




## AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING

(NAAC Accredited)

Nizara Educational Campus, Muthapudupet, Avadi IAF, Chennai - 600 055.

Ph: 044 - 26842627 / 26842086

### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

NAME & INITIALS	Dr. A.MOHANASUNDARAM	
DESIGNATION	Assistant Professor	
EDUCATIONAL QUALIFICATION	M.E., PhD.,	
EXPERIENCE	25 YEARS and 6 MONTHS	
DATE OF JOINING	18.12.2003	
EMAIL ID	mohanasundarm.a@aalimec.ac.in	
AREA OF SPECIALISATION	Power System Engineering, Wind Energy Generation, Hybrid Renewable Energy,	

### EDUCATIONAL QUALIFICATION

DEGREE	BRANCH / SPECIALIZATION	INSTITUTION	UNIVERSITY	YEAR
BE	ELECTRICAL AND ELECTRONICS ENGINEERING	BHARATH ENGINEERING COLLEGE, CHENNAI-72	MADRAS	1996
ME	POWER SYSTEM ENGINEERING	COLLEGE OF ENGINEERING, GUINDY CHENNAI-25	ANNA UNIVERSITY	2008
PhD	DESIGN OF VERTICAL AXIS WIND TURBINE AND UTILIZATION OF WIND-SOLAR ENERGY IN DEMAND-SIDE HOME ENVIRONMENT	COLLEGE OF ENGINEERING, GUINDY CHENNAI-25	ANNA UNIVERSITY	2023

### SHORT TERM COURSE OBTAINED

Name of the Course	Institution	Duration
CAD/CAM/CAE&CNC programming	Central Institute of Plastics Engineering & Technology (CIPET), Guindy.	7 <sup>th</sup> December 1998 - 3 <sup>rd</sup> March 1999.

**PROFESSIONAL TEACHING EXPERIENCE (25 YEARS AND 6 MONTHS)**

Name of the College	Designation	Duration
Aalim Muhammed Salegh College of Engineering, Avadi-IAF, Chennai -55	Head/EEE/Assistant Professor	June 2018 to Feb 2020 and /only AP till date.
Aalim Muhammed Salegh College of Engineering, Avadi-IAF, Chennai -55	Assistant Professor	Dec 2003 to May 2018.
Jaya Engineering college, Tiruniravur, Chennai 602024.	Lecturer	July 2002 to November 2003
Bharath Engineering College, Chennai-72.	Lecturer	June 1998 to June 2002

**GEST TEACHING EXPERIENCE**

Name of the College/University	Degree/ Specialization	Subject taught /Duration
College of Engineering, Anna University, Chennai-25	M.E/ Power System Engineering (Part-Time)	Power System Transients / Second semester (2015-16) & (2016-17)

**INTERNATIONAL JOURNAL PUBLISHED**

Name of the Journal	Journal title	Link to the Publications
Journal of Electrical Engineering, January 2018. (Annexure-1)	Analysis and Design of a Giromill Type Vertical Axis Wind Turbine for a Low Wind Profile Urban Area.	<a href="https://www.researchgate.net/profile/Mohanasundaram-Anthony">https://www.researchgate.net/profile/Mohanasundaram-Anthony</a>
Sustainability, October 2020/Current Impact Factor: 2.576/Scopus cite score:3.2 (Annexure-1)	Design of Rotor Blades for Vertical Axis Wind Turbine with Wind Flow Modifier for Low Wind Profile Areas.	<a href="https://www.mdpi.com/2071-1050/12/19/8050">https://www.mdpi.com/2071-1050/12/19/8050</a> .
MDPI -Electronics (Systems & Control Engineering) July 2021/Current Impact Factor: 2.397/Scopus cite score:2.7 (Annexure-1)	Autonomous Fuzzy Controller Design for the Utilization of Hybrid PV-Wind Energy Resources in Demand Side Management Environment.	<a href="https://www.mdpi.com/20799292/10/14/118">https://www.mdpi.com/20799292/10/14/118</a> .
Electrical Engineering/Springer Nature, January 2023. Impact Factor: 2.397/Scopus cite score:2.7 (Annexure-1)	Design of a Wind-Solar Hybrid Energy Air Conditioning System Using BLDC Motor for the Residential Buildings	<a href="https://www.researchgate.net/publication/364516684_Design_of_a_Wind-Solar_Hybrid_Energy_Air_Conditioning_System_Using_BLDC_Motor_for_the_Residential_Buildings">https://www.researchgate.net/publication/364516684_Design_of_a_Wind-Solar_Hybrid_Energy_Air_Conditioning_System_Using_BLDC_Motor_for_the_Residential_Buildings</a>

**INTERNATIONAL AWARDS FOR PUBLICATIONS**

Journal Name	Award Name	H-Index	Journal Citations
<i>London Journals Press, United Kingdom (UK)</i>	Quarterly Franklin Membership  ID #BO39884, May 2020	3	37

**INTERNATIONAL JOURNAL REVIEWER /IEEE**

ORCID iD	Reviewing Journal
<a href="https://orcid.org/0000-0001-7334-9543">https://orcid.org/0000-0001-7334-9543</a>	<b>IEEE Accesses</b> from 2019 till date, & London Journal Press from May 2020

**PROFESSIONAL MEMBERSHIP**

INDIAN SOCIETY FOR TECHNICAL EDUCATION (ISTE)	LIFE MEMBERSHIP Membership No.: LM-134372
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**NPTEL –SWAYAM (IIT) CERTIFICATION COURSE**

Course Code /Name	Course status	Course is given by
<i>noc21-ee77/ Power System Analysis (12weeks)</i>	One among the 100 completed the course all over India with an <b>FDP certificate</b> (July 2020)	Indian Institute of Technology, Kharagpur.
<i>noc22-ee06/ Electrical Machines – II (12weeks)</i>	Obtained <b>NPTEL ELITE Certificate</b> ( April 2022)	Indian Institute of Technology, Kharagpur.

**STATE LEVEL FUNDED PROJECTS**

Name of the Sponsorship	Title of the project /year of the award
Tamil Nadu State Council for Science and Technology/ students project scheme 2020- 2021	Regulation of MTC Bus with passenger alert system The fund received is ₹ 7500.

## NATIONAL LEVEL ACHIVEMENTS AND AWARDS FOR UG PROJECTS

1. An Under Graduate project work guided with titled “**Solar-powered Air conditioner using BLDC motor**” shortlisted for the finals of “**AICTE-ECI Charta Vishwakarma Awards 2017**” organized by All India Council for Technical Education (AICTE), Ministry of Human Resource Development, Government of India, Registration Code: **VAEE048**.
2. Mentored a Hardware project model titled **Solar-Powered Smart Rail Crack Identification system** participated in the national level **HACKATHON-2018 hardware edition** conducted by **Ministry of Human Resource Development, Government of India** and won all in India First Runner up prize and same is appreciated by Honorable chief minister of Tamil Nadu.
3. Participated as a **supporting Electrical Engineer in the Guinness World Record 2018** achievement completed by **Mr. Nawas Akram** in **Longest Power strip** held at Aalim Muhammed Salegh College of Engineering, Chennai-55.
4. **Participated in a TV program** named **Ariviyal Arivoum** regarding the project planning **Mr. Naushed Shaheb**, telecasted in **Doordarshan Podhigai** on 16<sup>th</sup> June 2019.

## NOTICABLE CONTRIBUTIONS IN AMSCE/EEE DEPARTMENT

- Designed the Layout and constructed the first **POWER SYSTEM SIMULATION** lab at **EEE/AMSCE** in 2005 and the same is upgraded in 2012 for supporting for PG-POWER SYSTEM under my Lab in-charge role.
- Upgraded Electrical Machines Laboratory with **INNOVATIVE THREE PHASES LINEAR T-section INDUCTION MOTOR** (looking forward to filing a patent) to support High-speed bullet train transportations through students' projects.
- Inaugurated **ROBOTICS CLUB** in **EEE/AMSCE** in 2018 to provide training for HSC, Diploma, UG students with a syllabus in the basic manual to autonomous level in Terrain Robotics.
- Renewable Energy Laboratory was designed with a **2kW HAWT prototype Model**, **2kW H-type VAWT model** and **2kW Involute VAWT model** to learn wind energy conversion behaviour through real-time wind speed variations.
- Taken Lead role in Energy auditing of the AMSCE campus and constructed **20kW SOLAR POWER PLANT** to support the **EEE /AMSCE** to support Renewable Energy Laboratory and students projects.
- Being a **Project Coordinator** from 2005 to 2020, established a project storeroom to help the students to use hardware components from more than **500 IN HOUSE PROJECTS**. Personally guided **100+ innovative and award-winning UG PROJECTS**.
- Taken in charge of **HT 600kVA, 11kV / 440V Transformer substation and Diesel generator maintenance** for the **AMSCE campus** from 2018-2020.
- Nominated as **EEE Department Coordinator** for the first international conference **IIASE** in **AMSCE** in 2017 and presented three journals at the conference.
- **State Level Achievement** under my leadership as **EEE Department HEAD/** As per the **Times of India Ranking the Department of Electrical and Electronics Engineering** in Aalim Muhammed Salegh College of Engineering, **RANKED No 1** in Tamil Nadu for **two consecutive academic years** in 2018-19 and 2019-2020.

### **SIGNIFICANT CONTRIBUTION IN THE INSPECTION**

- Participated in an **NBA and Deemed University** linked inspection in **BHATAH ENGINEERING COLLEGE** in 2003.
- **EEE Department FILES** coordinator for the **NBA inspection in AMSCE** in 2011.
- Coordinator in the **ANNA UNIVERSITY** department inspection for permanent affiliation in 2011.
- **HEAD** for the **CRITERION 6 FILES** and presented the **EEE achievements** during the **NAAC Inspection** in 2018.

### **SPECIAL AWARDS RECEIVED DURING RECENT TIMES**

- Received “**Excellence in Education 2022 award**” from **Tamil Nadu Teacher’s Association & Bala Educational trust** on **10.09.22** by **Justice Jeyachandran, Member, HRD.**
- Received cash prize, certificate of appreciation and a shield for producing **100 % Results** in a subject named **EE 8019 SMART GRID** in **Anna University theory examination NOV/DEC 2022.**

### **GUEST LECTURES PROVIDED**

- Provided a guest lecture on the topic of, **Wind Power Generation Analysis Using QBlade software** at **GRT Engineering College** for the **EEE students** on **26.08.2022**.

### **WEBINAR PROVIDED**

- Conducted a webinar on the topic of, **Design of vertical axis wind turbine Using QBlade software** at **Aalim Muhammed Salegh Engineering College** for the **Faculty members/ Research scholars/ PG &UG Engineering students** on **27.04.2022**.
- Conducted a Webinar on the **Research topic** of, **Comparative Analysis of vertical and horizontal axis wind turbine Using QBlade software** at **Aalim Muhammed Salegh Engineering College** for the **Faculty members/ Research scholars/ PG &UG Engineering students** on **11.02.2023** with **163 participants** (**92% External participation**).

**Dr. A. MOHANASUNDARAM**