Conference Report

National Institute of Technology Kurukshetra, in collaboration with the Power & Energy Society- Industrial Application Society (PES-IAS) & Power Electronics Society-Industrial Electronics Society (PELS-IES) Chapters of IEEE Delhi Section, is organizing 6th India International Conference on Power Electronics (IICPE-2014) from 8th December to 10th December, 2014. This prestigious conference is being jointly organized by the Department of Electrical Engineering and the Department of Electronics & Communication Engineering and is supported by Department of Science & Technology, New Delhi. It is a matter of pride for NIT Kurukshetra to host such a great event of International repute. We received 224 papers in all out of which 144 papers were finally selected for presentation. The papers were reviewed by eminent experts from all over India and abroad, meeting standards of IEEE. The delegates whose papers have been selected for presentation were required to present their papers in the Conference during these three days. Eminent experts of international repute in their respective fields were invited to deliver the plenary talks and tutorials. 135 papers to be presented during the conference were arranged in 20 technical sessions of different tracks according to specialization.

The inaugural programme of the conference took place at Senate Hall of the Institute on 8th December 2014 at 10.30 AM. The programme was presided over by the officiating Director Prof. V. K. Sehgal. Prof. K. K. Sen, Fellow IEEE,
from USA was the Chief Guest and Prof. Bhim Singh from IIT Delhi and Patron of IICPE 2014 was also present. A large number of participants from premier institutes of technology from India and abroad arrived to attend this conference. Prof. K. K. Sen delivered a keynote address on ‘Application of Power Electronics in Electric Power Grid’. He highlighted the role of power electronics in improving the efficiency of electric grid. Prof. Bhim Singh also spoke on the occasion and enlightened the audience regarding the role power electronics is playing in our day-to-day life by bringing more efficiency into common household appliances like fans, light etc.

Later during the day a tutorial session on topic ‘Smart Power Flow Controller for Smart Grid Application’ conducted by Prof. K. K. Sen was well received by the delegates. He conducted two hour tutorial session with a theme of FACTs application in Power sector and discussed about a new technology of Sen Transformers which acts like a UPFC FACTs devices having similar capability as of UPFC. But the Sen Transformer is highly economical compared to its analogous device UPFC. This device has revolutionized the whole world in Power sector and in future electrical utilities can adopt this technology for higher efficiencies at low cost. The audience appreciated the efforts of Prof. Sen in this direction of contribution to the technology.

, held in parallel at four conference rooms in the institute, where research papers in various areas of power electronics were presented by the participants.

The same was followed by Technical session of different tracks. There was one technical session (arranged in 4 parallel sessions organized) on 8th December and delegates presented papers. The technical sessions were chaired by eminent personalities Prof. Sen, Prof. Mini Thomas, Prof. D. K. Jain and Prof. S. Mukhtyar on 9th December, 2014. Prof. Bhim Singh from IIT-Delhi discussed the role of Power Electronics in modern Power devices. High efficiency
Power devices are the need of the day which will help to save huge amount of energy and in term will relieve high power demand on utilities. He also emphasized that wind energy utilization and LED technology in future will be of great use to go for green energy.

On 9th December-2014, Prof. M. Veerachary also delivered plenary lecture on the theme of Solar System and its role in development of green technology. He discussed the basic concepts explaining in a highly impressive way to the participants and all the participants appreciated the plenary lecture.

Also, Prof. Bhim Singh from IIT-Delhi delivered plenary lecture on the control of permanent magnet Brushless motors.

There were 03 technical sessions arranged in 4 parallel sessions of different tracks. The all sessions were chaired by eminent exports.

On 10th December, 2014, 4 technical sessions were arranged in the morning session. The all sessions were chaired by well known exports of their field.

On 10th December, 2014, Prof. V. K. Sood from Canada delivered tutorial on VSC and HVDC technology to the participants. He emphasized on the role of VSC based power connectors in HVDC technology which made it possible to connect different grids at different frequencies. The HVDC technology has made possible to transfer high amount of power in the transmission corridors. The back-to-back HVDC technology all over the world and in India has made possible to inter connect all the regional grids to one national grid. This will help the better and efficient utilization of the power sector. The delegates appreciated the tutorial session Int. Copper Association India Er. Y.P. Sood from delivered an expert talk on energy efficiency measures in the motors and its role in the power sector for energy savings. He informed to the participants that Indian utilities must go for standards 3 STAR, 4 STAR motors which follows international and national codes for higher efficiency of the system. The use of higher efficiency motor will save not only the bills but will put less burden o the utilities.

The tutorials and plenary lectures delivered by eminent personalities were appreciated by all delegates and have given inputs to our young budding
students as well as family members to breed idea and implement them for factor research in the direction of power electronics.

Out of 135 registered papers 133 papers were presented. It is a matter of honor for NIT Kurukshetra that all the delegated from all over India/ abroad participated in the event based on the report by eminent chair persons, some papers are of excellent quality and will be recommended for IEEE transaction on industrial applications.

The certificates to the presenting authors were delivered by the session chairs in each technical session.

After the special talk by Er. Y. R Sood, from International Copper Association India, who was also organizing partners of the conference, the three days program valediction was held.

The technical chair presented the brief technical report of the conference and propose vote of thanks on behalf of organizing committee by sincerely thanking Director, NITK for providing infrastructure and all logistic support to the conference, the pattern of the conference for their financial support, the advisory committee, all speakers of the conference, reviewers from all over India and abroad, technical sponsor IEEE IAS-PES and IEEE-PELS, IEEE Delhi section and the oversight committee members.

The General Chair of the conference also thanked all the delegates, all members involved in successfully organizing this International repute conference and in the end the declared the conference closed.