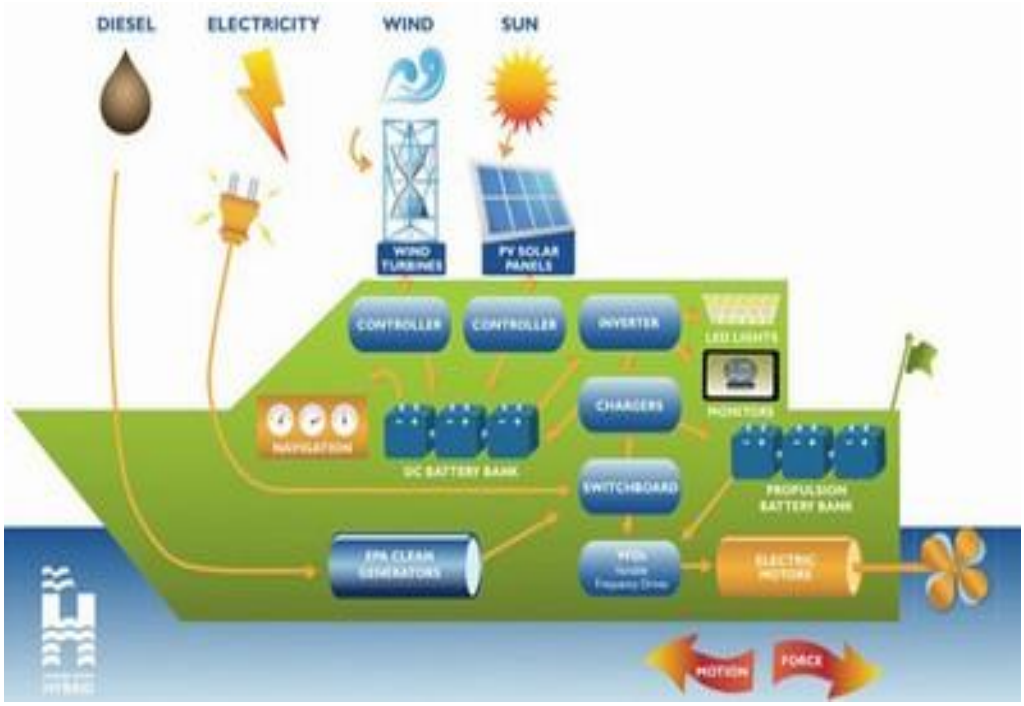


Electrical GNOSYS

DEPARTMENT OF EEE

September 2013

DEPT OF EEE WISHES HAPPY ONAM TO ALL

Editorial

The role of quality in technical education in the context of globalization of economy and emergence of knowledge society cannot be overlooked. Identifying India's basic strengths to emerge as a knowledge superpower if the quality of education in general and technical education in particular can be improved,

Still technical education in India faces many problems like syllabus has not been updated for more than ten years in most of these institutions, institute-Industry Interaction is almost nonexistent, little efforts are made to ensure high 'quality check' through recognized agencies like NAAC or NBA , majority of the Institutions were found low on Infrastructure, placement for students is a weak link for majority of the institutions

Necessary actions have to be to be formed and implemented to overcome these problems. This issue of the GNOSYS presents a draft of the department's mission, vision, mission, program educational objectives and outcomes to the students, parents scholars and industrialists to form a perfect curriculum procedure to achieve all these goals. Readers are expected to provide suggestions and corrections regarding the drafted plan in order to make them perfect. The readers are requested to meet the head of the department Ms Laly James, regarding the suggestions on vision, mission, Pos and PEOS

VISION

To evolve as a centre of excellence, to train students in contemporary technologies, to meet the needs of global industry and to develop them into skillful engineers instilled with human values and professional ethics.

MISSION

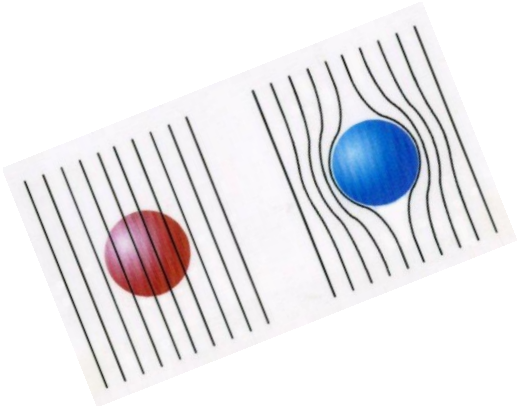
To produce competent and disciplined Engineers through delivery of quality education to meet the ongoing global challenges in alignment with technical education system and society.

QUANTUM LEVITATION

BY PARAG JIOSE

In many sci-fi movies that depict the future the most memorable special effects they do is of cars that float. The audiences are mesmerized to see them. But we never believe such a thing can exist. A car without fuel and can fly. It's too good to be true!!.

But there comes good news. An old research area is turning out to be really fruitful than imagined. Superconductivity has always been the dream of every electrical engineer. The modern transmission of power through cables yields a lot of power loss mainly due to heat loss. This loss amounts to a big percent of losses that adds on to the deficiency in power today. Super conductivity is a way to cool up these cables to sub zero

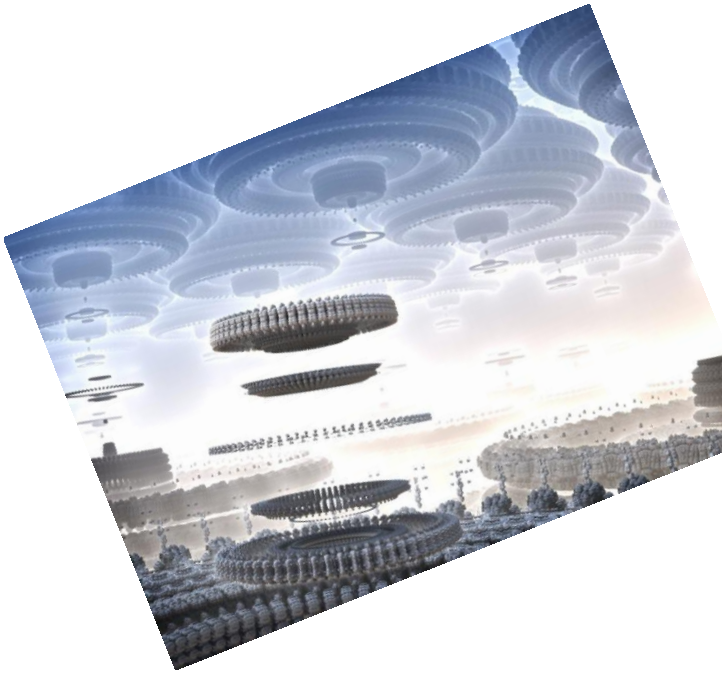


temperatures thereby making the heat loss zero and hence obtaining a pure conductor with zero resistance.

this technology is now paving path for another field called as Quantum Levitation. It is also called as Quantum Locking. It is a combination of Superconducting material and a magnetic field. Quantum refers to the superconductivity involved while locking refers to the magnetic field that is used.

The Meissen effect the basis of this phenomenon.

Meissen effect is the property of any superconductor material to expel the magnetic field to which it is exposed. However in Quantum levitation complete expulsion of the field is not done rather small tube like structures are used called flux tubes which have tubular structure. The tubular structure provides a path for the interaction of the magnetic field which along with the expulsive nature of the superconductor provides an levitation. This cloud proves to be a very important field in the coming future where the world would be in search for fuel less transportation.



PEOS AND POS

The Department of EEE publishes the draft copy of Program outcomes and program educational outcomes for the concern of all students, parents, scholars, faculties and authorities. The readers are requested to meet the head of the department Ms Laly James, regarding the suggestions on vision, mission, Pos and PEOS.

PROGRAMME EDUCATIONAL OBJECTIVES

i. Graduates will achieve broad and in-depth knowledge of Electrical and Electronics Engineering relating to industrial practices and research to analyze the practical problems and think creatively to generate innovative solutions using appropriate technologies.

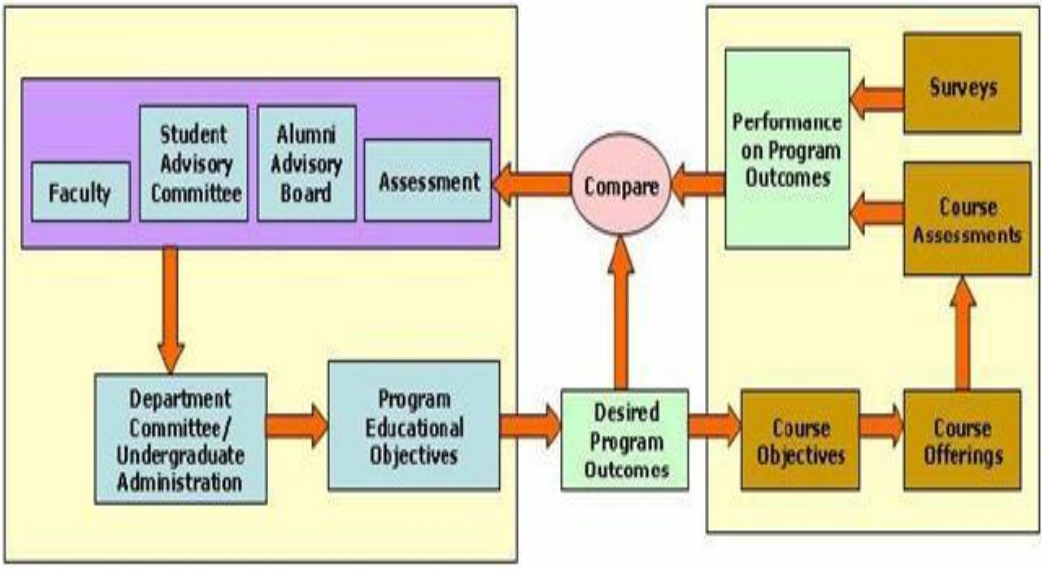
ii. Graduates will make valid judgment, synthesize information from a range of sources and communicate them in sound ways appropriate to their discipline.

iii. Graduates will sustain intellectual curiosity and pursue lifelong learning not only in areas that are relevant to Electrical and Electronics Engineering, but also that are important to society

iv. Graduates will adapt to different roles and demonstrate leaderships in global working Environment by respecting diversity, professionalism and ethical practices.

PROGRAM OUTCOMES (PO'S)

1. An ability to apply knowledge of mathematics, science, and engineering.
2. An ability to design and conduct experiments, as well as to analyze and interpret data.
3. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. An ability to function on multidisciplinary teams.
5. An ability to identify, formulate, and solve engineering problems,\
6. An understanding of professional and ethical responsibility.
7. An ability to communicate effectively.
8. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. A recognition of the need for, and an ability to engage in life-long learning.
10. Knowledge of contemporary issues.
11. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.



DEPARTMENT OF EEE organized

TWO DAY INTEGRATED NATIONAL WORKSHOP

A two day integrated workshop was organized on 2nd and 3rd of August 2013 at Vimal Jythoi Engineering College with sponsorship from Ministry of New And Renewable Resources.

The workshop was conducted under the EEE Dept. of VJEC. Many students and faculties from various colleges participated in this event. The activities of the event were based on two topics:- \

1) Renewable Energy Resources
2) Use of Variable Frequency Drives [VFD] in industries

The inauguration function was done in the presence of Msgr.Mathew M Chalil [Chairman VJEC],Dr.Benny Joseph [Principal,VJEC], Fr.Jinu Vadakemulanjanal Administrator, VJEC] ,Ms. Laly James [HOD,EEE Dept.].The classes were held by eminent resource persons.

The 1st day class was taken by Mr. Ajith Kumar , PACE Systems, which delt with use of VFD,its improving efficiency and increased production in industries for various purposes and common utilities.

The 2nd class was taken by Dr. L Ashok Kumar, Dept. of EEE, PSG college of Technology, Coimbatore. It delta with classes

elated to harnessing of renewable energy resources efficiently, namely solar and wind energy. A working model was also shown which made it easier for the students to understand.

The event was a great success with the support from staff and students of EEE Dept, VJEC.

DEPARTMENRTAL NEWS

CONGRADULATIONS

Mr Nikhil Valsan, Assistant Professor, Department of EEE, VJEC, has won first prize at International conference on Power systems on at China and recently he has been invited to United States of America to attend the certifirial ceremony.

CONGRADULATIONS

Sarin CR, Assistant Professor, Department of EEE, VJEC, has been selected as the reviewer of The International Journal of Energy Policy , ISSN: 0301-4215, with Impact factor 3.382.

CONGRADULATIONS

The following students of S3 EEE has received prizes during the technical fest conducted at CET, Trivandrum and at Rajagiri College of Technology.

Darwin (1st Prize)

Jyothis Joseph, Derin M Jacob (3 Prize)

Shejin George (3 Prize)

INDUSTRIAL VISIT

The department of EEE organized a one day inductrial visit for the students of S3 EEE. It was conducted as a part of the mission of the department to The IV was to Western India Plywoods, Valapattanam ,Kannur. The students were accompanied by Mr. Parag Jose, Mr. Nikhil Valsan, Ms.Jyothsna P and Ms. Namitha Shankar of EEE department.

For many it was their first ever visit to a real industry and hence it was really worthwhile. Under the guidance of Mr. Majid of Western India plywoods the students were imparted detailed review on the proper working of the plywood manufacturing factory. From bringing in the wood to how it is chemically treated and processed to making Export quality plywood was shown to them. As a continuation the students were taken to the electrical section of the industry.

The factory houses a Substation. The substation engineers present there were able to highlight to the students the proper working of the substation and how the entire power flow and control is performed.

INDUSTRIAL

Department of EEE and Training and Placement Cell , Vimal Jyothi Engineering College, are jointly organizing a Industrial training program to familiarize the students with industrial needs. The program covers hands on training of 4 PLCs, 2 SCADAs, HMI, VFD and other industrial embedded controls.

EEEE STUDENTS AT RAJAGIRI COLLEGE OF TECHNOLOGY.

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