





# DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

# ACADEMIC YEAR 2019-20 EVEN

# ONE DAY WORKSHOP ON "ADVANCED CONTROL TECHNIQUES IN INDUSTRIAL

#### ENGINEERING"

## **POST WORKSHOP REPORT**

Event	: Workshop
Title	: Advanced Control Techniques in Industrial Engineering
Date	: 21.02.2020
Number of Beneficiar	r <b>ies:</b> External: 28
	Internal: 04
Resource Persons	: 1.Dr.S.Sivakumar, VP/KCE.
	2. Mr.R.Sundaramoorthi, AP/EEE, KCE.
	3. Mr.J.Arokiaraj, AP/EEE, KCE.
	4. Dr.M.Meenalochani, AP/EEE, KCE.
Venue	: Pallava Hall



At Inauguration



Welcome Address



Inauguration Address

#### **OBJECTIVES OF ORGANIZING WORKSHOP:**

- > To meet curriculum requirements
- > To Provide knowledge and develop skills
- > To Provide fun, interactive and hands on opportunities to enhance learning
- > To cater for different learning styles and learning needs

In order to satisfy the above requirements, Department of Electrical & Electronics Engineering organized one day workshop on "Advanced Control Techniques in Industrial Engineering" on 21.02.2020.



Session-I was handled by Dr.S.Sivakumar, Vice Principal, KCE

Session-I was handled by Dr.S.Sivakumar on "Introduction about Energy Scenario & Advanced Control Techniques in Industry". In his presentation he pointed out that the importance of energy consumption of nations. He showed lot of slides regarding energy scenario. Vice Principal compared the various energy sources consumption by various nations from 1950's to till date. He mentioned the importance of renewable energy sources. And also he discussed the advanced control techniques used by industries.



Session-II was handled by Mr.R.Sundaramoorthi, AP/EEE, KCE

Session-II was handled by Mr.R.Sundaramoorthi on "Introduction about Controllers".

In his session he covered the following topics:

- Introduction of controllers
- Importance of controllers
- > Types of controllers.
- Methodology and design
- > Types of conventional controllers
- Programmable Logic Controllers (PLC)

He pointed out the lot of real time examples of Automatic over Tank Filling & Vehicle Acceleration. The session was very interactive and informative.



Session-III(Laboratory) was handled by Mr.J.Arokiaraj, AP/EEE, KCE

Session –III (Laboratory) was handled by Mr.J.Arokiaraj. In his session he demonstrated the working operation of solar panel with converter and DSP based PMBLDC motor speed control characteristics.

## **Details of Solar Plant Details:**

Total Capacity	: 1kWp
Panel	:4
Each unit	:260Wp

## **Details of Charge Controller:**

Input Voltage	: (12 – 48) V - Variable
Output Voltage	: (0 – 48) V – Constant
Output Current	: (0-10) A

## **Details of Converter:**

Input Voltage	: 24 V – DC
Output Voltage	: 220 V – AC (Sinusoidal PWM)
Capacity	: 3000 VA



Session-IV(Laboratory) was handled by Dr.M.Meenalochani, AP/EEE, KCE

Session-IV (Laboratory) was handled by Dr.M.Meenalochani on "Introduction of Simulating Software & Design of Renewable Energy Systems using Soft Computing tools". In her session she covered the following topics:

- Introduction of soft computing
- > Comparison Hard & Soft computing
- Soft Computing tools
- Applications of soft computing
- > Methodology and design by using soft computing tools



Feedback session









Certificate Distribution



National Anthem