

ELECRAMA

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

News letter



Vision: Be a premier department in the field of Electrical and Electronics Engineering for ever changing sustainable needs of the Society

Inside this issue:

Workshop	2
Club activities	2
Guest lecture	2
Article	3
Industrial Visit	3
Publication	4

Special points of interest:

- HoD
- Renewable Energy
- Electrical design
- Tools for life
- Trains
- CSIR-NAL
- LVRT
- Inverter
- Fair Allocation
- MPPT technique

Head of the Department



Dr. K.N. Bhanuprakash

Dr. K.N. Bhanuprakash joined in 28/07/2017 as a Head of the Department of Electrical and Electronics Engineering AMCEC Bangalore. He obtained his BE (Electrical) and ME (Power Systems) degree from NIE, Mysore University in the year 1980 and 1987 respectively. He obtained Ph.D from VTU Belgaum. His area of expertise includes Artificial Intelligence and Expert Systems, Advanced Power System Analysis and Advanced Electrical Machines. He has 37 years of teaching experience with 18 publications in reputed International/National Journals and Conferences. He worked as Professor and head in NHCE Bangalore as well as Dayananda Sagar College of Engineering Bangalore. He Worked as principal at Al-Amen college of Engineering, Shornur, Kerala(AL-HIND educational and charitable trust) from June2012 to May 2013. After that he Worked as Principal at Ernad College of Engineering and management, Manjeri, Kerala.(AL-HIND educational and charitable trust) from June 2013 to June 2015. He also Worked as Prinicpal @ Kalpataru Institute of Technology,Tiptur From 01.07.2015- 28.04.2017.

HoD Message

“The profound and rapid change in the technological and information sciences has been playing an important and vital role in every field. EEE is fast growing profession worldwide which requires well qualified and trained personnel to meet the industry requirements. This department is set up in order to meet the rapid growing needs of professionals. The broad objective of our department is to impart quality education and help students to develop creative thinking, analytical ability and to acquire managerial techniques in practical as well as academic fields. Department of EEE at AMCEC provides students with state-of-the-art laboratories, cross discipline interaction and broader knowledge base in phase with the rapidly changing environment. Electrical engineering pervades every aspect of handling information, from sensing and acquisition, through communication, networking, switching, procession and storage. Course coverage can be broadly classified into Power systems, Electronics, Programming, Circuits and Systems, measurement and instrumentation, machines and Drives. We believe in moulding the youth of today into engineers who can meet the technological challenges of tomorrow. To develop leadership qualities amongst the students.”

Workshop



Three days workshop was conducted on “Electrical design” by Prinston-Smart Engineers in Dr.A.P.J.Abdul kalam Seminar Hall from 08.09.17 to 10.09.17. An MoU was signed between EEE department and Prinston-Smart Engineers, New Delhi on 23.08.17. Electrical design entails planning, creating, testing, or supervising the development and installation of electrical equipment, including lighting equip-

ment, power systems, power distribution, fire and life safety systems, electronic components, and voice and data communications infrastructure. In its most simplistic definition, electrical design is the design of various electrical systems. Many electrical design projects start with an idea that emanates from the marketing and sales department or the research and development division within a company. Electrical design might seek to improve an existing product or system. electrical design projects can be extensive and very complex, electrical engineers often provide input at every stage.

Club Activity

One day workshop program on “Renewable Energy & Energy Conservation for Sustainable Development” on 27th October 2017 by Dr. H. Naganagouda, Director, NTCST, KPC Ltd .scientists are already working on another method of drawing power from the sun: solar wind. Not exactly a wind as we know it, solar wind is more like a constant



flow of accelerated particles, which could be used to generate energy using a sail made of copper. The earth does not receive this flow directly thanks to our

atmosphere, so the power generator would need to be placed in space. This might be difficult, but it is nothing compared to the biggest issue of this technology – how to send the generated power back to earth. The best idea so far has been to send it with a laser beam. The team of scientists at Washington State University hopes that it can generate 1 billion billion gigawatts of power by using a massive 8,400-kilometer-wide solar sail to harvest the power in solar wind

Guest lecture

A Guest lecture was conducted on the occasion of Teacher’s day in Dr.A.P.J.Abdul kalam seminar hall on 05/09/2017, titled “Important Tools for life” by Mr. Nishant Kumar, Quality Assurance (QA) Consultant, Member of Asian society for corpo-



rate university, China. Teachers' Day is a special day for the appreciation of teachers, and may

include celebrations to honor them for their special contributions in a particular field area, or the community in general. The idea of celebrating Teachers' Day took root in many countries during the 19th century. The birthday of Dr. Sarvepalli Radhakrishnan (5 September) is also celebrated as Teacher's Day in India since 1962.

The idea of celebrating Teachers' Day took root in many countries during the 19th century

Articles

TRAINS OF THE FUTURE:

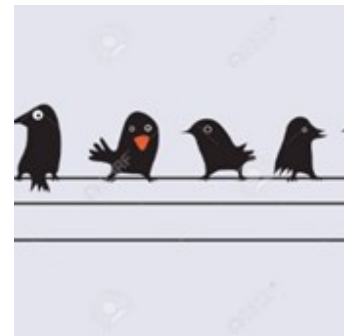
Two centuries ago, the only way to travel on land for the vast majority of the world was by foot, only the fortunate few were able to call upon horse and less again a carriage. For most of us, wherever we wanted to get, however far, we would have had to pull on the boots and walk. This all began to change when a group of pioneering inventors and engineers in the first years of the 19th century began developing steam engines, and by the end of the century, railways crisscrossed the world. To mark some of these innovations, Smart Rail World has looked back in the history books and focused on twelve of what have been the fastest trains in the world on their day, from steam, to electric to maglev...

The Shanghai Maglev wins the prize as the fastest high-speed train in the world. It has a top operational speed of 430km/h and average speed of 251 km/h. The Maglev started commercial operations in 2004. It runs on the 30.5km Shanghai Maglev Line, which is the first commercially operated high-speed magnetic levitation line, running from Longyang Road Station of Metro Line 2 and ending at Shanghai Pudong International Airport. The train cost an eye-watering \$1.2 billion to build and has been in huge deficit ever since.

Whilst Japan has reiterated its role as the world's leader in high-speed rail travel in breaking its own rail land-speed record, the maglev train has still not been launched for commercial service. And prospective passengers will have a long wait - until 2027! The maglev train belonging to the Central Japan Railway Company (CJR) hit a speed of 603km/h (375 mph/h) to set a new global benchmark. It is the second time in a week that the CJR's state-of-the-art train has broken its own record. Having celebrated its 50th birthday last year, the world's first bullet train, the Shinkansen, marked Japan out as the world leader in rail technology, but the maglev development have placed Japan back into the lead in the global high-speed rail race.

Ms.Shruthi.G,Asst.Prof

Ever wondered why birds that sit on power lines don't get electrocuted? If a bird sits on only one power line its safe. If the bird touches any part of its body to another line, it creates a circuit, causing electrocution



Industrial Visits



Final year students visited the Exhibition on latest technologies and products, titled "India International Science Festival IISF-2017" organized by CSIR-NAL, Bengaluru on 15/09/2017. CSIR-NAL has provided significant value added inputs to all the Indian national aerospace programmes. Its contributions over the last five decades have enabled it to create a niche for itself in advanced aerospace research and technology development. CSIR-NAL has also developed many critical technologies for the strategic sector and continues to support the mission-mode programmes of the country. CSIR-NAL's mandate is to develop aerospace technologies with strong science content design and build small, medium sized civil aircraft.

CSIR-NAL has also developed many critical technologies

Department of Electrical and Electronics Engineering
AMC engineering College
18th K.M. Bannerghatta Road
Bengaluru-83.



[http://
www.amcgroup.edu.in/
AMCEC/EEE-HOD.php](http://www.amcgroup.edu.in/AMCEC/EEE-HOD.php)


AMCEC

An Institution with a Unique
Style of Teaching and Learning

Editorial Team

Faculty incharge

Mrs.Monica,AP/EEE

Students incharge

Ms.Taha Mohammed, Final year EEE

Ms.Niveditha,Final year EEE

Mr.Akshay D,Final year EEE

Publications

SM Mustafa, N Amuthan, "Modeling & Analysis of a Voltage Regulator for a large-capacity DFIG wind turbine to achieve Low Voltage Ride Through", International Journal of Recent Trends in Engineering & Research (IJRTER), Volume 03, Issue 06; June - 2017 [ISSN: 2455-1457].

KS Deeksha, N Amuthan, "Design of Multi-input Converter for a Hybrid PV/Wind power Generation System and I-PVSC for Battery Charging and MATLAB Software", International Journal of Recent Trends in Engineering & Research (IJRTER) Volume 03, Issue 06; June - 2017 [ISSN: 2455-1457]

Priya B Esther "Partial Shading conditions for photovoltaic systems using MPPT technique" in International Journal in Recent Trends in Engineering and Research(IJRTER) 2017,Volume 3,Issue 6 pp347-355

Priya B Esther "Fair Allocation of Energy & Power using Shapely value to reduce deficit in regions of Indian Grid" in Indian Journal of Science & Technology 2017, Volume 10 pp 1-5

Selvamathi R, Hanumanth Raju G V, "MITIGATION OF SAG, SWELL AND REDUCTION OF THD IN AN AC MICROGRID USING FUZZY BASED UPQC" in International Journal of Recent Trends in Engineering & Research (IJRTER) Volume 03, Issue 06; June - 2017 [ISSN: 2455-1457]

Selvamathi. R, Pramod Satyanarayan Naik, "Protective Method for HVDC Transmission Line using Directional Characteristics of Reactive Energy", in IJSRD - International Journal for Scientific Research & Development| Vol. 4, Issue 05, 2016 | ISSN (online): 2321-0613.

Selvamathi R, Tony Feros Kennedy J, "SHC Reduces Proficiency in Single Stand Photo Voltaic Power System" in International Journal of Recent Trends in Engineering & Research (IJRTER) Volume 03, Issue 07; July - 2017 [ISSN: 2455-1457]

Selvamathi.R, V.IndraGandhi, AshokKumar L, Sharmila A, "A Case Study- Interfacing Of Pic16f877a With Driver Circuit For Transformerless Inverter", International Journal of Mechanical Engineering and Technology (IJMET) Volume 8, Issue 9, September 2017, pp. 244-249, © IAEME, Publication Scopus Indexed.