022
- ✓ Acted as a session chair in ICPECTS 2022 at Sri SaiRam Engineering College.

Proposals submitted:

- 1.Submitted a Proposal on “ FPGA based Monitoring and control of Biogas Plant” to MNRE Application Number:MNRE/A/2022/2348.

2. Submitted a Proposal to TNSCST on “IoT enabled air pollution meter with digital dashboard on smartphone” in the year March 2022 .
3. Submitted a Proposal to TNSCST on “HOME AUTOMATION – SMART DOORBELL” in the year of March 2022.
4. Submitted a Proposal to TNSCST on “Biblio peruser for the typhlotic people using jetsonano” in the year of Jan 2021.

Reviewer:

As a Reviewer for a book on Basic Electrical & Electronics Engineering by Oxford Publications.

As a Reviewer for Papers in Conference ICISCoIS 2022 at PSG institute Technology.

Professional Bodies:

- IEEE Member since 2021
- ISTE member since 2020
- IEEE SIGHT
- IEEE PELS

Events organized:

- 1.As a coordinator in National Level SDG Hackathon.
2. organized many value added courses for Department students.
- 3.Organised many seminars, webinars, awareness program as Atal Mentor ,Ensav club .

Industry Visit:

Visited Gamesa-Siemens on March 3rd 2023 arranged by PALS ,IIT.

Visited GH Induction ,Thirumudivakkam.