

**Dr . A.Soundarrajan**  
**Professor**  
**Department of Electrical & Electronics Engineering**  
**PSG College of Technology, Coimbatore – 641 004**  
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## EDUCATION

### DOCTORATE

(Dec/2011)

Anna University, Chennai - 2011

“Investigations on the applications of Intelligent controllers for Voltage and Frequency Control in Power Generating Systems”.

Area of Research: Soft Computing Techniques for Electrical Engineering Applications

### POSTGRADUATE

(May/2003)

M.E – Applied Electronics

PSG College of Technology

Bharathiar University

### UNDERGRADUATE

(APRIL/1999)

B.E (EEE)

Coimbatore Institute of Technology, Bharathiar University

### DIPLOMA (1993)

“Electrical and Electronics Engineering”

PSG Polytechnic College,

Department of Technical Education, Government of Tamilnadu.

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## EXPERIENCE

- 1) Larsen & Toubro Ltd.,(ECC Group) - 1 year  
Andhra pradesh.
- 2) Lakshmi Electrical Control System Ltd.,( LMW Group) - 3 years  
Coimbatore
- 3) Prakash Industrial Service, Coimbatore Region - 2 years
- 4) Department of Electrical & Electronics Engg. - 7 years  
Sri Ramakrishna Engineering College,

- |  |                         |
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| 5) Department of Information Technology<br>PSG College of Technology         | - June'2007 to May 2017 |
| 6) Department of Electrical & Electronics Engg.<br>PSG College of Technology | -From June'2017         |

## **COURSES HANDLED**

### **UNDERGRADUATE**

- Basics of Electrical and Electronics Engineering
- Electronic Devices
- Computer Architecture
- Digital Logic Design
- Total Quality Management
- Managing for Total Quality

### **POSTGRADUATE**

- Computer System Architecture & Design
- Cybercrime Investigations and Digital Forensics
- Cyber Security
- Ethical Hacking & Network Defense

## **RESEARCH AREAS**

- Soft Computing
- Power System Optimization
- Evolutionary Algorithms
- Cyber Security
- Industrial Automation using IoT
- Energy conservation and Management
- Intelligent Controllers

## **PUBLICATIONS**

### **INTERNATIONAL JOURNALS**

1. **A.Soundarrajan, Dr.S.Sumathi, R.Gowtham,**" Fuzzy-based Intelligent Controller for Power Generating Systems", International Journal of Vibration and Control, Vol.17, No.8, pp.1265-1278.

2. **A. Soundarrajan**, S. Sumathi, G. Sivamurugan, "Voltage and Frequency control in power generating systems using hybrid evolutionary algorithms" International Journal of Vibration and Control, Vol.18, No.2, pp.214-227.
3. **A.Soundarrajan**, Dr.S.Sumathi, G.Sivamurugan, "Evolutionary Algorithms for LFC in two area interconnected power systems", International Journal of Artificial Intelligent Systems and Machine Learning, Vol.5, Iss.1, 2010.
4. **A.Soundarrajan** & Dr.S.Sumathi, Particle Swarm Optimization Based LFC and AVR of Autonomous Power Generating System, "Statistical & Soft Computing Techniques For System Analysis and Design", IAENG International Journal of Computer Science, Special Issue,37:1, IJCS\_37\_1\_10, 2009.
5. **A.Soundarrajan** & Dr.S.Sumathi, "GA based PID controller for Load Frequency Control", International Journal on Advances in Computational Sciences and Technology(ACST), Vol.2 No.3, 2009.
6. **A.Soundarrajan** & Dr.S.Sumathi, "Effect of Non-linearities in Fuzzy Based Load Frequency Control", "International Journal of Electronics Engineering Research (IJEER)", Vol.1 No.3., 2009.
7. **A.Soundarrajan** & Dr.S.Sumathi, "Fuzzy based intelligent controller for LFC and AVR of a power generating systems", International Journal of Emerging Technologies and Applications in Engineering, Technology and Sciences, Vol.3, Issue.1, 2010.
8. **A.Soundarrajan**, Dr.S.Sumathi, C.Sundar, "ACO based PID controller for AVR in Autonomous power generating systems", International Journal of Recent trends in engineering, Vol. 3, Issue.4, Aug, 2010.
9. **A. Soundarrajan**, S. Sumathi, G. Sivamurugan, "Hybrid Evolutionary Algorithms for frequency and Voltage Control in Power Generating systems" ICTACT International Journal on Soft Computing", Vol.1, No.2, pp.88-97, 2010.
10. **A. Soundarrajan** and N.R.Naharaj, " Fuel cost minimization using an improved particle swarm optimization", GE-International Journal of Engineering Research, Vol.2, No.5, ISSN 2321.1717, pp.12-19.
11. **A.Soundarrajan**, Rajadurai, N.R.Naharaj, "Optimal Dispatch through deterministic dual objective particle swarm optimization", International Journal of Innovative research in EEIC engineering, Vol.2, No.10, ISSN 2321-5526, pp.2088-2095.
12. **A.Soundarrajan** and Haritha Deepthi, "Synchronizing clocks in large scale wireless sensor networks", "International Journal of Advanced Computer Technology", Feb 2014, ISSN 2320 – 0790.
13. **A.Soundarrajan**, Diwakar.M and Rajesh R Nambiar, "Implementation of Virtual Laboratory using

- Bring Your Own Device concept”, National Journal of Technology, Vol.10, No.5, pp.78-85.
14. N.Kavithamani, N.R.Naharaj, S.S.Sivaraju and **A.Soundarrajan**, “Wind Farms And Conventional Plants Primary Frequency Control Interaction”, International Journal of Applied Engineering Research, Vol. 10 No.64, pp.77-82, 2015
  15. N.R.NAHARAJ, BINCY.B.BABU, S.S.SIVARAJU, and **A.SOUNDARRAJAN** “A Neural based Control System Used to Improve Energy Production from Alternative Sources”, International Journal of Applied Engineering Research, Vol.10 No.64, pp.21-26, (2015).
  16. P.Priya, N.R. Naharaj, s.s.sivaraju and **A.Soundarrajan**, “The Grid Connected Photovoltaic Micro Inverter System Using MPPT”, International Journal of Applied Engineering Research, Vol. 10 No.64 pp.121-125, 2015.
  17. K. Thangarajan, **A.Soundarrajan** and K. Sivaramachandran, “Application of an Internal Model Control Schemes For PMSM Speed Regulation Using Fuzzy Adaptive Law”, International Journal of Applied Engineering Research, Vol. 10 No.64, pp.57-62, 2015.
  18. K. Thangarajan, **A.Soundarrajan** and Selda Rose K A, “Design of ANFIS Controlled Resonant Converter For Photovoltaic Applications”, International Journal of Applied Engineering Research, Vol. 10 No.64, pp.143-148, 2015.
  19. K. Thangarajan, **A.Soundarrajan** and L.Rathidevi, “A Neural Network Based Matrix Converter For Torque Ripple Reduction In PMSM”, International Journal of Applied Engineering Research, Vol. 10 No.64 pp.33-38, 2015.
  20. K. Thangarajan, **A.Soundarrajan** and K. Sivaramachandran, “Nonlinear Speed Management For Static Magnet Electric Motor Victimisation Model Prophetic Management”, International Journal of Applied Engineering Research, ISSN 0973-4562, 2015.
  21. K. Thangarajan, **A.Soundarrajan** and K. Sivaramachandran, “Sensorless Speed Control For PMSM Drive Using Model Predictive Control”, International Journal of Applied Engineering Research, Vol. 10 No.64, pp.102-113, 2015.

## WORKSHOP ORGANISED

- Workshops / Seminars Organised: 24
- Conferences Organized : 8

## REVIEWER FOR THE INTERNATIONAL JOURNAL

- National Journal of Technology
- IAENG Journal
- ICTACT
- EURASIP

- INDERSCIENCE

### **SEMINARS / CONFERENCES ATTENDED**

- WORKSHOPS / SEMINARS ATTENDED : 24

### **SPECIAL LECTURES DELIVERED**

Guest Lecture delivered in = 32  
Seminars/Workshops/SDP/FDP/Associations/Chapters

### **PROFESSIONAL MEMBERSHIP:**

Life Member in

- 1) Indian Society for Technical Education ( ISTE)
- 2) International Association for Engineers (IAENG)
- 3) International Association for Computer Science and Information Technology ( IACSIT)
- 4) ACADEMIC ADVOCATE MEMBER IN ISACA

### **Special Achievements & Awards**

- 1) Received “Privilege Partner Award” and “Best Academic Partner” awards for our campus from EMC Corporation
- 2) Received “Best Academic Officer” award for the year 2008 from EMC Corporation
- 3) Received Appreciation Award from VMware, March 2017