



## REGISTRATION FORM

Name : .....

Designation : .....

Name of the organization with full address :  
.....  
.....  
.....

Email : .....

Phone: ..... Mobile:.....

Fee Details :

DD No.: ..... Amount:.....

Dated : .....

Accommodation :      Yes              No

Place : .....

Date : .....

Signature of the Participant

Note: This form may be photocopied and used

### CHIEF PATRON

Dr. Shiv Nadar, Founder, SSN Institutions, Chairman,  
HCL Technologies & Chairman, Board of Governors,  
IIT Kharagpur

### PATRON

Ms. Kala Vijayakumar, President, SSN Institutions

### GENERAL CO-CHAIRS

Dr. S. Salivahanan, Principal, SSNCE  
Dr. K. Kasturi, Dean, SSNCE  
Dr. P. Ramasamy, Dean (Research), SSNCE

### CONVENER

Dr. V. Kamaraj, Professor & Head, EEE, SSNCE

### CONFERENCE CHAIR

Dr. Ranganath Muthu, Prof., EEE, SSNCE

### ORGANIZING SECRETARIES

Dr. R. Seyezhai, Assoc. Prof., EEE, SSNCE  
Dr. R. Ramaprabha, Asst. Prof., EEE, SSNCE

### TREASURER

Mr. M. Balaji, Asst. Prof., EEE, SSNCE

### TECHNICAL COMMITTEE

Dr. R. Arumugam  
Dr. A. N. Arvindan  
Dr. Aswin Kumar Sahoo  
Dr. R. Rengaraj

### TUTORIAL COMMITTEE

Dr. B. L. Mathur  
Dr. V. Rajini  
Mr. N. Pandiarajan

### PROGRAM COMMITTEE

Mr. A. Balasubramanian  
Ms. Mrunal Deshpande  
Mr. R. Leo I Mr. R. Ramesh  
Mr. M. Senthilkumar  
Ms. Latha Dinesh I Mr. K. Murugesan  
Ms. Alaghu Dheeraj I Mr. U. Shajith Ali  
Ms. R. Deepalaxmi I Ms. S. Krishnaveni  
Mr. P. Saravanan I Mr. N. B. Muthuselvan  
Mr. M. Pandikumar I Ms. J. Anitha Roseline  
Mr. M. Devesh Raj

Second National Conference on

# POWER ELECTRONICS AND RENEWABLE ENERGY SYSTEMS PEARES-2012

March 22-23, 2012



Organized by



## SSN COLLEGE OF ENGINEERING

Department of Electrical and Electronics  
Engineering, Rajiv Gandhi Salai, Kalavakkam-603 110

Supported by



MADRAS SECTION



SOUTH INDIA SECTION

www.ssn.edu.in



## ABOUT THE INSTITUTION

Sri Sivasubramaniya Nadar College of Engineering (SSNCE) is the outcome of the vision and initiative of Padma Bhushan Dr. Shiv Nadar, Chairman of HCL Technologies Ltd., a pioneer in the field of Information Technology. The Institution reflects the ideals of its founder and seeks to achieve excellence as an academic institution and advanced research centre.

Established in 1996 on a sprawling campus of 250 acres on the Rajiv Gandhi Salai (OMR), known as “Cyber Corridor” of Chennai, the Institution offers eight B.E. / B. Tech. degree programmes in Electrical & Electronics, Electronics & Communication, Computer Science & Engineering, Information Technology, Chemical, Biomedical, Mechanical and Civil. In addition, the Institution offers seven M.E. degree programmes in Power Electronics & Drives, Computer & Communication, Communication Systems, Computer Science & Engineering, Applied Electronics, VLSI Design and Software Engineering, in addition to MBA and MCA courses. NAAC has accredited the ISO 9001:2008 certified Institution with an A Grade. NBA has also accredited undergraduate and postgraduate programmes. The Institution consistently ranks first among all colleges affiliated to Anna University Chennai. Careers 360 magazine in the June 2011 issue has given the College AAA ratings in Tamil Nadu and India for being among the best engineering colleges in India. The Management awards over 400 scholarships worth Rs 4.3 crores every year to meritorious and deserving students. The College has Wi-Fi connectivity and state of the art laboratories and software.

## ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering offers NBA accredited B.E. degree programme in Electrical and Electronics Engineering and M.E. degree programme in Power Electronics and Drives. Prominent and leading employers include AREVA, L&T, SIEMENS, CTS, Wipro, Infosys, TCS, Polaris, iNautix, Birla Soft, Hexaware, etc. In addition, a sizable number of students pursue post-graduate studies at renowned institutions in India and abroad. The Department has 28 highly qualified faculty members including 10 PhD holders. The Department is well equipped with state-of-the-art laboratories and recognized as a Research Centre by Anna University Chennai and Anna University of Technology Chennai with 8 PhD Supervisors. 50 PhD scholars have registered with the Department of which 8 have received their PhD degree. The department has signed MoU with Danfoss Industries Pvt. Ltd, Chennai and taken up research projects funded by AICTE, C-WET and SSNCE. The Department has organized one International Conference, three National Conferences, five Faculty Development Programmes sponsored by Anna University, three Short-term Training Programmes sponsored by AICTE – ISTE and many Workshops. The first National Conference on Power Electronics and Renewable Energy Systems (PEARES-2009) held during March 19-21, 2009 had more than 100 delegates as participants.

## OBJECTIVES

The Second National Conference on Power Electronics and Renewable Energy Systems (PEARES-2012) will provide a platform for academicians, researchers, scientists, industrial professionals and students to present their research findings and developmental activities in the broad area of Power Electronics and Renewable Energy Systems. This conference will provide opportunities for delegates to exchange new ideas and their experiences and establish relations for future collaborations.

## CALL FOR PAPERS

The Organizing Committee invites research scholars, students, academicians, practicing engineers and scientists to submit original contributions based on the results of research and developments. Prospective authors may kindly submit their papers, not exceeding six pages, in IEEE double column format electronically through E-mail. Accepted papers will be included in the Conference Proceedings if at least one of the authors registers for the conference. Topics of interest for submission include, but not limited to:

### ENERGY SOURCES

- Wind energy conversion systems
- Solar energy systems
- Fuel cell technologies
- Battery energy and storage systems
- Grid control
- Other renewable energy technologies

### POWER ELECTRONICS

- Advanced power semiconductor devices
- Soft switching converters
- Multilevel converters
- Matrix converters
- Power converters modeling, simulation and control
- Power factor improvement
- EMI and over-voltage protection
- Active filters and harmonics

### POWER SYSTEMS

- Power supplies
- Distributed and co-generation systems
- Energy management and environmental issues
- Hybrid power systems and smart grids
- Integrated power generation systems
- Deregulation
- FACTS and HVDC

### ELECTRIC DRIVES

- Induction machines
- Reluctance machines
- Permanent magnet machines
- Sensorless control
- EMI/EMC
- Computational methods
- High frequency system simulation

## CONFERENCE TUTORIAL

The Conference Tutorial, scheduled for March 22, 2012, will provide a thorough grounding on topics such as Modeling of Solar PV Systems, Fuel Cells and Wind Generators using MATLAB and Intelligent Techniques to address Power Electronics problems.

## IMPORTANT DATES

Submission of Paper	: February 13, 2012
Notification of Acceptance	: February 27, 2012
Submission of Final Paper with Author's Registration	: March 9, 2012
Conference	: March 22-23, 2012

## REGISTRATION

Please send the duly filled-in registration form to the Organizing Secretary on or before February 13, 2012. The demand draft is to be drawn in favor of “The Principal, SSN College of Engineering” payable at Chennai. The registration fee, which covers the cost of registration kit, participation in all the activities of the conference, lunch and tea, is as follows:

Faculty from Academic Institutions / Research Scholars	Rs. 1000
Students	Rs. 500
Participants from Industries/ R & D Organizations	Rs. 1500

Regular members of IEEE and ISA get 20% discount in their registration fees.

## ACCOMMODATION & TRANSPORTATION

Limited hostel accommodation is available for outstation participants and provided on payment, as per College norms, on advance intimation. Bus routes and timings are available in the College website [www.ssn.edu.in](http://www.ssn.edu.in).

## CONTACT DETAILS

Organizing Secretary, PEARS-2012  
 Department of Electrical and  
 Electronics Engineering  
 SSN College of Engineering  
 Rajiv Gandhi Salai (OMR)  
 Kalavakkam-603 110  
 Tel: 044-27469700  
 Fax: 044-27469772  
 E-mail: [peares2012@gmail.com](mailto:peares2012@gmail.com)