

GNITS IEEE & WIE STB ACTIVITIES



Student Activity Centre: IEEE STB 64991 & WIE-GNITS, IEEE SB President Dr. K. Ramesh Reddy

Events Conducted for the A.Y.2015-16

Guest Lectures on 21st Sep 2015

REPORT

A short report on lecture program delivered by Dr. Vijayalata IEEE Hyderabad section student activity committee chair and Dr. Swarna Bai scientist E DRDO, at GNITS Shaikpet conducted by IEEE student branch GNITS on September 21st 2015.

The event started with invocatory song by Shruthi of ECE-3/4. After then , Dr. Balasubramanian sir(Prof of EEE Dept)gave a speech about the importance of this lecture. Office barrers of student branch are introduced by Dr.N. Malla Reddy sir(Prof of EEE Dept). Introduction about speakers is given by M.C.N. Deepika and Mohsina Rahamath of EEE-3/4.

The first lecture is given by Dr. Vijayalata. She deliverd an excellent talk entitled "Benefits of IEEE student membership". She gave valuable information for all the students as well as for the coordinators. The lecture has proven to be informative for students.

The second lecture was given by Dr. Swarna Bai about "WIE AG'S student branch activities and career opportunities for women engineers". The role of women pioneers in engineering is the main subject matter of her presentation. The lecture has proven to be very inspiring. Later momentos were presented to speakers by Dr. Moorty Mutthu Krishnan Sir(HOD of EEE Dept) and Prof. P.P.Reddy Sir(EEE Dept).

More than 300 students from EEE,ECE,ETM,CSE and IT attended the lecture along with 9 faculty members.

Guest lectures ended with vote of thanks by Prof. Renuka Devi mam, (ECE Dept).

Photo courtesy: Ramya Cheerla

EEE-B 2/4

Field visit to Synergy Infra Consultancy PVT LTD on 23-12-2015 at 14:00 hours

REPORT

The IEEE SB of G Narayanamma Institute of Technology and Science visited Synergy Infra Consultancies PVT LTD. which is situated at Jayabheri Pine Valley, Old Mumbai Road, Gachibowli, Hyderabad, on 23-12-2015 at 14:00 hours. There are various services offered by this company, like Electrical, Mechanical, Plumbing, Solar, Fire Fighting, ELV and BIM (Building Information). Our visit was purely confined to the Solar Photovoltaic.

The maximum power that Synergy Infra can generate using sunlight, i.e generated by Solar Photovoltaic System is approximately 25KW. Most of the power consumption is met through power generated from solar PV. The peak load, i.e during optimum consumption is around 38-40Amps. The average consumption lies between the range of 20-40Amps.

Synergy Infra has a net metering system which shows a rotating display of import (the extra power that is received from TSDISCOM for meeting the company's needs after fully utilizing the energy from the PV system) and exported energy (the amount of energy that solar PV system supplies to TSDISCOM on holidays) of energy. The difference between export and import is calculated. If the export value is more, the TSGENCO pays money, if the import value is more the company pays the electricity bill. The company was getting an electricity bill of Rs 7000 before, which has been considerably reduced after the PV system has been installed. There was never, till now, a case of zero or negative billing. They are no doubt striving for this.

The inverter has a capacity of 25KW. They are connected to batteries, 20 in number with a maximum capacity of 250 AmpHours. The PV system is grid-connected and also charges the batteries. The excess power generated during off-peak time or in winters is sent to the grid system. Depending on the load consumption and by using permutations and combinations the load can be met with energy from solar PV's, batteries and grid. The excess of energy can be saved in the batteries for future usage. There are a total of 110 solar panels of which 8 of them are dummy. These are monocyrstalline solar panels. Each panel is rated 220



Watts Peak. Solar panels at Synergy Infra, Hyderabad

Also, we had the privilege of listening to Mr. V Srinivas, the Director of Synergy Infra Consultancy PVT LTD, who is also The IEEE PES/IAS/PELS Joint Chapter Vice Chair. He educated us on the need for shifting our reliance to solar energy for our future power needs, also emphasizing on other possibilities for energy generation from other renewable sources like wind and small hydro. He also spoke to us about the design of the solar panels. He also touched slightly on various other aspects pertaining to solar PV. He gave us the company's future insights in projects on power quality Audits.

We thank Mr. Srikanth for guiding us throughout our visit. For taking the onus on him for making us understand the mechanism of the inverter and the net metering system discussed above and also for joining us in showing the solar panels with the

same zeal. We appreciate his alacrity. We also extend our thanks to Mr. V Srinivas for his lecture.

We are blissful for getting an opportunity to visit Synergy Infra Consultancy PVT LTD, which is one of the very few companies which runs computers without any UPS. This visit would not have been possible without the extended support from our IEEE Student Branch

Advisor-

Dr. R. Balasubramanian and the Branch Counselors- Dr. Malla Reddy and Dr. Renuka Devi. We also thank Mr. PP Reddy and Mr. Surya Prakash for accompanying us. Added, without the support from the IEEE SB members this visit would seem incomplete.



IEEE-GNITS Paper Presentation' Contest

REPORT

The IEEE G Narayanamma Institute of Technology and Science (for women) Student Branch has conducted an 'IEEE-GNITS Paper Presentation' contest on the 23rd of January of 2016.

We have received a total of 112 abstracts. The event started with a prayer song followed by lighting of the lamp by Dr. K Ramesh Reddy the Principal, Dr. R Balasubramanian the IEEE GNITS SB Branch Advisor, Dr. N Malla Reddy the IEEE GNITS SB Branch Counselor, Dr. Renuka Devi the IEEE GNITS SB Branch Counselor and Sravya Prabhala the IEEE GNITS SB Chairperson. The inaugural was attended by few faculty members and all the participants apart from Dr. Rajkumar L Biradar, Ms. Sesha Bhargavi, Ms. Bhageshwari Ratkal and Mr. P Buchibabu the faculty coordinators of ETM, IT, CSE and EEE respectively.

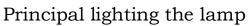
There were two sessions, one pre-lunch and the other post-lunch. 31 papers were presented in the pre-lunch session and 30 papers were presented in the post-lunch session.

The following people have been the judges of this event.

- 1. EEE- Dr. R Balasubramanian and Mr. P Buchibabu
- 2. ECE- Dr. Renuka Devi and Dr. Sri Valli
- 3. CSE- Ms. Bhageshwari Ratkal Ms. Jayashree S Patil
- 4. IT- Ms. Sesha Bhargavi and Dr. B V Prasad Babu
- 5. ETM- Dr. P Sreesudha and Dr. M Vijaya Lakshmi

The valedictory was held at 16:00 hours and 1, 2, 2, 2 and 3 prizes were distributed in ETM, EEE, CSE, IT and ECE departments respectively. The prizes were distributed by Dr. R Balasubramanian the IEEE GNITS SB Branch Advisor.







paying respect to the prayer song



Judges at the desk



paper being presented by a team



Participants at the inaugural

The Sixth Alexander Graham Bell Memorial Lecture by IEEE Hyderabad Section Hosted by GNITS

REPORT

A REPORT ON The Sixth Alexander Graham Bell Memorial Lecture By IEEE Hyderabad Section Hosted by GNITS

The IEEE Hyderabad Communications and Signal Processing Societies Joint Chapter organized the Alexander Graham Bell lectures in 2011, in the view of 164th birthday of Bell. The 2016 lecture held in G Narayanamma Institute of Technology and Science on 24th March is the sixth annual Bell lecture under the IEEE Hyderabad Section.

The sixth Bell Memorial lecture kick started with an attendance of 100 people including students, faculty, sexagenarians and septuagenarians who are IEEE and non-IEEE members. It started with Mr. N Venkatesh, the IEEE Comm/ SP Joint Chapter Chair giving us insights on how the lecture will proceed. Dr. K Ramesh Reddy, the Principal of GNITS then gave a brief introduction on GNITS and its history. He also spoke about the IEEE GNITS Student Branch and its activities.

The speaker for the day, Dr. Manish kothari, the Vice President of Qualcomm India Private Limited, where he leads the cellular modem Software, Connectivity Software (WIFI, BT, GPS), Systems-Engineering and Power/performance/Thermal therms, gave an overview on Internet of Things which is projected to be a trillion dollar market in the upcoming years. The lecture lasted for 50-60 minutes.

After the completion of the lecture and questionnaire, the speaker was presented with mementos.

Guest Lecture on Microgrids by J.Rupamathi from Carnigi Mellon University

A Guest Lecture on 'Introduction to Micro Grids' and 'Opportunities abroad for students (Masters Education)' by J Rupamathi on 20th July 2016

Ms J Rupamathi focused on the following topics: (a) difference between conventional power systems and micro grid convention (b) problems with existing hierarchical control. She also spoke on the new framework proposed by her research group named: DyMONDS. She also stressed upon the need for a good numerical simulation framework and the challenges involved in it.

She had also addressed the students regarding the opportunities they have as a Masters student in the United States of America. She put forth the benefits of pursuing Masters in several core areas for Electrical students. She also shared her experience in Masters at Carnegie Mellon University, where she is currently studying. She told about the various job opportunities, the minimum term of OTP and about further studies in USA like PhD.





