



TECHOVATION

Center for Research & Development
(An Initiative of ECE Department)



CERTIFICATE

Feb 12 2020

This is to certify that Neeraj Gauntam from Civil 3rd yr. has successfully participated in Plastic Road Project held on 28/2/2020 at R.D. Engineering College, Ghaziabad. He/She ~~secured~~/contributed 2nd position in the event.

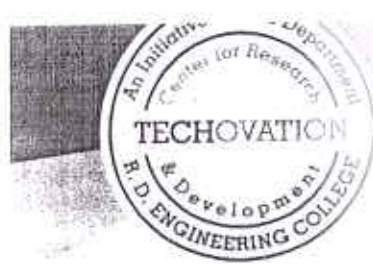
We wish him/her all the best for future endeavours.

Prof. Mohit K. Singh
Program Coordinator



Prof. Vishal Upmanu
Head - ECE Department


Director
R.D. Engineering College
Duhai, Ghaziabad



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Center for Research & Development
(An Initiative of ECE Department)



CERTIFICATE

This is to certify that ABHISHEK SHARMA from CS 2nd yr. has successfully participated in FACE RECOGNISER held on 20/02/2022 at R.D. Engineering College, Ghaziabad. He/She secured/contributed 1st Position in the event.

We wish him/her all the best for future endeavours.

MK
Prof. Mohit K. Singh
Program Coordinator



x Panj N
Prof. Vishal Upmanu
Head ECE Department

[Signature]
Director
R.D. Engineering College
Duhai, Ghaziabad



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CERTIFICATE

This is to certify that CHANCHAL from CS 2nd yr. has successfully participated in FACE RECOGNISER held on 28/02/2022 at R.D. Engineering College, Ghaziabad. He/She secured/contributed 1st position in the event.

We wish him/her all the best for future endeavours.


Prof. Mohit K. Singh

Program Coordinator




Prof. Vishal Upmanu

Head - ECE Department


Director
R.D. Engineering College
Duhai, Ghaziabad



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CERTIFICATE

This is to certify that KESHAV CHAUDHARY from CS 2nd yrs. has successfully participated in FACE RECOGNISER held on 28/02/2022 at R.D. Engineering College, Ghaziabad. He/She secured/contributed 1st Position. in the event.

We wish him/her all the best for future endeavours.

MLK

Prof. Mohit K. Singh
Program Coordinator



VUP

Prof. Vishal Upmanu
Head - ECE Department


Director
R.D. Engineering College
Duhai, Ghaziabad



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CERTIFICATE

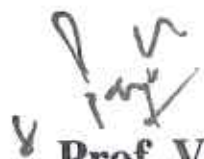
This is to certify that ABHAY GUPTA from CS 2nd yr. has successfully participated in FACE RECOGNISER held on 28/02/2022 at R.D. Engineering College, Ghaziabad. He/She secured/contributed 1st position in the event.

We wish him/her all the best for future endeavours.


Director
R.D. Engineering College
Duhai, Ghaziabad


Prof. Mohit K. Singh
Program Coordinator




Prof. Vishal Upmanu
Head - ECE Department



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Center for Research & Development
(An Initiative of ECE Department)



CERTIFICATE

This is to certify that SHUBHAM SINGH from CIVIL 2nd yr has successfully participated in WASTE PLASTIC MIX held on 28/02/2022 at R.D. Engineering College, Ghaziabad. He/She secured/contributed II Position in the event.

We wish him/her all the best for future endeavours.

MS

Prof. Mohit K. Singh

Program Coordinator



Vam
Prof. Vishal Upmanu

Head - ECE Department

Vag
Director
R.D. Engineering College
Duhai, Ghaziabad



R. D. Engineering College



AWARD OF EXCELLENCE

to

Mr./Ms. Disha Singh

For designing and developing the innovative project titled **“Piezoelectric Mat for Electricity Generation”** and displaying it in the RDEC Research and Innovative Technology Development Centre.

Dr. Sanjeev Sharma
Director
R.D. Engg. College

Dr. Rakesh Sharma
President
R.D. Engg. College

Dr. Kumar Krishen
Vice President, Innovation Program
R.D. Engg. College

Director
R.D. Engineering College
Duhai, Ghaziabad



R. D. Engineering College



AWARD OF EXCELLENCE

to

Mr./Ms. Surya Kumar

For designing and developing the innovative project titled “Dual Axes Solar Tracker System” and displaying it in the RDEC Research and Innovative Technology Development Centre.

Dr. Sanjeev Sharma

Director

R.D. Engg. College

Dr. Rakesh Sharma

President

R.D. Engg. College

Dr. Kumar Krishen

Vice President, Innovation Program

R.D. Engg. College


R.D. Engineering College
Duhai, Ghaziabad



R. D. Engineering College



AWARD OF EXCELLENCE

to

Mr./Ms. Suryaj Kumar

For designing and developing the innovative project titled "Vermicomposting System" and displaying it in the RDEC Research and Innovative Technology Development Centre.

Dr. Sanjeev Sharma
Director
R.D. Engg. College

Dr. Rakesh Sharma
President
R.D. Engg. College
Ghaziabad

Dr. Kumar Krishen
Vice President, Innovation Program
R.D. Engg. College



R. D. Engineering College



AWARD OF EXCELLENCE

to

Mr./Ms. Disha Singh

For designing and developing the innovative project titled “Solar water Purifier” and displaying it in the RDEC Research and Innovative Technology Development Centre.

Dr. Sanjeev Sharma
Director
R.D. Engg. College

Dr. Rakesh Sharma
President
R.D. Engg. College

Dr. Kumar Krishen
Vice President, Innovation Program
R.D. Engg. College

MAIZO Shot by Meet Kaur

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Director
R.D. Engineering College
Duhai, Ghaziabad



R. D. Engineering College



AWARD OF EXCELLENCE

to

Mr./Ms. Sunil Kumar

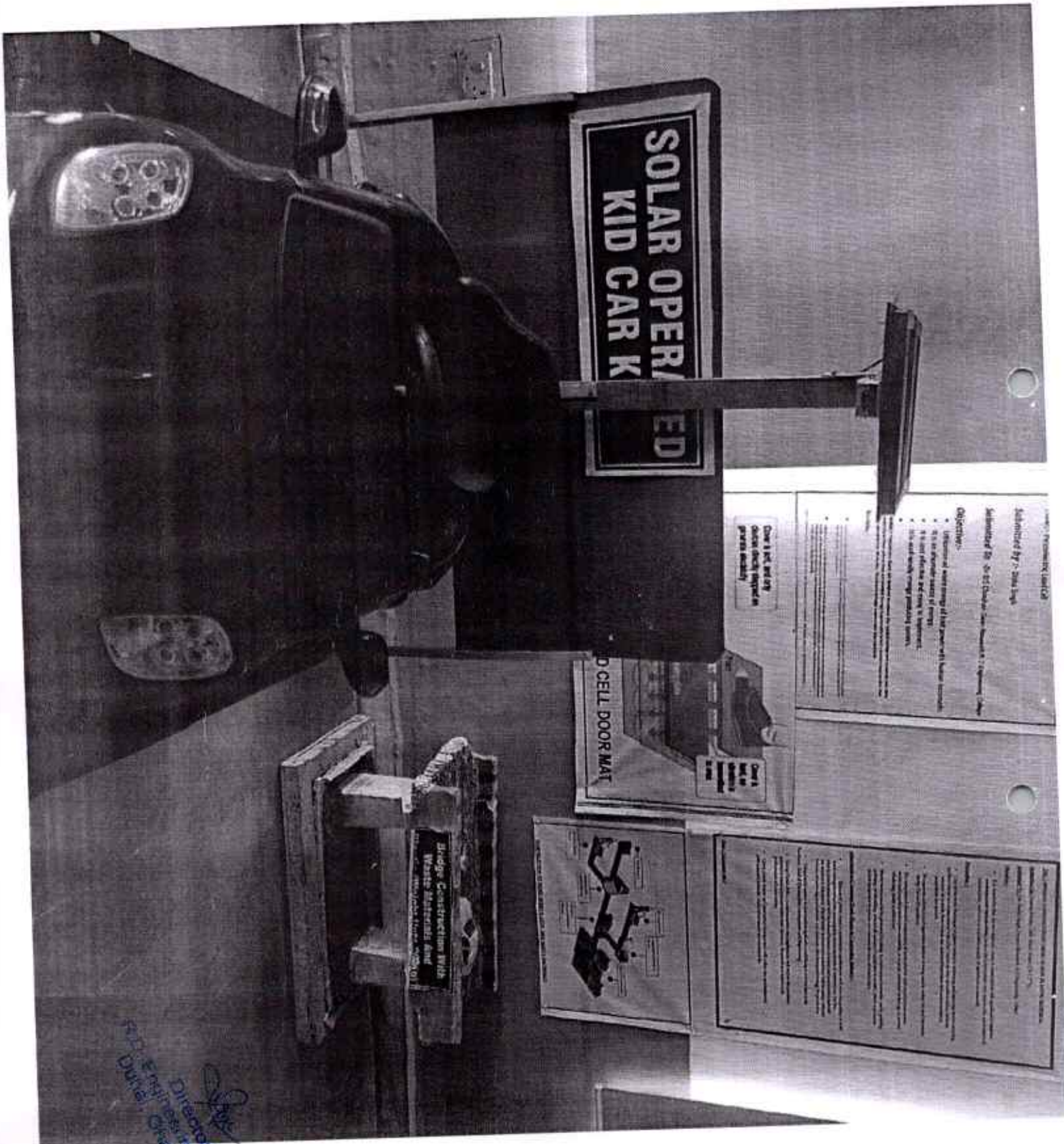
For designing and developing the innovative project titled “**Obstacle Avoiding Smart Car Using Adriuno**” and displaying it in the RDEC Research and Innovative Technology Development Centre.

Dr. Sanjeev Sharma
Director
R.D. Engg. College

Dr. Rakesh Sharma
President
R.D. Engg. College

Director
R.D. Engineering College
Duhai, Ghaziabad

Dr. Kumar Krishen
Vice President, Innovation Program
R.D. Engg. College



SOLAR OPERATED
KID CAR K

ED

CELL DOOR MAT

Dodge Construction With
Waste Materials and
recycled tires - 4/29/01

Over 1 pct. of all
cars built require
green energy!

Over 1
million
cars
built
in
the
US

Submitted by: ...
Submitted to: ...

Objective:

- Understand energy that power with solar panels
- It is an alternative source of energy
- It is not polluting and easy to operate
- It is a clean and green technology

Director
Feroz Engineering College
Durrani, Gaziabad

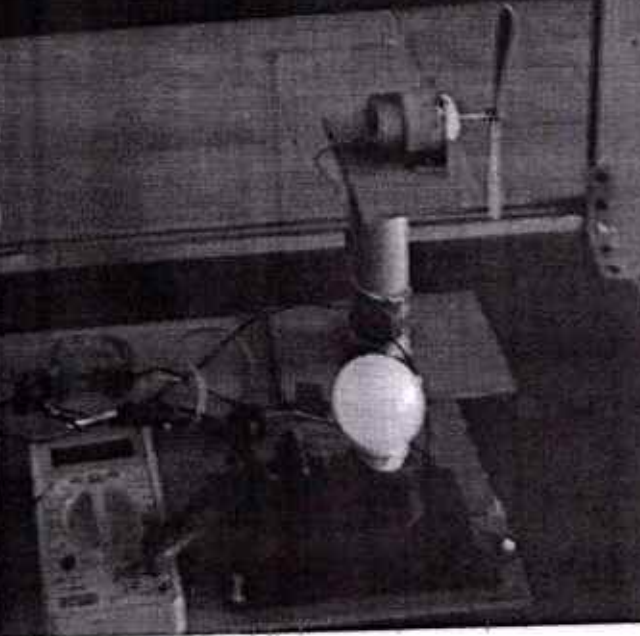
Hybrid Power Generation System with AC Voltage

THEORY

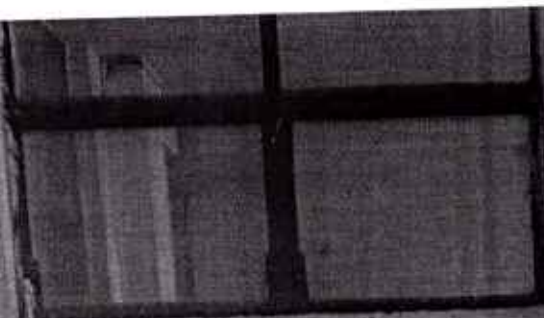
Hybrid power generation system is a combination of two or more power sources. It is used to generate power for various applications. The main advantage of this system is that it can provide a continuous and reliable power supply. The system consists of a generator, a motor, and a battery bank. The generator is used to generate power from a mechanical source, such as a wind turbine or a hydro turbine. The motor is used to drive the generator. The battery bank is used to store power for use when the generator is not operating.

OBJECTIVES

The objectives of this project are to design and build a hybrid power generation system that can provide a continuous and reliable power supply. The system should be able to generate power from a mechanical source and store power in a battery bank for use when the generator is not operating. The system should also be able to provide a continuous and reliable power supply to a load.



P. U. Engineering College
Duhok, Ghaziabad



Title: Power Switching System
Submitted By: *[Name]*
Submitted To: *[Name]*
[Detailed description of the project, including objectives, methodology, and results. The text is small and partially illegible.]

POWER SWITCHING SYSTEM



R.D. Engineering College
Durai, Chazlabad
Director

Dual Axis Solar Tracker

Abstract: This project is about the design and construction of a dual axis solar tracker. The main objective of this project is to track the sun's position and adjust the solar panel's orientation accordingly. The project is divided into two main parts: the design and the construction. The design part involves the selection of the materials and the design of the mechanical and electrical components. The construction part involves the assembly of the components and the testing of the tracker's performance.

Introduction: The sun is the primary source of energy for the earth. It provides the energy that drives the earth's climate system and the growth of plants. The energy from the sun is also used to generate electricity. However, the amount of energy that reaches the earth varies throughout the day and throughout the year. This is due to the earth's rotation and the tilt of its axis. A solar tracker is a device that follows the sun's path across the sky. It allows solar panels to receive the maximum amount of energy from the sun throughout the day and throughout the year.

Objectives: The main objective of this project is to design and construct a dual axis solar tracker that can track the sun's position and adjust the solar panel's orientation accordingly. The secondary objectives are to design a mechanical structure that is strong and durable, and to design an electrical control system that is simple and reliable.

Methodology: The methodology used in this project is a combination of theoretical and practical work. The theoretical work involves the design of the mechanical and electrical components. The practical work involves the construction of the tracker and the testing of its performance.

Results: The results of this project show that the dual axis solar tracker is able to track the sun's position and adjust the solar panel's orientation accordingly. The tracker's performance is compared to a fixed solar panel, and it is found that the dual axis tracker receives significantly more energy from the sun throughout the day and throughout the year.

Conclusion: The dual axis solar tracker is a simple and effective device that can track the sun's position and adjust the solar panel's orientation accordingly. It is a valuable tool for anyone who is interested in solar energy.



FIGURE 1



DUAL AXIS SOLAR TRACKER

F.D. Engineering College
Datta
Ghaziabad

Advance Home Automation


What is Home Automation?
Home automation is the use of technology to control and manage home appliances and systems. It allows users to control their homes remotely via a computer or mobile device.

Submitted by: [Name]

Submitted to: [Name]

Abstract: This project is designed to provide a comprehensive overview of home automation systems. It covers the various components and technologies used in these systems, including sensors, actuators, and communication protocols. The project also discusses the benefits and challenges of home automation and provides a detailed description of the system implemented.

Keywords: Home automation, sensors, actuators, communication protocols, remote control.




Title: Power Switching System

Submitted by: [Name]

Submitted to: [Name]

Abstract: This project is designed to provide a comprehensive overview of power switching systems. It covers the various components and technologies used in these systems, including relays, contactors, and circuit breakers. The project also discusses the benefits and challenges of power switching systems and provides a detailed description of the system implemented.

Keywords: Power switching, relays, contactors, circuit breakers, safety.



R.D. Engineering College
Director
Durai, Ghaziabad

Title - Dual Axis Solar Tracker

Submitted By - [Name], [Institution]

Submitted To - [Name], [Institution]

Abstract:

The Dual Axis Tracker Collects Energy from the Sun from Top, North, South, and West Angles. They Function like a Lens - "Passive And Automatic" One Axis Make The Solar Tracker To Move from Top To Bottom And The Other from The Tracker To Move from West To East.

Working Principle:

The Dual Axis Tracker Works on a Servo Motor. The Servo Motor Controls The Sun's Position. It Rotates the Solar Panel in Vertical Direction. The Servo Motor Controls the Sun's Position in Horizontal Direction. The Dual Axis Tracker Works on a Servo Motor. The Servo Motor Controls the Sun's Position in Vertical Direction. The Servo Motor Controls the Sun's Position in Horizontal Direction.

Block Diagram of Dual Axis Solar Tracker:

The Dual Axis Tracker, The Servo Motor, The Servo Motor Controls the Sun's Position. It Rotates the Solar Panel in Vertical Direction. The Servo Motor Controls the Sun's Position in Horizontal Direction. The Servo Motor Controls the Sun's Position in Vertical Direction. The Servo Motor Controls the Sun's Position in Horizontal Direction.

Dual Axis Solar Tracker

[Signature]
Director
R.D. Engineering College
Duhai, Ghaziabad

STEADY STATE CONNECTION BETWEEN AC VOLTAGE

Submitted by: Shabbir Ahmad, Siddiqui, and Ali
Submitted to: Dr. A. J. Ghaffar, Lecturer, Electrical Engineering
Objective:
 To study the steady state connection between AC voltage and current in a series circuit.

Theory:
 In a series circuit, the current is the same through all components. The voltage across each component is proportional to its impedance. The total voltage across the series combination is the sum of the voltages across each component.

- Method:**
1. A circuit diagram is drawn on the board showing a series circuit with an AC source, a resistor, and an inductor.
 2. The circuit is connected and the current is measured using an ammeter.
 3. The voltage across each component is measured using a voltmeter.

THE AC CIRCUIT WITH CAPACITOR

Submitted by: Shabbir Ahmad, Siddiqui, and Ali
Submitted to: Dr. A. J. Ghaffar, Lecturer, Electrical Engineering

- Objectives:**
1. To study the steady state connection between AC voltage and current in a series circuit with a capacitor.
 2. To determine the phase difference between the voltage and current in a series circuit with a capacitor.
 3. To determine the power factor in a series circuit with a capacitor.

Theory:
 In a series circuit with a capacitor, the current leads the voltage. The phase difference between the voltage and current is 90° . The power factor is $\cos 90^\circ = 0$.

- Method:**
1. A circuit diagram is drawn on the board showing a series circuit with an AC source, a resistor, and a capacitor.
 2. The circuit is connected and the current is measured using an ammeter.
 3. The voltage across each component is measured using a voltmeter.

THE AC CIRCUIT WITH INDUCTOR

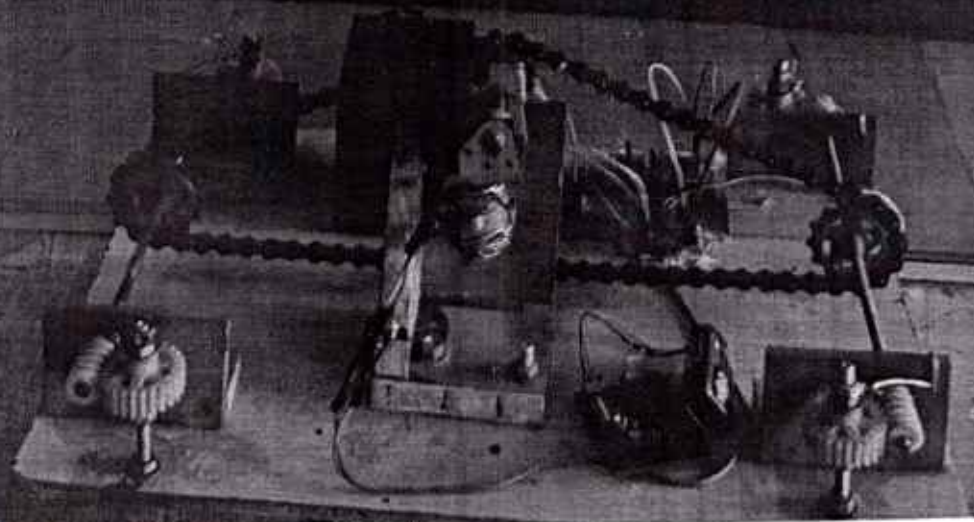
Submitted by: Shabbir Ahmad, Siddiqui, and Ali
Submitted to: Dr. A. J. Ghaffar, Lecturer, Electrical Engineering

- Objectives:**
1. To study the steady state connection between AC voltage and current in a series circuit with an inductor.
 2. To determine the phase difference between the voltage and current in a series circuit with an inductor.
 3. To determine the power factor in a series circuit with an inductor.

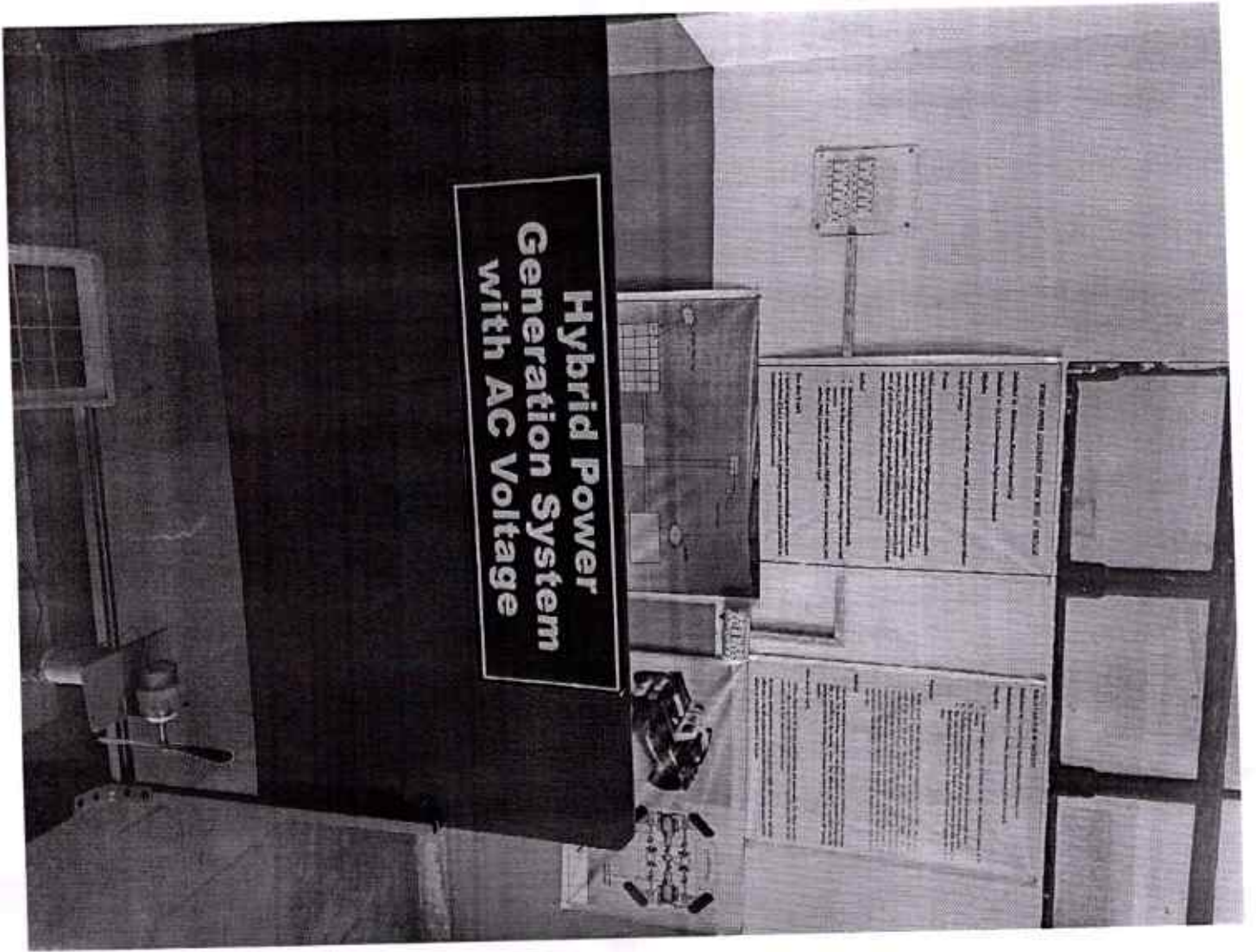
Theory:
 In a series circuit with an inductor, the current lags the voltage. The phase difference between the voltage and current is 90° . The power factor is $\cos 90^\circ = 0$.

- Method:**
1. A circuit diagram is drawn on the board showing a series circuit with an AC source, a resistor, and an inductor.
 2. The circuit is connected and the current is measured using an ammeter.
 3. The voltage across each component is measured using a voltmeter.

**A Car for
 90°
 Motion**



Director
 Ghazi Engineering College
 Duhai, Ghaziabad




Director
R.D. Engineering College
Duhai, Ghaziabad