

# AALIM MUHAMMED SALEGH COLLEGEOF ENGINEERING

(NAAC Accredited)

Nizara Educational Campus, Muthapudupet,

Avadi IAF, Chennai - 600 055. Ph: 044 - 26842627 / 26842086

DEPARTMENT OF ELECTRONICS	AND COMMUNICATION ENGINEERING	
NAME&INITIALS	Dr.A.MOHANASUNDARAM	
DESIGNATION	Associate Professor	3
EDUCATIONAL QUALIFICATION	B.E., M.E., PhD.,	
EXPERIENCE	26 Years and 3 Months	4
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,	
Google Blog link: <a href="https://sites.google.com/aalimec.ac.in/dr">https://sites.google.com/aalimec.ac.in/dr</a>	-a-mohanasundaram-profile/home.	1

EDUCATIONAL QUALIFICATION				
DEGREE	SPECIALIZATION	INSTITUTION	UNIVERSITY	YEAR OF PASSING
PhD	Wind Energy	College of Engineering, Chennai-25	Anna University	2022
M.E	Power System Engineering	College of Engineering, Chennai-25	Anna University	2009
B.E	Electrical and Electronics Engineering	Bharath Engineering College, Chennai-72	Madras University	1996

PROFESSIONAL MEMBERSHIP	
Indian Society For Technical Education (ISTE)	Life Membership  Membership No.: LM-134372

PROFESSIONAL TEACHING EXPERIENCE: 26 YEARS AND 3 MONTHS		
Name of the College	Designation	Duration
Aalim Muhammed Salegh College of Engineering, Avadi-IAF, Chennai -55	Associate Professor/ECE	08.04.2024 till date
Aalim Muhammed Salegh College of Engineering, Avadi-IAF, Chennai -55	Head/ EEE/Assistant Professor	June 2018 to Feb 2020 and only 07.04.2024
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

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.

GUEST TEACHING EXPERIENCE		
Name of the College/University	Degree/ Specialization	Subject taught /Duration
College of Engineering, Anna	M.E/ Power System	Power System Transients / Second
University, Chennai-25	Engineering (Part-Time)	Semester (2016-2017)

PhD SUPERVISOR	
Recognized supervisor in Centre For Research (CFR) · Anna University, Chennai - 600 025 Ref Number: 4230031	<ul> <li>Area of specialization:</li> <li>Design of vertical axis wind turbine</li> <li>Home energy management</li> <li>Hybrid wind solar energy optimum utilizations</li> </ul>

INTE	INTERNATIONAL JOURNAL PUBLISHED		
S.No	Name of the Journal	Journal title	Link to the Publications
1	Journal of Electrical Engineering, January 2018	Analysis and Design of a Giromill Type Vertical Axis Wind Turbine for a Low Wind Profile Urban Area.	https://www.researchgate.n et/profile/Mohanasundaram -Anthony
2	Sustainability, October 2020/Current Impact Factor: 2.576/Scopus cite score:3.2	Design of Rotor Blades for Vertical Axis Wind Turbine with Wind Flow Modifier for Low Wind Profile Areas	https://www.mdpi.com/2071 -1050/12/19/8050.
3	MDPI –Electronics (Systems & Control Engineering) July 2021/Current Impact Factor: 2.397/Scopus cite score:2.7	Autonomous Fuzzy Controller Design for the Utilization of Hybrid PV- Wind Energy Resources in Demand Side Management Environment	https://www.mdpi.com/2079 -9292/10/14/1618
4.	Electrical Engineering/Springer Nature, January 2023. Impact Factor: 1.631 (Annexure-1)	Design of a Wind-Solar Hybrid Energy Air Conditioning System Using BLDC Motor for the Residential Buildings.	https://link.springer.com/artic le/10.1007/s00202-023-01759- w

INTERNATIONAL JOURNAL REVIEWER /EDITORIAL MEMBER		
ORCID iD	Reviewing Journal	
https://orcid.org/0000-0001-7334-9543	IEEE Accesses from 2019 till date London Journal Press from May 2020	
Editorial Member	International Journal of Architectural Engineering Technology, From March 2023 Onwards. ISSN (online): 2409-9821	

INTERNATIONAL AWARDS FOR PUBLICATIONS		
Journal Name	Award Name	
London Journals Press, United Kingdom	Quarterly Franklin Membership ID #BO39884, May 2020	

NPTEL -SWAYAM CERTIFICATION COURSE		
Course Code /Name	Course status	Course is given by
noc21-ee77/ Power System Analysis(12weeks)	One among the 100 completed the course all over India with an FDP certificate (July 2020)	Indian Institute of Technology, Kharagpur.
noc22-ee06/ Electrical Machines – II (12weeks)	Obtained NPTEL ELITE Certificate ( April 2022)	Indian Institute of Technology, Kharagpur.
noc23-ge40/ Fundamentals Of Artificial Intelligence/(12weeks)	Obtained NPTEL ELITE Certificate (November 2023)	Indian Institute of Technology, Guwahathi.
noc23-cs83/ Introduction To Internet Of Things/(12weeks)	Obtained NPTEL ELITE Certificate ( November 2023)	Indian Institute of Technology, Kharagpur

## NATIONAL LEVEL ACHIEVEMENTS & AWARDS FOR THE PROJECTS

- 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.
- 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 Honourable chief minister of Tamil Nadu.
- 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.
- Hosted a TV program named Ariviyal Arivoum regarding the project planning Mr Naushed Shaheb, telecasted in Doordarshan Podhigai on 16<sup>th</sup> June 2019.

# STATE-LEVEL SPONSORSHIP FOR BEST 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.
Niral Thiruvizha 2023-24	Next Generation E-Bicycle The fund allotted is ₹ 10000

## 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.

# NOTICEABLE CONTRIBUTION IN THE 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 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 2017-2020.
- 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.

# CONTRIBUTION IN THE ACADEMIC AND EXAMINATION WORK

• Framed a syllabus for the Direct Study Research Coursework Paper.

- Published a FIRST laboratory manual for Engineering Practices laboratory in 2012.
- Worked as Anna university representative (AUR) in smooth conducting university examination and Chief Examiner in answer paper valuation.
- Participated in UG /PG Project Viva Voce examination and UG /PG university Question paper setting in Power system and Electrical machines specializations.

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# SIGNIFICANT FACULTY DEVELOPMENT PROGRAM ATTENDED

- Neural Networks and Fuzzy logic Control from 18<sup>th</sup>-30<sup>th</sup> June 2007 at College of Engineering (CEG), Anna University, Chennai-25.
- QIP on Internal Revenue Generation and Utilization in Engineering Institutions from 28th-30th July 2008 at National Institute of Technical Teacher Training &Research (NITTR), Chennai-25 sponsored by MHRD, Government of India.
- Teaching the Teachers on 12<sup>th</sup> December 2009 at Aalim Muhammed Salegh College of Engineering, Chennai-55.
- Significance of Course Files & How to use it for PDCA in OBE on 4<sup>th</sup> June 2020 at Rajalakshmi Engineering College (Autonomous), sponsored by AICTE –Margadarshan.
- Direct & Indirect Measures of Assessment for CO, PO Attainment on 8<sup>th</sup> June 2020 at Rajalakshmi Engineering College (Autonomous), sponsored by AICTE –Margadarshan.

#### **WORKSHOP AND SYMPOSIUM ATTENDED**

- Attended Workshop on Emerging Trends in Electrical Electronics & Computer science Engineering held on 25th October 2005 at Aalim Muhammed Salegh College of Engineering, Chennai-55
- Attended Workshop on Recent Trends in Energy Engineering held on 17th
   February 2007 at Aalim Muhammed Salegh College of Engineering,
   Chennai-55
- Attended Workshop on Computing, Conditioning & Controlling Techniques Applied to Electrical Engineering held on 9th February 2008 at Aalim Muhammed Salegh College of Engineering, Chennai- 55.
- Attended Workshop on Introduction to PLC programming & Interfacing with HMI held on 21th- 23th January 2010 at Aalim Muhammed Salegh College of Engineering, Chennai-55.
- Attended AICTE Sponsored Two days National Workshop on Challenges and opportunities in Solar Photovoltaic- An Emerging Energy Research, from 19th-20th December 2013 held at RMK Engineering College.

## 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.
- Received cash prize, certificate of appreciation for producing 100 % Results in a subject named EE 8702-POWER SYTEM OPERATION AND CONTROL inAnna University theory examination APRIL/MAY 2023.

## **GUEST LECTURES /WEBINAR CONDUCTED AS A RESOURCE PERSON**

- 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.
- 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, 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).