



**Professor and Head**  
**Department of Electrical and Electronics Engineering**  
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**Dr. C. SHANMUGA SUNDARAM**

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**Professional Objective:** To pursue a challenging and inspiring career in a well established institution where I can exploit my teaching and technical skills.

**Educational Qualification:**

NAME OF THE DEGREE	YEAR OF PASSING
<b>DOCTOR OF PHILOSOPHY (Ph.D)</b> <b>ELECTRICAL AND ELECTRONICS ENGINEERING</b> Pondicherry Engineering College, Pondicherry University, Puducherry	March 2018
<b>MASTER OF TECHNOLOGY (M.Tech)</b> <b>HIGH VOLTAGE ENGINEERING</b> SASTRA Deemed University, Tanjore, Tamil Nadu	December 2002
<b>BACHELOR OF ENGINEERIN (B.E)</b> <b>ELECTRICAL AND ELECTRONICS ENGINEERING</b> Annamalai University, Chidambaram, Tamil Nadu	May 1998
<b>DIPLOMA</b> <b>ELECTRICAL AND ELECTRONICS ENGINEERING</b> Elumalai Polytechnic ,Villupuram, Tamil Nadu	April 1990

## Teaching Experience:

S.NO.	NAME OF THE INSTITUTION	DESIGNATION	PERIOD OF SERVICE
1.	Manakula Vinayagar Institute of Technology	Professor	01-07-2018 to Till Date
2.	Manakula Vinayagar Institute of Technology	Associate Professor	04-07-2012 to 30-06-2018
3.	Manakula Vinayagar Institute of Technology	Assistant Professor	20-11-2009 to 03-07-2012
4.	Mailam Engineering College	Assistant Professor	01-10-2004 to 19-11-2009
5.	Mailam Engineering College	Senior Lecturer	01-10-2003 to 30-9-2004
6.	Mailam Engineering College	Lecturer	09-06-1999 to 30-09-2003

## Courses Taught:

**(i) Under Graduate:** Electrical Machines I,  
Electrical Machines II,  
Renewable Energy,  
Energy Engineering,  
Power System Restructuring and Deregulation,  
Utilization of Electrical Energy,  
Power System Analysis,  
Electrical Safety and Quality Management,  
Electrical Circuit Analysis.

**(ii) Post Graduate:** Electrical Machines and Design

**(iii) Laboratories handled:**

Basic Electrical & Electronics,  
Measurement and Control Lab,  
Electrical machines I Lab,  
Electrical machines II Lab  
Power System Simulation Lab

**Project Guided:** 40 Projects

### Grants Received:

NAME OF THE SCHEME	PROGRAMME TITLE	DURATION	AMOUNT SANCTIONED (RS.)	STATUS
AICTE Sponsored Two weeks FDP	Analysis and Modeling of Motors using FEM package [ANSYS]	18 <sup>th</sup> Nov to 30 <sup>th</sup> Nov 2013	5,00,000	Completed
Anna University Sponsored Staff Development Program	Power Electronics	7 <sup>th</sup> May to 18 <sup>th</sup> May 2007	5,00,000	Completed

### Academic/Administrative Responsibilities

- Head of the Department for Electrical and Electronics Engineering at Manakula Vinayagar Institute of Technology from 04.05.2018 to till date
- Head of the Department for Electrical and Electronics Engineering at Manakula Vinayagar Institute of Technology from 20-11-2009 to 30.07.2015
- Head of the Department for Electrical and Electronics Engineering at Mailam Engineering College from 09-06-1999 to 19-11-2009
- Board of Studies member for the EEE Board in Pondicherry University since 2014
- Board of Studies member for the Food Technology in Pondicherry University since 2019
- PG Question paper setter for CETPEC Examination
- Institute Library Coordinator since 2017
- Exam Cell Coordinator for the academic year 2010-2011
- Additional Chief Superintended at Manakula Vinayagar Institute of Technology for conduction of Pondicherry University Examination during 2014-2015

**Reviewer for the journal:** Journal of Electrical and Electronic Engineering

**Professional Membership:** Life Member of ISTE - LM28943

Life Member of IE - AM093965-2

## Programmes Coordinated

- One Week AICTE-ISTE Induction/Refresher programme on “Smart Grid, Internet of Things and Green Computing-The Future of Energy Intelligence” from 16-07-2018 to 21-07-2018.
- One day IEEE workshop, titled “INDUSTRIAL AUTOMATION USING IOT” on 7<sup>th</sup> July 2018 organized by MVIT.
- AICTE sponsored PMKVY (ASSISTANT ELECTRICIAN) – Rural Youth Development Programme – Coordinator in the year 2018
- “SIGARTHA NOKKI” A career guidance program for HSc. students held at cuddalore for 5 years from 2014 to 2018.
- One day seminar on “ENERGY CONSERVATION AND METHODOLOGY” on 19.11.17 jointly with puducherry HR circle at MIT
- Symposium “TRANSMIT’14” during 29<sup>th</sup> & 30<sup>th</sup> Aug. 2014.
- Convener for AICTE Sponsored Faculty Development Program on “Analysis & modeling of motors using FEM package (ANSYS)” at MIT from 18.11.2013 to 30.11.2013 and received a grant of Rs.5 lakhs.
- National Conference on “EMERGING TRENDS AND DEVELOPMENT IN ENGINEERING AND TECHNOLOGY” on 16<sup>th</sup> March, 2012.
- Project Exhibition “MITILENCE- 2011” conducted between 4<sup>th</sup> and 5<sup>th</sup> Feb, 2011.
- Department of Electrical & Electronics Engineering “ELECTRA” Technical Symposium on 12<sup>th</sup> January, 2011.
- National Level Technical Symposium “MITLENCE-2010” was organized on 19<sup>th</sup> February, 2010.
- Symposium “TRICLONIX08” between Sep.10 and 11<sup>th</sup>, 2008.
- Anna University Sponsored Staff Development Program on “POWER ELECTRONICS” held during 7<sup>th</sup> to 18<sup>th</sup> May, 2007 held at Mailam Engineering College, Mailam and received a grant of Rs.5 lakhs.

- National Science Day Exhibition “Generic 2007” between Feb, 27<sup>th</sup> & 28<sup>th</sup> 2007.
- Intra College level National Science Day “Generic 2006” as Convener on Feb, 28<sup>th</sup> 2006.
- National Conference on “Advancement in Electrical and Mechanical Engineering” between Feb, 20 & 21, 2004.
- One Day Technical Symposium “Electret 2001” and released a Magazine on Feb, 3 2001.

## **Publications:**

### *International journal*

- Shanmuga Sundaram C, Sudhakaran M, Ajay-D-Vimal Raj, Tabu Search Enhanced Artificial Bee Colony Algorithm to Solve Profit Based Unit Commitment Problem with Emission Limitations in Deregulated Electricity Market, International Journal of Meta-Heuristics, Inderscience Publications, Vol. 6, Nos. 1/2, pp.107-132, 2017.
- Shanmuga Sundaram C, Sudhakaran M, Ajay-D-Vimal Raj, Tabu Search Enhanced Artificial Bee Colony Algorithm to Solve Economic Load Dispatch with Prohibited operating zones and Ramp Rate Limit Constraints, International Journal of Electrical Engineering, Vol.101, pp.43858-43864, 2016.
- Shanmugasundaram C, Sudhakaran M, Ajay-D-Vimal Raj, Tabu Search Enhanced Artificial Bee Colony Algorithm to Solve Economic Load Dispatch with Line flow limits and Voltage limits, International Journal of Electrical Power and Energy Systems, Elsevier publications . (Under Review)
- K.Vijayakumar, A. Joseph Basanth and C. Shanmuga Sundaram Influence of Iron Powder Core on the Switched Reluctance Motor Performance Enhancement Elsevier publications. (Under Review)

### *International conference*

- Shanmugasundaram C, Sudhakaran M, Selvakumar R, Natarajan R G, 2014. “Solution to Profit based unit commitment using swarm intelligence technique”, International Conference on Computation of Power, Energy, Information and Communication. “ICCPEIC-2014”, PP. 353-358, April 16-17, 2014.
- Shanmugasundaram C, Sudhakaran M, Harthi M G, Ravichandran R, 2014. “Solution to unit commitment problem in conventional and restructured using FABC algorithm”, International conference on advance in engineering and technology. “ICAET-2014”, May 2-3, 2014.

- C.Shanmugasundaram and T.S. Sivakumaran “Development of PI controller for positive output super lift converters,” First National Conference IEEE-09 held at MPNMJEC, Chennimalali, Erode, on Jan, 23, 2009.
- C.Shanmugasundaram and T.S. Sivakumaran “Development of PI controller for negative output super lift converters,” First National Conference IEEE-09 held at MPNMJEC, Chennimalali, Erode, on Jan, 23, 2009.
- C.Shanmugasundaram and N. Arun Kumar “Simulation and real time implementation of Fuzzy controller for CUK converter operating in buck mode,” International Conference (ICCCn 2008), Computing Communication and Networking, held during 18-20, Dec 2008.
- C.Shanmugasundaram and P. Srinivasan, “Control strategies for pulse width modulated multilevel inverters” published in the proceedings of CISCON-08 on April 18-19, 2008 at Manipal Institute of Technology, Manipal, India.
- C.Shanmugasundaram and N. Arun Kumar “Simulation of conventional control for DC-DC cuk converter operating in buck mode” published in the proceedings of CISCON-07 on Nov. 9-10, 2007 at Manipal Institute of Technology, Manipal, India.
- C.Shanmugasundaram and Y. Thiagarajan “Design and simulation of pi controller for a DC-DC boost converter using renewable energy system” published in the proceedings of CISCON-07 on Nov. 9-10, 2007 at Manipal Institute of Technology, Manipal, India.

### **Faculty Development Program /Induction /Refresher Programme Organized and Attended**

- ICTACT Sponsored Faculty Development Program on LIFE SKILLS at ICT Training Academy from 02.11.2015 to 06.11.2015
- Convener for AICTE Sponsored Faculty Development Program on “Analysis & modeling of motors using FEM package (ANSYS)” at MIT from 18.11.2013 to 30.11.2013 and received a grand of Rs.5 lakhs
- AICTE Sponsored Staff Development Program on “SMART OPERATION & CONTROL OF ELECTRICAL MACHINE & POWER SYSTEM” held during 2<sup>nd</sup> to 12<sup>th</sup> June 2010 organized by Pondicherry Engineering College.

- Co-coordinator for Anna University Sponsored Staff Development Program on “POWER ELECTRONICS” held during 7<sup>th</sup> to 18<sup>th</sup> May, 2007 held at Mailam Engineering College, Mailam and received a grand of Rs.5 lakhs
- AICTE Sponsored Staff Development Program on “ADVANCES IN EMBEDDED & WIRELESS TECHNOLOGY” held during 18<sup>th</sup> to 28<sup>th</sup> Jan, 2007 organized by Sri Manakula Vinayagar Engineering College, Madagadipet, Puducherry.
- Anna University Sponsored Staff Development Program on “POWER SYSTEM OPERATION” held during 13<sup>th</sup> to 18<sup>th</sup> Dec, 2004 organized by I.R.T.T, Erode.

### **National Workshop/Seminar Organized and Attended**

- Attended AICTE Sponsored Quality improvement program on “Nascent generation and distribution, and potential research problem in power system” at Pondicherry engineering college from 04.12.2017 to 08.12.2017
- ISTE sponsored one week short term training program (STTP) attended on “CONTEMPORARY WORD OF ELECTRICITY –Solar Energy” at Manakula Vinayagar Institute of Technology, Puducherry from 27.11.2017 to 01.12.2017
- Attended Two days AICTE sponsored seminar on “SMART GRIDS and GREEN SYSTEMS (Smart Greens) at Pondicherry Engineering College from 05.10.2017 to 06.10.2017
- Successfully completed the three day professional development workshop on “TECH-Transform, Empower and Change” organized by SEED from 15.06.2017
- Organized CSIR sponsored two days national seminar on “Recent Trends in Hybrid Power Generation” at MIT, Puducherry on 30.06.17 and 01.06.17.
- Attended AICTE QIP Sponsored Short Term Course titled “Challenges on Insulation Reliability in Smart Grid Applications (CIRSA)” at Pondicherry engineering college from 23.11.2015 to 27.11.2015
- A Training program attended on “Cloud computing and advanced Java” was organized by ICT Academy of Puducherry at MIT from 22.07.2013 to 30.07.2013

- Attended CSIR sponsored two days national seminar on Challenges of Power System Planning in Restructured Indian Electricity Market at PEC, Puducherry from 13.12.13 to 14.12.13.
- Attended ISTE sponsored one day workshop on “research and Development in Engineering Institutions’ at MIT
- Workshop on Virtual Simulation for Power Converter using Matlab organized by Prist university puducherry on 6.10.2012
- Workshop on Soft Computing Techniques & E-Journal preparatory process organized by Dr. Pauls Engineering College Puducherry on 17.10.2012
- Seminar on “Intelligence System Applications to Future challenge in Power Engineering” held at Pondicherry Engineering College, Pondicherry from 09-09 -09 to 11-09-09.
- Attended 6 days Training Program on “Exploring MATLAB and Its tools” held during 17<sup>th</sup> to 22<sup>nd</sup> August 2009 organized by Department of ECE at Mailam Engineering College & Raghuram Associates, Chennai.
- Workshop on “Simulation Softwares” organized by SSN College of Engineering, Chennai from 14-11-06 to 15-11-06.
- One day National Seminar on “Renewable Energy-Today & Tomorrow” sponsored by Ministry of Non-Conventional Energy Sources & Tamil nadu Energy Development Agency at Mailam Engineering College, Mailam on Aug, 19<sup>th</sup> 2006.
- Three days National Seminar on “Recent Advances in Renewable Energy Technology Transfer” sponsored by AICTE, New Delhi, 27-29<sup>th</sup> Jan.-06, organized by Sri Manakula Vinayagar Engineering College, Madagadipet.
- Attended seminar on 7<sup>th</sup> Aug, 2004 on “Innovative Teaching Techniques in Engineering Colleges” organized by Mailam Engineering College.
- One day National Seminar on “Professional Ethics” conducted on 31<sup>st</sup> July, 2004 at Mailam Engineering College, Mailam and Guest Lecturers were given by Dr. Mrs. B. Sushila Balaguruswamy, K. S. Sharma, Njal Njalstroem and Rita D’Souza.
- Two days’ workshop on “AU Power Lab” from May 31<sup>st</sup> to June, 1<sup>st</sup> 2004 at Anna University, Chennai



- Three days ISTE XXX Annual Convention and National Seminar on “Shaping Technical Education for the Future” from Dec, 14-16 2000 at Nirma institute of technology, Ahmedabad.
- Three days ISTE XXIX Annual Convention and National Seminar on “Management of Technical Education in the 21<sup>st</sup> Century” from Dec, 10 to 12, 1999 at Kongu engineering college, Perundurai.

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