

IEEE The Institute of Electrical and Electronics Engineers. Inc

Message from Chairman

OCTOBER,2011..

Dear Members,



Greetings from IEEE INDIA COUNCIL. October is month of festivals. Our Heartiest Greeting on these festivals. May the GOD give us and the family Happy, Healthy, Prosperous and Joyful life. All yours desires be granted.

During the month IEEE India Council, Delhi Section has been awarded the recruiter under IEEE Member-Get-a-Member Award. Following is the text addressed to the Chair Prof. Shiban K Koul from IEEE MGA:

I am pleased to inform you that your exceptional recruiting efforts in the IEEE Member-Get-a-Member (MGM) program during 2011 have earned the Delhi Section an additional award of \$1000. You were the first place recruiter in the Asia and Pacific Region, and the top overall recruiter across all IEEE (for the second year in a row I might add - very impressive).

Many Many Congratulations.

During the month we also had an impressive All India Students Congress, the platform to showcase our tradition of providing an optimum environment for students in technical know-how, leadership skills and nurturing talent and creativity. It integrate knowledge and ignite innovating minds. The meets hold at JMI Delhi. The number of attendees including volunteers and dignitaries was 187 (IEEE members 178, non members 9). A full report is attached.

As indicated in my First Message of April,2011, IC will recognize the services rendered by our Senior Superannuated Members and will reimburse the IEEE Membership paid by them in case they have no other source of income other then the pension. In this regard, we would like to have the inputs from the members and names of such member with full details like name, membership no., section, and present IEEE activities. In lieu of this, we would like these members to take at least two lectures at any IEEE Student Branch on topics of their choice. So far I have received no input on the subject.

Looking forward for your inputs. Thanks.



Dr. Ram Gopal Gupta

That is IT in September 2011

Prof. S. Sadagopan

1. <u>General</u>

- "Namma Metro" (Bangalore Metro) clears all safety check on September 23, 2011 and ready for launch on October 20, 2011
- Government hikes petrol price by more than Rs 3 per liter on September 15, 2011, adding to the already high inflation
- Telengana agitation disturbs normal life in Andhra from September 15, 2011
- One more terrorist attack in India; Delhi blast on September 8, 2011 takes dozen lives
- There were a number of accidents; train accident in Tamil Nadu on September 13, 2011 claims 20 lives;
- Nuclear accident in France kills 1 person on September 14, 2011;
- Massive earthquake (measuring 6.8 in Richter scale) in North East (Sikkim) and Nepal on September 18, 2011 leads to heavy loss of life; and,
- Nepal air rash on September 25, 2011 kills 19 people
- Every sixth American (49.9 million Americans) lives below poverty line (\$22,113) (US Census Bureau)

2. <u>Technology</u>

- Intel unveils solar powered chip and talks of \$800-1,000 ultra books (compact laptop computers)
- With Intel joining Android camp, and Microsoft testing out Windows 8 on ARM processor, the "Wintel" monopoly seems to be nearing; similarly, with HP planning to get out of PC business, HP Microsoft partnership is getting over; with Oracle and Cisco getting into HP territory, HP, Oracle and HP Cisco partnership has failed in the recent past. All major partnerships between IT majors are in trouble!

3. Products

- Amazon unveils \$ 199 Tablet "Fire" on September 28, 2011
- Vodafone launches Facebook phone in India aggressively in September 2011
- Nokia launches Nokia 100 low cost (Rs 1,100) dual SIM phone in the Indian market
- Cisco launches "Cius" tablets on September 29, 2011 in India
- Microsoft launches Windows 8 for developers on September 13, 2011

4. Markets

- Sensex loses 244 points on September 30, 2011
- On September on September 30, 2011, IBM market capitalization goes past Microsoft for the first time after 1996
- Broadcom set to acquire NetLogic for \$3.7 billion on September 11, 2011
 Google decides to acquire Restaurant Reviewer site Zagat on September 12, 2011
- Chennai-based Vembu buys Cloud-Nucleus for \$ 10 million on September 12, 2011
- IBM acquires Analytics companies British-based i2 (that specializes in analytics and fraud management and different from supply chain company i2 Technologies) on September 1, 2011 US-based CSC (Computer Science Corporation) acquires Hyderabad-based testing services company AppLabs on September 14, 2011

5. Indian IT companies

- SoftBank of Japan pumps \$ 200 million in Bangalore-based start up InMobi (in mobile advertisements space) on September 19, 2011
- Mahindra start 5-seater aircraft test flight in September 2011
- 6. MNC companies in India



- 3M invests Rs 100 crores in a new R& D Centre in Bangalore on September 23, 2011
- Samsung triples handset production in India and invests \$70 million
- GE talks of Rs 1,000 crores investment in India
- Microsoft Research completes 20 years on September 27, 2011; MSR India will soon be seven years in Bangalore and has a very successful operation in India

7. Education & Research

- CSIR announces Bhatnagar prize winners on September 26, 2011; the eleven scientists (of the 463 till 2010) are (as per Press Information Bureau)
 - Amit Sharma of ICGEB, New Delhi and Rajan Sankaranarayanan of CCMB, Hyderabad (Biological Sciences)
 - Balasubramanian Sundaram of JNCAR, Bangalore and G N Sastry of IICT, Hyderabad (Chemical Sciences)
 - Shanker Doraiswamy of NIO, Goa (Earth, Atmosphere, Ocean & Planetary Sciences)
 - Sirshendu De of IIT Kharagpur and Upadrasta Ramamurthy of IISc, Bangalore (Engineering Sciences
 - Mahan Maharaj of RMV University, Kolkata and Palash Sarkar of ISI, Kolkata (Mathematical Siences)
 - K N Balaji of IISc Bangalore (Medical Sciences), and
 - Shiraz Minwalla of TIFR, Mumbai (Physical Sciences)

8. <u>People</u>

- HP CEO Leo Apotheker steps down and Meg Whitman (former eBay CEO) takes charge as HP CEO on September 22, 2011
- Yahoo CEO Carol Bartz is fired, that too over phone on September 7, 2011
- GE CEO Immelt visits India during September 20 25, 2011
- Kambar from Karnataka wins Jnanpith Award for the year 2010 (Bhartiya Jnanpith Foundation)

9. Some interesting numbers

- India's wireless subscriber base increased by 6.67 million in July 2011 to 858.37 million; wire-line subscribers decreased by 0.11 to 34.18 million in July 2011; broadband customer base increased by 0.12 million to 12.50 million. The active wireless subscriber stood at 601.73 million. Wireless subscriber base has been steadily decreasing for several months at a steady rate; broadband subscriber base increase is also steady and slow; wireless subscriber base has been increasing at 10+ million for several months, but increased by mere 6.67 million in July for which we have the official data; it will be interesting to watch its growth in the coming months (TRAI Press Release 47/2011 of September 9, 2011) (August data yet to be posted by TRAI as of October 17, 2011)
 BSE (Bombay Stock Exchange) Index Sensex ends at 16,453 on September 30, 2011
- On September 30, 2011 the currency exchange ratio of USD to INR stood at 48.95; by September end, India's Foreign exchange reserves (Forex Reserve) was at \$311.482 billion (RBI Statistical Bulletin)
- Karnataka accounts for 75% of India's flower output
- SBI has 12,000 branches as of September 5, 2011 and installs 120,000 fans in 12,000 schools nationwide (Part of CSR activity)

IIMA average, max, min compensation package at Rs 16 Lakhs, 37 Lakhs and 8 Lakhs!

Universal with 29%, Sony Music with 23%, Warner with 15% and EMI with 10% the top 4 account for more than 75% of recorded music!

The Institute of Electrical & Electronics Engineers (IEEE), Hyderabad Section IEEE PES/IAS/PELS Joint Chapter, Hyderabad Section

Invites you for

Half Day Tutorial on Power system Reliability - Concepts & Techniques.

Date	: 29th November 2011.
Venue	: Powergrid Conference Hall, 4th floor, MCH Complex, R.P.Road, Secunderabad-3
Time	: 0930 hrs 1230hrs
Speaker	: Dr.Lalit Kumar Goel (IEEE R10 Regional Representative, PES)

This presentation will discuss the fundamental concepts of power system reliability at all levels, namely generating capacity, generation and transmission combined capacity, as well as distribution systems. The use of quantitative stochastic reliability indices as opposed to

deterministic "rule-of-thumb" indices will also be discussed.

The talk will also cover aspects of customer interruption costs for cost-benefit analyses to support decisions on investments and maintenance for enhancing supply reliability. The overall thrust of the presentation is on the fact that probabilistic methods are as important and critical today as they were a few decades ago, particularly in the light of increased pressure for economic justifications and the need to manage our assets effectively, efficiently and reliably. The talk will also cover in some detail the calculation of generation capacity reliability indices including load forecast uncertainty.

About Speaker:

Lalit Goel was born in New Delhi, India, in 1960. He obtained his B-Tech Degree in electrical engineering from the Regional Engineering College, Warangal, India in 1983, and his MSc and PhD degrees in electrical engineering from the University of Saskatchewan, Canada, in 1988 and 1991 respectively. He joined the School of EEE at the Nanyang Technological University (NTU), Singapore, in 1991 where he is presently a professor. He served as the Head of the Division of Power Engineering from July 2005 to August '08. Since July'08, he is serving as the Dean of Admissions & Financial Aid (redesignated Director of Admissions Financial -Aid with effect from 1 July 2011).Dr Goel is a senior member of the IEEE. He has received more than 18 teaching awards at the Nanyang Technological University.

He has served in various capacities on the conference committees of IEEE Power Engineering Society (PES) Energy Management and Power Delivery (EMPD) conferences, IEEE PES Winter Meeting 2000, International Power Engineering Conferences (IPEC), IEEE PES Powercon2004, Tencon2009 and PMAPS2010. Dr Goel received the IEEE PES Singapore Chapter Outstanding Engineer Award in 2000, and the IEEE PES Outstanding Power Engineering Educator Award in 2009. Dr Goel is the Editor for the International Journal of Electric Power Systems Research, and an editorial board member of the International Journal for Emerging Electric Power Systems. He served as deputy director of NTU's Protective Technology Research Center (PTRC) from May 1999 to April 2007.Dr Goel served as the IEEE Singapore Section Chair from January 2007 to December 2008, and is currently the Asia-Pacific Representative on the IEEE PES Governing Board.

Registrations Fee: IEEE Member: 100/-; Non IEEE Member: 400/-

Queries : Sampangi apparao/ Mithun M.Bhaskar Telephone:9848943077/9293181378 Email: sampangi_apparao@aptransco.gv.in thun.bm@ieee.org

Directions to Venue: http://bit.ly/nvYox8

GOING Electric in transportation

Dr.S.Thiruvengadam, Professor of Eminence Department of Electrical Engineering Valliammai Engineering College. SRM Nagar, Kattankulathur- 603 203.

Introduction: More and more Electric (EV) and Hybrid Electric Vehicles (HEV) are being launched nowadays. Such vehicles actually date back to late 1800s when many American and European inventors were developing such electricity powered automobiles. Several were built in 1890s. But these electric cars could only move in areas from where they could easily return home to recharge. These early electric vehicles were slower than their gasoline counterparts. Their heavy batteries required frequent maintenance. In 1891 the first successful electric car was built by William Morrison with 4HP motor and 24 cell battery(350gm). Its top speed was 22km/hr. Alva Edison also spent lot of time and effort to promote EVS. He developed in 1909 a nickel iron alkaline battery for car. It had a weight of 54 Pounds/HP-Hr. In spite of his attempts to improve the battery, problems were encountered in their performance. So, EV's lost, temporarily, the race against gasoline powered vehicles. But in early 70's concerns about soaring gas prices and environment, renewed interest in EV's. Companied like Sebring- Vanguard and GM produced EVS. But still the limitations in the performance of batteries remained to be addressed. This led to the birth of hybrid vehicles using both gasoline and electric motors. Toyota launched a commercial hybrid around 2000. Nowadays Chevrolet has its version of HEV in the market. More innovative cars with an eye on fuel efficiency are being built to go on the road soon, in large numbers. The battery being the core of the HEV system, there are certain basic concerns that are to be tackled for HEVs to be adopted enthusiastically by users.

Some of them are:

- 1. Charging stations have to be built. They have to be available for public use. These require infrastructure involving several hundred amperes of spare capacity. They may be expensive.
- 2. Several charging facilities in one area may overload the local transformers leading to a brownout or blackout.
- 3. Battery capability reduces with time i.e say after about thousand charge-discharge cycles. It is also affected by how the battery is charged and the climatic conditions. An EV's range will decrease if driven very aggressively.
- 4. Suitable measures for recycling of batteries are to be introduced requiring vendors to reclaim and recycle the batteries.
- 5. Aged EV batteries, which cannot hold charge, can be used at home as backup sources of electricity.

Conclusion: Electric and hybrid vehicles can earn widespread acceptance only after certain basic issues outlined above are satisfactorily sorted out. But there is a surge of interest in the present power electronics engineering community who are engaged in innovative projects in the field. Some of them are

- (1) Projects focusing on using renewable energy sources to help power plug-in hybrid EV's, (PHEV) are on the anvil.
- (2) Computer programs are being developed to manage power in HEV.

Indicon 2011

MGPL Narayana

This year IEEE-Hyderabad Section is organizing INDICON 2011.

IEEE INDICON is the prestigious annual conference of the IEEE India Council that is being held since 2004. INDICON covers the fields of Computer Sciences and Engineering, Electrical Engineering, electronics and Communication Engineering, Bio-medical Engineering, Life Sciences, Technology Management among other areas of discipline of the IEEE. Indicon 2011 will be organized during 16-18 December 2011.

INDICON 2011 has launched a video contest for students. The theme of the video should match the Indicon 2011 coneference theme "Engineering Sustainable Solutions".

For more details please follow the link http://bit.ly/oDufiU

Website: http://indicon2011.org/

Facebook Page: IEEE Indicon 2011

Thank you.

CAMP ON HEALTH AWARENESS AND PREVENTIVE MEASURES FOR WOMEN- 29-08-2011 REPORT

DRNGPIT IEEE WIE affinity group of Dr. N.G.P.Institute of Technology organized a CAMP on "Health Awareness and Preventive Measures for Women" on 29 August 2011 for the women students & faculty in its campus. Mrs P. Pradeepa, WIE staff coordinator warmly welcomed the gathering. Presiding over the session was our honorable secretary Dr. Thavamani D. Palaniswamy. She stressed upon the benefits of healthy mind through a healthy body and the importance of health conscious for the working women & students. She introduced Dr. Rupa, Consultant Radiologist, KMCH, the chief guest of the occasion.

Dr. Rupa elucidated the high possibility of cancer among women. She referred to the statistics that 1 in 100 women in India is prone to one or the other kind of cancer, whereas in U.S.A, the ratio is 30 in 100. However the mortality rate in India is much greater than the same in U.S.A. This is because of the lack of awareness among the Indian population about cancer and its preventive measures. She further proceeded with an elaborate talk on the prominent types of cancer seen in women such as cervical and breast cancer etc. She briefed about the self-examination procedure for breast cancer- a method which can help in diagnosing and treating cancer at the early stages. When practiced on a regular basis it can reduce the mortality rate. She also explained about the medical procedures such as Mammography, MRI scans etc. which help in the early diagnosis of breast cancer. Furthermore she highlighted the age groups that are most prone to this cancer. She concluded the lecture with the importance of a healthy diet and healthy habits in keeping women protected from such fatal illnesses.

This ended with a query session where the faculty & students interacted with Dr. Rupa on various issues brought up in the lecture. The session was then concluded with the vote of thanks by Miss V. Priyadarshini, WIE staff coordinator. Around 300 participants including Dr.N.G.P. Arts & Science College, Dr.N.G.P. Institute of Technology attended the programme and get benefited. Dr.K.Porkumaran, Vice Principal and SB Counselor, IEEE coordinators Mr.Karthik, Mr. S.Prabakar, Mr. Krishnaprabu, IEEE-WIE coordinators Ms.V.Priyadarshini, Ms. Pradeepa have successfully convened and coordinated the health camp.

IEEE Student Branch Officer Training Workshop: Chennai

The IEEE Region 10 SAC in association with the IEEE Madras Section and the IEEE SRM Student Branch organized a one-day IEEE Student Branch Officer Training Workshop on 8th October, 2011 at SRM University, Kattankulathur. The main motive of the workshop was to to train the IEEE Student Branch Office Bearers and other volunteers of various IEEE Student Branches in the city of Chennai, under the IEEE Madras Section of the duties and tactical skills an IEEE SB Office Bearer must possess in order to run the IEEE Student Branch in an efficient manner which in turn benefits all the students of that college not only technically, but also in humanitarian aspects. The workshop commenced with the participating IEEE Student Branch Officers taking a pledge of the IEEE Code of Ethics followed by the welcome address by Mr. S Vidyasagar, Branch Counselor, IEEE SRM Student Branch. The Presidential address was delivered by Dr. T Thyagarajan, Chairman IEEE Madras Section. He presented on "What IEEE Membership means to you" covering various benefits of being an IEEE Member.



Left to Right – Mr. S Vidyasagar, BC, IEEE SRM, Major V V Chandrasekharan, Treasurer & SAC, IEEE MAS, Dr. T Thyagarajan, Chairman, IEEE MAS, Mr. R Arjun Pillai, R10 GINI Team Member

The next talk was by Major V V Chandrasekharan, Treasurer & SAC IEEE Madras Section. He spoke on the importance of having an IEEE Student Branch, guidelines to form new SBs. He also briefed on tasks and duties of various Student Branch Officers stating the importance of reporting, fund-raising, networking, etc. Following Major Chandrasekharan's talk was a presentation by Dr. Mini S Thomas, Vice Chair IEEE MGA Membership Development on "IEEE Member Benefits: Student Membership and Beyond". During the course of the presentation, she covered the benefits that an IEEE Student Member enjoys like the IEEE Spectrum and IEEE Potentials being included with the basic membership, discounted products and services, IEEE MDL, IEEE Student Job Site, Microsoft Software for Students, Scholarships to name a few. She then briefed about the Life Cycle Grid of an IEEE Membership as a table of benefits that an IEEE Member in any of the career phases such as the Undergraduate Students, Graduate Students, Young Professionals, Practitioners, Life members, etc. versus the various products and services. She specifically emphasized on the benefits for students in six key areas viz., Being technically updated, Discounts, Professional Networking, Career Development, Contests and Challenges



Dr. Mini S Thomas delivering a talk on IEEE Member Benefits: Student Membership and Beyond

The post lunch session comprised of a group activity presided over by Mr. Arjun R Pillai, IEEE R10 GINI Team member assisted by Mr. Barnabas Muthu, IEEE Madras Section GINI Rep. The activity focused on forming multiple teams with SB officers from different Student Branches and assigning them a case study problem related to main issues that an SB might face like Event Planning, Fund-raising, Membership retention & increase and Election of the new Office Bearers. The participants were divided into four teams and each team was given each case study. The teams had to identify the root cause of the issue and draft a remedy to the problem statement. The presented solutions were reviewed

by Mr. Arjun and Mr. Barnabas and alternative better solutions wherever required were suggested. Following the Group Activity, Mr. Arjun introduced the concept of Global Integrated Network of IEEE Students (GINI) to the participants starting with the common myths and misconceptions related to GINI, followed by the importance of networking and how GINI acts as a Common Platform for various SBs to come together to work towards the mission and vision of the IEEE. He also mentioned the goals of the GINI and briefed on what GINI is doing help the IEEE serve the student community better. He also stated the major achievements of R10 GINI since it's inception in 2008 comparing the membership sustainability rate of the sections with an active GINI body with those without a GINI body and concluding that the GINI has indeed played a very pivotal role in the membership sustainability and increase.

The workshop saw participation from Seven SBs in and around the city of Chennai. The participating Student Branches were Sri Muthukumaran Institute of Technology, Jeppiar College of Engineering and Technology, SSN College of Engineering, Asan Memorial College of Engineering and Technology, SRM Eshwari College of Engineering, Sri Venkateswara College of Engineering and SRM University, Kattankulathur.

Editor's Message

Dear Members,

Greetings of festivals to all. I hope you are reading newsletter regularly. I am regularly receiving emails from many members regarding their IEEE services. Most of them are related to non-delivery of SPECTRUM or non-receipt of IEEE membership number. For all these thing, I would like to advise all members, to contact member-services@ieee.org. All the member services are being taken care of at IEEE headquarter and IEEE India Council will not be able to help in that regard.



The purpose of this newsletter is to enhance communication and exchange ideas among IEEE fraternity in India. Please submit reports on events at your section, your ideas, article of general interest and suggestions to us, so that we can publish them for benefit of all the members. Looking forward receiving your comments/ suggestions.

Hitesh Mehta

Editor

IEEEJMI AISC 2011 Report

29th September, the day eagerly awaited by the entire IEEE JMI had finally arrived. All India Students Congress was the platform for us to showcase our tradition of providing an optimum environment for students in technical knowhow, leadership skills and nurturing talent and creativity. Working all year round, IEEE JMI aims at integrating knowledge and igniting innovating minds.

Opening Ceremony

The FTK CIT where the inaugural ceremony was to take place was filled with an aura of newness. Delegates with their crisp collars and tags on clearly showed their zeal and enthusiasm for the event.



The event was honoured by the gracious presence of our chief guest, Sri RPN Singh, Union Minister of state, Petroleum and Natural gas and Corporate Affairs. This was shortly followed by the delivery of the Presidential Speech by the Pro Vice Chancellor of JMI, Prof. S M Rashid.

At the event were also present Prof. R.G.Gupta, Chairperson of IEEE India Council, Prof. Shiban Kaul, Chairperson of IEEE Delhi section , Prof. Khalid Moin, Dean of Faculty Of engineering and Technology, Prof. Masood Alam, Proctor, Jamia Millia Islamia, Prof. S.N Ahmad, Head Department of Electronics And Communications, Prof. M.N Doja ,Head Department of Computer Science, Prof. Zaheer-ud-Din, Head Department Of Electrical Engineering, Prof.Abid Haleem ,Head Department of Mechanical Engineering, Prof. Mehtab Alam ,Head Department of Civil engineering, Prof.SS Islam ,Head Department of Applied Science and Humanities, Prof. Mini. S. Thomas, MGA vice Chair MD, Branch Counsellor of IEEE JMI. After the delegates briefing was over, the delegates were escorted to Ansari Auditorium.