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# **GOKUL EPITOME**

**GOKUL  
GROUP OF INSTITUTIONS  
BOBBILI**

BY  
R.SRINIVAS RAO  
ASST.PROFESSOR in EEE

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## Publication & Presented By Members



**Mr. B. S. Suresh Kumar,  
M.Tech, (Ph.D)**

Asst. Professor of Electrical & Electronics Engineering,  
Gokul Institute of Technology and Sciences  
Bobbili.

1. **Title of Paper:** “An Improved Control Strategy for Modular Multilevel Cascaded Inverters with Unbalanced DC Sources” in *International Journal of Scientific Engineering and Technology Research, IJSETR, Vol.05, Issue.14, JUNE-2016, ISSN 2319-8885, Pages: 2688-2693*

**Abstract:** This paper proposes the neutral voltage modulation strategy for pulse width modulation of multi level converter to achieve balanced line-to-line output voltages and to maximize the modulation index in the linear modulation range where the output voltage can be linearly adjusted in the multilevel cascaded inverter (MLCI) operating under unbalanced dc-link conditions. Here one by three model multi level multi level cascaded inverter is utilized for the evaluation of NVM method. In the proposed method, too large of a dc-link imbalance precludes the balancing of the output voltages. This limitation is also discussed. The simulation for a seven-level phase-shifted modulated MLCI for electric vehicle traction motor drive shows that the proposed method is able to balance line-to-line output voltages as well as to maximize the linear modulation range under the unbalanced dc link conditions. This paper gives the comparison of proposed and conventional modulation methods in the case of unbalanced dc link voltages of MLCI.

2. **Title of Paper:** “Modeling And Simulation Of Dstatcom For Power Quality Enhancement In Distribution System” in *International Journal of Advance Research In Science And Engineering, IJARSE, Vol. No.4, Issue No.01, January 2015, ISSN-2319-8354(E)*

**Abstract:** Shunt compensation for medium voltage distribution systems requires higher rating for voltage source converters (VSCs). Ratings of the semiconductor devices in a VSC are always limited; therefore, for higher rated converters it is desirable to distribute the stress among the number of devices using multilevel topology. Cascaded multilevel configuration of the inverter has the advantage of its simplicity and modularity over the configurations of the diode clamped and flying capacitor multilevel inverters. Application of cascaded multilevel converters for shunt compensation of distribution systems has been described in Literature. This paper presents an investigation of five- Level Cascaded H – bridge (CHB) Inverter as Distribution Static Compensator (DSTATCOM) in Power System (PS) for compensation of reactive power and harmonics. The advantages of CHB inverter are low harmonic distortion, reduced number of switches and suppression of switching losses. A CHB Inverter is considered for shunt compensation of a 11 kV distribution system. Finally a level shift carrier PWM (LSCPWM) and phase shifted PWM (PSPWM) techniques are adopted to investigate the performance of CHB Inverter. The results are obtained through Matlab/Simulink software package. The proposed DSTATCOM is simulated for both linear and nonlinear loads.



**Mr.P.Pavan Kumar,  
M.Tech**  
Asst.Professor  
Dept. of ECE  
Gokul Institute of Technology  
and Sciences

1. **Title of Paper:** “A Novel Arm Based accident Preventive System For Automobiles” in *International Journal of Intelligence Research, IJOIR, Volume 8, July - December 2016, (e) 0976-9859 (p) 0976-985x, pages : 73-77.*

**Abstract:** Present world is being controlled by technologies and now a day's so many useful technologies are coming out to make our life style more comfort, luxurious and secure. Especially in automobiles many technologies are being implemented to provide more safety for users. This project is best application for avoiding collisions in automobiles. Based on requirements of modern vehicle, in- vehicle Controller Area Network (CAN) architecture has been implemented. In order to reduce point to point wiring harness in vehicle automation, CAN is suggested as a means for data communication within the vehicle environment. The benefits of CAN bus based network over traditional point to point schemes will offer increased flexibility and expandability for future technology insertions. This paper describes system which uses sensors to measure various parameters of the car like speed, distance from the other car, presence of alcohol in car and accidental change of lane and sends a warning signal to the driver if any of the parameter goes out of range to avoid accidents. The aim of this project is to avoid collision by detecting obstacles, vehicles using obstacle sensors (IR or Ultrasonic) and controlling the vehicle accordingly by using CAN protocol.

2. **Title of Paper:** “Arm Based Driver Assistance System for Vital Signal Monitoring” in *International Journal of Science and Engineering Research (IJOSE), Volume 5, Issue 5, May 2017, 3221 5687, (P) 3221 568X.*

**Abstract:** This project is about making cars more intelligent and interactive which may notify or resist user under unacceptable conditions, they may provide critical information of real time situations to rescue or police or owner himself. The primary purpose of this paper Drowsy Driver Detector is to develop a system that can reduce the number of accidents from drowsy [2] driving. And the second application in this paper was to detect the alcohol detection and also to track the vehicle to find the culprit and in intimation to the Control Room with their location, and also the vehicle can be stopped. The third application of the project is to provide security to the vehicle. ECG [1] is used to detect the pulse of the driver. If the driver is in abnormal condition that is pulse rate of the person is high then the vehicle is stopped and the position of the vehicle is traced. If the warning feedback system is triggered, the micro controller makes a decision which alert needs to be activated. And send location using GPRS&GPS technology.

3. **Title of Paper:** “A LOW POWER VLSI DESIGN OF AN ALL DIGITAL PHASE LOCKED LOOP” in *International Journal of Science and Engineering Research (IJOSE), Volume 5, Issue 4, April 2017, 3221 5687, (P) 3221 568X.*

**Abstract:** The design is synthesized in Xilinx ISE software. Phase locked loop is a familiar circuit for high frequency application and very short interlocking time. In this paper we have implemented and analysed All Digital Phase locked loop (ADPLL), as the present applications

requires a low cost, low power and high speed Phase locked loops. This work Implements an ADPLL with Nyquist rate phase detector which is basically a digital multiplier, simulation results proves a very high speed of operation for low frequency ranges and resource utilization on FPGA proves the structure simpler.



**CH, DAMODAR NAIDU**

ASST.PROFESSOR  
DEPT.OF CIVIL  
GOKUL INSTITUTE OF  
TECHNOLOGY AND SCIENCES

1. **Title Of The Paper:** “**EXPERIMENTAL STUDY ON COMPRESSIVE AND FLEXURAL STRENGTH OF USING FIBRE REINFORCEMENT & METAKAOLIN AS PARTIAL REPLACEMENT OF CEMENT**” in **International Journal & Magazine of Engineering, Technology, Management and Research, Volume No: 3 (2016), Issue No: 10 (November).**

**Abstract:** Concrete is probably the most extensively used construction material in the world. The main ingredient in the conventional concrete is Portland cement. The amount of cement production emits approximately equal amount of carbon dioxide into the atmosphere. Cement production is consuming significant amount of natural resources. That has brought pressures to reduce cement consumption by the use of supplementary materials. Availability of mineral admixtures marked opening of a new era for designing concrete mix of higher and higher strength. GROUND GRANULATED BLAST FURNACE SLAG (GGBS) is a new mineral admixture, whose potential is not fully utilized. Moreover only limited studies have been carried out in India on the use of slag for the development of high strength concrete with addition of steel fibers. The study focuses on the

flexural strength performance of the blended concrete containing 20% percentage of GGBS and different %s of steel fibers as a partial replacement of OPC. The cement in concrete is replaced accordingly with the percentage of 20% by weight of GGBS and 1%, 2%, 3% by weight of steel fiber. Concrete Samples are tested at the age of 7 and 28 days of curing. Finally, the strength performance of slag blended fiber reinforced concrete is compared with the performance of control mix. From the experimental investigations, it has been observed that, the optimum replacement of 20% of Ground Granulated Blast Furnace Slag to cement and steel fiber of 2% with respect to the weight of cement showed improved better results in flexural strength and proved to be optimum proportion when compared with other proportions with respect to strength and economy

### CHEMCO CASE

Started in 1965, ChemCo is a leading manufacturer of car batteries in the U.K. market. Since then, it has been under the charge of Mr. Jones, the founder-owner of the firm. In 1999, the company decided to go for a diversification by expanding the product line. The new product was batteries for fork-lift trucks. At the same time, Mr. Marek was appointed the Senior Vice President of marketing in the company. However, soon after its successful diversification into fork-lift batteries, the sales in this segment began dropping steadily. Mr. Marek wanted to introduce some radical changes in the advertising and branding of the new business but the proposal was turned down by the old-fashioned Mr.Jones. At this juncture in 2002, the firm is losing heavily in the fork-lift batteries business and its market share in car batteries is also on a decline. Mr. Jones has asked Mr. Marek to show a turnaround in the company within a year.



## ELECTRONICS CLUB

### PROJECT NAME:-SENSITIVE CLAP SWITCH (CLAPS ON SWITCH CITCUIT)

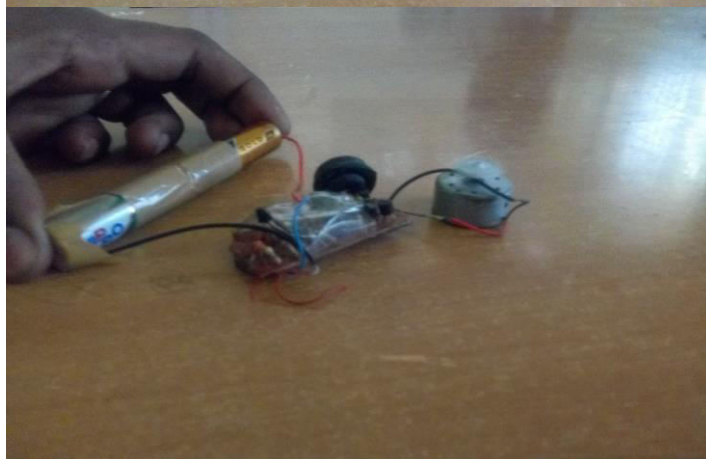
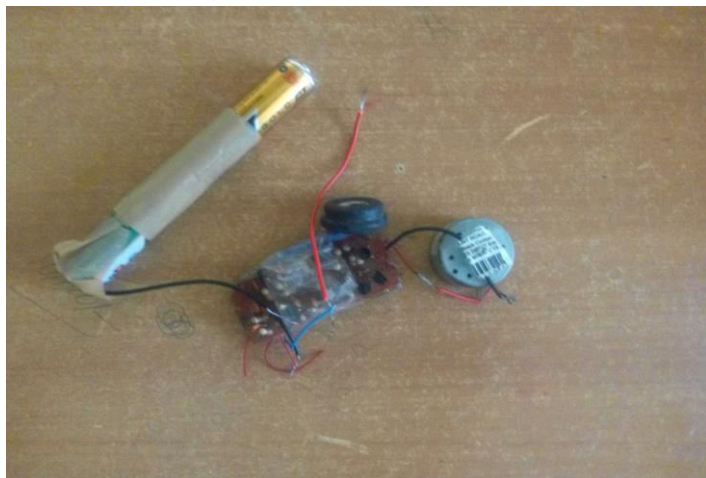
Autonight lamp using LED is a simple circuit that uses LDR to sense the intensity of light and automatically turn LEDS ON and OFF.

The transistors are used in saturation mode. These are used as electronic switches in this mode. The transistor BC547 is a general purpose NPN transistor which is used to further switch the LEDs. This is a power transistor with a heat sink. The heat sink helps the transistor to dissipate the generated heat into air so that the transistor can handle higher power loads than it can do without the heat sink.

The entire circuit along with the LEDs is powered by 9V DC power supply. A battery based DC power supply is usually preferred. However, you can use a AC rectified and regulated power supply

The LEDs used in the circuit are high powered while LEDs. The intensity of light produced by these LEDs equals an ordinary flourescent bulb. The lighting produced is sufficient for reading or doing other daily activities.

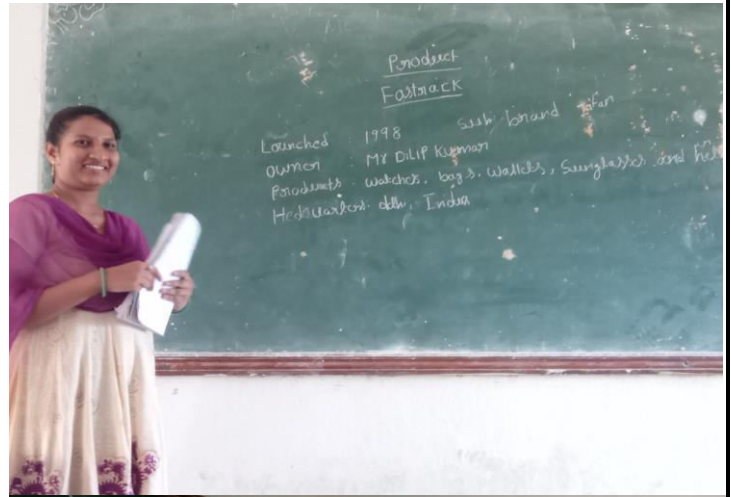
### QUIZ FOR BTECH STUDENTS ON 05-10-2017





## QUIZ FOR DIPLOMA STUDENTS ON 05-10-2017

## BUSINESS QUIZ FOR MBA STUDENTS ON 15-10-2017





## BUSINESS QUIZ FOR MBA STUDENTS ON 15-10-2017



## GUEST LECTURE ON FINANCE TOPIC BY Dr.S.TARAKESWARA RAO ON 18-10-2017





QUIZ EEE DEPARTMENT ON 13-10-2017

QUIZ BY PHARMACY DEPARTMENT ON 16-10-2017





**QUIZ BY PHARMACY DEPARTMENT ON 16-10-2017**



**SWATCH BHARATH CONDUCTED BY FACULTY AND STUDENTS OF GOKUL ON 20-10-2017**





**SWATCH BHARATH CONDUCTED BY FACULTY AND STUDENTS OF GOKUL ON 20-10-2017**



**INDUSTRIAL VISIT AT SIRI SMELTERS AND ENERGY LTD, BOBBILI ON 25-10-2017**





**PPT TO BTECH STUDENTS ON 28-10-2017**



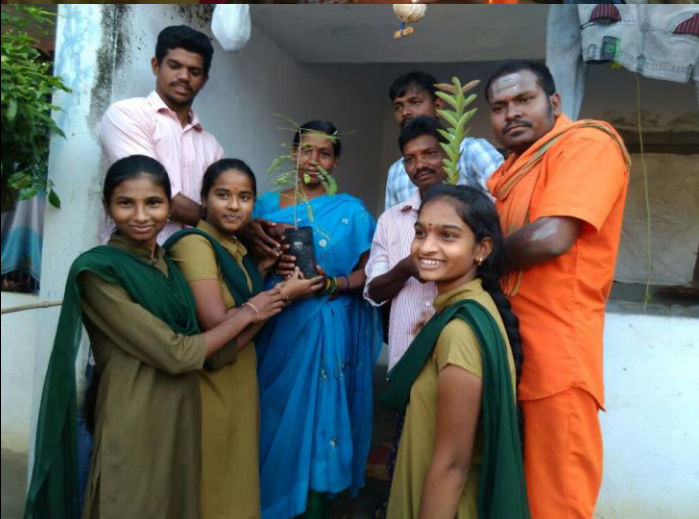
**INDUSTRIAL VISIT AT SIRI SMELTERS AND ENERGY LTD, BOBBILI ON 25-10-2017**





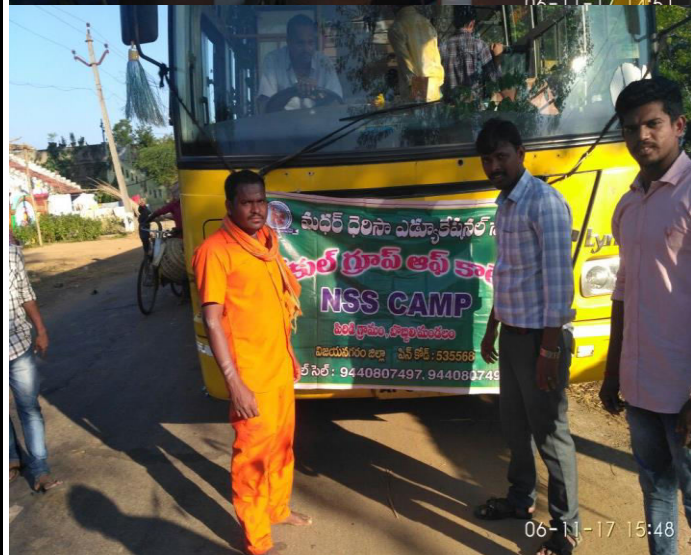
**NSS CAMP ON 25-10-2017 AT  
KAMAVALASA**

**NSS CAMP ON 25-10-2017 AT  
KAMAVALASA**





**NSS CAMP ON 25-10-2017 AT  
KAMAVALASA**



**QUIZ CONDUCTED ON 24-10-2017 FOR  
DIPLOMA STUDENTS**





**PPT PRESENTATION TO BTECH STUDENTS  
BY D VENKATESH SIR ON 21-10-2017**



**INDUSTRIAL VISIT AT HERITAGE FOODS  
LIMITED ON 26-10-2017**





MEDICAL CAMP CONDUCTED ON 30-09-2017 AT  
BALIJIPETA MANDALAM

SEMINAR CONDUCTED BY SWATHI  
MADAM ON 20-10-2017

