CURRICULUM VITAE

Dr. A. GNANA SARAVANAN   13/17, North Thoppu Street,

Ambasamudram-627401,

Tirunelveli District.

Vision

To create innovative and vibrant young leaders and entrepreneurs in Engineering and Technology with excellence and ethics to reach the unreached.

Educational Qualifications

Degree	Specialization	College Name	University	% of Marks	Year
Ph.D	Electrical Engineering	College of Engineering, Guindy.	Anna University, Chennai	Highly Recommended	2013
M.E	Power Electronics & Drives	Govt. College of Engineering, Tirunelveli.	Anna University, Chennai	84% (**First Class With Distinction**)	2009
B.E	Electrical & Electronics Engineering	MPNMJ Engineering. College, Erode.	Anna University, Chennai	83% (**First Class With Distinction**)	2005
H.S.C	Maths, Physics, Chemistry and Biology	St.Marys Hr. Sec. School, V.K.Puram	State Board, Tamilnadu	83%	2001
S.S.L.C	Maths, Science and Social	St.Marys Hr. Sec. School, V.K.Puram	State Board, Tamilnadu	93%	1999

Scopus Details

- Scopus Author ID: **55312121700**
- h-index: 2

Anna University Supervisor Details

- Anna University Recognized Ph.D Supervisor in the Department of Electrical Engineering
- Supervisor Recognition No: **2330052**

Publications in Refereed International Journals

1. **Gnana Saravanan, A. and Rajaram, M.** "Fuzzy controller for dynamic performance improvement of a half-bridge isolated DC–DC converter" Neurocomputing, Elsevier Journal, Vol. 140, No. 1, pp. 283-290, 2014. **(Annexure-1 Journal having Impact Factor of 1.634)**

2. **Gnana Saravanan, A.** and Rajaram, M. "Analysis of soft switched isolated DC-DC converter for low voltage applications", Turkish Journal of Electrical Engineering & Computer Sciences (Accepted for Publication). **(Annexure-1 Journal having Impact Factor of 0.568)**

3. **Gnana Saravanan, A.** and Rajaram, M. "Dynamic response analysis and output voltage control of asymmetric half bridge DC-DC converter for low voltage applications", International Journal of Electric Power and Energy Systems, Elsevier, Vol. 43, No. 1, pp. 774-778, 2012. **(Annexure-1 Journal having Impact Factor of 3.432)**

4. **Gnana Saravanan, A.** and Rajaram, M. "Artificial Neural Network for monitoring the asymmetric half bridge DC-DC converter", International Journal of Electric Power and Energy Systems, Elsevier, Vol. 43, No. 1, pp. 788-792, 2012. **(Annexure-1 Journal having Impact Factor of 3.432)**

5. Raguraman, L. and Gnana Saravanan, A., "Performance Optimization And Comparison Of Variable Parameter Using Genetic Algorithm Based PID Controller" International Journal of Electrical Engineering & Technology, Vol.4, No.4, pp. 42-47, 2013.

6. Indra Getzy David, Rajaram, M. and Gnana Saravanan, A. "Power Transformer Faults Identification Using Fuzzy Based Dissolved Gas Analysis Method", Journal of Electrical Engineering, Vol.13, No.1, pp. 154-158, 2013.

7. **International Conference Publications : 2**
8. **National Conference Publications: 5**

Membership Details

Sl.No	Organization	Type of Membership	Membership ID Number	Country
1	International Society for Research and Development (ISRD)	Senior Member (Life Time)	SR3140900133	London, United Kingdom
2	Institute of Research Engineers and Doctors (IRED)	Senior Member	SNM10100050 667	California, USA
3	IEEE Membership (Electronic)	Member	1-2842292653	Canada
4	International Association of Engineers (IAENG)	Member (Life Time)	149045	Hong Kong
5	IAENG Society of Artificial Intelligence & Electrical Engineering	Member (Life Time)	149045	Hong Kong

Experience Details

S.No	College Name	From	To
1	Vice Principal & Professor/EEE SCAD College of Engineering & Technology, (NBA Accredited Institution & Recognized by UGC under the Section 2(f) and 12(B)) Cheranmahadevi - 627414. Tirunelveli District, Tamilnadu, India.	12.09.2005	Till date

Awards & Achievements

➢ **BEST PAPER AWARD** in the DRDO sponsored National conference organized by National Engineering College Kovilpatti.

➢ Award for **100%** Results in Anna University Examinations.

➢ Award for **First Rank in M.E.** & **B.E.** course.

➢ Award for **maintaining 100% attendance in B.E.** course.

➢ Award for **Best Utilization of Library** in B.E. course.

➢ Second Place in State level Technical Cross word competition.

➢ Third Place in State level Essay competition.

➢ Awarded First & Best place in various cultural competitions in B.E. course.

Summary of Ph.D Research Work

- **Title:** Performance Improvement of Half Bridge Isolated DC-DC Converter Using Artificial Intelligent Techniques

- **Description:** In this work, half bridge isolated DC-DC converter operation, monitoring and its controller design is investigated to meet the challenges of soft switching, current sharing and high volumetric power density for effectively processing the energy. It also investigates the effectiveness of an artificial neural network while training as an asymmetric half bridge DC-DC converter circuit. This sort of identification is valuable for many sensitive applications where the small deviations in the converter output can cause undesirable problems. The use of small signal model of the converter in conjunction with artificial intelligence guarantees excellent dynamic response. The artificial intelligence based experimental results reveal the improved system response.

Research Areas

- Methanol Based Fuel cell power Generator
- Micro grid

In order to secure a good future, the current energy emissions should be reduced and the energy production should be based on renewable energy sources. Use of batteries creates large and expensive logistical footprints, while diesel generators are noisy, maintenance intensive and consume large amounts of fossil fuels. The potential advantages of a fuel cell for providing energy includes: reduced maintenance, High Reliability and environmentally beneficial.

Microgrid is a small, independent power system with increased reliability, integrating the alternative energy sources.

Date: 09.03.2016 Dr. A. Gnana Saravanan