

Dr. M. Sundaram

Assistant Professor

Department of Electrical & Electronics Engineering

PSG College of Technology, Coimbatore – 641 004

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EDUCATION

DOCTORATE:

(July 2013) Electrical Machines
Anna University

POSTGRADUATE:

(June 2004) Electrical Machines
PSG College of Technology
Bharathiyar University

UNDERGRADUATE:

(July 1997) Electrical & Electronics Engineering
Government College of Technology
Bharathiyar University

EXPERIENCE

Sl. No.	Name of the Post	Employer	Period of Employment		Teaching/ Industrial/ Research
			From	To	
1	Assistant Professor (Govt. Aided)	Dept. of EEE PSG CT Coimbatore	July 2016	Till date	Teaching/ Industrial/ Research
2	Associate Professor	Dept. of RAE PSG CT Coimbatore	Dec 2013	June.2016	Teaching/ Industrial/ Research
3	Assistant Professor(Sr.Gr)	Dept. of RAE PSG CT Coimbatore	Aug 2011	Nov. 2013	Teaching/ Industrial/ Research
4	Assistant Professor(Sr.Gr)	Dept. of EEE PSG CT Coimbatore	Sep 2010	Aug 2011	Teaching/ Industrial/ Research
5	Senior Lecturer	Dept. of EEE PSG CT Coimbatore	June 2008	Oct 2010	Teaching
6	Lecturer	Dept. of EEE PSG CT Coimbatore	June 2003	May 2008	Teaching
7	Lecturer	Sri Ramakrishna Polytechnic College	June 1997	June 2003	Teaching
8	Electrical Supervisor	TEXT TOOL Company Limited	Aug 1991	June 1997	Industrial

COURSES HANDLED

UNDERGRADUATE

- DC Machines & Transformers
- Induction and Synchronous Machines
- Power electronics
- Electric Drives and Controls
- PLC, SCADA & DCS
- Renewable Energy Sources

POSTGRADUATE

- Power converters
- Special Machines and Controllers
- Generalized Theory of Electrical Machines
- Electric Drives and Controls
- Advanced Topics in Power electronics
- Design of Energy Efficient Electrical Machines

RESEARCH AREAS

- Power converters
- Electrical Machines
- PLC, SCADA and DCS

PUBLICATIONS

INTERNATIONAL JOURNALS

- Sundaram, M. and Navaneethan, P. "On the Influence of Stator Slot shape on the Energy Conservation associated with the Submersible Induction Motors", American Journal of Applied Sciences, Science Publications, Vol. 8, No. 4, pp. 393-399, 2011
- Sundaram, M. and Navaneethan, P. "Determination of Flux linkage Characteristics and Inductance of a Submersible Switched Reluctance Motor using Software Tools", Journal of Computer Science, Science Publications, Vol. 7, No. 2, pp. 179-187, 2011
- Sundaram, M., Navaneethan, P. and Vasanthakumar, M. "Magnetic Analysis and Comparison of Switched Reluctance Motor with Different Stator Pole Shapes using a 3D Finite Element Method", ICGST-ACSE Journal, Vol. 9, Issue-II, pp. 49-53, 2009

- Sundaram, M., Navaneethan, P. and Vasanthakumar, M “Magnetic analysis and comparison of Switched Reluctance Motors with different stator pole shapes using a 3D finite element method” IEEE International Conference, INCACEC 2009, pp.1,4, 4-6 June 2009
- Sundaram, M., Navaneethan, P Design and Development of Energy Efficient Submersible Switched Reluctance Motor” is under review in Journal of Engineering & Technology
- Prakash,N, Ranithottungal D.,and Sundaram, M. An Effective Wind Energy System based on Buck-boost Controller Research Journal of Applied Sciences, Engineering and Technology, June 25, 2013
- J. Joe Brislin, J. Chelladurai, B. Vinod, M. Sundaram “Modulation Strategies For Three Phase Inverters Supplying Unbalanced Three Phase Loads” International Journal of Innovative Research in Science, Engineering and Technology, Vol 3, 2014, pp-30-37.
- J.Chelladurai, B.Vinod, T.Bogaraj, J.Kanakaraj, M.Sundaram, “Scalar Controlled Boost PWM Rectifier for Micro Wind Energy Systems”, International Research Journal of Applied Sciences, Engineering and Technology, 10(1): 2015, pp-35-44.

CONSULTANCY ACTIVITIES

- Design and Development of Induction Cooking System for Sri Annapoorna Kitchen Equipments, Coimbatore
- Design of curriculum and Lab set-up (Electrical and Power Management part only) for Naval Academy, Elimazha, Kerala
- Optimisation of Instrument Current transformer for Surya Instruments
- Design of Controller for SRM for Ampere Vehicles
- Design and Development of SR Motor and BLDC Motors for PSG II,CBE
- Project Review Committee Member for PSG STEP (DSIR)
- Power Analysis of Motor at different Loading cycles for Coimbatore Compressors
- Electrical Characteristic of Domestic Wind Generator for Alpha Powers, Coimbatore
- Power quality Analysis of Electronic gadgets for Pricol Technologies

SPONSORED RESEARCH ACTIVITIES

- PI in Design and Development of Submersible Switched Reluctance Motor sponsored by DSIR, Govt. of India
- PI in Design and Development of Electronic Irrigation Control system for Agriculture sponsored by L-RAMP, Govt. of India
- PI in Design & Development of Smart Autonomous In-service Inspection and Cleaning Ground Vehicle for Large Scale Solar PV Farms sponsored by Department of Science and Technology (DST), Solar Energy Research Initiative (SERI), Govt. of India
- PI in Establishment of Center of Excellence in WELDING POWER SOURCE DEVELOPMENT, sponsored by DHI, Govt. of India

- PI in Establishment of Center of Excellence for TECHNOLOGY FOR SMART PUMPS at SITARC Coimbatore, sponsored by DHI, Govt. of India

MEMBERSHIP OF PROFESSIONAL BODIES

Professional Body	Type of Membership	Position Held
System Society of India	Life Member	Member
BSI	Lead Auditor	Auditor
Electrical Inspectorate	Supervisor Competency Certificate	Rule- 3 Person

AWARDS RECEIVED AND PATENTS

- Dakshinamoorthy Award for Teaching Excellence
- Patent on “Automatic Switch Actuation Systems” (Applied)
- Patent on “Economic Energy Management for Telecommunication Towers” (Applied)

PROJECTGUIDANCE / SUPERVISION

- **Number of PG Project Completed: 45**
- **Number of UG Project Completed: 37**